

CLOTHING PROBLEMS OF PHYSICALLY DISABLED
PERSONS IN PUBLIC CONTACT EMPLOYMENT

By

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CHAPTER I

INTRODUCTION

According to a survey taken in 1972 by the Social Security Administration, slightly more than one in seven persons between the ages of 20 and 64 were considered disabled because of chronic health conditions or physical impairment. Approximately 7.7 million of these adults were severely disabled, an additional 3.5 million adults were required to change occupations due to a disability, and yet another 4.4 million were limited in the kind or amount of work they could perform (Allan, 1976).

The disabled person is often avoided entirely in the hiring process because the employer does not believe him capable of performing the job (Bennett, 1972). A recent disability survey (Steinberg, 1976) indicated that handicapped employees do have adjustment difficulties. Indications are, however, that the disabled employee is a superior worker.

Work disability rates for professional and technical workers were 61 per 1,000 men and 38 per 1,000 women (Metropolitan Life Insurance Company Statistical Bulletin, 1975, p. 9). Disabling conditions were considerably higher among older (55-64) workers as compared to younger (18-44) workers. The poorest disability rates existed in clerical occupations for men and in sales positions for women. Occupations involving public contact are more often considered white collar

positions such as professional and technical workers, managers and administrators, except farm management, sales and clerical workers (Metropolitan Life Insurance Company Statistical Bulletin, 1975; Canty, 1950).

Discrimination exists for the paraplegic and others confined to wheelchairs. Their absence in business is proof of the problem. Gavin (1975, p. 717) has stated, "Those who have the ability and possess the desire and will to succeed should have access to further personal and professional development." Significant relationships exist between an employer's attitude toward hiring the physically disabled and his previous experience with the disabled (Lyth, 1973). Affirmative Action has been implemented in Section 503 of the Rehabilitation Act of 1973, "Any employer with a federal contract or subcontract must take affirmative action, or positive steps, to hire and promote qualified physically and mentally handicapped persons" (DeLury, 1975, p. 679). The British employ a quota system to encourage hiring the disabled (Greaves, 1972).

For many physically disabled workers not only employment, but also clothing selection is a problem. The non-disabled individual when selecting clothing for work usually considers appropriateness, style, fit, color, and price among other factors. In addition to these factors the physically disabled individual must also consider whether or not the garment will fit over any distortions of the figure, any prosthetic device, whether there is enough ease for movement, and whether alterations can be made to accommodate these problems.

Because adjusting physically to the disability requires a great deal of time and energy, clothing often becomes a minor problem, one to

be tolerated and accepted. According to Newton (1976) few disabled people, and fewer of those who assist the disabled take the problem of clothing seriously. More information, however, is needed from both those who are physically disabled and those who deal with the physically disabled at some point in the rehabilitation process.

Clothing can play a major role in the rehabilitation of the physically disabled. It is the feeling of many people that the physically disabled person should be as well dressed as a non-disabled person. Yet, only Newton (1976) cited the need for further research into the relationship of clothing and the rehabilitation process. The purpose of the study, therefore, is to identify what specific clothing problems exist for physically disabled people in public contact employment.

Objectives

The specific objectives of the study were:

1. To establish criteria for selection of case study participants.
2. To identify clothing problems which result from a physical disability.
3. To identify the difficulties encountered during the selection, purchase and alteration of clothing.

Definitions

Cervical Vertebrae: Referred to in the body of the thesis as C-2 or C-3 indicating the location of the first seven vertebrae on the upper spinal column.

Disability: Wright (1960) referred to disability as the physical effects of a medical condition. In situations discussed in this text these would be physical conditions characteristic of amputation, quadriplegia, paraplegia, or any disease or congenital deformity.

Handicap: Wright (1960) interpreted handicap as the result of the psychological and social obstacle affecting an individual with a physical disability thereby preventing him from functioning at his maximum level of ability.

Indwelling Catheter: A tubular apparatus inserted and maintained in the urethra to facilitate drainage of urine from the bladder to a holding bag usually attached to a leg.

Paraplegic: A person who as a result of injury to the thoracic or lumbar region of the spine is paralyzed in the lower extremities and usually confined to a wheel chair (Felton, Perkins, Lewin, 1966).

Prosthesis: The term used to indicate both the replacement of a lost part of the body, such as an arm or leg, and the actual replacement device itself (Felton, et al., 1966).

Public Contact Employment: Professional, managerial, clerical, administrative, technical, or sales work involving direct confrontation with people other than co-workers.

Quadriplegic: Schlenoff (1975, p. 3) defined a quadriplegic as "an individual who as a result of some sort of trauma has suffered a lesion high on the spinal cord causing paralysis of all four extremities, accompanied by loss of sensation, and some impairment of functions dependent upon the autonomic nerve fibers."

Rehabilitation: The process of preparing an individual to re-enter society through work. Rehabilitation involves education, physical medicine, psychotherapy, politics, and family and interpersonal relationships.

Scoliosis: A medical term describing a lateral curvature of the spine (Webster's New Collegiate Dictionary, 1956).

Thoracic Vertebrae: Referred to in the body of the thesis as T-9 indicating the region of the spine involving the 12 vertebrae below the cervical vertebrae.

Work Disability: The Census Bureau defines work disability as "a health or physical condition that limits the kind or amount of work an individual can do on the job" (Metropolitan Life Insurance Company Statistical Bulletin, 1975, p. 9). Disability is neither acute nor of short duration.

CHAPTER II

REVIEW OF LITERATURE

The review of literature included a survey of the following areas: demographic characteristics of disabled persons; employment problems of physically disabled persons; clothing problems and dressing skills used by physically disabled persons; clothing for public contact employment; the self-concept as it relates to clothing; and clothing selection and use characteristics of the 'non-disabled' population.

Demographic Characteristics of Disabled Persons

The 1972 Social Security Administration survey of the non-institutionalized adults revealed approximately 15.6 million disabled people in America (Allan, 1976, p. 18). Forty-six percent of approximately 1.7 million recently disabled were in the labor force in 1971 (Steinberg, 1976, p. 3). The disabled group was divided according to severity of disability: 7.7 million were severely disabled, 3.5 million were occupationally disabled, and 4.4 million had secondary work limitations. Steinberg's (1976) survey of work adjustment of the recently disabled indicated one-half of the handicapped were either working or looking for work in 1971. Work force age of the handicapped was placed between 16 and 64, though the Social Security Administration surveys of 1971 and 1972 considered ages 18 - 64 and 20 - 64 respectively. The 16 - 64 age bracket included about 7.2 million handicapped

(DeLury, 1975).

The terms handicapped and disabled have been used in different surveys with similar definitions. The Rehabilitation Act of 1973, amended in 1974 to include a new definition of a handicapped person, defined a handicapped individual as

. . . any person who (1) has a physical or mental impairment which substantially limits one or more of such person's major life activities, (2) has a record of such impairments, or (3) is regarded as having such an impairment (DeLury, 1975, p. 681).

A major life activity was described as ". . . any mental or physical function or activity which, if impaired, creates a substantial barrier to employment" (DeLury, 1975, p. 681).

The terms handicapped and disabled were applied to anyone with a physical limitation, but able to do a job, though possibly not the same job (Steinberg, 1976; Allan, 1976; DeLury, 1975).

More women than men, 15.2 percent and 14.0 percent respectively, considered themselves disabled during 1972. Eight and one-half percent of the women compared to 5.9 percent of the men reported severe handicaps (Allan, 1976). Men reported greater labor force participation (59.6 percent) during 1971 than did women (35.5 percent). Prior work experience may have influenced work status after onset of the disability (Steinberg, 1976). In the 1972 survey the disabled were found to be older than the non-disabled. In a comparison of the 1966 survey with the 1972 survey, the disabled during 1972 were found to be younger. The number of disabled persons increased with age as did the severity of the handicap. The median age at onset of disability was 41. Approximately 29.4 percent reporting a disability during 1972 were between 55 and 64 years of age.

Black people were one and one-half times more likely to be disabled than were white people. They were also a younger group. According to Allan (1976, p. 23), "Lack of education is associated with disability," explaining the unemployment and underemployment status, and consequently, the lower socio-economic status of the handicapped. Higher educational attainment was associated with reports of lower levels of disability (Allan, 1976). Olshansky and Beach (1974) reported the results of counseling, training and job placement of 237 handicapped persons, including 46 percent psychiatrically disabled, 18 percent physically disabled, 30 percent mentally retarded and 6 percent alcoholic. Twenty-eight percent of the handicapped persons had never worked, 51 percent had encountered sporadic periods of employment and the remaining 21 percent had been employed at least one year prior to the rehabilitation program. Of the 237 handicapped persons in the program, 53 percent (126) were still employed at the time of the survey and 29 percent were unemployed. Employment prior to onset of the disability and comprehensive rehabilitative training were important factors in the determination of return to employment after the onset of a disability.

Disabling conditions were related to educational level and employment status. Allan (1976) reported one-third of the disabled listed musculoskeletal disorders as the cause of disability. This fact may have prevented some from attending school since only four years lapsed between the 1968 law requiring adaptation of school and college buildings to become accessible to the handicapped and the survey taken as reported by Allan.

Single marital status was another characteristic of the disabled. Seventy-one percent were single; the majority of that number were men. Allan (1976) emphasized the positive effect of marriage on the sociability of the disabled, in that a spouse could provide income, extra care and essential social contact and interaction.

Thirty-seven percent of the disabled lived in the South, compared with 31 percent of the total U. S. population living in that area. More disabled (22 percent) lived in rural communities than did non-disabled persons. A six percent increase was seen in the number of occupationally disabled residing in the large urban areas. The veteran status of the disabled indicated more (30 percent) disabilities resulting from World War II injuries than from Vietnam (4 percent) and Korean (7.1 percent) injuries (Allan, 1976).

The number of musculoskeletal disorders causing disabilities had increased. Bennett reported in Iron Age (1972) that leg or hip impairments occurred over eight million times, with spinal or back injuries and diseases afflicting over 6.5 million people. Arm or shoulder impairments occurred in nearly two million cases and paralysis in just under one million. Two hundred sixty thousand individuals became disabled due to loss of limbs. Arthritis crippled over 18 million persons. The older person, with less education, had a greater occurrence of disability and resulting unemployment. Loss of income was directly related to the severity of disabilities whether or not the cause was work related (Steinberg, 1976). The duration of disabilities was inversely related to work status. Disabilities were of shorter duration for male and female white collar workers between 18 and 64. The longest duration of disability was reported for both service and

farm occupations (Metropolitan Life Insurance Company Statistical Bulletin, 1975). Instead of indicating fewer disabilities occurring among white collar occupations, it may reveal the underemployment of the physically disabled.

Disabled people have been characterized by many similarities. However, each is an individual person requiring individual consideration of his or her needs, desires and abilities, both in the rehabilitation process and employment situation.

Employment of the Disabled

The facts cited as characterizing the disabled are only the surface of a multitude of problems which face the disabled as they search for employment or adapt to the employment routine. The disabled individual has often been overlooked for employment because of the myths surrounding his capabilities. English (1971) summarized feelings toward the disabled by stating,

. . . in work individuals have the opportunity and responsibility for displaying competence. Since one of the most prevailing stereotypes of the disabled person is that they are basically incompetent, work can be associated with improving positive attitudes toward the disabled and different (p. 14).

The most progressive effort toward equalization of employment opportunities for disabled people occurred with the passage of the Rehabilitation Act of 1973. This legislation enacted a number of rehabilitation programs to provide employment opportunities. It also outlined affirmative action steps toward employment and the promotion of the physically handicapped in government contract jobs. Though complex problems remain in the implementation of regulations, such as whether or not a physical barrier to one job should be a deterrent to

another job, the legislation has focused on the positive efforts of the federal government and the positive thinking of the many handicapped American individuals (DeLury, 1975).

The British, to encourage employment of the disabled, developed a quota system enacted by the Disabled Persons Employment Act of 1944 which required every company employing 20 people or more to hire three percent of its payroll from a national list of registered disabled.

Remploy Limited was created in 1945 as a result of this act. This legislation created industry for the handicapped separate and apart, but competitive with industry to employ people too severely handicapped to be employed elsewhere. In 85 Remploy factories alone, 7,629 handicapped people were employed from a register of 80,000 unemployed handicapped individuals throughout England, Scotland and Wales (Dodd, 1972, p. 181). Though Remploy was not created as a rehabilitative tool, about 200 handicapped persons annually have sought employment in open industry. The criteria a Remploy manager must consider when judging qualifications for work has not been the handicapped person's disability, but his abilities. The value of the British Remploy program has been the development of opportunities for self-sufficiency among the handicapped (Dodd, 1972).

An American system of employment for the disabled is non-existent in comparison with the British Remploy program. Instead, the approach has been more educational in nature - that of educating the public and potential employers about the employability of the disabled and as complete a rehabilitation as possible of the physically disabled person, including an emphasis on his or her abilities, not disabilities.

The most frequent reasons mentioned for not hiring the physically

disabled included higher insurance rates, adjustment of the work place, negative employee attitudes, poor safety and attendance records of the disabled, the special treatment required by the disabled, transportation problems, emotional problems, longer training periods, costs of group insurance and workmen's compensation, incomplete job information, and undesirable previous experiences with the disabled (Halperin, 1973; Louviere, 1976; Sears, 1974; Nagi, McBroome, Collette, 1972; Knapp, 1970). The physically disabled have been competitive in the employment situation and have been superior employees (Bennett, 1972). Sears (1974) found in a study of 1,452 disabled DuPont employees that only nine percent suffered on-the-job injuries. He also reported that a Conference Board survey of 242 firms which employed the disabled indicated that 90 percent had no change in their insurance rates. Ninety-six percent of DuPont's severely disabled employees had average or better safety records. Louviere (1976) cited examples of employment adjustments such as placement of braille numbers on phones and elevators, raising the level of a desk with blocks, widening of doorways and adjustment of toilet facilities to accommodate wheelchairs. Sears (1974) explained that DuPont employees took pride in the company's employment of disabled persons. The matching of abilities to job requirements contributed to the success of DuPont's employment of the physically handicapped. Sears (1974) stated,

. . . there is no physical handicap great enough to deprive an individual of the dignity of a productive happy life, provided he has acquired a proper attitude and is placed in a job suitable to his abilities (p. 714).

