

Student Work

7-1-1986

A Survey of the Occupational, Community Living, and Leisure Time Strengths and Weaknesses of Trainable Mentally Retarded Adults

Janet K. Urban
University of Nebraska at Omaha

Follow this and additional works at: <https://digitalcommons.unomaha.edu/studentwork>

Recommended Citation

Urban, Janet K., "A Survey of the Occupational, Community Living, and Leisure Time Strengths and Weaknesses of Trainable Mentally Retarded Adults" (1986). *Student Work*. 2781.
<https://digitalcommons.unomaha.edu/studentwork/2781>

This Thesis is brought to you for free and open access by DigitalCommons@UNO. It has been accepted for inclusion in Student Work by an authorized administrator of DigitalCommons@UNO. For more information, please contact unodigitalcommons@unomaha.edu.

A SURVEY OF THE OCCUPATIONAL, COMMUNITY LIVING, AND
LEISURE TIME STRENGTHS AND WEAKNESSES OF
TRAINABLE MENTALLY RETARDED ADULTS

A Field Project
Presented to the
Department of Educational Administration
and the
Faculty of the Graduate College
University of Nebraska

In Partial Fulfillment
of the Requirements for the Degree
Specialist in Education
University of Nebraska at Omaha

by
Janet K. Urban
July, 1986

UMI Number: EP74309

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI EP74309

Published by ProQuest LLC (2015). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

FIELD PROJECT ACCEPTANCE

Accepted for the Graduate Faculty, University of Nebraska,
in partial fulfillment of the requirements for the degree Spe-
cialist in Education, University of Nebraska at Omaha.

Supervisory Committee

Name

Department

James M. Wood

Learning and Special Educati.

Blaine S. Ward

Educational Administration

James Kellams
Chairperson

8-6-1986
Date

TABLE OF CONTENTS

	Page
LIST OF TABLES	iv
LIST OF FIGURES	v
Chapter	
I INTRODUCTION	1
Purpose of the Study	4
Delimitations	6
Limitations	6
Assumptions	6
Methodology Employed	6
Definition of Terms	7
Organization of Study	8
II REVIEW OF RELATED RESEARCH	9
III DESIGN OF THE STUDY	29
IV ANALYSIS OF THE DATA	31
V SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	63
REFERENCES	68
APPENDIX A	71
APPENDIX B	80

LIST OF TABLES

Table		Page
I	Number of Respondents by Response for Question Number Three	34
II	Number of Respondents by Response for Question Number Four	35
III	Number of Respondents by Response for Question Number Six	37
IV	Number of Respondents by Response for Question Number Eight	40
V	Number of Respondents by Response for Question Number Ten	42
VI	Number of Respondents by Response for Question Number Eleven	44
VII	Number of Respondents by Response for Question Number Twelve	45
VIII	Number of Respondents by Response for Question Number Twenty	55
IX	Number of Respondents by Response for Question Number Twenty-One	57
X	Number of Respondents by Response for Question Number Twenty-Two	59
XI	Ten Most Frequently Observed Work-related Problems Reported by Sheltered Workshop Supervisors	61

LIST OF FIGURES

Figure		Page
1	Residential Setting of Mentally Retarded Adults	33
2	Percent of Respondents by Response for Question Number Five	36
3	Percent of Respondents by Response for Question Number Seven	39
4	Percent of Respondents by Response for Question Number Nine	41
5	Percent of Respondents by Response for Question Number Thirteen	46
6	Percent of Total Responses by Category for Question Number Fourteen	47
7	Percent of Total Responses by Category for Question Number Fifteen	49
8	Percent of Total Responses by Category for Question Number Sixteen	50
9	Percent of Total Responses by Category for Question Number Seventeen	51
10	Percent of Total Responses by Category for Question Number Eighteen	52
11	Percent of Respondents by Response for Question Number Nineteen	54
12	Percent of Total Responses by Category for Question Number Twenty	56

Chapter I

INTRODUCTION

All human beings have a right to become all that they can be, whether that potential leads to great discoveries in the sciences or is limited to learning how to dress oneself. Seeking new techniques and methods to help each child reach his full potential is a challenge to every professional in special education. If we are going to meet the ever increasing challenges in the education of the handicapped, we must be constantly alert for innovative ideas and be willing to try new ways to help these students achieve their goals.

In 1976 Hoyt reported that only 4 million of the 11 million handicapped persons of work age were employed. This represents a 64% unemployment rate. When employment opportunities do arise, jobs are frequently offered to those with physical limitations rather than to those with mental handicaps. Employers hire the handicapped person who can perform the work effectively without additional supervision. Most often mentally retarded workers require a longer training period than the average worker. Their production rate is often slower than the non-handicapped counterpart or the mentally alert worker with some physical disability that does not interfere with task performance. Rusch and Schutz (1979) estimated that more than 75% of the retarded people in the United States could be self-supporting.

Since these individuals are students of the public school system until age 21, the responsibility for providing them with opportunities to learn employable skills rests with special educators. Determining

the most effective curriculum and setting for training the mentally retarded is a difficult task and has been the subject of debate.

There are basically three approaches currently in practice.

Some programs have followed a developmental timetable. The student is presented with tasks at or slightly above his mental age, and when those are accomplished, he proceeds to tasks at the next developmental level. Trainable mentally retarded persons function in adulthood with mental ages which range from approximately age 4 through age 7. Consequently, many mental age-appropriate tasks will have little relevance for these persons in a competitive work place and may, in fact, accentuate the discrepancies between these individuals and their non-handicapped peers.

Other programs for the mentally retarded have concentrated on training specific skills needed in the work place but have used artificial materials and artificial settings. This requires the worker to transfer the skill learned to new sets of materials and across other environments. Thus to train factory skills, a school might have the student sort various objects by color and shape for discrimination practice, or place pegs in a pegboard for training in manual dexterity.

Previous research has indicated little spontaneous generalization across stimulus elements (Schleien, Certo, & Muccino, 1984). It would seem, therefore, that school curricula should find ways to train students using actual materials and settings as much as possible.

In recent years, programs for the training of the mentally retarded have moved into the community to provide functional training

without requiring complex generalization. The problem with this approach is centered on selecting appropriate skills for training. Trainable mentally retarded students learn at a slow rate. Many tasks are attempted for several years before the student demonstrates competence. It is crucial, therefore, that the skills being taught are relevant and will actually be required in the student's adult life. Teaching non-essential skills is acceptable when dealing with normal students who have the capacity to transfer skills to related tasks, but it cannot be justified when training students whose capacity to acquire knowledge is so limited. When it takes years to learn a skill, educators must be certain the skill can be incorporated in a productive life.

Planning the curriculum for the trainable mentally retarded students is, therefore, a challenging task. Data are needed about the lives of these individuals in adulthood if the curriculum is going to reflect needed skills and behaviors. Each community is different due to geographical area, size, community attitude, and available job opportunities. Curriculum planners must know where their students are likely to be following graduation. They need to know whether they will be using public transportation, eating in restaurants, filling out personnel forms, so that the curriculum can be designed to train those actual skills if needed. They also need to know what job placements are available in their communities and what specific job skills are required in these placements. In addition, curriculum planners need to know what social deficits are responsible for most job loss and employer dissatisfaction.

Finally, curriculum planners need to know how trainable mentally retarded adults spend their leisure time. If their leisure habits are appropriate and fulfilling, they need to be incorporated into the curriculum to enable the students to develop some skill, interest, and satisfaction in worthwhile leisure habits before graduation. If appropriate and satisfying activities are not being engaged in, then curriculum planners must train these students in worthwhile pasttimes.

There is a need for research to be conducted in this area. Useful information can be gleaned from research obtained in other cities, but a great deal of data is geographically specific. Each community must conduct its own research if the curriculum is going to prepare the students for future work in that community.

Purpose of the Study

In 1986 there are approximately 400 trainable mentally retarded students age 5 through 21 residing in the city of Omaha, Nebraska. Although exact numbers are unknown, there are many hundreds more of work age currently living in the community. If these individuals remain unemployed, a significant number of citizens are deprived of a satisfying work experience and the community is deprived of productive citizens. Determining appropriate curriculum is a significant problem.

This issue is relatively new in our society. Educational programs for trainable mentally retarded persons at the public school level have been in existence in the Omaha community since the 1960s. The first 5-year-olds in the program at that time are the working age adults of today. Unlike other educational programs in our public

school system, educators have no background of previous experience to which they can refer.

The subject, however, can be examined. The metropolitan community has sufficient numbers of retarded adults living within it to provide an adequate sample for research. There are sheltered workshops in the community from which information can be obtained. School records are available to aid in locating some of these individuals and the Eastern Nebraska Community Office of Retardation maintains many group homes in the area from which subjects can be obtained.

There are significant numbers of trainable mentally retarded students in the public schools, and this will permit the compilation of data in future years on the adult lives of today's students to determine if curriculum changes introduced today do bring about changes for the better in the lives of these persons.

The purpose of this study was to determine:

1. What occupational skills are being required of trainable mentally retarded adults in Omaha, Nebraska?
2. What community living skills are being required of trainable mentally retarded adults in Omaha, Nebraska?
3. What leisure time skills are being utilized by trainable mentally retarded adults in Omaha, Nebraska?
4. What curriculum objectives do parents/guardians consider important in the educational program of trainable mentally retarded students?

5. What are the most frequently observed work-related problems in vocational training centers for trainable mentally retarded adults?

Delimitations

This study involves the population classified as trainable mentally retarded. Although similar concerns exist for educable mentally handicapped, severe-profound, and learning disabled persons, the subject is too broad to be analyzed in this study.

Limitations

This study is limited by the number of subjects available in the community and the willingness of caretakers and parents to share the information. Vocational opportunities and community attitudes change through the years, and the data gathered in this paper reflect the current conditions in Omaha, Nebraska. It will be necessary, therefore, to replicate the study at periodic intervals to reflect current trends.

Assumptions

It is assumed that information received from caretakers, parents, and vocational trainers is accurate and reliable and representative of the life skills of the subjects.