Canty (1950) surveyed rehabilitated amputees who had been released from rehabilitation for at least one year, and of the 402 cases studied

only 24 were unemployed. Attitudes of employers reflected in Lyth's (1973) study revealed that

. . . although positive attitudes towards the employment of disabled people did not necessarily result in the actual employment of these people, these attitudes did relate significantly to previous experience with the disabled (p. 67).

Potential employers often exhibited mental blocks toward the physically disabled, thereby failing to provide the disabled person the opportunity to demonstrate his or her responsibility, aptitude, initiative, and abilities resulting from training (Sears, 1974; Bennett, 1972). The shock of viewing an applicant for employment in a wheelchair was cited as a reason employers fail to hire the physically disabled (Bennett, 1972). Attitudes toward one's disability and the personal attributes of the individual were ranked respectively when selecting the most successful disabled employee. Employers considered physical impairment of the legs as the most difficult disability to accommodate in business (Lyth, 1972).

Severely disabled individuals in wheelchairs were reported by Greaves (1972) as having fewer employment related problems than persons with chronic bronchitis. The absentee rate of the former was less than for the person with bronchitis. Degree of handicap severity was cited by Greaves (1972), Bennett (1972), Sears (1974), Nagi et al. (1972), and Lyth (1973), as a positive consideration since many employment stations require little, if any, motor ability. Lyth (1973, p. 70) stated, "the possibilities for adaptation by the disabled person are not appreciated by prospective employers . . ." in cases of dexterity loss. Yet Lyth (1973) reported in her study of employers' attitudes that employers considered positive attributes of employees more often than they did the employees' negative attributes when considering the

employees' success.

Consideration of the physically disabled person's employment situation has been a key to the rehabilitation of the employability of the individual. The type of job the disabled person acquires has been dependent upon the individual's prior experience, education, training, physical ability, and possibly most important their motivation. Greaves (1972, p. 175) stated, "The first requisite for the employment of a disabled person is to be socially acceptable." This was felt to be more important than the degree or kind of disability. Aggressiveness compensated for lack of confidence in the disabled, thereby creating another disability for the individual. Self-confidence must be a trait of the disabled to be socially acceptable.

Halperin (1973) explained that rehabilitation should begin immediately at the onset of the disability and be supported continuously by the family, employer, physicians, and rehabilitation counselors to dispel fears and to assist the disabled individual in achieving the fullest recovery. Individual counseling and guidance should be designed to meet the needs of the individuals in order for them to select and/or plan for a return to employment. Halperin (1973, p. 91) further stated that ". . . training in interpersonal skills necessary to meet the requirements for employment, . . . and changing personal attitudes which interfere with vocational adjustment . . ." were additional steps in the rehabilitation process. Motivation provided by all who come in contact with the disabled individual has been cited as the key to successful re-employment of the person (Halperin, 1973; Greaves, 1972; Ganty, 1950; Gavin, 1975; Sears, 1974).

Appropriate placement of the disabled individual, whether or not

previously employed has been a difficult, yet important task. Methods of integrating the disabled individual into industry have been cited as an area needing further research (Greaves, 1972). Sheltered workshops have been utilized as a method of rehabilitating the physically disabled person. The problem, however, of maintaining such a workshop when the disabled individual has reached an employable point has become a concern to many since it may prevent an individual from utilizing his maximum abilities (Nagi et al., 1972). The role that the physically disabled person assumes in the work force is controversial. Amputees have expressed few discriminatory feelings, while "paraplegics and others confined to wheelchairs" have been discriminated against (Halperin, 1975, p. 716).

Schlenoff (1975) in discussing the career development of the quadriplegic defined him as typically male, between 14 and 29 years of age, victimized by automobile, swimming or diving accidents, or gunshot wounds, and one who has received little consideration in career development at either the rehabilitation or employment level. The visible shortage of physically disabled persons among professionals is an indication of the extent of discrimination in employment.

A person's physical disabilities have usually resulted in under-employment, even though his mental capabilities may have far exceeded the non-handicapped person's abilities. This has resulted directly from lack of understanding of the disabled person. Canty (1950) reported that rehabilitated amputees were employed in the following areas: professional and semi-professional occupations, managerial, official, clerical and sales occupations. Fifty-nine people were in clerical employment. Sales were next with 38 disabled persons,

followed by 30 professionals, and 27 people in managerial/official occupations. Lyth (1973) reported 26 British disabled employees in clerical employment, in comparison to 1,050 non-disabled employees in the same firms.

Positive aspects of successful employment evolved from a study by Tseng (1975). The study involved an assessment of occupational function by rehabilitated clients of a vocational rehabilitation agency. Eighty-one former clients, 13 of whom were physically disabled, and 100 employers participated in the survey. The data revealed that the physically disabled were employed as beauticians, clerks, secretaries, realtors, social workers, teachers, waitresses, and as non-public contact employees. The study, which measured job satisfaction and its relationship to self-acceptance and people's positive attitudes toward work, resulted in disabled people accurately evaluating job proficiency. However, they estimated higher levels of personal quality in job performance than did their employers. A positive correlation resulted in the disabled employees' job satisfaction in relation to self-acceptance and positive work attitudes.

Gavin (1975) in discussing the lack of disabled persons in professional and scientific employment, felt that those with the desire, ability and willingness to assume professional responsibilities should have access to such occupations. The inability of non-disabled people to overcome an innate dislike for disabled people was cited by Menninger (1955) as one possible reason for the lack of opportunities for the physically disabled. Halperin (1975, p. 87) stated in contrast that everyone had a limitation and that ". . . the degree of ability and not disability" was the only distinguishing difference between all

people.

The handicapped are a natural resource for business and industry, possessing talents and abilities that have remained untapped. The removal of prejudice and misunderstanding toward the disabled is an absolute necessity before they can fully assume their contributing role in society.

Rehabilitation has resulted in successful employment or re-employment of disabled persons. Whether or not the concentration of effort and funds should be in rehabilitation of younger or older disabled individuals has been a controversial issue. Data has revealed that advancing age yields more disabilities, and yet, the disabled are younger as a group. Kiser (1972) has concluded that neither group is inefficient in its utilization of rehabilitation services and funds. Menninger (1955) in discussing the crucial role of the rehabilitation counselor stressed the importance of rehabilitating not only the physical person, but the psychological person as well.

An important impetus has been given employment of disabled people through national recognition of the status of the many physically disabled people in the United States. Events such as specially designated weeks stressing the disabled population's employment problems have attracted national attention. The President's Committee on Employment of the Handicapped has prompted the organization of corresponding state and countywide committees to help promote the cause of the handicapped. By rewarding especially effective employers and disabled employees, public attention has been drawn to the initiative, abilities and achievements of both the disabled individual and those who employ him (Knapp, 1970).

Clothing Problems and Dressing Skills Used by Physically Disabled Persons

As one of man's basic needs wearing clothing has been a practice from which few individuals deviated. Body shape and size has been enhanced by careful selection of clothing. Society has placed extreme importance on clothing. Clothing awareness among the physically disabled has been researched very little. Only the need for adequate and comfortable clothing for the disabled has been established as an area of concern.

Continued motivation of the physically disabled person has been cited as a requirement for successful rehabilitation. The use of clothing as a rehabilitative tool was established by Schwab and Sindelar (1973, p. 30). "Psychological needs for the disabled may be met through the use of attractive colors, functional and fashionable design, and interesting textures."

The same questions of clothing choice have faced the non-disabled and the disabled person. Rusk and Taylor (1953, p. 35) stated that clothes "help to minimize the appearance of disability," and therefore, it is even more important for the physically disabled to select appropriate clothing and to be neat and well groomed. Clothing has become more than protection and adornment for disabled people; it satisfied deep psychological needs by providing satisfying experiences (Clulow, 1974). Clothing for the physically disabled should not set them apart from society, instead efforts should be made to help the individual to conform to society in as many ways as possible (Schwab and Sindelar, 1973).

Appropriate clothing can also make dressing an easier task. It has been tempting for physically disabled people to become dependent on someone to assist them in dressing. Developing independence in the dressing process takes time, patience, and desire. Clothing that fits well and presents few problems when dressing adds to the development of independence. How much a person can do when dressing himself was reported by May, Waggoner and Holte (1974) as being determined by the severity of the disability. Barton (1972, p. 19) stated, "Every bit of independence is imperative for morale." Nichols (1971) felt that some severely disabled persons preferred to be assisted in dressing to preserve their energies for more creative outlets such as work. The routine tasks of the non-disabled, such as putting on socks, buttoning shirts or blouses, tying a tie or scarf, or fastening a bra, have become major obstacles in the dressing process for the physically disabled person (Schlenoff, 1975; Barton, 1972).

How the physically disabled person dresses varied according to the specific handicap. Several self-help features have been adapted to aid in the dressing process. For men who wear braces, these features included zippers the entire length of the pants legs, trouser leg linings to prevent extra abrasion by braces, half-belts, ties with elastic for hooking around the neck instead of tying, and shoe locks to facilitate fastening of shoes (Barton, 1972). Suit coats made to seat length have improved the appearance of men in wheel chairs. Velcro, placed on closures where buttons are normally used, have enabled men and women to dress themselves more easily (May et al., 1974).

A study by Williams (1975) determined the clothing problems and

dissatisfactions of 31 physically disabled men. The results of the survey indicated that poor fit, difficulty with closures and lack of ease in dressing were the major clothing problems. ^{pix}

Self-help features for women included features similar to men's. There was Velcro for hard-to-manipulate closures, large buttons, magnetic fasteners, grippers, front-zippered closures on dresses, slips, blouses, action pleats (adapted for men's wear, also), wrap-around skirts in A-line or slightly full styles, stretch bras or bras that hook in front, fuller slacks, and raglan or kimona style sleeves (Barton, 1972; May et al., 1974; Newton, 1973).

Special styles and fabrics have been designed to help the incontinent individual to be more independent (May et al., 1974; Newton, 1973). The use of wool, cotton and other cellulosic fibers has helped to combat the problems of excessive perspiration odor which has been a characteristic problem for many quadriplegic individuals (Clulow, 1974).

Self-help clothing for both sexes included the following general characteristics: large openings in garments that prevent struggling, discomfort, or overexertion, extra ease in waistlines or armholes, and fasteners that are easy to reach and manipulate. The major emphasis in clothing designs and adaptations for disabled persons has been the development of more comfortable clothes involving more freedom of movement to allow greater independence (Clulow, 1974). All clothing for the physically disabled should enhance the appearance of the individual, as well as provide comfort, ease in care and accessibility (May et al., 1974; Drug and Therapeutic Bulletin, 1973).

New (1976) summarized the need for careful selection of clothing,

Clothing may be selected to camouflage a physical characteristic or to accent a physical attribute. It may be selected because of a functional contribution to the dressing process or features needed for daily activities (p. 20).

The availability of suitably designed clothing has been a problem for the physically disabled population. Clulow (1974) reported that problems of access to specially designed clothing existed for most disabled people in Britain. Various organizations have developed special clothing for the disabled usually available through special catalogues. The Shirley Institute in Great Britain has produced a catalogue of 12 suitable garments for the disabled (Drug and Therapeutic Bulletin, 1973). Listed below are organizations, agencies, and publications which have supplied special designs and garments for the disabled: The Clothing and Housing Research Division of the Agriculture Research Service of the United States Department of Agriculture; "Functional Fashions for the Disabled" (approved designs of the Clothing Research and Development Foundation); The Vocational Guidance and Rehabilitation Services in Cleveland, Ohio; Leisenweber, Inc., (custom tailors) in Chicago; Fashion-Able in New Jersey, and PTL of Stillwater, Oklahoma. Commercial patterns have been designed for adaptation to the disabled person's physical needs (Schwab and Sindelar, 1973).

Accessibility to retail outlets which may or may not feature special clothing for the disabled has been improved by the efforts of states' Governor's Committees on Employment of the Handicapped. Ramps, wider doors, elevators, and renovation of restrooms, drinking fountains and other service areas have enabled entry and access. The international handicap symbol of access, now in use, has indicated to the disabled person that a building is barrier free (May et al., 1974).

The important role that clothing plays in the rehabilitation of the physically disabled person has been cited by Newton (1973 and 1976), Clulow (1974), Schwab (1973), May (1974), and Reeves (1966). Because clothing problems become minor problems amidst other difficulties in the rehabilitation of a disabled individual, they have seldom been taken seriously. In her study of concepts and use of functional clothing by therapists in rehabilitation, Bright (1974) reported that a positive correlation existed between therapists' concepts of functional clothing and therapists' use of clothing. The mean scores of the therapists' responses, however, indicated neutral or indifferent feelings on the use and concept of functional clothing. Though the therapists agreed with the concept of functional clothing, the utilization of such clothing in the rehabilitation process was negligible.

The disabled population has not been informed of the availability of special clothes and the methods of adaptations that may be made to their existing garments. Schwab and Sindelar (1973) have emphasized the need to develop community and agency awareness to the special clothing needs and availability of specialized clothing for the disabled. Rehabilitation counselors and occupational therapists were two resources cited as possible informants concerning clothing for the physically disabled.

Because the disabled person wants to and should be as well dressed as his non-disabled counterpart the importance and relationship of clothing to the individual's total development in the rehabilitation process must be emphasized by those who work closely with him. Newton (1976, p. 19) has stated, "If clothing is to be a tool in rehabilitation, we need feedback from staff. And most of all, we need information

from disabled people themselves."

Clothing for Public Contact Employment

Suitable clothing for physically disabled people can mean independence in the work environment as well as independence in all aspects of life. Morton (1926) has written that clothing determines not only how a person feels about himself, but it also determines where a person goes in society and if he can obtain and hold a job. "Clothing is one of the most powerful forms of non-verbal communication" (Newton, 1976, p. 19). How clothing messages are interpreted varies among individuals. Acceptance or non-acceptance of a person, particularly a physically disabled person, in society is dependent upon how "normal" he appears in both stature and body movement (Easton, 1973).

The relevance of clothing in the work environment was studied by Stone and Form (1955). Interviews conducted with a sample of 108 men revealed that clothing was important to men. Men in white collar occupations felt clothing would impress people with whom they came in contact at work. White collar workers also realized the importance of clothing when applying for jobs. Since clothing was a status symbol, white collar workers, more often than manual workers, felt they did not have enough money to purchase adequate clothing for employment. Deviation from dress norms was felt by many to impair the relationship between white collar workers and the general public, including both customers and the entire work force.

In her research Dress Problems Encountered in Role Change From Student to Employee, Hatch (1974) interviewed business college graduates and employers to determine the clothing expectations and practices

of new employees. The survey revealed that both students and employers agreed that neatness, good grooming and over-all appearance were important aspects in the job interview, as well as in actual employment. Conservative dress was more often mentioned as appropriate attire for job interviews. The majority of employed graduates concluded that it was important to wear clothing that made them look as much like the other workers as possible. Fellow employees reported noticing or discussing what other workers wore. The careful selection of clothing can determine success in the interview and employment process.

The relationships that evolve between an employee and the public in an employment situation are greatly affected by the attire of the employee. Bickman (1974), in studying the reactions of people dressed to appear low-or-high-class, theorized that clothing was a cue to social status and wealth. He further stated, ". . . they also may lead others to assume certain facts about our personal attitudes and values" (Bickman, 1974, p. 50). In another study by Bickman the association between uniforms and social power was researched. The research revealed that when confronted with those wearing uniforms, (indications of authority), people reacted differently than had been predicted. Instead of responding positively to directions from a uniformed authority figure, individuals were just as likely to reject the command of the person.

Appropriate business dress was discussed by Head (1967) in her book How To Dress For Success. She stated that clothing selected for work should reflect the image of the company and its personnel. She stressed the importance of knowing the appropriate dress needed for various kinds of employment. Simplicity, conservativeness and good

grooming were listed as three essential clothing requirements for successful employment.

Birmingham (1962, p. 82) summarized the effects of good grooming habits for men when he stated, ". . . right dress gives a man a psychological lift, a sense of belonging, of success, and of well-being that helps him in his everyday life." He stressed the importance of selecting conservative clothing for work. Fashion has begun to play a more important role in men's clothing; yet, the clothing selections of business men have continued to reflect the images of other successful businessmen.

Proper clothing for the disabled individual as well as the non-disabled person in public contact employment can lead to independence and success in business. The significant role of clothing for the physically disabled has been stressed by English (1971) who reported that physical disfigurement caused people to be less socially acceptable than people with other disabilities, such as mental illness.

Self-Concept as it Relates to Clothing

Clothing is worn for protection, adornment and enhancement. Clothing and one's self-concept are closely related. Though not a universal definition, Ryan (1966) defined self-concept as the role in which one sees himself and how the physical body and mind related to this self-image. She further divided the self into two parts: the somatic self or the physical perception of the body, and the social self, the sort-of-person-I-am self (the determinant of how one behaves) and the self as a member of a group. Clothing played a significant part in each of the components of self-concept either by definition of

the body limits, determination of the roles assumed in life or how one felt about himself in various situations. Ryan (1966, p. 85) stated, ". . . theoretically, at least, clothing plays a relatively important part in establishing the self-concept and conversely the self-concept is important in determining our choice of clothing."

The relative importance of clothing and how it affects the self-concept in specific situations is not known. The various aspects of clothing characterize the self and communicate impressions and facts about the person to others in society. Because clothing is an extension of the body image, and therefore, becomes part of the body image, the same concerns about the body are often transferred to concerns about the clothing a person wears (Horn, 1975). This fact would explain the importance society places on clothing throughout the life cycle.

The significance of clothing in altering the appearance, and consequently, the self-concept of the physically disabled person was studied by Friend (1970). Fifty students enrolled in a residential rehabilitation center, 25 of whom were visibly disabled and 25 who were non-visibly disabled, were interviewed to determine their degrees of self-concept and concern about their bodies. Following the taping of interviews three judges rated the individual students on the Clothing Value Scale and Appearance Evaluation Scale. Correlations of .80 resulted. The results also revealed that body cathexis, concern for the body and its functions, and self-concept were related for all the students. Only those evaluations of students with visible handicaps resulted in positive correlations between appearance and self-concept. These students, Friend theorized, expected to be evaluated more on

appearance than were the non-visibly disabled. Visibly disabled students who were enrolled in the clerical training reported high clothing ratings. Students with non-visible disabilities and visibly disabled students placed equal values on clothing. Males received higher appearance evaluation ratings than did females, as did older students than younger students. Friend (1970, p. 615) concluded, "If factors determining the high expectations of appearance evaluation for the handicapped could be identified, perhaps training programs could be more successful."

Several researchers have explored the varied facets of the physically disabled individual's self-concept. It is a common goal of all who work with disabled people during the rehabilitation process to motivate them sufficiently to develop the confidence, desire, and physical stamina to rejoin society in as normal a manner as possible. The disabled person's awareness and feelings about his body and other's, and people's attitudes toward his physical disability greatly affect his self-concept. Babin (1975, p. 184) stated that the physically disabled person views his body in one of three ways: "1) with shame, or guilt, or both; 2) in anger, in bitterness, or both; or 3) with dignity and perhaps even with a certain kind of pride." He believed that the environment in which the disabled person lives is the cause for all three of these feelings. Babin (1975) further stated:

Frequently the physically abnormal person is taught to hide his abnormality to whatever degree is possible, or at least to minimize it, in order to avoid 'offending' or embarrassing others. . . . Attempt at concealment is an act usually associated with shame or guilt, and this association is not lost on the physically abnormal person. Whether the feeling causes the behavior or the behavior awakens and then reinforces the feeling is immaterial here; the effect is the same (p. 186).

The careful selection of clothing is one method that has been used universally to conceal or modify body appearance.

The self-concept has also involved one's awareness of his own body. Several researchers believed that the self-image of the physically disabled person was the same as that of a normal person and his perception of other disabled people. Although the more negative the attitude of the person toward his body, which in reality were frustrations with his disability, the more negative the disabled person's attitudes were toward other disabled and non-disabled persons (Babin, 1975; Schwab and Harmeling, 1968; Comer and Piliavin, 1975). The kinds of clothing selected by physically disabled persons have been reported by Babin (1975) to be affected by one's perception and his body image. As an example, he stated,

. . . when I shop for clothes I am very aware of my size and shape and what clothes will fit me. Perception. But in the preceding stage, when I am thinking that I need a new suit and looking at the newspaper ads or at catalogues, I see myself wearing clothes just like those the models wear; not only the same clothes, but wearing them in the same way (p. 190).

The value of incorporating clothing in the rehabilitation process has been summarized by Geis (1972) who reported that disabled people once having achieved satisfactions by "doing" activities, need additional satisfactions which can only be achieved through "being" experiences. These experiences included exploration, manipulation, choosing, interests, enjoyment, simplification, uniqueness, and realistic experiences among others. Clothing can provide impetus to the disabled person to be proud, happy, satisfied, and above all, more confident and assured in assuming his role in society.

Clothing Selection and Use Characteristics
of the "Non-Disabled" Population

The term "non-disabled" has been used in the study to indicate those people without major motor disabilities. It has been recognized that no one person is actually without any disability or handicap. However, for the purposes of the study it has been necessary to differentiate between the two in order to define clothing needs in public employment situations and to compare the needs and practices of the two groups.

Numerous studies have established that individuals follow certain patterns in their clothing selection practices. Horn (1975) stated that clothing satisfied the basic needs of warmth and comfort. Other needs of conformity, individuality, creativity, attractiveness, status, and general satisfaction have also been satisfied by clothing. Though these needs exist for all people, the degree and priority of fulfillment vary from person to person. As early as 1949, Hartman (Journal of Home Economics) summarized the psychological effects of clothing without scientific verification by assuming that clothing was an expression of one's ego-involvement that reflected and influenced a person's potential personality. When an individual attempts to reflect by his dress what he is not, he becomes dissatisfied with himself and reacts accordingly. Individuals are free to select their preferred dress, yet vary in their degree of selection freedom. Some choose to conform, while others intentionally deviate from norms. Too many alternatives in dress create problems for the wearer (Roach and Eicker, 1973).

Horn (1975) verified that people dress in an attempt to compensate for their physical inadequacies by dressing to camouflage large hips,

protruding stomach, thick waistline, heavy arms, or narrow shoulders. The camouflage diverts the reality of the situation from the person. Men often exhibit camouflaging techniques when wearing dark suits with contrasting light or white shirts, thereby drawing attention to other areas of the body. Individuals also project their own body attributes, good or bad, to others. The style of clothing one wears may not be reflective of the individual's most desirable attributes. Roach and Eicker (1973) stated that a person's dress tends to resemble the ideal, yet the ideal body weight, height, and figure proportions may not be the average. Therefore any deviation from the ideal results in negative social value judgments. Williams (1974) studied the fit (tightness or looseness) of clothing as it related to body image, body build and clothing attitudes of 151 female clothing and textile students. No significant relationship existed between the fit of garments at the bustline, waist or widest point of the hipline to body image, body build, or clothing attitudes. She suggested that additional variables might influence the choice of clothing fit. Though fit determines quality and beauty of a garment, fit is determined by the garment's design, use and the individual's personal requirements (Kefgen and Touchie-Specht, 1976).

Horn (1975), Hartman (1949), Ryan (1966), and Rosencranz (1962) have agreed that clothing reflects one's self and desires. Reed (1973) reported in her study of the variables which determine the self of college women that value-variables were the most powerful force in differentiating clothing styles. High fashion wearers invested more money on clothing, and were most interested in fashion; whereas low fashion wearers desired only to dress adequately. Non-fashion wearers

were lowest in socio-economic status, were older and politically conservative, but more dogmatic.

Self-acceptance as it related to perceptions of clothing usage, clothing attitudes and practices was studied by Zentner (1971). The research with 168 male and 80 female participants indicated that less self-accepting males reflected higher degrees of clothing conformity and used clothing as a means in goal achievement. The subjects indicated that other individuals would use clothing as a means of achieving an end.

Clothing practices related to occupations has been studied by several individuals. Walters (1973) investigated the clothing practices of adolescents who aspired to white collar occupations. She reported that students agreed that social acceptance was influenced by clothing and that clothing was a factor in acquiring a job, maintaining a position, and being promoted. Females were considered to be more fashion conscious.

Spence (1969) attempted to establish criteria for wardrobe planning and purchasing as related to occupation, age, income, self-image, and shopping habits. The results indicated that as the economic and educational levels of the 105 women (of whom 72.5 percent were secretary-typists) increased, clothing became a medium for self-expression. As the two variables decreased there was greater variation in clothing, indicating that clothing choices may be related to a person's concept of his social role. She also reported that the participants considered clothing selection in order of; first, acceptability to the work environment; second, coordination with existing wardrobe; and third, suitability and becomingness to the individual. Fit and

size were ranked second as selection factors. Department stores, specialty shops, and high fashion stores, in that order, were preferred for shopping.

Nelson (1975) in studying clothing perceptions and preferences of executive secretaries in relation to their roles reported that secretaries considered clothing an important factor from both the physical and visual aspect as a means of projecting both the company's image and the individual's self-image to fellow employees, clients, and themselves. No significant difference was found in clothing perception as it related to the secretarial position and the woman's age.

Allan (1973) researched clothing attitudes and purchases of employees in a company without a dress code. Of the 153 female and male employees surveyed, over 96 percent indicated they had also worked for companies with dress codes; two-thirds indicated they would wear different clothing if a dress code were implemented, even though they might be less comfortable. Further, clothing would differ for various jobs. Position and age influenced purchasing habits more than did any other factors. Clothing attitudes would vary little if a dress code were adopted.

Fashion awareness among men was studied by Golightly (1974). Age was not a significant factor in fashion awareness and acceptance; higher educational income levels, however, were positively correlated with acceptance of current fashion. The frequency of planned and impulse purchases decreased with age. Planned purchases increased, however, as the number of years in formal education increased. The importance of differentiating between fashion awareness and fashion acceptance was emphasized.

Pershing (1974) studied specific clothing practices of male faculty members. She concluded that though younger faculty members expressed greater versatility in their acquisition and use of clothing, they also discarded more out-of-style garments than did other male faculty. Furthermore, clothing was considered an important aspect of professionalism by men of higher academic rank. Professional dress was considered by men from 21-40 years and over 51 years of age to include dress slacks, dress shirts, sports jackets, suits, and ties or bow ties. More than 50 percent of the men purchased their clothing themselves with the frequency of purchases occurring once every six months to three years. Solid colors were preferred more for slacks, though no relationship was established for color preference and professional rank.

Though clothing purchases are considered to be a reflection of personal attitudes and values, some people select clothing only for convenience and comfort, others for serviceability, and others for low cost or quality as well as accessibility. Martin (1975) reported that a group of women considered price more important than color or fabric. Those who purchased clothing, as opposed to those who did not, considered more than just the brand name.

A recent college student survey (Clothes Magazine, 1977) indicated that female students selected clothing based first on fit, then on style, price, color, fabric quality, brand name, and finally care. Reasons for shopping were the availability of merchandise, brands carried by a store, and prices offered. The reasons given for rejecting certain clothing stores were: 1) merchandise was hard to find; 2) items were too similar; 3) items were too expensive; 4) shopping was

frustrating, boring and time-consuming; 5) stores were crowded; 6) poor service; 7) clothing fit improperly. Over 65 percent of the students surveyed reported shopping for specific items and rejecting any item not fitting their actual needs. Though more students shopped in specialty stores, the store's selection of merchandise was the principle reason given for store selection.

Though clothing purchases are generally an individual matter, many variables have been shown to influence decision making. Just as color selection is a reflection of a person's individuality, so are clothing decisions a reflection of one's life (Horn, 1975; Ryan, 1966; Kefgen, 1974). With increasing discretionary income and the infringing expense of clothing, people can be expected to exhibit continued individuality in their purchase and use of clothing.