Methodology Employed

A survey was conducted among parents and caretakers of trainable mentally retarded adults in Omaha, Nebraska, to determine:

1. What occupational skills were being required of these persons. They were asked to state specific job categories of each position their ward had held since graduation, and to list each specific job responsibility.

2. What community living skills were being required of these persons. They were asked to state how their son or daughter got to work, i.e., whether they used public transportation, were driven by parents, rode in special vans, etc. They were asked questions concerning purchasing and eating meals while at work. They were also asked to list all household chores that the trainable adult was able to perform independently and which ones were attempted but not adequately accomplished.

3. What leisure time skills were being utilized by these persons. They were asked to list all leisure time activities they have observed the subjects engaging in, both solitary pursuits and group interactions.

An opinionnaire was conducted among supervisors of sheltered workshops to determine what work-related problems were most frequently observed in vocational training centers for the trainable mentally retarded. They were asked to state the problems they had observed and to place them in a hierarchy of frequency.

Definition of Terms

Trainable mentally retarded. For purposes of this study, trainable mentally retarded shall refer to any adult who was classified as trainable mentally retarded during his educational program. This term usually refers to those individuals whose intelligence quotient falls between 35 and 54 as measured by standardized intelligence tests.

Client/student. These terms are used interchangeably depending upon the study cited.

Organization of Study

Chapter I - Introduction

Chapter II - Review of Related Research

Chapter III - Design of the Study

Chapter IV - Analysis of the Data

Chapter V - Summary, Conclusions, and Recommendations

Chapter II

REVIEW OF RELATED RESEARCH

Over the last 10 years, competitive employment has come to be accepted as an important part of the normalization process for mentally retarded adults. The passing of the Rehabilitation Act of 1973 led to efforts to expand and promote employment opportunities for these individuals. But competitive placement is only the first phase for these individuals. Unless adequate systems are developed for maintaining them on the job, there can be no assurance that their lives have, in fact, been enhanced.

Ford, Dineen, and Hall (1984) addressed the need for extended follow-up on job placement of mentally retarded individuals. Eighty-two mentally retarded adults had been placed in food service jobs by the Employment Training Program (ETP) at the University of Washington since 1976. All of these clients met competitive vocational criteria before placement, received extensive on-the-job training and follow-up services. Yet the majority of clients continued to require support and retraining long after most agencies had discontinued services. Only 8 clients needed no intervention after 7 months on-the-job, and of 10 clients who looked for jobs on their own after quitting or being dropped from the program, only 2 were successful in finding employment and holding the job for 6 months.

Ford et al. (1984) examined the factors affecting job maintenance. They found that vocational issues, including insufficient speed, poor task completion, poor independence, and noncompliance accounted for 47%

of job losses. They pointed out that societal approval for working and satisfaction of accomplishment are learned responses that many retarded adults have had limited opportunities to develop. Also, public workplaces usually provided far less social reinforcement than the client had been accustomed to in his school or sheltered workshop.

It was found that social life/skill issues were involved in 42% of job losses. The lack of social or recreational activity after work was found to account for some clients delaying completion of work tasks due to having nothing to do when they got home. Maintaining acceptable grooming standards after being placed in apartment living quarters had also contributed to job loss.

Most mentally retarded adults had limited practice in appropriate decision-making. ETP job loss data indicated that 11% of job losses were due to clients terminating their employment even though they had no other employment alternatives. Other decision-making deficits were revealed in their decisions about getting up on time for work, scheduling appointments during working hours, and finishing tasks instead of leaving early. Many found it difficult to understand that maintaining employment must be one of their highest priorities.

ETP surveyed agencies providing job training and placement services to mentally retarded clients. Only about 50% did any follow-up training after the client was employed, and most of those agencies provided less than two weeks of training after employment. They were not set up to offer any long-term follow-up. If this situation is to be improved, funding systems need to be changed in order to provide financial support for long-term vocational services. A system also

needs to be implemented to reinforce agencies for maintaining persons in jobs, not just placing them.

Since retarded individuals are now in our public school systems until age 21 and are then turned out to "face the world," the responsibility of providing them with the basic prerequisite skills to function in the competitive marketplace falls upon the schools. Kokaska (1977) and Heller and Schilit (1979) surveyed experts in the field of education regarding the future for the handicapped. They concluded that curriculum materials must be improved, techniques must be adopted to incorporate career education into all classes from primary to age 21, and evaluation systems must be set up to monitor these programs.

Lombardi and Hotsinpiller (1979) reported on the results of a project designed to strengthen career foundation skills of elementary school-age mentally retarded students. They identified the following deficit skills: academics, communication, interest, leisure time, motor, responsibility, self-concept, self-help, socialization, and task performance. Results of the study indicated that these skills could be developed and strengthened.

In 1981, Miller reported on the dearth of data regarding curriculum and serviceable instructional alternatives for secondary (i.e., chronological age over 14) handicapped adolescents. Throughout the mid-1970s, the majority of special education programs had focused on strategies for preadolescent children. This had resulted in a lack of appropriate and reliable data from which to design and implement programs for secondary students. The data that were available had

come from research on delinquent, disadvantaged, and normal youth. This resulted in assessment, placement, and instructional programs that did not meet the needs of educationally handicapped youths at the secondary level. Although Congress appropriated money for direct services, it failed to provide funds for research and program planning. He indicated that state and local agencies were using dollars not specifically earmarked for research to hire new personnel rather than spend money for building a data base. The result of this situation was and is a large population of untrained, unemployable individuals who have the potential, with proper training, to become productive members of society.

Since 1981, several authors have addressed the issue of curriculum planning for moderately retarded youths. Langone (1981) pointed out that the routine and regulations of the public school system did not facilitate the use of appropriate activities by teachers. Often plastic money and dittoed assignments were used to teach skills that should more appropriately be taught in the community. Even bus skills were taught in simulated situations in the classroom. Opportunities must be provided for these students to practice these simulated skills with different persons and materials if transfer to practical use is to take place. A teacher must know what kind of environment the child lives in, where the child will probably be in 5 years or 10 years, what skills will be necessary for community placement before the teacher can incorporate these skills into his or her daily curriculum. In addition, living alternatives and career opportunities vary from

one community to another, making it necessary for the curriculum to be tailored to the function and resources of the specific community.

Another problem with curriculum development is selecting from all possible skills those that are priorities for a given type of student. However, adopting a philosophy of normalization can provide a guide that enables educators to focus on those skills that will make it possible for the student to function in the community. Browder and Steward (1982) proposed a community living or "top down" curriculum approach which selected adult skills and materials and used systematic instruction and material adaptations to teach mastery of those skills. This is in contrast to the developmental model which stresses normal child development as the content and sequence. Implementation of the community living approach in the public schools will require changes in current practice. Educators will need to rely on inventories and task analysis as well as assessment of the environment for educational evaluation instead of relying solely on standardized instruments, instruction will need to be focused on useable skills rather than teaching tasks that require generalization to other materials and settings, and all instruction should no longer take place within the four walls of the classroom. It will be necessary to move the educational program into the community.

Forness, Thornton, and Horton (1981) reported the development of an instrument to assess applied academic and social skills. They stated that samples of behavior under actual work conditions are among the best predictors of work success, and they favored task analysis as an effective means of vocational assessment. The Applied Assessment

Instrument (AAI) was developed in a prevocational workshop for developmentally disabled adolescents and has been used to evaluate these students to determine readiness for various vocational or hobby activities.

The first section of the AAI was designed to assess three reading skills: applied reading, comprehension, and direction following. This was accomplished by having the student perform a functional task after first reading the directions. The second section assessed applied number skills and requires the student to complete functional tasks related to counting, numbering, measurement, and telling time. The third section assessed social skills by observing the student at work on various tasks. Measurement included concentration, frustration point, ability to accept guidance, ability to work independently, care and respect for tools, and cooperation. The fourth section was devoted to applied motor skills which were measured by observing the student's ability to use common tools while performing functional tasks.

An applied assessment of this type is important for two reasons. First, it provides the vocational instructor a means of assessing whether a particular student has mastered the academic and social competencies essential for on-the-job training. Second, it provides the classroom teacher feedback as to whether his or her instruction is actually relevant to the vocational needs of the student.

D'Amico, Hursh, Lasky, and Shrey (1982) presented a model for the development, implementation, and evaluation of career education programming for students with special needs. It described a step-by-step process aimed at identifying, defining, and achieving goals.

Step one involved assessing the needs of the special student and was accomplished by exploring where the student was in relation to the world of work, what his or her career-related goals were, his/her levels of physical, interpersonal, social, and intellectual skills, and level of motivation. Step two involved identifying specific career education goals and was accomplished by exploring the student's career goals, helping him/her expand or identify the most realistic goal, and encouraging him/her to seek additional information about the career. Step three identified barriers and facilitators and was accomplished by assessing the knowledge, skills, and attitudes of the family/social and school systems, brainstorming and exploring available community resources, determining significant barriers that might exist in the family, school, or community, and integrating the individual into the career education process. Step four involved generating intermediate objectives and was accomplished by brainstorming and operationalizing objectives necessary to reach career goals, anticipating barriers and developing action programs to implement plans with existing barriers, and developing time frames. Step five was concerned with measuring the effectiveness of the program and was accomplished by examining IEPs, evaluating current progress, assessing whether planning and programming information was used, determining what community services were used, monitoring the coordination of program efforts and the quality of coordinated services, and integrating progress reports of each program activity. The authors felt that this program allowed career education to remain dynamic, responsive, and accountable to the individual student.

Cain (1984) pointed out that the students entering kindergarten in 1984 will be the college graduating class of 2001. This is the population that will function in the world of computers, automation, robots, telecommunication systems, and other electronic technologies. The ability of today's special education students to function in the world of 2001 will depend in part on their ability to use these technologies in their daily lives. He stated that the need is crucial for special educators to begin to plan instructional programs that will prepare their students to fully use the technology of the next century. At present, there is a variety of computer software available that will assist in communication for nonverbal students, enhance problem-solving abilities, and provide satisfying ways for mentally retarded students to fill their leisure time.