Summary

Approximately 15.6 million disabled people live in the United States. Chronic health conditions or physical impairments are the causes of these disabilities. The physically disabled population are characterized by rural residency, youthfulness, low educational attainment, underemployment, and a variety of disabling conditions.

Disabled people face many problems which begin at the onset of the handicap. Those people, who become involved with the disabled person during rehabilitation, must provide the necessary motivation for the person to regain physical strength, self-confidence and courage to confront the daily problems of living as normally as possible.

Though great strides have occurred to eliminate discrimination, disabled people are not considered equally with non-disabled persons

especially in the employment process. Clothing can play an important role in the self-concept and appearance of the disabled person in his search for employment and retainment of a job. It can also positively or negatively affect the relationship a physically disabled individual might have with customers or co-workers. Clothing characteristics of the non-disabled population were discussed in order to provide a basis for comparison in the selection, use and care methods of handicapped and non-handicapped people.

Several sources have indicated the need for more research in the use of clothing with the rehabilitation process, employment, and as a stimulus to the improvement of the self-concept for the physically disabled person. Little information and research is available on the social-psychological aspects of clothing for the disabled.

CHAPTER III

METHOD AND PROCEDURE

The purpose of the research was to identify specific clothing problems of physically disabled people in public contact employment. The lack of available information indicated a need for research in the area. The rehabilitation process aids in the necessary readjustment of the physically disabled person to society and self-sufficiency. Clothing problems become less important in the face of major physical and psychological readjustment; however, clothing can be a necessary part of the readjustment process.

The basic method used in the research was the case study involving physically disabled people. Dollars (1936, p. 3) stated that the ". . . life history is an account of how a new person is added to the group and becomes an adult capable of meeting the traditional expectations of his society for a person of his sex and age." He further stated (p. 4) ". . . that detailed studies of the lives of individuals will reveal new perspectives on the culture as a whole which are not accessible when one remains on the formal cross-sectional plane of observation."

Life histories of physically disabled people identified specific problems of clothing expectations, functions, needs, fit, care, comfort, preference for styles and colors, accessibility and performance. Determination of the existence of these and other clothing problems

were to provide a "way-station" (Dollard, 1936, p. 7) for developing hypotheses relating to clothing for the disabled in employment and the scientific verification of these hypotheses.

Selection criteria for the case study participants were dependent on the results of locating participants. It was originally planned that six participants would be selected representing the physically disabled population in relation only to their participation in public contact employment, the number of daily public contacts and the type of physical disability. Disabilities identified for possible study were persons paralyzed and confined to wheel chairs, those using braces or crutches, amputees and persons with developmental deformities. Physically disabled individuals who were considered included those with congenital defects and those who had become disabled later in life.

The initial efforts to contact individuals with disabilities involved several conferences with rehabilitation personnel in the Psychology Department at Oklahoma State University. Because previous studies had emphasized the problems of locating disabled people for study, the researcher attempted to contact as many sources as possible to obtain the names of potential participants. The individuals contacted were cooperative and enthusiastic about the interest shown in the clothing needs of disabled persons. Two contacts were made with individuals in Tulsa, Oklahoma, who were former Oklahoma State University students working at that time in public contact employment and who themselves were physically disabled. Both people were interviewed in an attempt to obtain possible background information for the interview schedule and names of persons who would be willing to serve as participants and to elicit ideas pertaining to needed research. These two

people provided 31 names of employed individuals with the specified types of handicaps. The initial contacts, selection and interviews were conducted during the summer of 1977. Letters (Appendix A) were mailed to these individuals explaining the purposes and procedures of the study. A questionnaire (Appendix B) was included to provide the researcher with the sex, type of handicap, location and type of employment, and the individual's number of daily public contacts in employment. These questionnaires were returned to the researcher as an indication of the person's willingness to participate in the study. Twenty-three questionnaires were returned. Conflicts with work and vacation schedules prevented the prompt return of several questionnaires. However, once the deadline was reached for the return of the questionnaires, the selection procedure was completed. In order to select the six participants an elimination process was established. First those who were not currently employed were eliminated. Then those not in public contact employment were eliminated. Finally those with fewer than ten daily public contacts were eliminated. From the remainder the researcher then selected those who met a representative type of handicap requirement. An attempt was made to obtain a balance of males and females.

An interview schedule (Appendix C) consisting of open-ended questions was developed to obtain detailed information regarding clothing attitudes, preferences, expectations, needs, fit, style, comfort, accessibility, care and work requirements. The questionnaire and the interview schedule were pretested with three individuals, one in Stillwater and two in Tulsa, who were handicapped with disabilities similar to those to be studied. The questionnaire and the interview

schedule were revised prior to their use; the process of contacting possible participants then followed.

Following the selection procedure six individuals were contacted by telephone to arrange a date, time and place for the interviews. Those selected included one male and one female paraplegic, one male and one female quadriplegic (all four confined to wheel chairs), one female who used crutches because of cerebral palsy, and a male polio victim confined to a wheel chair. Though education and race were not a selection factor, all participants were Caucasian and five had at least a bachelors degree and three had completed work beyond the bachelor's level. All participants worked in public contact employment and five were interviewed in their place of employment with the sixth being interviewed at home because of his work schedule.

Eight interviews were conducted in Tulsa, two in Skiatook and two in Enid, Oklahoma. Each participant was interviewed twice, involving six days to complete all 12 interviews. All interviews, except one, were a week apart. Due to a scheduling conflict one subject's interviews were two days apart. The purpose of spacing the interviews was to allow the participants time to reflect on pertinent aspects of their clothing situations. Each interview was tape recorded and ranged in length from 25 minutes to an hour and a half depending on the responses of the participants. No one's responses appeared to be inhibited because of the recording.

The interview schedule was divided into two sections. The first section, completed in one session, consisted of a brief introduction, followed by open-ended questions concerning the circumstances through which the participants acquired their handicaps, the extent of their

injuries or illnesses, and the resulting effects, their previous and current employment, changes in employment, position responsibilities, work clothing requirements, changes in wardrobes due to changes in position, clothing preferences relative to fit, comfort, style, fashion, care, fabric, safety, price, temperature, and ease in getting into or out of a garment, and finally, the effects of clothing on communication abilities, self-concept, and working abilities. The second interview also began with a brief introduction. Open-ended questions followed relating to clothing and dressing skills, information received during rehabilitation, pre-employment or employment counseling, and methods used to dress. Other questions were included on fabric and fiber preferences, cost and care of clothing, shopping habits, preferred, disliked and suggested features of shopping areas, clothing alterations and clothing advice for other people with handicaps and additional clothing needs of the participants. Following the second interview with each participant a photograph was made of the person wearing typical work clothing.

Information reported in the interviews was summarized and general statements were developed regarding any significant clothing situations and problems of the six participants. Recommendations were made as a basis for possible further research involving more disabled individuals.

CHAPTER IV

FINDINGS

Studies have been conducted which have established that portions of the physically disabled population do have special clothing adaptations which can pose problems for them. Few, if any, studies have revealed the effects of care dependency and the specific clothing attitudes of the disabled individual. The purpose of this research has been to reveal through six case studies what specific problems exist for people with different physical disabilities who work in public contact employment.

Case Studies

The six case studies reported in the following pages reflect the opinions and situations of the six participants. Every attempt was made by the researcher to present in as unbiased a manner as possible the content of the indepth interviews.

Subject A

Subject A was a single male who at the age of 18 months was involved in a car accident. The resultant condition, paraplegia, was caused by severe trauma to the spinal cord. Paralysis was present at the rib cage level and there was no sensation of feeling from that point down, though pressure could be detected. The paralysis resulted

in loss of bladder control, necessitating the use of an indwelling catheter and a leg bag for urinary control. Subject A also had scoliosis which is a lateral curvature of the spine. Though he was confined to a wheel chair, he could transfer from the chair to the bed or car by himself. He dressed himself completely while still in bed because the wheel chair was restrictive. He usually sat in bed using no special devices while dressing and then transferred to the wheel chair. His experiences when learning to dress were more or less trial and error with directional assistance from his mother as with most children.

Subject A had worked in a police station in a small northeastern Oklahoma town for four years. Following a one year delay due to health problems after graduation from college, he began working as a police dispatcher. Two and a half years prior to the interviews he became a juvenile officer. Prior to that time Subject A worked for an insurance agency in the same town while in college. His responsibilities included that of file clerk, receptionist, typist, and other general office responsibilities, all of which involved public contact. No special training was required for either job until he became a juvenile officer. At that time he took 160 classroom hours of training which were required by the State of Oklahoma for all policemen.

The job of dispatcher involved general office work, receiving public complaints, answering the telephone and handling the police radio and as he said, "Just talking to anyone who comes in for whatever they need to talk about." As juvenile officer he counseled with people, both youth and adults (parents, relatives, etc.) at the police station and at their homes, and was on call 24 hours a day on any case involving a juvenile.

The clothing worn by Subject A for both jobs differed considerably. Since neither position required a uniform, the final decision in clothing selection was his. He felt that the insurance agency position because of the location, the office situation, and the supervisory requirements, demanded that he wear sports outfits, slacks, sport shirts, and sometimes a sports jacket. The typical attire for Subject A in the police job, as seen in Figure 1, was usually casual clothing which included t-shirts, jeans and overalls.



Figure 1. Case Study Subject A Wearing Typical Work Garments

He mentioned specific occasions when the attire might change such as special guests or meetings with fellow officers when he had worn a leisure suit, dress shirt, and occasionally a tie. He reported that he

had done this to conform to society's expectations. Subject A in previous employment dressed to conform to people's expectations, but during college he decided that comfort was more important; and that people really judged a person by his feelings rather than his appearance.

Though he mentioned having a police uniform, he was not required to wear it. Subject A stated that it was more important for the juvenile officer and juvenile to feel at ease with one another. The existing unwritten dress code at the police station required that the clothing worn be neat and clean. Shorts and sleeveless shirts and unusual clothing styles were discouraged.

In selecting clothing to wear to work as well as for leisure, comfort and a good fit were considered very important to Subject A, though he explained that he really had never stopped to think why he wears one garment and not another. He purchased clothing that "feels good when I wear it." If it did not fit or could not be altered to fit, he did not buy it. Because of the scoliosis, he had attempted to conceal the curvature, not to satisfy his feelings or anxieties about it, but to make other people feel more comfortable around him. Their discomfort when noticing the curvature interfered with his ability to concentrate on the work relationship.

Properly fitting slacks created support for his back. Because the lower back was weak and there was a need for good support he bought slacks with a fairly high, large waistband. Finding slacks with the combination of a large waistband and short leg length was a problem. Shirts which Subject A purchased were usually the pull over type as opposed to the type that buttoned and required tucking into the slacks

waistband. Keeping shirts tucked in was a problem because of his shifting movements in the wheel chair. Wearing shirt tails outside the slacks also de-emphasized the curvature of the spine. Tails of suit coats and sport coats had been problems for Subject A because of their length and bulkiness in the wheel chair. Leisure suits were more preferable because of the shorter coat tails and because they did not require buttoning. The lapels of suits stood up and out when operating the wheel chair. Subject A emphasized the importance of comfort. Concern with the fit of his clothing had interfered with Subject A's ability to communicate with his clients.

Alterations made on Subject A's clothing to create a better fitting garment involved shortening the slack leg length and the length of shirt tails. Subject A's mother performed these alterations. When he was young and wore leg braces, zippers were inserted on the inside of the trouser legs in order for them to slide easily over the braces.

Two additional clothing problems relating to the wheel chair involved cuffed slacks and fabric abrasion on shirts. Cuffs on his slacks used to catch on the foot rest of the wheel chair when transferring. However, fashion changes had solved that problem. Subject A's shirts would abrade on the wheel chair behind the arms because of constant rubbing. Consequently, he preferred durable fabrics and well constructed shirts, though comfort was more important than fiber type. His fabric preferences included 50 percent cotton/polyester for warm temperatures and woolen fabrics for cooler weather. Nylon knits such as Banlon tended to snag and pill. For slacks he preferred woven fabrics for firm support and in shirts knitted fabrics for flexibility. He had been able to wear slacks for longer periods of time whereas

t-shirts only endured one year's wear. An increase in weight over the past six or seven years had resulted in his wearing clothing two sizes larger than in years earlier.

Subject A stated that shoes were difficult to put on and take off. Consequently, he avoided boots. A pair of shoes was worn for several years. He had had difficulty finding undershorts with legs, which were more comfortable than the brief.

Fashion and styles of clothing were not really important to Subject A. He wore a garment if he liked it. Many of his garments may have been out of style, but he still wore them. Subject A preferred colorful clothing in some situations, but did not express a preference for any one color. He did like colorful jeans, both striped and plain, and figured t-shirts, though he did not express any differences in his feelings when wearing any one color.

Garments Subject A purchased were wash and wear with the exception of a leisure suit. His mother took care of his clothes, however he realized eventually that responsibility would be his. Ease of care was important to him. His clothing was worn once before cleaning, and washing occurred at least every other day.

Subject A's clothing had been acquired as gifts and through occasional shopping trips. Since his purchase of clothing had been based on need, price was considered in relation to use, quality of the garment and reputation of the store. The price range for shirts was reported as six to eight dollars and for slacks ten to fourteen dollars. He frequently shopped locally and nationally known department stores in Tulsa and Sand Springs as opposed to men's specialty stores and discount stores. He did not shop by catalogue, though he was aware

of special clothing catalogues for individuals with special disabilities. If he were to purchase a complete suit, he stated he would probably go to a source which tailored clothing for the handicapped. Subject A reported shopping equally as often as his male co-workers and less often than his female co-workers.

Subject A preferred to shop at stores which were accessible for wheel chairs both outside and inside the store. He did not recall any of the stores he shopped displaying the International Symbol of Access, though two of the stores he frequented did have public elevators and one had only a freight elevator available for customers unable to use an escalator. Aisles in most stores were narrow and difficult to navigate in a wheel chair because of rack placement. Some racks of clothing were too high to reach from the wheel chair. Subject A stressed the need to consider accessibility in stores for those most severely handicapped, thereby intentionally upgrading their accessibility standards. He had obtained helpful assistance from sales personnel when he requested assistance. Only once or twice when shopping with someone did the salesperson talk to Subject A's companion, not to Subject A, as if he did not know what he wanted.

In discussing his attitudes toward dress and other people's attitudes toward his clothing, Subject A stated that because people in the community knew him well, they judged his work ability by his job performance, not by the clothing he wore. The effects of paraplegia had not limited the types of clothing Subject A wore. Instead, his personal preferences were the limiting factors. When people joked with Subject A about his "hippie" appearance he felt accepted. He did not believe people really noticed what he wore. Subject A's major concern

was to avoid alienation of his juvenile clients and their parents in order to facilitate more effective communication. His casual attire, longer hair and mustache had helped him to break the stereotype of the officers both parents and juveniles had seen. When considering clothing worn by other individuals, Subject A considered cleanliness the most important factor.

Subject A recommended that people with physical disabilities should strive to wear clothing that is neat and clean when working with the public. He expressed his concern of creating a good relationship with a person who might not be physically disabled by wearing clothing that would not emphasize Subject A's own physique. He stated, however, that he did not intentionally wear a garment to make the other person feel comfortable or uncomfortable.

When suggesting ideas for improving the availability of clothing for people with physical disabilities, Subject A suggested there be greater emphasis during the rehabilitation process on clothing that could be worn by an individual with a particular disability. Though he was aware of the need, specialized clothing might be expensive and prohibitive for many handicapped individuals. Subject A considered the period of rehabilitation very important. The process of learning what one needed to be able to dress and then adapting one's abilities to meet his needs were necessary steps in rehabilitation. This method had worked best for him over the years. He stated the need existed for specialized ideas for self-alterations to clothing and for meeting specific clothing needs. The magazine, Accent on Living, had included information about clothing modifications and alterations.

Subject B

Subject B, a married female with one child, was injured in an automobile accident during 1962 while in her late twenties. The injury occurred at the T-9 level which resulted in paralysis from the waist down. Though her back was broken, she reported that it had healed completely. Consequently, she was able to lift anything her sense of balance allowed. When her legs were paralyzed the ability to balance while sitting was lost and therefore precaution had to be taken to avoid falling in any direction. She compared the effects of paralysis to the slowing down of the organs in old age. Her greatest difficulty had been incontinence. During the first ten years after the accident Subject B used only plastic pants and disposable diapers which were available in adult sizes. She encountered several problems in using the special pants: 1) the diapers were not absorbent enough for adult use; 2) urine frequently penetrated her clothing; 3) it was necessary to wash clothing frequently; 4) slacks had to be lengthened from the crotch to the waistline to accommodate the added bulk of the diapers; 5) her skin became irritated by the urine; and, 6) changing the diapers while away from home was inconvenient and required privacy as compared to only having to empty the contents of a leg bag. For the past five years an indwelling catheter has controlled the flow of urine from the bladder to a leg bag attached to her upper right leg.

During her rehabilitation in the hospital subject B was given verbal instructions by the physical therapist and nursing staff, and practiced without their supervision, adapting the suggested methods to suit her own abilities and needs. Subject B's stamina permitted her

to be innovative and to require little assistance compared to other patients. The hospital staff did not know how or what to recommend to Subject B about the lack of bladder control, consequently she solved the problem herself. Though she did not mention what dressing method she was taught, at the time of the interview, she dressed while in bed after her morning shower. Throughout the interviews Subject B emphasized the importance of cleanliness. While on the bed she placed her legs by lifting them with her arms into the legs of her underwear and slacks. Then while lying down she rolled from side to side pulling up the garment a little at a time, requiring no assistance in this process. It required about 20 minutes to dress. A two-foot long stainless steel bar was installed above her bed which she grasped to help herself turn. Otherwise she would have to sit each time to turn. Subject B emphasized how essential her arm strength had been in enabling her to transfer from the wheel chair to the car, the bed, or bath by herself. Her strength permitted her to lift her wheel chair into her car.

Prior to her injury Subject B worked in her home in an urban north central Oklahoma town as a self-employed interior decorator. The job involved counseling on home decorating ideas using drapes, furniture and carpets. Subject B also made and hung drapes by herself for both individuals and local home shows. Subject B was trained by a neighbor who had also been an interior decorator, and then she continued to gather ideas through experience and readings.

Subject B's physical condition resulting from the injury prevented her from continuing employment. For five years she followed her own therapy program to develop every possible physical ability. Subject B returned to employment as an employment counselor with the Oklahoma

Employment Commission in the same town in which she had been previously employed and had continued in that position for almost two years. Her responsibilities, which were learned through on-the-job training, included receiving, reviewing and processing of job applications, as well as interviewing, counseling and referral of the applicants.

Distinctly different dressing requirements had been required for both of Subject B's jobs. The interior decorator's job required casual dress, which included neat and attractive slacks and blouses most of which she sewed herself. Neatness was a main objective in that job and in her current position.



Figure 2. Case Study Subject B Wearing Typical Work Garments

As seen in Figure 2, Subject B wore primarily pantsuits, maxi length dresses, and jumpsuits, but maintained throughout the interviews that pants had been the best fashion for her. She mentioned that pantsuits have remained the mode of dress for women in her office, which she considered a conservative environment. At home she wore more casual clothing such as caftans, jumpsuits and maxi length casual dresses. She explained that the unwritten dress code of the Employment Commission endorsed neatness and an appearance appropriate for public servants. She explained that the employees in the office, particularly the counselors, served as examples to the clients which positively affected the attitudes and confidence of both the clients and the counselors. Male employees were required to wear suits or slacks with sports jackets, including ties.

When selecting clothing for work Subject B explained that she considered comfort, neatness and warmth. She particularly preferred better pantsuits, cowl or turtle neck sweaters or blouses, and occasionally tailored shirts. Blouses which pulled on over the head must go on easily and quickly for her to maintain her balance while sitting. Tailored shirts had presented two problems for Subject B: first, when operating the wheel chair the blouses pulled apart, creating a gap between the buttonholes; second, the shirts had to be worn outside the waistline to conceal her protruding abdomen. In order to wear the tailored shirts, which Subject B preferred for garment beauty and variety, she added additional buttonholes or snaps between existing buttonholes and split the seams upward on the shirt tails allowing additional ease to cover her hips and abdomen, or she had to buy blouses in larger sizes which then created extra bulk. Subject B was

able to wear a ladies size 12 garment, which was the same size she had worn for 15 years. Often Subject B either made slacks legs longer or lengthened purchased slacks. Because Subject B was an accomplished seamstress she had successfully made these alterations. Jumpsuits necessitated that Subject B wear a body suit for stomach control to prevent protrusion of the zipper. Bodysuits, however, restricted the blood circulation, therefore she did not often wear them. She had substituted the long legged pants liners for the short under briefs since the pants liners had no seams other than the waist elastic. She explained that she had decubitus ulcers which were aggravated by sitting on seams and bulk for long periods of time. Pins were never worn because there was a lack of sensation.

Quality of garment construction and fabric type were considered essential by Subject B. Because of excessive strain from lifting and stretching, Subject B reported that seams pulled under the arm and required double stitching. Transference from the wheel chair to the car seat and handling of her legs had caused the fabric to snag. Subject B attributed her critical view of clothing to her sewing abilities. Specific fabrics which Subject B preferred included firm knits made from acrylic, polyester or cotton or a combination of polyester and cotton. Woven fabrics, particularly cotton, were avoided because they did not provide adequate ease for movement. Subject B preferred wool fabrics in cold weather, but could not wear wool above the waist due to irritation. Lack of sensation below the waist enabled her to wear wool slacks. She emphasized that her preferences for particular fabrics were due more to her desire to appear neat, and not necessarily to accommodate her disability. More accessories such as scarves and

jewelry were worn during the winter.

Subject B preferred a style of clothing which included elasticized waists, blouse closures with plastic zippers, over-the-hip blouses, long slacks, and most important adequate sleeve length and "banded" sleeves that remain close to the wrist to avoid dragging the wheel of the chair. Adequate ease in her clothing was essential. She determined fit when she first tried on a garment by looking, feeling with her hands, and ease with which the garment went on her body. Though Subject B had no sensation below the waist, she could detect pressure or see the tightness, but was unable to determine if the crotch length of slacks was adequate. If some part of her clothing below the waistline or her shoes were too binding, Subject B explained that the muscles of her legs spasmed as a signal to her to adjust the garment. This actually occurred during one interview. Subject B admitted that she occasionally wore clothing that was either difficult to put on or uncomfortable to wear in order to appear more attractive. The neater she appeared the less emphasis was placed on her physical condition. By appearing as neat and attractive as possible, Subject B reported that clients were positively affected. If her clothing was uncomfortable, she explained, her self-confidence or ability to communicate would be little affected in a one-to-one contact, but would affect her in front of a large group.

Ease of caring for her clothing had become more important since Subject B returned to work. Having less energy, working longer hours and disliking ironing all contributed to her preference for knits and their easy-care features. Her knits were washed by machine and hung on specially made racks to dry. Subject B washed her clothing after

every wearing, and therefore preferred not to invest in very expensive clothing. She made most of her clothing, explaining that she had tried to stay in a medium price range in purchased and home sewn clothing for both work and home wear. Subject B's sewing ability had increased her fashion consciousness and her desire to dress accordingly. She had taken a three-week course at a local fabric center and received printed booklets on procedures for fitting patterns and garments.

Subject B reported that shopping trips had been spasmodic, though they seemed to average about one a month. Her daughter usually accompanied her. Because she tired of her clothing, she enjoyed replacing or adding new clothes to her wardrobe occasionally. Subject B shopped in a variety of stores in her home town, Oklahoma City and Tulsa. She preferred shopping in the larger shopping malls and the inclusive department stores in these malls, as well as shopping from nationally known catalogues. Though she admitted having no need for specialized clothing, Subject B was aware of, but had not seen nor used any of the special clothing catalogues for individuals with physical disabilities. She mentioned three major shopping malls in Oklahoma City which are easily accessible for people with disabilities. Few curbs, doors which remain open, elevators, cleanliness, smooth thresholds, adequately marked parking and ramps were the major features of the shopping malls she preferred. Subject B disliked department stores with only escalators which necessitated using the freight elevators, although she reported that store personnel had been helpful in assisting her to the elevator. Sales personnel had usually been helpful and courteous and allowed her to return garments unworn and with all hang tags attached if she was dissatisfied with a purchase since she was unable

to try on a garment in a store. Narrow aisles stacked with boxes in discount stores and variety stores were her major complaint when shopping.

When discussing the effects of her dress as it related to her job and self perception, Subject B stated that though her co-workers had complimented her clothing, she felt it was a reflection of her neatness and desire to be in style due to her sewing interests. She related that she needed to look nice, clean and attractive to satisfy herself. She had avoided directly judging a client's dress and instead, attempted to create self-pride and self-confidence through a more personal approach, hoping that the individual would react positively and improve his or her appearance accordingly.

Subject B's primary clothing need was a short winter coat. Knee length coats became wrapped around her. Because she was usually cold, Subject B wore insulated underwear, a sweater or lap robe in the winter, though she tried to avoid bulkiness. She suggested that individuals with more limited disabilities should be aware of the catalogues with special clothing. She also recommended that knits be worn until a person develops knowledge and abilities to handle other types of clothing.

Subject C

Subject C, a single male from a city located in northeastern Oklahoma, was injured in an automobile accident during 1961 at the age of 23. His injury classification was quadriplegia resulting from a broken neck between C2 and C3. At the time of the interview he was able to move his left arm to operate his electrically powered wheel chair with the left hand. His right arm was stationary with a brace

on the arm and hand. He was unable for the most part to use his hands. Though the right hand was immobile, the thumb and index finger on his left hand moved slightly enabling him to grasp large objects. Subject C was able to sense touch over his entire body, but could not distinguish hot from cold, nor feel pain below the neck. He indicated an increasing awareness of sensitivity had occurred within the past four or five years and especially within the past year in his left arm, from which he had recently removed a brace, and in his left foot. Though he mentioned he was unable to account for this occurrence, he was always glad to have the improvement. He used an indwelling catheter and leg bag to control the flow of urine from the bladder.

Subject C resided with an elderly couple whom he reimbursed for his personal care. Following his injury he spent a year in the hospital. The next seven years were spent in a nursing home where he usually wore t-shirts, a lap robe and shoes when he had to be up. However, decubitus ulcers limited the length of time he could sit. He also developed and followed his own therapy program during these seven years. In 1968 he was referred by a rehabilitation counselor to the Okmulgee Rehabilitation Center where he remained for ten months. During his stay at the Center, licensed practical nurses assisted him in a program of Activities for Daily Living (ADL), which included learning dressing skills. Surgery on the decubitus ulcers permitted him to sit for thirteen or fourteen hours a day and to be more ambulatory. As a result of the increased activity and appetite, he gained thirty pounds. He was taught how to handle button hooks, coat hooks and other dressing aids. He explained that it was really impractical for him to use these aids since he also had to use his teeth, and it

required 30 to 45 minutes to simply put on a t-shirt, and then the shirt still had to be tucked inside the slacks by someone else. Though it did improve his self confidence in knowing he could perform the task by himself, the t-shirt was often wrinkled and wet from excessive handling. Subject C also mentioned an additional disadvantage to dressing himself. If he dropped one of the dressing aids, he had to wait until someone picked it up for him before he could continue. During his stay at the rehabilitation center he was advised not to wear socks with elastic bands since this would slow the blood circulation in his legs. The lady with whom Subject C was living dressed him and her husband sat him in his wheel chair. It took the lady 15 or 20 minutes to dress Subject C while he was in his bed.

Prior to his injury Subject C was in the Navy working as an aviation electronic technician. After his stay at Okmulgee, he attended college and completed a rehabilitation counselor-training program. His position at the time of the interview, a counselor at Goodwill Industries, Inc., involved counseling approximately 20 individuals employed in the sheltered workshop at Goodwill Industries. Subject C assisted them with problems in finances, housing, education, and other personal difficulties.