As stated earlier, Ford et al. (1984) found that 47% of job losses among mentally retarded workers were due to social life/skill issues. Bernstein (1981) addressed the issue of curriculum assessment and training in this area. The literature on assessment is confusing and incomplete and information on teaching those skills simply does not exist. Bernstein stated that in order for research on training interpersonal skills to progress, it is first necessary to develop a multidimensional model of interpersonal behavior and to operationally define the various types of skills needed to function successfully across various dimensions. He proposed a model of assessment that is based on three dimensions: behavior, the person, and the setting. The author felt that educators must first determine in what interpersonal interactions the individual must succeed in order to

function in his environment, then identify the skills necessary to engage in these critical interactions, then determine what skills are prerequisites for others. He offered no concrete intervention models to train these skills, but suggested that since effective procedures for teaching other skills have been developed by behavioral researchers, educators should look to behavioral procedures such as role-playing and modeling to teach interpersonal skills as well.

Cheney and Foss (1984) conducted a situational analysis in vocational settings to determine the nature and frequency of interpersonal problems of mentally retarded clients. Naturalistic observation, self-reports, and structured interviews were used to gather data. Eighteen mentally retarded workers were analyzed during one Monday through Friday work week. Of 335 problematic situations reported by supervisors and co-workers, 132 concerned problems with the supervisor. These included accepting criticisms, requesting assistance, following instructions, and accepting a new supervisor. Ninety problems involved co-workers and included problems about work tasks, problems caused by teasing or provoking, and personal matters. Of the 355 situations, 109 involved disruptive social behavior including excessive talking and laughing, inappropriate or bizarre conversation, and other miscellaneous disruptive behavior. The authors stated that strategies for coping with problems, responding to supervisors appropriately, and communicating with co-workers must be developed and taught to these persons before they are placed in jobs, or it is highly unlikely that many will achieve any job satisfaction or tenure.

Once the specific objectives for the curriculum have been agreed upon, the task of training the individual in those skills begins.

Hill, Kochany, and Wehman (1979) described the design and implementation of a community-based training program for mentally retarded adults. Their focus was on job preparation, training, and placement, with a secondary focus on functional independent living skills. They stated that a major weakness of many training programs is a lack of appropriate training content simulating jobs actually available in the local job market. They developed a systematic-type structure for teaching food service, janitorial, and utility-type jobs. Their program consisted of three parts: the industrial unit, the skill acquisition unit, and the pre-employment unit.

Students were placed in the industrial unit based on lack of potential for future employment in industry and with the view that sheltered workshop employment was the least restrictive environment for them. The unit was set up to closely resemble local sheltered workshops. Raw materials were obtained from the workshops, and the students were trained on the actual jobs available in sheltered employment locally.

Students were selected for the skill acquisition unit based on potential for future employment in the community. The purpose of this unit was to train the students on the isolated basic skills required for entrance into the next stage of the program--the pre-employment unit. The students were taught to sanitize tables and chairs, clear tables, breakdown trays, clean ashtrays, sweep, mop, wash dishes, scrub pots, clean sinks, toilets, windows, and mirrors,

wipe down equipment, and collect and empty trash. They also received training in grooming, communication, functional social skills, and job attitude and survival skills.

Once data indicated acquisition of the basic isolated skills the students were then moved to the pre-employment unit. This was a simulated dining hall, with a large kitchen and two bathrooms located on either side. Each work period the instructor messed up the area to simulate a working cafeteria. The student checked the roster to determine what job category he was placed in for the day, and then proceeded independently on his job. Job categories were busing the dining hall, preparing items for the dish machine, cleaning floors and wiping down equipment, and cleaning restrooms.

As task criteria within the center were reached, the students were given opportunities to practice their skills in the community. They served as volunteers at local luncheons, a free lunch program for the elderly, and volunteer service busing tables at fast food restaurants.

Still needed is a longitudinal study to determine the number of students placed in competitive/sheltered employment and their rate of success.

Bradley and Warrenfeltz (1981) reported on the task of contract procurement and training. In the United States, at that time, there were 841 work activity centers. These were defined as facilities that developed life-coping skills in severely disabled individuals to allow them to become more independent in their communities. They had been severely criticized in recent times for their inability to provide

clients with an adequate work component. Critics stressed the absence of a true work environment, lack of interaction with nonhandicapped workers, and the overall inadequacy of the work necessary to support the work component. The authors suggested a new model of training which they termed the job module. This was basically a work task with high point-to-point correspondence to local business tasks. Six steps were required to develop this program. The first step involved developing a working knowledge of local business and industry. Step two required determining priority locations within the community. The third step involved visiting the job site to determine if any jobs would be suitable for subcontract and acquainting the employer with workshop. In step four, the procurement person did a step-by-step analysis of the job components. Step five was the process of setting up the module to resemble the original job as closely as is feasible. Step six required determining the business or industrial production rate for the task to correlate with training expectations.

The advantages of this module include a curriculum that reflects the local market and the ability to procure subcontracts that in the past were considered too complex. This approach allows for advance training giving more able clients the opportunity to be trained on complex modules.

Several authors have examined a variety of techniques aimed at improving job performance of mentally retarded workers. Zohn and Bornstein (1980) assessed the effectiveness of a self-monitoring treatment package designed to increase productivity among moderately retarded sheltered workshop employees. The subjects were assembling

hospital kits for a local health care center. They were given clipboards and pens and told simply to record the number of kits assembled. Results indicated that the self-monitoring treatment did enhance productivity in some workers. However, other investigations with normal populations have indicated that these improvements are relatively transient in nature. Additional studies will be required to determine if this improvement can be maintained.

Schipp, Baker, and Cuvo (1980) studied the relationship of attention to task and productivity in a moderately mentally retarded woman. The worker was paid 20¢ an hour regardless of her production rate which was quite low. The worker was informed that she would be given gum when she kept her eyes on her work. The rate of attending more than doubled with the introduction of this treatment, however, the rate of production did not increase. This study illustrates that one cannot assume that decreasing off-task behavior will necessarily result in increased productivity. It would suggest that reinforcing productivity directly will be necessary for positive results.

A study was conducted by Davis, Bates, and Cuvo (1983) designed to increase the productivity of a mentally retarded woman working at a tray stripping job in competitive employment. Prior to the start of the study, the woman's rate of tray stripping was 55% of the competitive rate. A changing criterion design with graphic feedback was used for the experiment. Each day the experimenter would provide graphic feedback on her rate and the criterion for the day. As her rate increased, so did the criterion. In a 69-day study, the subject's rate of tray stripping increased from 55% of competitive

rate to 97%. In addition, the 11 kitchen workers were polled prior to the start of the study to determine their perception of the subject's speed. Of the 11, 10 felt she was slower than the average worker. By the end of the program, most of the co-workers felt the subject was as fast as some or most of the other tray strippers. This is significant since an important aspect of successful employment is the cooperation of co-workers and supervisors.

As was discussed earlier, Ford et al. (1984) found that lack of satisfying leisure skills had an effect on job performance. This is, therefore, an appropriate area for training prior to job placement. Schleien, Kiernan, and Wehman (1981) conducted a study to evaluate the leisure skills of six mentally retarded adults in a group home. Systematic observations were conducted during the leisure period following the evening dinner hour. Three categories of behaviors were defined for assessment. They were classified as: high quality behavior which included goal-directed conversation, appropriate use of materials and equipment, talking on the telephone, looking through books or magazines, taking pictures, playing cards, etc.; low quality behavior which included sitting or lying passively, watching TV, smoking without other activity, and solitary pursuit of participant activities; and inappropriate social behavior which included violently aggressive verbal or physical behavior, non-goal-directed purposeless behavior, nonsense conversations, self-stimulation, and inappropriate use of materials.

Results of the observations indicated very little high quality leisure time activity engaged in by the residents. Most leisure time

was spent in smoking cigarettes and watching television. Following the observation stage, the subjects were systematically trained in appropriate leisure time activities. These included cards, a dart set, jigsaw puzzles, billiard sets, silk screening materials, computerized TV games, and a guitar. General instruction was provided and a system of tournament play was set up.

Results of the experimental treatment indicated significant increases in high quality leisure time pursuits during the treatment phase. This dropped significantly and continued to decline after the intervention was completed and rose again when instruction and encouragement were again reinstated. The intervention program was shown to have a positive relationship with high quality activity. The authors stated that the services of a recreation specialist once weekly would be sufficient to maintain these skills.

Schleien, Certo, and Muccino (1984) described a study designed to teach leisure skills to a nonverbal mentally retarded 16-year-old male. The skills identified for training were initiating and completing a bowling sequence independently, ordering a soft drink from a concession stand, and purchasing a snack from a vending machine. The student was provided with cards stating his intention to bowl and his shoe size, and he was trained to give the appropriate card to the desk clerk. He was also provided with cards showing pictures of two of his favorite drinks. He was to show one of these to the concessionaire. Exact amounts of money were given to him to pay for his bowling and shoes and to purchase a snack from the vending machine.

Results of the study indicated that the student acquired the skills and also performed these skills at a different bowling alley without additional instruction. The authors point out that this generalization finding is somewhat at odds with previous research which indicated that severely handicapped individuals exhibit little spontaneous generalization (Guess, Sailor, & Baer; Harris; Stokes & Baer; Williams, Brown, & Certo; cited in Schleien, Certo, & Muccino, 1984).

The research reviewed has covered establishing curriculum that is relevant to the student's world and appropriate training environments and techniques for teaching that curriculum, but unless this effort results in community or sheltered workshop placement and long-term employment, all of this effort will be futile. The ultimate goal of education for mentally retarded citizens is normalization in the community, and purposeful employment is the primary component of normalization for most of these individuals. "Many mentally retarded individuals have been, and often continue to be, excluded from vocational rehabilitative services for a variety of reasons" (Goodall, Wehman, & Cleveland, 1983, p. 271). Job placement assistance is of crucial importance if these individuals are going to enter into competitive employment. Goodall et al. (1983) stated that more teachers and adult service professionals need to involve themselves in the placement procedure. They presented an overview of the current trends in competitive placement.

The characteristics of a good placement specialist are three: he or she must possess substantial knowledge of the client's abilities and weaknesses and avail himself or herself of information regarding

the current trends in vocational placement; he or she should demonstrate skill in the task areas that comprise the placement process; and should be able to sell the employability of the client to employers and other professionals.