While in the Navy, before the injury, Subject C wore only uniforms. His clothing size had not changed. As seen in Figure 3 he wore knit slacks and shirts to work explaining that his style of dress did not particularly distinguish him from his clients. Until mid-summer he wore clip-on ties, but discontinued this when he noticed other male workers were not wearing ties. Goodwill Industries had a written dress code which required men to wear coats and ties and

discouraged the wearing of jeans, cut-offs, and very casual clothing. He explained that the economic situation of many employees limited the quality and variety of clothing worn. Throughout the interviews he stressed the importance of appearing clean and neat.



Figure 3. Case Study Subject C Wearing Typical Work Garments

Comfort and fit were important factors to him in the selection of clothing for work. Subject C avoided wearing jeans because the tight legs were difficult to put on and take off over the leg bag. Wrinkles in his slacks were uncomfortable and irritating, so these were pulled out from under him when he was first put into the wheel chair in the morning. He preferred to match his slacks and shirts as much as possible and wore primarily blues and greens. Brighter colors, with the

exception of a red outfit he owned, made him feel good about himself. He mentioned that the red outfit was too bright. He attempted to alternate the colors and combinations of clothing daily. Fashion was a factor in clothing selection, but because his clothing could be worn so long, particularly suits and sports coats, he sometimes did not appear as fashionable as he would have liked to appear. Subject C had changed the style of undergarments he wore, from the brief to the boxer style, because of discomfort from decubitus ulcers. Knee high knit socks, rather than thin nylon socks were worn and aided in keeping the leg bag in place on the lower leg even though the bag had straps attached to it which helped hold it securely in place. The socks also prevented the bag from protruding.

The only alteration made to Subject C's clothing had been to slit the lower center back seams of sports coats or suit coats to make them easier to put on and take off. He purchased slacks in a 32 or 34 inch waist size with a slightly longer leg length to accommodate his sitting. Subject C explained that waistbands appeared to be 2 to 3 inches larger than the waist when he put them on in bed, but the sitting position required that extra size. If a belt or the straps on the leg bag were too tight, the muscles in his legs spasmed as a signal for him to loosen them. He stressed that he bought clothing just like everyone else did. Subject C had to consider whether the left sleeve of shirts would catch on the chair's arm when he raised and brought his arm back over the chair. Older shirts sometimes caught on the arm and ripped. Fiber content was not as important as the fabric type; he preferred sturdy synthetic double knits which provided adequate ease in movement and were easily laundered. He gave special consideration to the time

required for clothing care, even though he paid someone for the service. This fact contributed to his feelings of independence. Subject C mentioned that his clothing was washed at home at least every other day so that he always had an adequate supply of clean clothing. Sport coats and ties were the only items which required drycleaning.

Subject C's clothing selection was limited only by his personal preferences for maximum comfort. He usually avoided bulky coats even though he dressed more warmly in the winter. Because of his contacts with clients, he preferred to set a good example of cleanliness and neatness in his appearance. If his clothing was uncomfortable or soiled he was more self-conscious, though Subject C explained that his attire had little effect on his handling of various work situations. His dependence on someone else to care for him and his clothing had at one time resulted in his clothing appearing soiled and wrinkled. He expressed appreciation for the positive comments he had received concerning his clothing and felt that people were comfortable in their relationship with him, but that this was not particularly due to the way he dressed.

The clothing Subject C purchased ranged from six to ten dollars for shirts and ten to fifteen dollars for slacks. His purchases were usually unplanned, and spontaneous, depending on whether he saw something he liked. His clothing lasted a long time; he was able to wear shoes four or five years with the inside of the shoe wearing out first. His desire to have a new item of clothing was his main motivation when shopping. Subject C preferred to shop in discount or department stores in order to find the least expensive item. He considered these factors important: first, his wardrobe needs; second, price; and third,

quality for the price. The availability of desirable prices and accessibility to the clothing were important factors in deciding where to shop. Though the stores he frequented generally did not have the International Symbol of Access displayed, Subject C reported that most stores displayed their clothing in an accessible manner, though often aisles were too cluttered. Inability to maneuver the wheel chair through the check-out aisles at discount stores was his main objection, and he suggested these store aisles be widened for improved accessibility to persons with physical disabilities. Because he was usually accompanied by someone during his shopping, that person handled the checkout procedure and assisted Subject C in reaching inaccessible items. Except for one department store, which had only escalators, Subject C used elevators to reach other floors in the stores. He reported store personnel had been helpful when he requested assistance.

Subject C recommended that individuals with physical disabilities should consider comfortable clothing a necessary selection factor in choosing clothing for work. He commented that one's preoccupation with an uncomfortable garment might interfere with the person's attitude toward other people. He also suggested that individuals with special clothing needs might receive tax credits, as they do for some medical expenses, for special clothing alteration costs as a way of alleviating such expenses for clothing, since many handicapped persons were unable to afford specially made clothing. Subject C maintained the attitude throughout the interviews that he really had no clothing problems, in that when he found a garment he liked, he purchased it, but that he was only able to do this because of his income.

Subject D

Subject D, a female and mother of two children, had cerebral palsy. The congenital defect had affected both legs, necessitating the use of crutches. At the time of the interview she was unable to turn one arm and was deaf in one ear. Because she had a petite stature she wore size 12 children's clothing and a children's size 2-1/2 shoes. Though she had not been involved in any rehabilitation program, she did attend a school for children with handicaps as a child. She was taught by her mother at the age of six to dress herself. The only limitation Subject D had in dressing was that she had to sit in a straight-backed chair in order to lift each leg into the slacks. Blouses with long back zippers were avoided because she had difficulty reaching them. Since she had little muscle control in her legs, Subject D had been unable to use a sewing machine, because they used either leg or knee controls. Consequently, she made alterations by hand, though she expressed an interest in learning to use a sewing machine. At the time of the interview Subject D lived and worked in a northeastern city in Oklahoma. She had been employed at Goodwill Industries for two and one-half years as a counselor. Prior to this position she was a special education substitute teacher in elementary schools. Subject D held a master's degree in special education. As a counselor at Goodwill Industries she counseled individuals on social, personal and work-related problems. She was also an active member of various social and governmental groups dealing with problems of people with handicaps. The primary requirement for her job had been her interest in and ability to work with people.



Figure 4. Case Study Subject D Wearing Typical Work Garments

The clothing requirements of both positions had been similar, professional appearing clothing, though Subject D explained the teaching position required "dressier" clothing. In the counseling position, as seen in Figure 4, she wore primarily slacks and blouses because they were more comfortable for her. Subject D explained that dresses hung shorter in the back than in the front because the crutches raised the level of the hem and any bending she did caused the hemline to rise. She also assumed a slightly bent stance when standing so that the crutches assumed some of the body weight. The dress code of the company prohibited the wearing of bare midriff tops, cut-offs, jeans, or underwear type t-shirts.

Subject D expressed preference for clothing comfort and proper fit. She preferred clothing which fit at the waist and loosely fitting blouses. When she purchased a size ten dress or slacks, they fit at

the waist, but the waist length in dresses was too short. Consequently she preferred to buy a children's size twelve which fit her waist length, then she took one-half to one inch tucks on each side of the waistline. Her crutches also caused the waistline to rise because of pressure on the garment under the arms. Subject D purchased a ladies size small or medium blouse, depending on the style and fit of the garment. She only purchased garments with zippers in the front or on the side. Blouses which button in front gapped because of underarm pressure from the crutches. Longer blouses with tie belts did not fit as snugly, and therefore, did not gap as much in front. Knitted pull-over blouses satisfied her need for proper fit and neat appearance, but again a larger size was usually purchased to allow adequate ease across the bustline.

Subject D explained that the style, neatness and fit of her clothing affected her self-concept in ways similar to that of other people. When other people noticed and commented on her clothing she felt good. Her work ability, Subject D explained, was judged not by her clothing, but instead by her individual personality and that her clothing did not distract from nor attract attention to her physical disability. Since style was important to her in clothing selection, she noticed the style of clothing worn by other people more often than any other feature.

Soft but firmly woven fabrics were preferred because they wore longer. Bright colors, such as oranges, composed her wardrobe. However, she explained that she avoided colors that were too bright or too pale. Greens were another favorite color, whereas blues were not because she had to wear many blue garments as a child. Subject D had had problems with the crutches wearing holes under the arms in loosely

knitted fabrics and woolen garments. Her preferences for synthetic fibers and knitted fabrics was primarily due to comfort and wash and wear care features. Subject D washed her clothing at home after wearing a garment only once. Very few garments required any pressing. Time limitations due to family and work demanded easy care clothing features.

Because of finances and the inconvenience of shopping, Subject D shopped only when it was necessary to fulfill a specific need. Price was a critical factor to her in clothing selection, and therefore she shopped for the best quality and fit for the least price. Discount stores and department stores in Tulsa were places Subject D shopped. Though she had purchased clothing from nationally known catalogues, she was not pleased with garment fit. She was not familiar with any special clothing catalogues for people with special clothing needs. Specific problems Subject D related to shopping were finding slacks in children's sizes which matched blouses in women's sizes. In department stores she had to locate, fit, and purchase slacks in the children's department; then in the women's department, usually located elsewhere in the store, she attempted to find a suitable garment to wear with the item. Discount stores which required payment for items in only one area of the store were much easier in which to shop. Dressing rooms were usually accessible in both types of stores, but because she would not purchase a garment without first trying it on, she required a straight-backed chair or a stool set against a sturdy wall to put on the garment. Sales personnel, she explained, were usually helpful in locating a chair for her or in carrying garments to and from the dressing rooms. She had experienced some sales people

who did not believe she was able to dress herself. She had not noticed any of these stores displaying the International Symbol of Access since she had no special problems. Escalators were avoided, so she normally used the stores' elevators, though they were sometimes inconvenient to find. She expressed concern in not being able to locate a satisfactory selection of children's size clothing or shoes which appeared mature enough for her to wear. She avoided shoes with big heels and thick soles and wore only shoes which tied. Other than desiring more children's size 12 slim slacks, Subject D explained that she had no serious clothing needs or problems.

Subject D was concerned that the poor financial status of many people with disabilities prevented them from affording properly fitting clothing. She also suggested that the general public needed to be made more aware of these people's needs through the mass media and a solution found to supplying handicapped people with less expensive, better fitting clothing. She explained that many people with disabilities need to be better informed of appropriate styles and fashions for various handicapping conditions.

Subject E

Subject E, a married male who lived in a northeastern Oklahoma city, contracted polio during 1949 when he was 18 years of age. He was unable to walk as a result and was confined to a wheel chair. He was self-sustaining, however, in that he was able to transfer from the wheel chair to the car, a chair, or a bed without assistance. Though muscle control was absent in the stomach and both legs, sensation was present. Subject E explained that due to poor circulation in the lower

extremities, he remained uncomfortably cool year round. He dressed while sitting in the wheel chair without assistance or use of any devices. Due to aging, his clothing size had increased over the last 30 years. He was unable to wear the same size clothing because his waist was four or five inches larger. The only instruction he recalled with regard to dressing activities during his recuperation was that he had to relearn how to put on his slacks. Other dressing techniques had to be learned by himself based on his abilities.

Subject E worked prior to his illness as an assistant manager of a nationally known grocery store chain. His job responsibilities involved continuous public contact both before having polio and afterward. His dress included slacks, sports shirts and ties. Due to his physical condition he eventually had to change employment.

Subject E's position at the time of the interviews was business manager of a large hospital complex in Tulsa. He was responsible for all institutional business activities, all of which involved contact with hospital staff, consultants and outside resources. His training for the position actually began as a patient in that hospital when he completed a correspondence accounting course. Then following college he returned to the institution. His position at the time of the interviews had evolved from the reordering of his past responsibilities. Though the hospital had an established dress code for most employees, it did not specify garments to be worn by non-uniformed employees. Management level employees were expected to dress in a businesslike manner, as seen in Figure 5, which reflected the status of their positions. Because Subject E considered suits and ties to be reflective of businessmen's appearance, he reported that he had always worn a suit

and tie, unless he had to return to his office on Saturdays knowing he would not be meeting anyone employed outside the hospital. On those days he wore slacks and sport shirts.



Figure 5. Case Study Subject E Wearing Typical Work Garments

Subject E's selection of work clothing, based on price and quality, usually resulted in a compromise between the two factors, but his prime consideration had been comfort; therefore he had suits tailored during the last eight or ten years in the men's department of a national department store chain. He indicated that \$125 to \$150 had been paid for a tailored suit and that occasionally a suit or sports coat had been found on sale. Subject E seldom found suitable items for less than \$100. When having his clothing tailored, the back pockets on the

trousers were eliminated because they were inaccessible; also, the pockets received excessive strain and often tore. The suit coat pushed up around the back of the neck creating a large uncomfortable wrinkle because of the constant sitting position. The tailoring had eliminated much of that problem. Trousers had been ordered in a slightly longer length to accommodate the slippage up the leg also caused by constant sitting. Subject E preferred that waistbands not rise too high on his waist or his stomach since the stomach muscles had atrophied and protruded. He was self-conscious of the protruding stomach, therefore, he had slacks tailored so that the front waist to crotch length was slightly shorter and held in the stomach instead of pressing the stomach muscles down and out. Though these alterations were done by skilled individuals, he was not aware of any available information on making alterations nor of any special clothing catalogues. Subject E mentioned also that he no longer wore boxer style underwear because it bunched and rode up the leg; though the shorter brief had been more comfortable, the bias leg band had sometimes been a problem due to binding.