The placement process involved developing jobs, assessing the client, and placement. Job development required a great deal of time and energy in employer contact. It also required perseverance and patience. The specialist had to be familiar with vocational and educational assessment instruments in order to review assessment information adequately. He or she had to match the client's abilities with the job opening to minimize failure situations, arrange interviews, and coordinate schedules.

Nietupski, Nietupski, Welch, and Anderson (1983) presented several strategies that might be employed by training specialists to establish and maintain vocational training sites in the community. They viewed the training specialist as developing community-based competitive work sites as did Goodall et al. (1983). However, they also stated that the trainer should develop volunteer training sites, provide training at these sites, and also provide instruction in mobility skills such as bus riding, street crossing, and elevator use. They also stated that the trainer should provide the classroom teacher with feedback regarding necessary skills the student needs to acquire for success at the community training site.

The authors cited some problems that have been evident in some districts. These include minimal success in finding acceptable sites, frequent loss of sites because of poor job task performance, behavior

problems, and employer dissatisfaction. They suggested the following strategies to alleviate these problems. First, know your community and the kinds of jobs available. Know, too, the contact persons in the local businesses. Second, a friend or personal acquaintance within the business is a very useful go-between with management. Third, make an initial telephone contact to discuss your goals. It is important to stress that you are looking for unpaid training sites, not paid employment. Fourth, make a face-to-face contact and emphasize again that you are looking for unpaid work experience. The authors also thought it helpful to supply the employer with a list of other employers who have provided work experience. Fifth, use appropriate interpersonal skills. Easy-going styles and warm interactions have met with the most success.

Establishing a vocational training site is not the ultimate goal. The specialist must then analyze the job and personal skills required for success. The authors recommended selecting students whose skills closely correlate with the job demands for the initial placement. The success of the first trainee at the site is highly correlated with business's decision to expand into more training sites. After the program has experienced success at this site, then students that are less skilled can be placed. It is also important to closely monitor the student's performance and to seek and provide frequent feedback to and with the employers.

Finally, the successful trainer must establish ways of rewarding employers for their participation. Certificates of appreciation can be obtained, letters can be written to the company, and feature

stories can be given to newspapers. Appreciation banquets and patronage of those businesses that are participating have also been shown to be excellent reinforcers. It is important to site maintenance that this step not be overlooked.

Increasing numbers of mentally retarded individuals are leaving institutions and taking up residences in the community. Major efforts must be undertaken to improve public attitude and community acceptance of these persons. Sandler and Robinson (1981) reviewed research on the effects of contact and information on the attitudes of the public. A commonly expressed rationale for integration of mentally retarded children into the mainstream is improved public attitude. Research is conflicting on this point. Sandler and Robinson found that surveys of teacher attitude demonstrated improved attitude among special class teachers (Efron & Efron; cited in Sandler & Robinson, 1981), however, nonhandicapped children have consistently shown a more negative attitude toward educable mentally handicapped children with increased exposure (Goodman, Gottlieb, & Harrison; Gottlieb & Budoff; Gottlieb & Davis; Gottlieb, Cohen, & Goldstein; cited in Sandler & Robinson, 1981).

Other research efforts have suggested that carefully structured contact experiences, as opposed to contact per se, are likely to have a positive impact on attitude.

There have been few studies of the effect of information on public attitude. Baker, Seltzer, and Seltzer (cited in Sandler & Robinson, 1981) found that group homes met with more opposition when they attempted to inform the community about their program before entering the community than when they simply moved in.

Sandler and Robinson (1981) stated that to rely on increased contact alone to lead to more positive attitudes toward the retarded is overly simplistic. In order for these persons to live happily in the community and maintain competitive employment, it is imperative that their employers, co-workers, and neighbors accept them. This issue must be seriously addressed in the future, if de-institutionalization is to succeed.

Chapter III

DESIGN OF THE STUDY

Selection of the Subjects

Fifty parents/guardians of trainable mentally retarded graduates of a large metropolitan school district were polled by telephone for the study. The respondents were selected at random from the list of graduates. The mentally retarded subjects ranged in age from 21 to 29 with a mean age of 24.32.

A second poll was conducted by the investigator among supervisors of five community-based sheltered workshops for the mentally retarded. Ten supervisors participated in the study.

The Instruments

Two instruments were used in the study. The first was a questionnaire consisting of 22 questions concerning home/community living skills, work-related skills, and leisure time skills of trainable mentally retarded young adults. The questions were formulated and established with input from Anne Reim, Assistant Supervisor of the mental retardation program for the Omaha Public Schools, and fellow educators in the Omaha School system.

The major areas analyzed were:

1. Community living arrangements
2. Performance of household chores
3. Performance of personal grooming skills
4. Knowledge of clothing sizes
5. Independent care of medical needs

6. Ability to order from a catalog
7. Level of independence on shopping expeditions
8. Ability to perform money transactions
9. Ability to utilize public transportation
10. Telephone skills
11. Restaurant skills
12. Reading skills
13. Employment information, i.e., fields of employment,
job responsibilities
14. Utilization of community sports activities
15. Utilization of leisure time activities at home
16. Parental opinion of curriculum priorities.

The second instrument in the study was an opinionnaire consisting of 26 work-related problems concerning vocational, communicational, and grooming deficits. The supervisors were asked to circle the 10 problems that, in their opinion, were the most frequently observed in adult trainable workers. They were then asked to number the 10 on the basis of frequency of occurrence.

The data were analyzed by compiling the responses in tabular form and then arriving at a mean response for the group for each of the questions asked. The results of these analyses are presented in Chapter IV.

Copies of the instruments used in this study are in Appendices A and B.

Chapter IV

ANALYSIS OF THE DATA

Responses to the Graduate Level Parent Questionnaire and the Sheltered Workshop Supervisor Opinionnaire were tabulated and analyzed.

The questionnaire was conducted by telephone. The parents or guardians of graduates of a large metropolitan high school Trainable Mental Retardation Program were polled for information about their adult child and for their opinion on curriculum choices. Fifty parents or guardians participated in the study. The instrument consisted of 22 questions.

Questions numbered 3, 4, 6, 8, 10, 11, and 12 required the parent to respond using the following key: 1) always, 2) usually, 3) seldom, 4) never, 5) I don't know. The responses were then tabulated using the following formula: $N \times R = S$, where N = the number of respondents, R = Rating, and S = Resultant Score. The scores were then totaled and divided by the number of respondents to obtain a mean. Where mean scores included a fraction, it was arbitrarily decided that fractions above .5 would raise the mean. The means were then represented by the description of the category, i.e., always, usually, seldom, never. "I don't know" responses were not included in the tabulation.

Questions number one and two dealt with the childhood and current residential settings of the graduates. The results showed that 42 graduates or 84% were currently living in their family home, 6 graduates or 12% were living in supervised community living

arrangements outside their home, and 2 graduates or 4% were living in institutions.

During childhood, the survey showed that 47 graduates or 94% resided in their family home with 3 students or 6% living in supervised community living arrangements outside their home (see Figure 1).

Question three dealt with the household chores that the subjects perform. The results are shown in Table I. The mean responses indicated that the subjects usually make their own bed, set the table, select their own snacks, and do general cleaning around the house. They seldom select the food for the family meal or do the laundry. They never do mending, sewing, or ironing.

Other household chores performed by the subjects included taking out trash, doing dishes, running errands, cooking, and shoveling.

Question four dealt with the independent performance of personal grooming skills. As shown in Table II, the mean response for independent bathing and showering was always, while usually was the mean response for independent selection of daily clothing, hair washing, and shaving.

Question five asked whether the subjects knew their own size for shoes and wearing apparel. As shown in Figure 2, 32% of the parents responded yes, 54% said no, and 14% indicated that they did not know.

Question six dealt with independent care of simple medical needs. The mean responses indicated that the subjects can usually apply a bandaid independently, but seldom take prescription medicine or treat a cut or burn without assistance (see Table III).

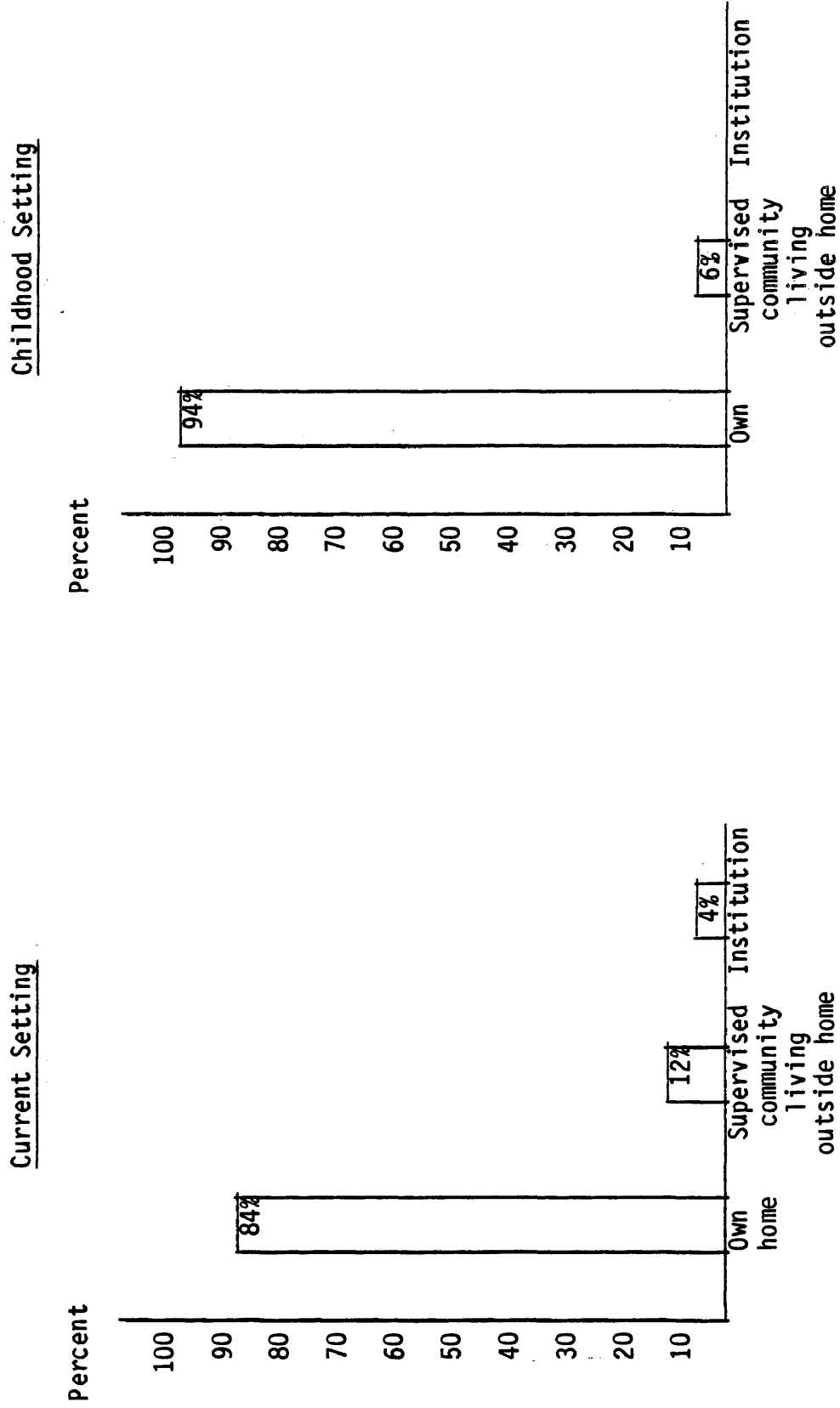


Figure 1
Residential Setting of Mentally Retarded Adults

Table I
Number of Respondents by Response for
Question Number Three

	Always	Usually	Seldom	Never	Don't know	Mean Response
a. bedmaking	24	6	13	7		usually
b. table setting	13	12	14	11		usually
c. food selection	9	7	9	25		seldom
d. snack selection	34	7	4	5		usually
e. general cleaning	20	10	12	8		usually
f. laundry	15	4	6	25		seldom
g. mending/sewing	2	0	9	39		never
h. ironing	2	3	10	33	2	never
i. other:						
trash	4					
dishes	1	1				
errands	1					
cooking		1				
shoveling		1				

Table II

Number of Respondents by Response for
Question Number Four

	Always	Usually	Seldom	Never	Don't know	Mean Response
a. selects clothes worn daily	34	9	4	3		usually
b. coordinates outfits	26	10	6	7	1	usually
c. bathes and showers self	40	2	4	4		always
d. shaves own self	27	4	2	17		usually
e. washes own hair	29	3	6	12		usually

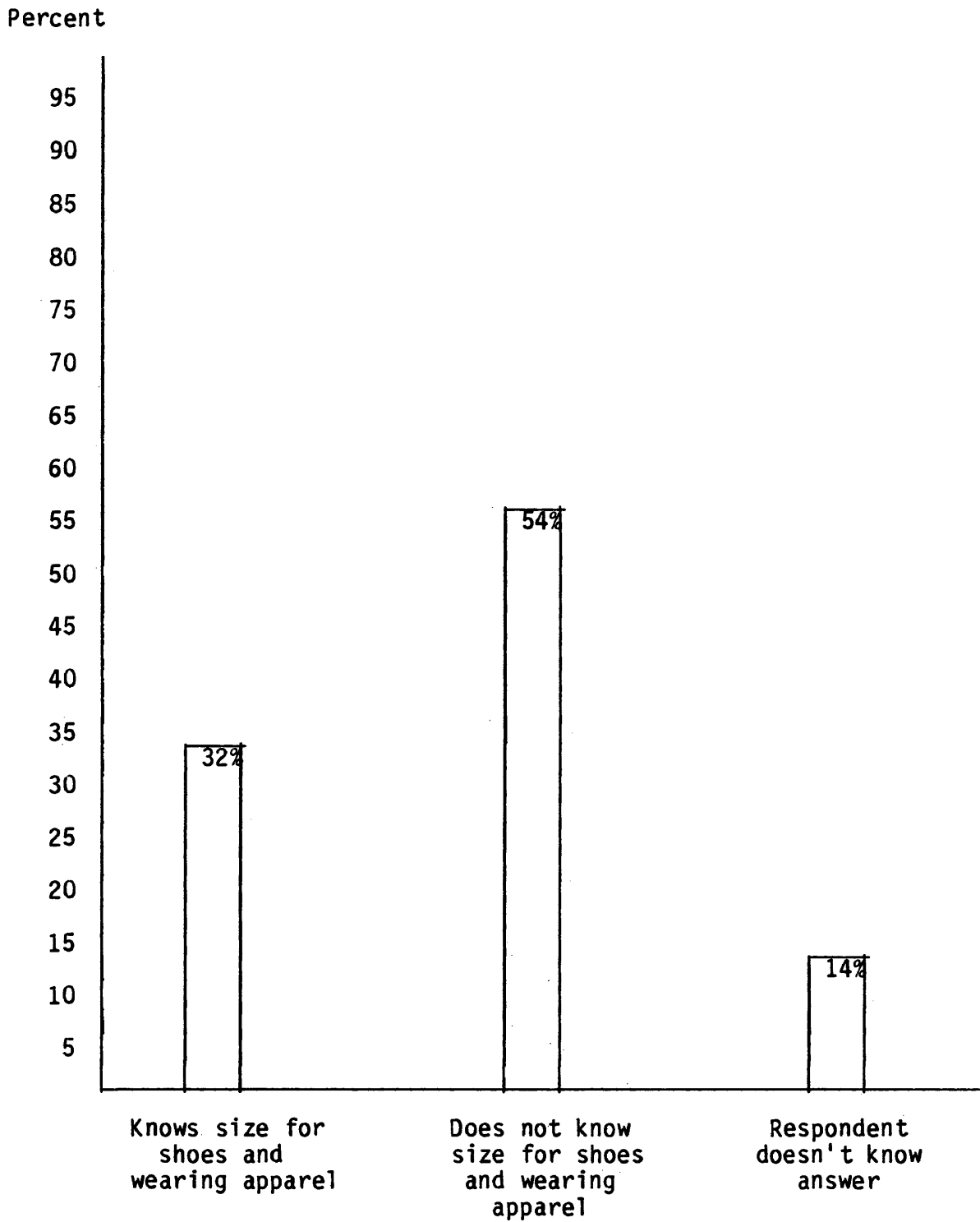


Figure 2

Percent of Respondents by Response for Question Number Five

Table III
Number of Respondents by Response for
Question Number Six

	Always	Usually	Seldom	Never	Don't know	Mean Response
a. applies a bandaid	36	4	1	6	3	usually
b. independently take prescription medications	19	2	1	28		seldom
c. treats a simple cut or burn	18	9	3	15	5	seldom

Question seven asked whether the subjects had had the opportunity to order items from a catalog. As shown in Figure 3, 6% of the parents said yes, 92% said no, and 2% indicated that they did not know.

Question eight dealt with the level of independence demonstrated by the subjects on shopping expeditions. As shown in Table IV, the mean response for independently purchasing items at the grocery store or clothing store was seldom. The survey results showed that the subjects were usually able to assist parents at the grocery store by locating items to be purchased, but were seldom able to accomplish this at the clothing store. When asked if the subjects were able to make simple purchases and correctly count the change for money transactions under \$1.00 to over \$20.00, the respondents replied with a mean response of seldom for under \$1.00, under \$5.00, under \$10.00; and never for over \$20.00.

Question nine dealt with the level of independence demonstrated in using available transportation systems. Figure 4 shows that 16% of the subjects independently ride the bus or taxi; 8% ride with assistance in boarding/deboarding, making change, and maintaining appropriate social skills; 6% accompany adults; 66% do not use public transportation; and 4% drive their own vehicle.

The telephone skills of the mentally retarded subjects were polled in Question ten. As shown in Table V, the mean response was usually for the ability to call home in an emergency, call 911 in an emergency, cancel van transportation or report sick to work, talk socially with friends, and relate a phone number or message. The mean