Style and fashion were factors in clothing selection, but Subject E had worn suits until they became frayed. He indicated that a narrow lapel suit would not be worn. Cuffed slacks had been worn to maximize garment wear life. Subject E explained that two-button suits were not worn because they gapped when he wheeled his chair. He had, however, continued to wear the three-button suits completely buttoned even when they were no longer in style. As fashion became more casual, he left the suit coat unbuttoned. He attempted to dress so that his clothing would neither distract from nor attract attention to his physical

condition. Wool and synthetic blends were preferred for tailored suits because it had become difficult to find wool and silk blends. Subject E felt that the wool and synthetic blends were better looking but he had attempted to select suits which could be worn year round. Suit wrinkles had been a problem since he sat all day. Subject E learned through experience that silk was not as durable as wool, though his selection of a particular fiber for a suit had been based more on his desire for comfort than for any other factor. Knit fabrics were noted as a more practical fabric for people with physical disabilities since they stretched and appeared as neat as woven fabrics. Subject E felt woven fabrics were more fashionable than knit fabrics. Laundering was performed at home by his wife. Knitted shirts were more comfortable, but he did not wear knitted pull-on shirts because they usually had no pockets. The shirt pockets had become the substitute for his eliminated trouser pockets since he carried a billfold, keys and change. Most of Subject E's suits were professionally dry-cleaned, though in recent years he reported some of his suits had been successfully dry cleaned in coin-operated self-cleaners. Most of Subject E's suits were dry cleaned every four to six weeks.

Subject E preferred blues and browns for his wardrobe, but admitted that his wife had been helpful in incorporating variety into his wardrobe. He selected clothing to be worn to work on a rotation system. As each suit was worn it was placed at the back of the rack; the following day the suit on the front of the rack was worn and accessories chosen to match. Though he did not wear clothing to match his mood and had not been aware of any effect color or style of dress had on his work attitudes or abilities, he did express self-

consciousness concerning his atrophied legs and protruding abdomen and explained that his dress was restricted in that sense. He strived to maintain a professional profile at all times while at work and if he fell short of that self-image, he was affected. Because of his professional dress, Subject E had been stereotyped into the role of the professional even in regard to church activities. He explained that the only comments he received on his clothing were compliments, though he related that people judged another person by their dress and reacted accordingly. Shoes were one factor about dress which negatively or positively affected his working relationship. If a person who was well dressed wore scuffed shoes, Subject E felt that person should receive some instruction on appropriate dress. Because he was conscious of shoes, Subject E had purchased more expensive shoes, which did not scuff and marr as easily as the less expensive shoes.

Subject E preferred to shop at the larger national chain stores rather than at local department or specialty stores where clothing was higher priced, though not better in product quality. He usually purchased two suits a year, usually during the spring. He generally disliked shopping due to the crowds and the inconvenience. Though he had selected his suits and some ties for himself, his wife often purchased separate slacks, shirts and ties two or three times yearly. A suit purchase involved a visit to the store in order to select the fabric and the desired style and a return to the store when the suit was fitted. Subject E usually tried to seek the assistance of one particular sales person because this individual knew Subject E and his personal preferences. Poor accessibility to a freight elevator in one nationally known store and cluttered aisles in some other stores were

the only areas indicated as needing improvement for shopping accessibility. His wife had occasionally ordered some of Subject E's clothing items from a nationally known catalogue. Subject E reported that stores had been selected based on their convenience to his home and convenience while shopping. He considered also whether he could enter the store without assistance. Subject E had been instrumental in encouraging the elimination of many architectural barriers in Tulsa stores and frequented a store that had eliminated its barriers. He had observed the International Symbol of Access only in parking areas.

In discussing improvements for other people with disabilities, Subject E suggested that placing the International Symbol of Access in a store's advertisement might make the shopping experience more pleasant and less frustrating for those who were disabled, since they would have improved knowledge of barrier-free stores. He also suggested increasing the advertising in all catalogues of items that could be utilized by handicapped individuals. Subject E recommended that individuals with physical disabilities dress in order to blend with society, thereby avoiding extremes and accepting their special problems and dressing accordingly.

Subject F

At the time of the interview, Subject F was a single female living with her parents in a northeast Oklahoma city. She was injured in 1966 at 17 years of age in an automobile accident. She did not explain exactly at what level the injury occurred; however, the resulting condition, quadriplegia, had confined her to a wheelchair. She had no sense of touch below the level of the collar bone. Subject F reported

being cold regardless of the season. Though she was able to use her hands and fingers to write, sew, manipulate front buttons and zippers, and propel her wheel chair, she did not have sufficient arm strength to transfer from her bed or car to the wheel chair. She also used an indwelling catheter and leg bag to facilitate proper drainage of the bladder and prevent infections. Because of the leg bag and necessary adjustments to conceal it, she preferred not to wear dresses. She recalled while recuperating at Children's Medical Center in Tulsa that physical therapists tried to help her learn to dress. Lack of arm strength and balance, however, had prevented her dressing herself. Her mother put underwear on her, hooked her bra and by having Subject F roll from side to side, her mother pulled the slacks up. She then was transferred to her chair, selected her blouses from her wheel-in closet without assistance, and completed the dressing process. She was able to put on soft-soled shoes without assistance, but not hard-soled shoes.

Because Subject F was injured during high school and later attended and completed college, she had not been formally employed full time until six months prior to the interview. She reported that at the time she was injured the fashions did not include jeans for many occasions; usually only skirts and blouses were worn. Consequently her wardrobe needs had changed due not only to employment but also to fashion. She had been employed since February, 1977, as a receptionist for a pediatrics clinic in Tulsa. Her responsibilities included making patients' appointments, recording messages, and relaying helpful information to patients. She received no special training other than on-the-job experience. Though no dress code existed for the office, she was

instructed during the initial interview that jeans and extreme clothing were not allowed, but unlike the nursing staff, Subject F was not required to wear white uniforms. Instead she wore slacks, blouses, and pull-on tops as seen in Figure 6. She wore jeans, casual slacks, embroidered shirts and tops for informal wear.



Figure 6. Case Study Subject F Wearing Typical Work Garments

Subject F explained that her work attire reflected her desire both to conform and to appear business like. She preferred more tailored clothing for all occasions. Clothing was selected for work with comfort, warmth, and neatness in mind. Properly fitting slacks were essential. If they were too tight in the waist, they were uncomfortable and bothered her in addition to causing whelps on her skin from too

much pressure. Subject F indicated that ease and fit judgments for slacks were made primarily by trying them on and observing the ease with which they stretched as well as by inserting her thumb under the waist of the slacks to determine whether or not any extra ease existed. Though she purchased her clothing by size, she explained that every manufacturer used a slightly different sizing range. Allowance for adequate ease was made when purchasing fitted slacks with waistbands and zippers. Because she had long arms, Subject F preferred that garments have adequate ease and stretch so that they were not binding when she reached. A preference was expressed for knits particularly the gabardine knits. Corduroy fabrics and jeans were especially difficult to pull on because they did not slide easily. She explained, however, that her preference for any particular fabric was not due to her paralysis, instead it was due to the availability of fabrics, fibers and styles in stores and her concern for comfort, warmth and avoidance of ironing.

Most of Subject F's clothing had been made from synthetic fibers or blends of natural and synthetic fibers. She owned some garments which were 100 percent cotton, but washed them in cold water to avoid shrinkage even though the labels usually indicated the garment would not shrink. Acrylic fiber slacks, which she had worn, pilled. She preferred wool for warmth and had had no allergic reactions to it other than around the neck. However, she indicated that drycleaning costs were expensive. All of her clothing care was performed by her mother, though Subject F had pressed some items, particularly collars and cuffs of blouses. Fabric color and season of the year determined how many times slacks and blouses could be worn before cleaning. Cuffs

of blouses became easily soiled as a result of rubbing on the chair's wheels and on desk tops. Items had to be carried in her lap, therefore clothing became easily soiled. Most of Subject F's clothing, since she had to consider that her mother cared for her clothing, was usually washed and worn with only a few items requiring the special care of a drycleaner.

Her preferences for colors included natural hues with an occasional bright color for variety. She explained that though she had many different colors of slacks, she really had no favorite color. Her choice of a garment had been more important than choice of color. She preferred to follow fashion conservatively rather than ignore fashion in her garment choices. She indicated that uncomfortable clothing or clothing worn as a result of an impulsive decision affected her ability to put forth her best efforts while at work. She felt more secure and at ease when wearing comfortable clothing, but felt she had been able to disguise any uneasy feelings when communicating with patients or co-workers. She reported that nothing she wore would either attract attention to nor distract attention from the wheel chair. Subject F explained that everyone, based on their values, judged others by their clothing, though the clothing might not be related to what the person was really like.

Subject F reported shopping in the Tulsa area, usually accompanied by someone to assist her in maneuvering through the stores. She most frequently shopped in larger shopping centers where many kinds of stores were located. She preferred purchasing clothing in the larger department stores. Since she began working in February, the frequency of her purchases increased probably due to her need for more

professional appearing clothing. She avoided purchasing items strictly for special occasions. She strived to purchase medium priced garments, but sometimes justified the purchase of more expensive garments if she really wanted them. She had purchased moccasins from a special catalogue which offered larger sizes and a color variety. She usually wore these shoes because of swelling in her feet. She had had difficulty finding appropriate shoes which were attractive but more important, comfortable. Subject F was aware of catalogues for people with special clothing needs, but had not acquired nor used any. The stores where she shopped were usually accessible to her, but did not display the International Symbol of Access other than in specific parking areas, which she said were often violated. Though many of the large department stores were convenient and offered an assortment of prices, styles and fabrics, she reported that they were too spread out and confusing in arrangement. Though sales personnel had been helpful in assisting her, dressing rooms were too narrow for her chair. She could try on blouses and sweaters in the stores' dressing rooms, though she had to try on slacks at home where a couch or bed was available. Subject F also mentioned that the carpeting in the newer stores made it difficult to maneuver the wheel chair. Elevators were usually accessible to her, though in one nationally known store special assistance was required to use the freight elevator. Subject F explained that the higher level racks of clothing, as she expected, had been inaccessible to her. She expressed concern over the unavailability of larger sized short coats in fashionable styles which might accommodate her long arms and also fulfill her need for warmth.

Subject F indicated that she would advise a person with a physical

disability, though the advice would be dependent on the specific disability, to select clothing within that person's price range that could be cared for easily without the necessity of depending on someone else. She suggested that though nylon zippers were easily handled, the pull tabs were too small for someone with hand limitations to handle. The more decorative zippers were usually easier to manipulate. In addition she expressed a need for reinforced fabric over the elbows since this was an area in her clothing that wore out first.

Discussion

The case studies reported in the preceding pages relate the situations of each individual as explained to the interviewer. No attempt has been made to categorize these responses since the objective of the case study approach was to emphasize the varieties of existing situations and to delve into the causes and consequences of each of the six person's disabilities. The interview method of data collection was expensive in relation to the amount of time and money spent commuting to the interview locations, since the researcher lived in Stillwater and the interviews were conducted in Tulsa, Skiatook and Enid, Oklahoma, requiring approximately a three hour round-trip drive. Forty-five minutes to one hour were allocated for each interview. These times varied, however, because of the varieties of detailed responses elicited. Each of the twelve taped interviews was transcribed and typed, requiring two or three hours per tape for transcription. Some assistance was acquired in this process.

Though the interview schedule was pretested some specific terms were confusing to the interviewees. Fashion and style, fiber, knitted

and woven, and rehabilitation had to be redefined during three of the interviews. A lack of fashion and textile terminology knowledge accounted for the misunderstanding. Fashion was explained as exemplifying the most current clothing on the market, while style included the more traditional characteristics of sleeves, necklines, waistlines, hemlines, etc. Clothing the interviewer or respondent was wearing was used as examples of fiber types and knitted and woven fabrics. It would have been much more effective to have prepared and taken to the appropriate interview swatches of fabrics including a woven and a knitted fabric and additional swatches of fabrics constructed from natural and man-made fibers. Even a color wheel could have been used to describe warm and cool colors. Rehabilitation was explained as including recuperation time in a hospital or convalescent situation. Interpretations varied for open-ended questions which concerned the person's reactions to wearing a garment in a certain situation. For example, question 28 on the first interview, "Do you feel differently about work when you are dressed neatly . . . as opposed to casually?" There was a question with four of the respondents inquiring if this meant how they felt physically or emotionally. The question was intended to elicit emotional reactions as it affected their work situations. When this was explained, the respondents usually adjusted their remarks to include emotions.

The color photographs proved to be helpful in describing each participant. However, for publishing purposes black-and-white glossy photographs would have printed with much greater detail.

The clothing needs of the employed physically disabled person, though not totally different from the non-disabled person's, do present

some unique situations. Knowledge of these situations and possible solutions might be helpful to rehabilitation counselors and others involved in the rehabilitation or hiring process. The more recently disabled person, since he may not as yet have adapted his abilities to meet his needs, could benefit greatly from specific clothing advice. Assistance to help the person overcome obstacles in the rehabilitation process cannot be overlooked. Advice on clothing could be helpful in promoting greater self-confidence and self-esteem. Several general statements concerning clothing topics on which to advise follow:

1. Advise the disabled on the selection of fabric types which provide maximum flexibility, warmth, attractiveness, and durability for garment design and stress needs.

2. Encourage the disabled to select and purchase fabrics which can be easily cleaned by the individual or by someone else.

3. Clothing should be selected which can be easily fastened, such as garments utilizing Velcro, zippers with large pull tabs and front closures.

4. Clothes should provide enough ease in circumference and length to cover the legs adequately and conceal a leg bag, braces, or other apparatus.

5. Encourage the disabled person to locate in his vicinity clothing alterationists, seamstresses, special clothing construction companies, or sources of special adaptation ideas.

6. Be aware that the disabled individual prefers colorful, stylish clothing, in order to avoid any unnecessary differentiation from other people.

7. Advise the disabled on appropriate dress for various

employment positions.

8. Encourage the disabled to select clothing which is attractive and psychologically comfortable.

9. Advise the disabled on clothing which is appropriate for appearance as well as for physical comfort. Types of garments to be avoided are outer and under garments which are too constricting, tight belts, long sleeves with loose cuffs, light colors which soil easily, and loosely woven garments among others.

10. Advise the individual on the accessibility of clothing stores and any special problems they might encounter, such as exterior barriers, narrow check-out and merchandise aisles, and high clothing racks.

11. The disabled should try to be assertive in their shopping and decision-making and less dependent on others to do the talking.