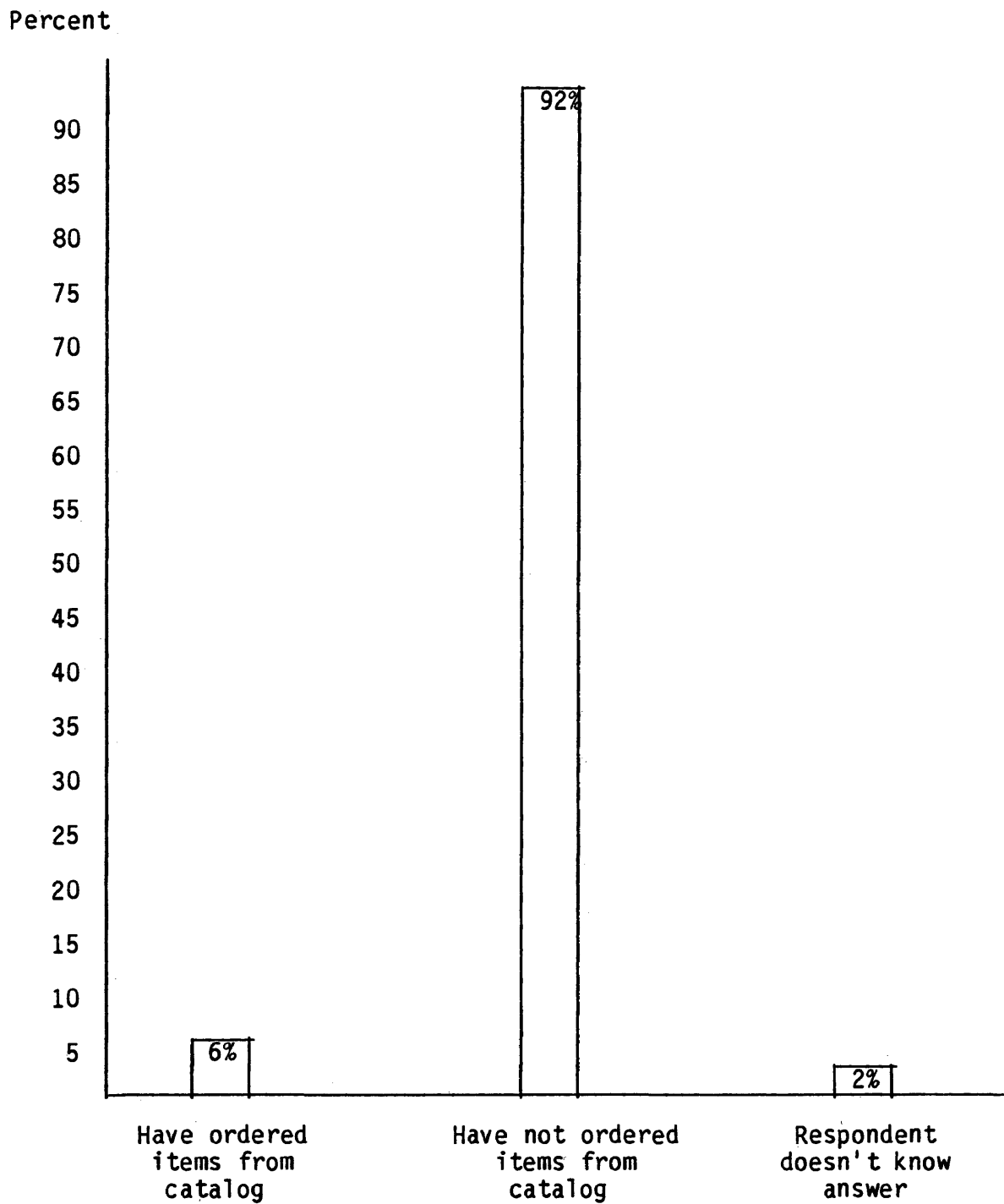


Figure 3

Percent of Respondents by Response for Question Number Seven

Table IV

Number of Respondents by Response for
Question Number Eight

	Always	Usually	Seldom	Never	Don't know	Mean Response
a. independently purchases items at:						
1) grocery store	8	6	4	32		seldom
2) clothing store	6	4	3	37		seldom
3) other:						
Westroads		1				
sporting goods		1				
b. assists you in shopping by locating items to be purchased at:						
1) grocery store	23	11	4	12		usually
2) clothing store	11	9	7	21	2	seldom
3) other:						
c. purchases simple items and correctly counts change for money transactions of:						
1) under \$1.00	16	4	1	28	1	seldom
2) under \$5.00	9	3	1	35	2	seldom
3) under \$10.00	9	3	2	34	2	seldom
4) over \$20.00	6	2	1	38	3	never

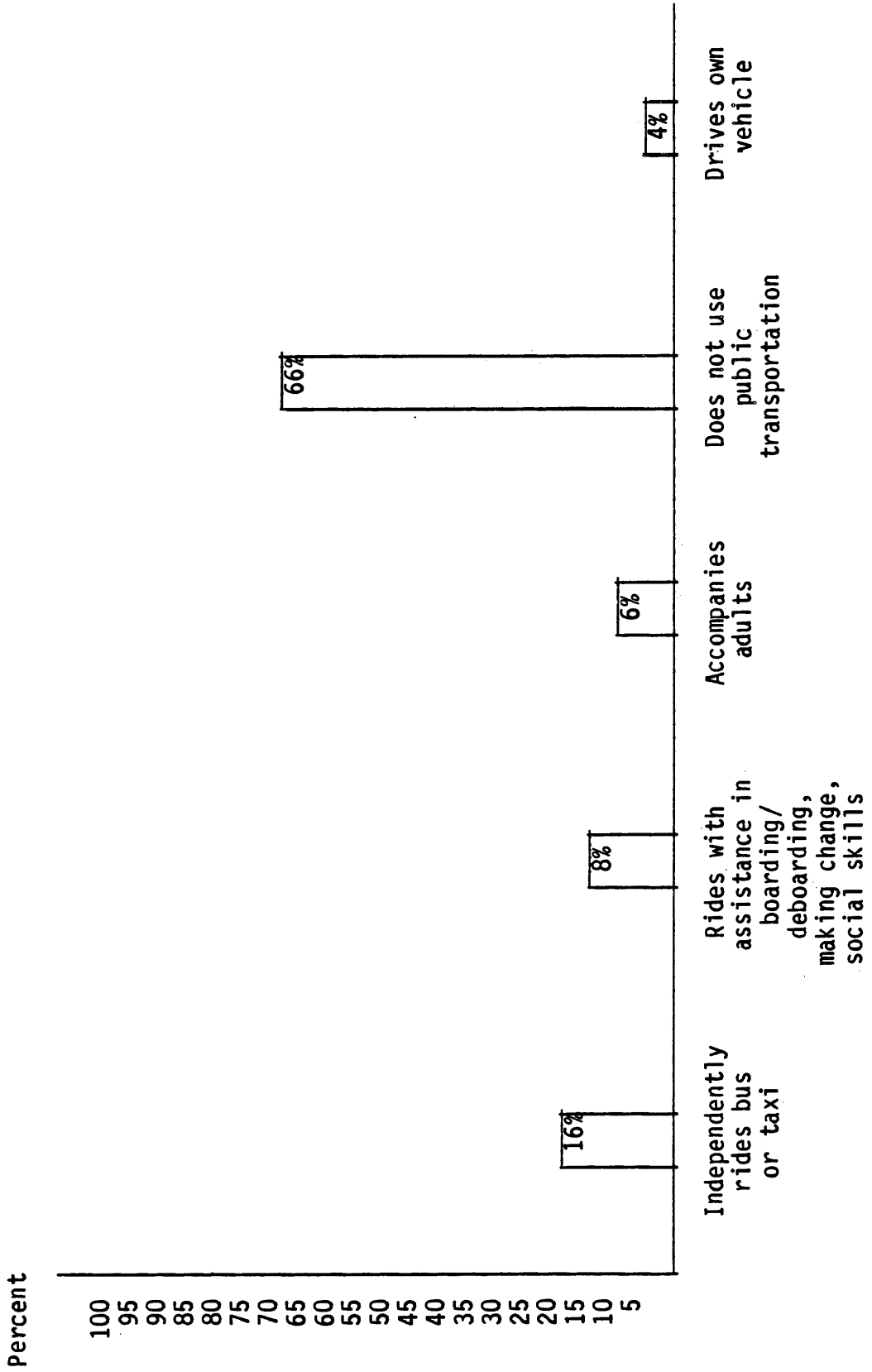


Figure 4
 Percent of Respondents by Response for Question Number Nine

Table V

Number of Respondents by Response for
Question Number Ten

	Always	Usually	Seldom	Never	Don't know	Mean Response
a. call home in an emergency	31	3	3	13		usually
b. call 911 in an emergency	33	6	0	11		usually
c. cancel van transportation or report sick to work	23	3	2	15	7	usually
d. talk socially	27	4	7	12		usually
e. call time and temperature	5	1	5	37	2	never
f. order fast food	2	2	3	41	2	never
g. locate information in phone book	3	1	12	33	1	never
h. relate a phone message or number	20	14	7	9		usually

response was never to calling time and temperature, ordering fast food, and looking up information in the phone book.

Question eleven asked whether the subjects had had the opportunity to eat in restaurants. Ninety-six percent of the respondents said yes, while 4% said no. As shown in Table VI, when asked if the subjects could make a purchase independently at a fast food restaurant, the mean response was usually. The mean response was seldom to independently ordering from a menu and estimate the amount of money needed to make a purchase. Results also showed that the subjects usually needed assistance to select food items.

Question twelve dealt with the subjects' acquired reading skills. As shown in Table VII, the mean results showed that the subjects could usually follow directions given by signs in the community, but could seldom follow label directions, locate weather, ads, or TV schedule in the newspaper, or read for enjoyment.

Question thirteen asked if the subjects are employed. Fifty-six percent of the respondents said yes, and 44% said no. As illustrated in Figure 5, 82% of those employed were in a sheltered workshop position and 18% were competitively employed.

Question fourteen dealt with the types of positions the subjects had held since graduation. Figure 6 shows that 15% of the positions were in food service, 17% custodial, 6% laundry, 2% maid positions, 44% routine benchwork, and 16% listed other positions. Included in the "other" category were trash hauling, babysitter, grandmother sitter, truck unloader, carpentry, and handyman.

Table VI

Number of Respondents by Response forQuestion Number Eleven

	Yes	Percent	No	Percent		
Eat in restaurants	48	96%	2	4%		
	Always	Usually	Seldom	Never	Don't know	Mean Response
a. independently order from menu	15	6		27	2	seldom
b. make the purchase independently at fast food restaurant	32	6	1	8	3	usually
c. estimate amount of money needed	10	8		29	3	seldom
d. need assistance to select food items	22	5	5	17		usually

Table VII
Number of Respondents by Response for
Question Number Twelve

	Always	Usually	Seldom	Never	Don't know	Mean Response
a. follows label directions	9	6	2	32	1	seldom
b. follows directions given by signs in the community	19	15	3	12	1	usually
c. locates weather, ads, TV schedule in newspaper	15	5	1	26	3	seldom
d. reads for enjoyment	6	2	9	31	2	seldom

	Yes	Percent	No	Percent
Is your son/daughter employed?	28	56%	22	44%

Percent

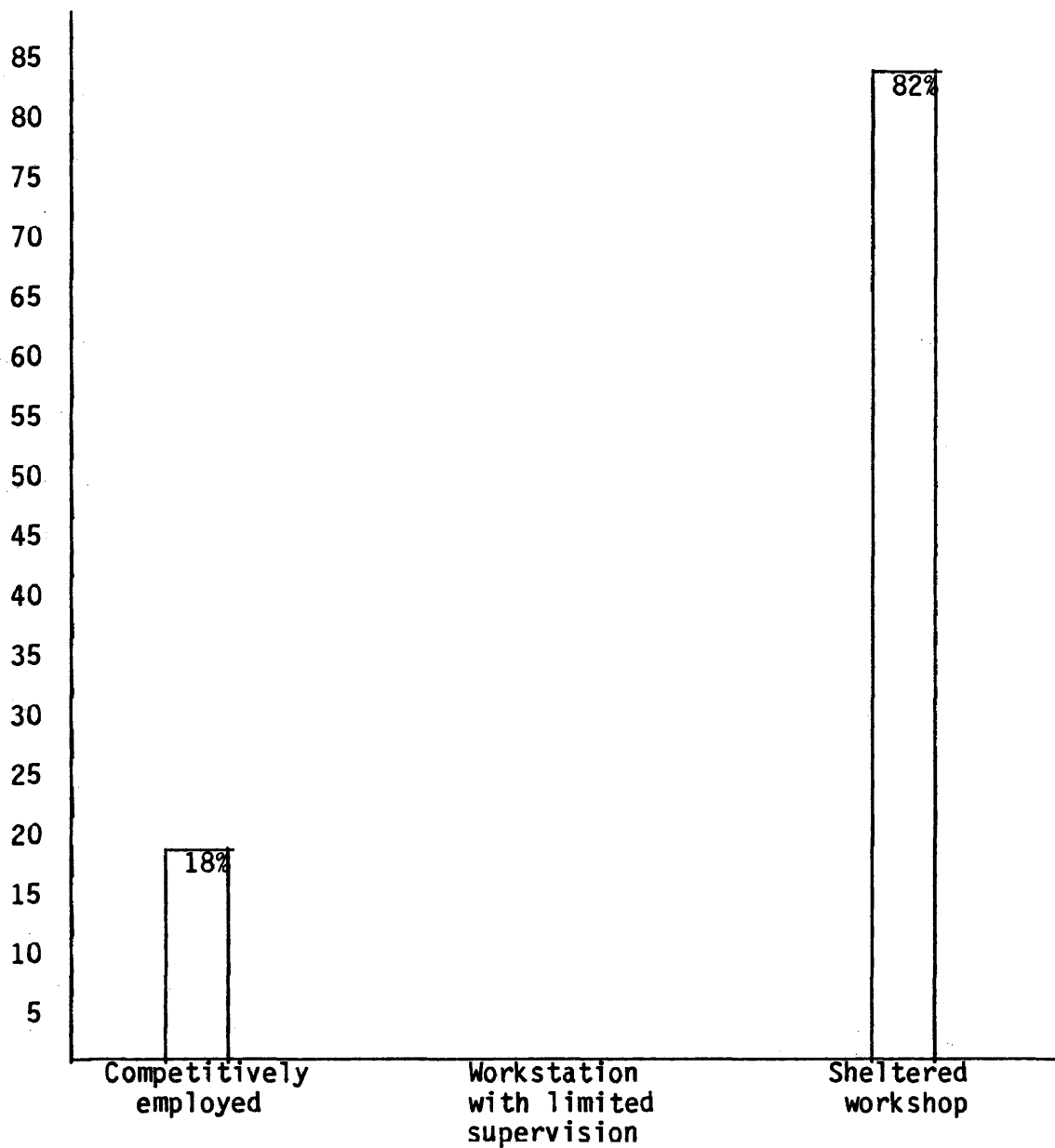


Figure 5

Percent of Respondents by Response for Question Number Thirteen

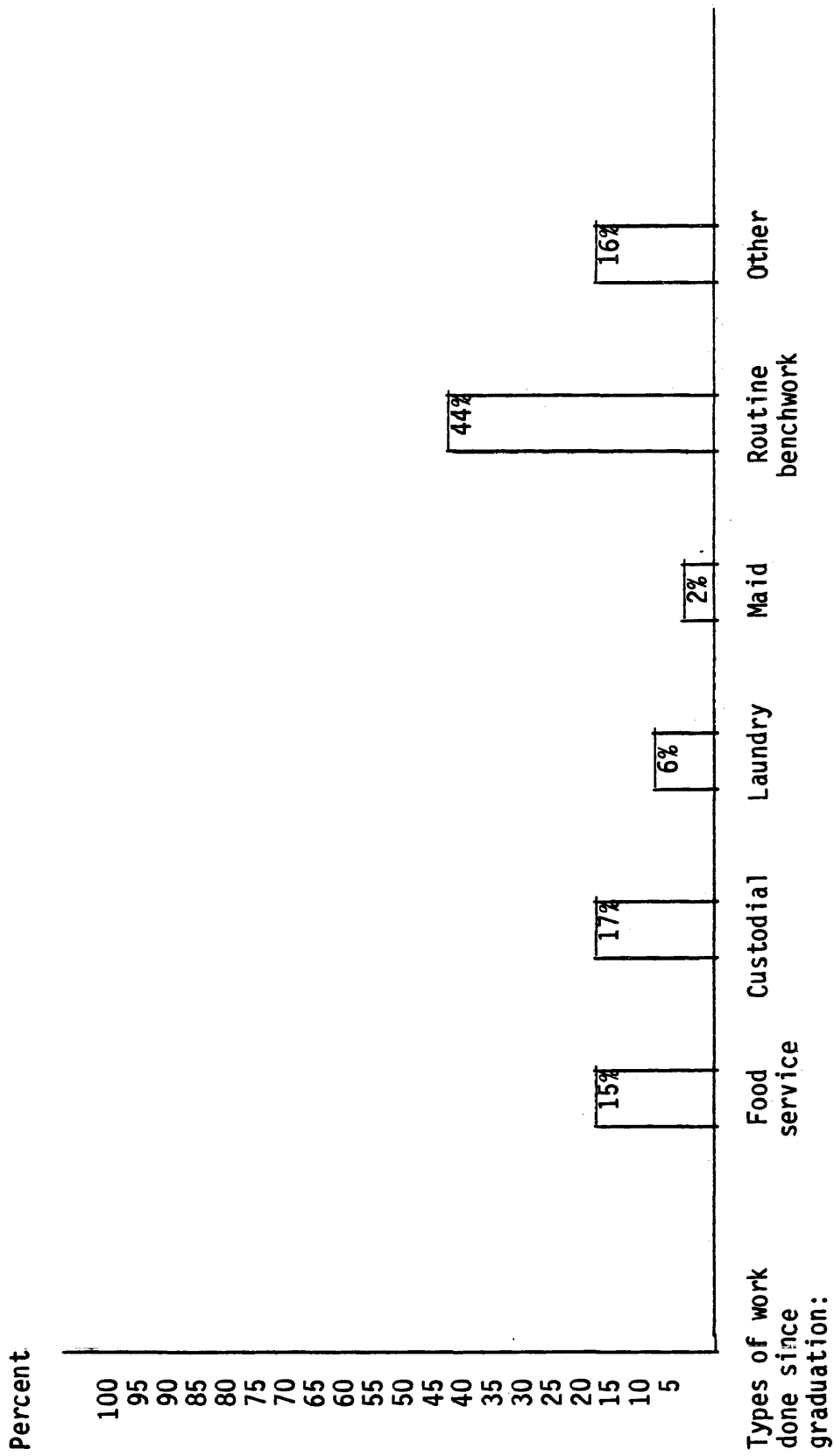


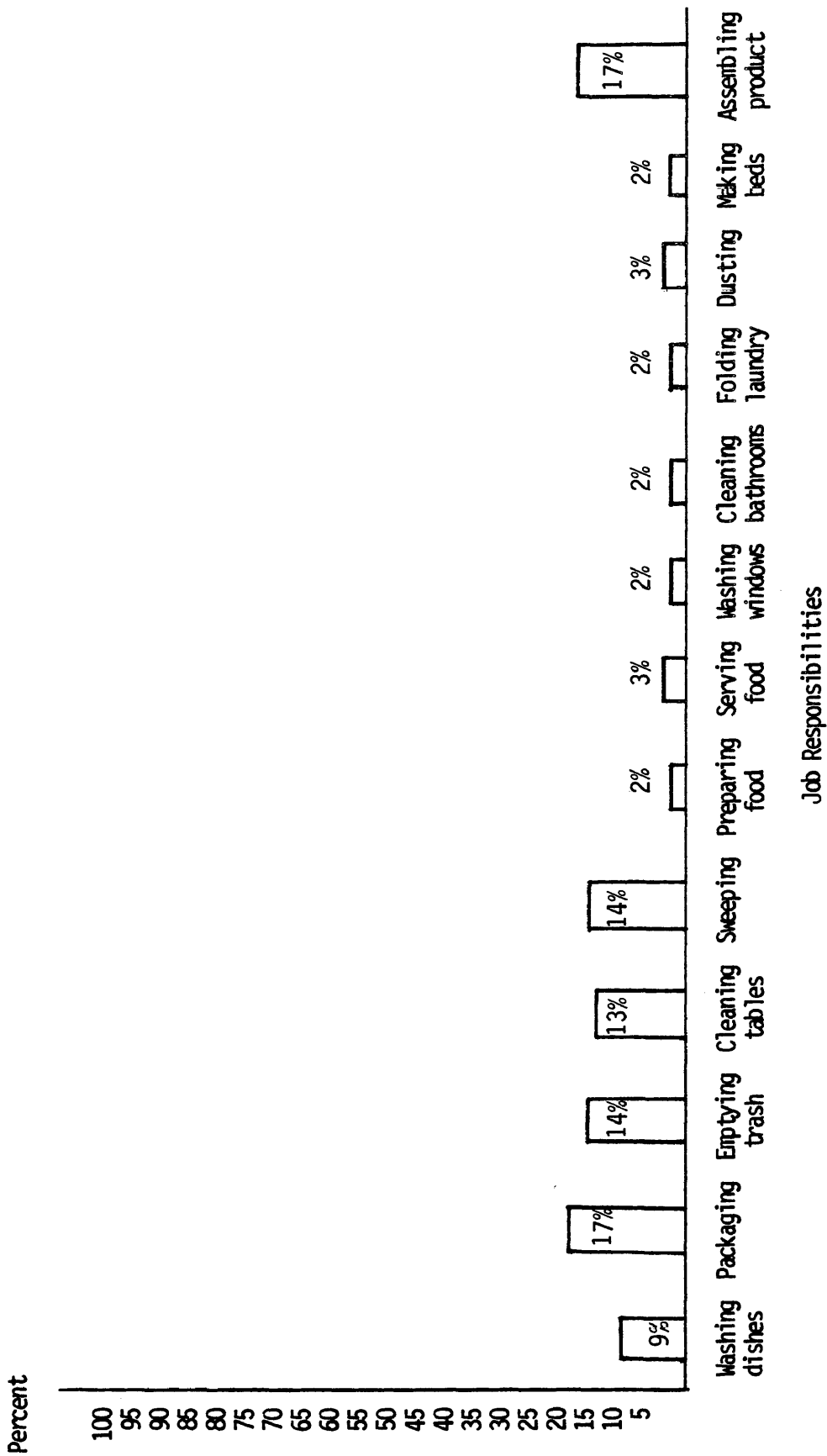
Figure 6
 Percent of Total Responses by Category for Question Number Fourteen

Question fifteen polled the specific job responsibilities the subjects had. The respondents' replies are shown in Figure 7. Assembling and packaging were the most frequently named, amounting to 17% of the replies for each. The next most frequently reported job responsibilities were emptying trash and sweeping, 14% for each, and cleaning tables, 13% of the replies.