12. For the wheel chair bound person shoes should be purchased that will be satisfactory for a long period of time (1-7 years) since the shoes receive little abuse except on the interior.

13. Purchase clothing for function, durability, versatility, and quality.

14. Advise the individual on management of the clothing budget.

These topics are only suggestions. The individual characteristics, background, interests, and resources of the disabled person will determine the extent to which the topics are covered. Awareness of rehabilitation personnel to these possible areas of interest may help prevent unnecessary frustration to the individual. Clothing does assume an important role in the re-adaptation of the person to his environment.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of the study was to determine through case studies what clothing problems existed for the physically disabled individual working in public contact employment. Six individuals with a variety of disabilities who were employed in a variety of public contact work situations were interviewed in depth concerning their selection, use and care, and attitudes toward clothing. The results of these interviews were not generalized to be characteristic of the total disabled population. The study was designed to serve only as a basis for additional more detailed research concerning clothing for working disabled individuals.

Conclusions

Several conclusions were drawn from the six interviews. First, though all six men and women had visible physical limitations none of the six really considered themselves as having problems, particularly clothing problems. Each was a healthy individual capable of performing any task within his or her physical limits. The degree to which the injury, illness, or congenital defect affected each person created varying physical needs and limitations. No two individuals were exactly alike in their physical stature, abilities or personalities, thus emphasizing the uniqueness of each individual's condition, ability

and inability.

The employment positions of the six people demanded frequent daily contact with co-workers and clients. None of the six individuals considered clothing selection for their jobs to be unique; none required any special clothing to be able to dress or to appear properly dressed. It was of greater concern to these individuals to satisfy their own expectations of the clothing standards for the positions they held. The wearing of clothing which characterizes the position has been shown by Walter (1973), Nelson (1975), Allan (1973) and Spence (1969) to be an important consideration of employed men and women without disabilities. The clothing worn varied according to the person's work role. Other than the need to appear work related, clothing also became a health factor, particularly when it constricted the body or restricted movement. Clothing assumed importance in maintaining a clean, neat appearance at all times.

Dressing skills requiring the least effort for the subject or the person assisting him in dressing were developed and accepted as a fact of life. Little assistance or information was available other than encouragement to any of the people throughout their experiences with disability. This factor was supported by Bright (1974) in her study indicating the lack of information used by occupational therapists in Tennessee and in Williams' (1975) study of handicapped men.

Though each individual reported some garment alteration none purchased special clothing. They selected, purchased and wore their clothing as did other people regardless of their disabilities. Any changes in their wardrobes resulted more from job requirements or strong personal preferences than from their physical disabilities.

Any changes in their wardrobes resulted more from job requirements or strong personal preferences than from their physical disabilities. A need was expressed for more information to be made available to disabled persons concerning appropriate clothing that could be worn with specific disabilities. A greater volume of moderately priced clothing, also, could be made accessible to the disabled since the majority of the six people expressed concern over the expense of clothing and limited income.

Recommendations

The self-limiting nature of the case study approach emphasized the need to further explore the clothing needs, and especially the clothing attitudes of the physically disabled. The following recommendations could assist in improving clothing selection of employed physically disabled persons:

1. ~~Clothing information~~ resources should be made readily available to medical, rehabilitation and employment personnel for use in counseling and understanding the needs of the physically disabled.
2. Clothing selection, use and care information might be incorporated into rehabilitation and counseling programs.
3. More emphasis might be given during rehabilitation to fabric selection for garments in order to improve fit and care thereby increasing a person's independence.
4. A clothing consultant employed in a statewide capacity to serve groups and organizations which work specifically with people who are disabled could facilitate improved communication

among groups conducting clothing research and those with special clothing needs.

5. Improving the accessibility to retail clothing by widening aisles and lowering racks where feasible would make purchasing by the disabled individual a less frustrating task.

Recommendations for further research include the following:

1. Survey a larger sample of employed physically disabled people to determine whether similar clothing attitudes and practices exist.
2. Survey occupational and physical therapists, and rehabilitation and employment counselors to determine the degree of clothing information awareness, and how this information is used with clients.
3. Survey the available resources of disabled clothing information to determine whether or not a compilation could be made to more efficiently distribute the information to the necessary sources.

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APPENDIX A

INITIAL LETTER TO POTENTIAL CASE

STUDY PARTICIPANTS

Dear Mr., Miss, Mrs. _____:

Your name was suggested to me by _____ as someone who might be willing to participate in at least two interviews for research concerning clothing problems of physically handicapped individuals employed in public contact employment. By sharing your experiences and feelings concerning your clothing, we may identify clothing problems of other handicapped people and find answers to these problems.

I am a graduate research assistant at Oklahoma State University in the Department of Clothing, Textiles and Merchandising. I am presently doing research on the clothing problems of employed physically handicapped people under the direction of Dr. Lavonne Matern, Assistant Professor of Clothing, Textiles and Merchandising at OSU.

I will be interviewing six people. If you are interested in participating in this project, please return this questionnaire by June 23 in the enclosed self-addressed, stamped envelope. This information is needed prior to the interviews. All information will be kept confidential. During the actual interviewing and reporting of the results, names will not be used. However, I do need your name on the questionnaire.

Thank you for your assistance. I will look forward to receiving your signed questionnaire by June 23.

Sincerely,

Pam Brown
Graduate Assistant

Lavonne Matern, Ph.D.
Assistant Professor

APPENDIX B

QUESTIONNAIRE FOR SELECTION OF
CASE STUDY PARTICIPANTS

APPENDIX C

INTERVIEW SCHEDULE

First Interview

The questions I am going to ask you in this interview will be helpful in determining if clothing problems exist for people with physical handicaps who are employed in jobs where they have direct contact with the public. Today's questions will pertain to your individual physical handicap, the type of employment you are in and your ideas on appropriate clothing for your work. I will be tape recording your responses, however, I hope this will not inhibit your answering the questions. Your name will not be associated in any way with your responses in the report of this study. Hopefully, through your answers there will be better availability of clothing and clothing literature for people with physical handicaps.

1. In the questionnaire which was mailed to you, you described your physical handicap. Is there any other information concerning your handicap which would help me understand your abilities or disabilities?
2. When did you acquire your handicap? What was the cause?
3. Were you employed prior to becoming handicapped? If not, what did you do? (If birth defect or acquired soon after birth) have you been employed prior to the position you currently have?
4. Describe your work at that time. What were your responsibilities?
5. Did you have direct contact with the public in this job? Probe- Did you talk face-to-face with customers?
6. Were you specially trained for the job?
7. Did you have to change jobs because of your physical condition?
8. Tell me about those changes.

9. How long have you been employed in this present job?
10. What are your job responsibilities? Did you receive any special training for this job?
11. Think for a moment about the kinds of clothing you wore prior to having this job and the types of clothing you wore prior to becoming handicapped. (If not a birth defect) Did the clothing you wore for work differ from those you wore for other occasions? If so, how? Why did you select that type of clothing for work?
12. Are you now able to wear the same size of clothing you wore prior to becoming disabled? Probe-Did you have to make changes in the clothes in order for them to fit? (If birth defect) Have you had to make changes in the size clothing you wear?
13. Describe the types of clothing you wear for leisure times?
14. Describe the types of clothing you wear for work.
15. Does the company you work for require or provide uniforms for the employees?
16. Does the company have a written dress code for employees? If so, what type of clothing is encouraged or required?
17. (If no dress code, for women) Do you wear slacks, dresses or both to work?
18. (If no dress code, for men) Do you wear suits, slacks and shirts with ties or casual clothes to work?
19. Why do you wear these types of clothes? Probe-Do you wear them to appear businesslike, because of the dress policy, to conform, to appear neat, to be comfortable, or any other reasons?
20. When selecting clothing to wear to work what factors do you consider?

21. Are changes made in your clothing to make them fit better? If so, what kinds of changes or alterations are made? Who makes these changes? Probe-When you buy a blouse or pair of slacks do you have to alter them in order to be able to wear them comfortably?
22. How important to you is comfort? Fit? Colors? Styles? Fashion? Care? Price? Safety features? Ease in getting into or out of the garment? Type of fabric? Fiber content or fabric construction?
23. Is warmth or maintaining a cool temperature important to you in selecting clothing?
24. Are there certain fabrics you must avoid because of physical problems? Are you aware of the difference between knitted and woven fabrics? Probe-Are knit fabrics more comfortable to wear than woven fabrics?
25. Are there certain types of equipment, such as braces or a urine bag, which you must use, that affect the type of fabrics you buy? If so, what are the advantages and disadvantages of that particular kind of fabric?
26. When you are dealing with people in your work does the clothing you wear affect how you relate to these people? Probe-For example, if your clothing is uncomfortable, how does this make you feel? (Around people or by yourself)? Do you feel secure and self-confident? Are you better able to communicate? Do you feel shy and withdrawn?
27. Is fashion an important factor in how you dress? Why?
28. Do you feel differently about your work when you are dressed neatly? Casually? Please explain.

29. Does your handicap or physical condition limit the kinds of clothing you can wear? Explain?
30. Do your co-workers comment on the clothes you wear? What kinds of comments do they make? How does this make you feel?
31. Do you think people, either co-workers or customers, judge you and/or your job performance by the clothes you wear? If so, in what way?
32. How do you react to the types of clothing other people wear?

That concludes the first interview. Thank you for your candid responses to these questions. During our next interview I will be asking questions concerning your dressing skills, how and where you purchase your clothing and how you care for your clothes? One request I have of you for the next interview is that you wear a garment that is typical of the clothes you wear to work. I would like to take a picture(s) of you dressed in these clothes so that I can show in my report of our conversations the type of clothing you wear to work. Again, though, your name will not be associated in any way with the picture or your responses to the interview questions.

When and where would it be convenient for you and I to meet for the second interview? Thank you again for your cooperation.

Second Interview

In today's interview I would like to ask some questions relating to your dressing skills, how and where you purchase your clothing for work, how you care for your clothing, and changes you have made in your wardrobe. As I mentioned at the first interview, I would like to take a picture of you at the end of this interview so that I will have an example of how you dress for work.

1. During your rehabilitation, were you taught to dress yourself? If so, by whom? Probe-For example, were you taught by a therapist, a friend, another patient, a relative, or were you self-taught?
2. Tell me about the methods you use to get dressed in the mornings?
3. Do you require some help in getting dressed? If so, who helps you? How?
4. (If no one helps the person) Do you dress in bed, with the aid of mechanical devices? Please explain.
5. Does your ability or inability to dress and undress affect your selection of clothes to wear to work? Probe-(If applicable) Do you have to select certain types of clothing to be able to go to the bathroom by yourself at work? What features are included in the clothing?
6. Are there certain fabrics and styles of clothing that you cannot wear or prefer not to wear because of your handicap? Do some fabrics or styles bind or abrade your skin? What do you do about this?
7. Are there certain fabrics or styles of clothing you cannot wear because of difficulty in handling at work? Please explain.
8. What type of counseling or information did you receive during your

rehabilitation or pre-employment situation that pertained to dress or clothing? When did you receive this information? Was it printed or verbal?

9. Which fabrics do you find most suitable to wear? Probe-synthetic or natural? Which of the synthetics-nylon, polyester, acrylic?
10. Please describe these fabrics. Are they stiff or clingy? Are they warm or cool? Why do you prefer these? Why do you dislike that type?
11. Which styles of clothing do you find most suitable? Why? Probe-For example, do you prefer kimono sleeves, short sleeves, waisted blouses or dresses, belted or unbelted slacks, etc.?
12. Do you feel the clothes you wear distract from or attract attention to your handicap? In what way?
13. What colors do you like to wear to work? How do you feel about yourself when you wear warm or cool colors?
14. How do you like your clothes to fit? Probe-tight or loose?
15. (For quadriplegic or paraplegic) How do you determine how well something fits without sensation?
16. Tell me how you judge how well a garment fits? Probe-Should it go on easily over your head? If it fastens, where should the fastenings be located and what kind should they be?
17. What price range clothing do you purchase? Probe-For example, what would you pay for a pair of slacks or dress or blouse or shirt and slacks?
18. Do you buy clothes which are specially tailored for you? If so, what do you pay for specially made clothes or special alterations?
19. What differences in price exist for the clothing you buy for work

- and the clothing you purchase for leisure wear?
20. Tell me about your clothes shopping habits.
 21. How often do you shop for clothing you wear to work? Is it based on need?
 22. Would you say you shop more or less often than your co-workers?
 23. What do you look for when you shop for clothing? Probe-Do you look for quality, price, etc.?
 24. Where do you buy your clothing? Probe-Do you shop in retail stores or by catalogue? Which stores or which catalogues do you use? Which catalogues are you aware of which produce clothing for people with physical disabilities?
 25. Which stores do you shop most often?
 26. What features about the stores do you like? What do you dislike about them? Probe-Do they display the International Symbol of Access? Are they really accessible? How do you get from one floor to the next? Is there an elevator available? How accessible are the dressing rooms? Restrooms? What kinds of assistance do you receive from the sales personnel? What suggestions would you make to improve these situations?
 27. Tell me how you care for the clothing you wear to work?
 28. Where do you wash or dry clean your clothing? What assistance do you require? How often?
 29. What special care, if any, does your clothing require? Who does this? How often? How many times do you wear your clothing before cleaning?
 30. Tell me about the alterations or changes, if any, you make in the clothing you own to make them wearable for work. Probe-For

example, do you have to shorten or lengthen slacks, sleeves, etc.?

31. How did you learn about doing these changes? What printed materials are you aware of that tell about these alterations?
32. What suggestions do you have which might improve the availability of clothing for people with physical handicaps?
33. What would you tell a recently handicapped person about the clothing he or she should wear in work where there is contact with the public?
34. What additional clothing needs do you have?
35. Are there further comments you would like to make concerning anything we have discussed in these two sessions?

VITA 2

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Candidate for the Degree of

Master of Science

Thesis: CLOTHING PROBLEMS OF PHYSICALLY DISABLED PERSONS IN PUBLIC CONTACT EMPLOYMENT

Major Field: Clothing, Textiles and Merchandising

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