Question sixteen asked how the subjects spend their time. As shown in Figure 8, 10% are employed, 4% do volunteer work, 45% are in sheltered workshops, and 41% stay at home. Of the 5 subjects, or 10% who are employed, 3 are employed 40 hours a week and 2 are employed for 10 hours a week. The 3 full-time workers are employed as a custodian, a school aide, and a laundry worker. The 2 part-time workers are employed as a fast food restaurant worker and a maid service employee. Of the 2 subjects or 4% who do volunteer work, 1 is a grandmother sitter for 40 hours a week, and 1 subject is a volunteer school aide for 20 hours a week. Of the 23 subjects, or 45% who work in sheltered workshops, 21 work a 40-hour week, 1 subject works a 25-hour week and is competitively employed an additional 10 hours a week, and 1 subject works 2 hours a week.

Question seventeen examined the means of transportation to competitive employment, sheltered workshop, or volunteer job. As shown in Figure 9, 8 subjects, 29%, ride public buses; 13 subjects, 43%, are driven in special vans; and 8 students, 28%, are driven in private vehicles.

Question eighteen asked how the subjects fulfill their lunch needs on the job. Figure 10 shows that none of the subjects eat lunch in



Job Responsibilities

Figure 7

Percent of Total Responses by Category for Question Number Fifteen

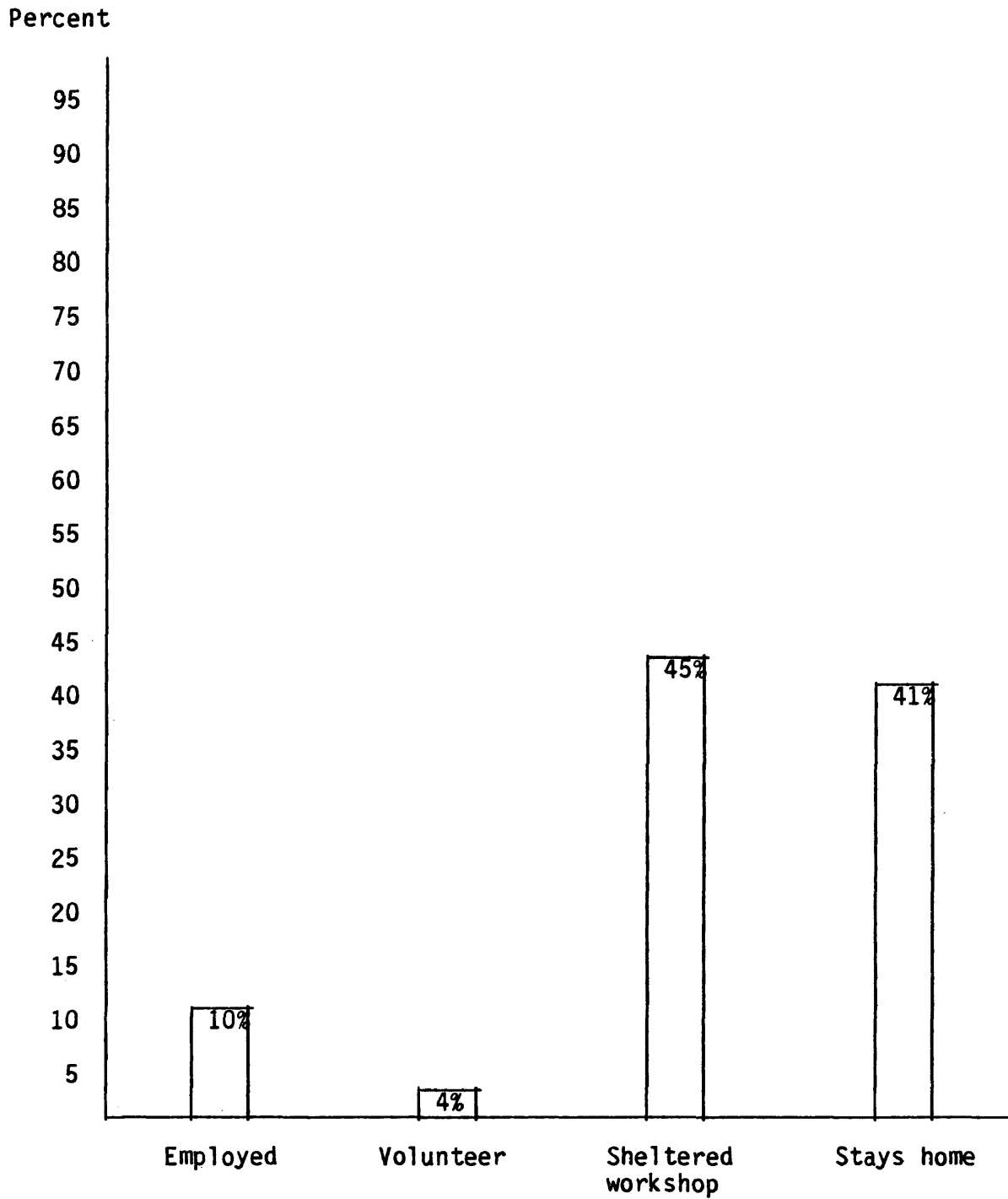


Figure 8
Percent of Total Responses by Category for
Question Number Sixteen

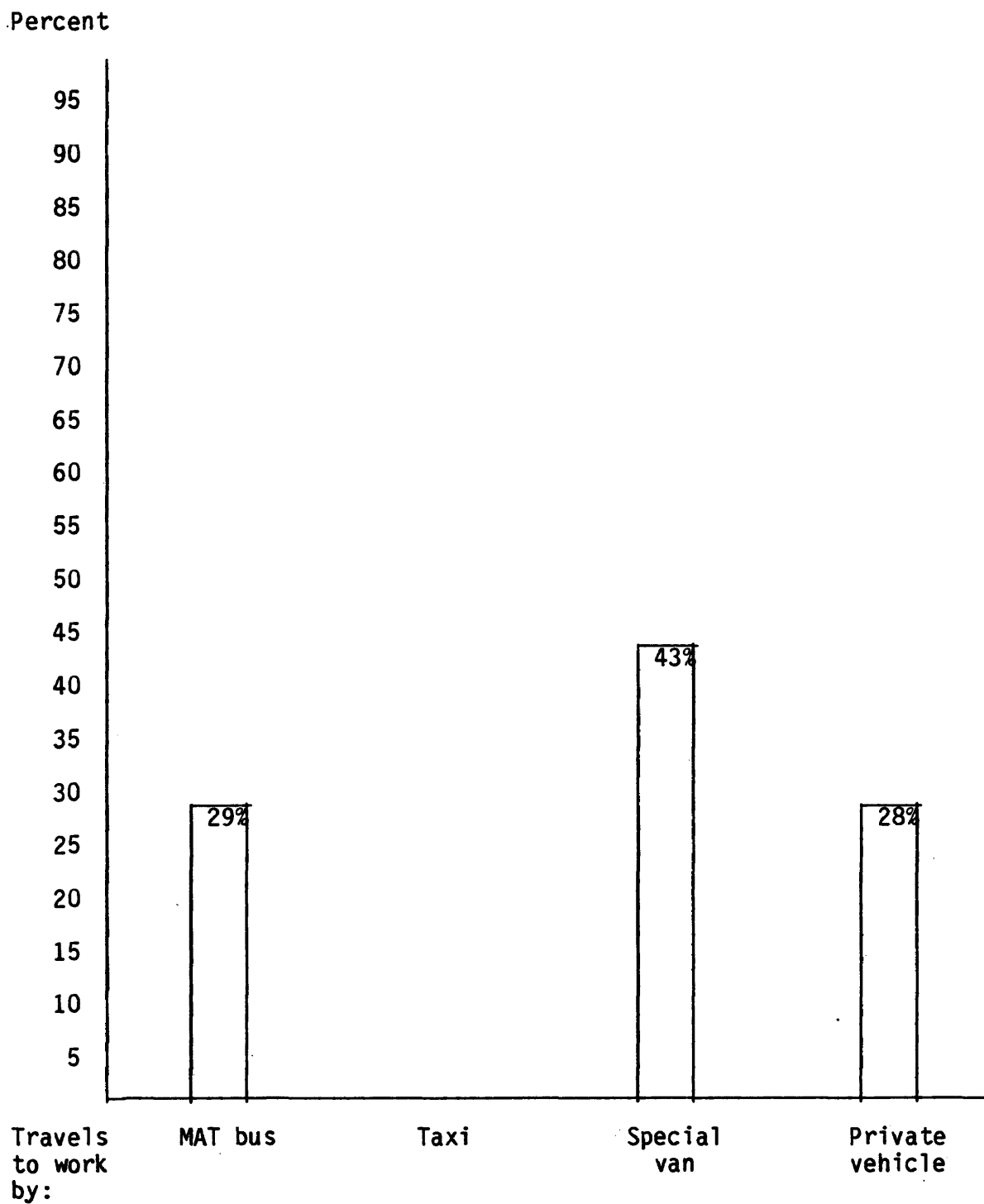


Figure 9
Percent of Total Responses by Category for
Question Number Seventeen

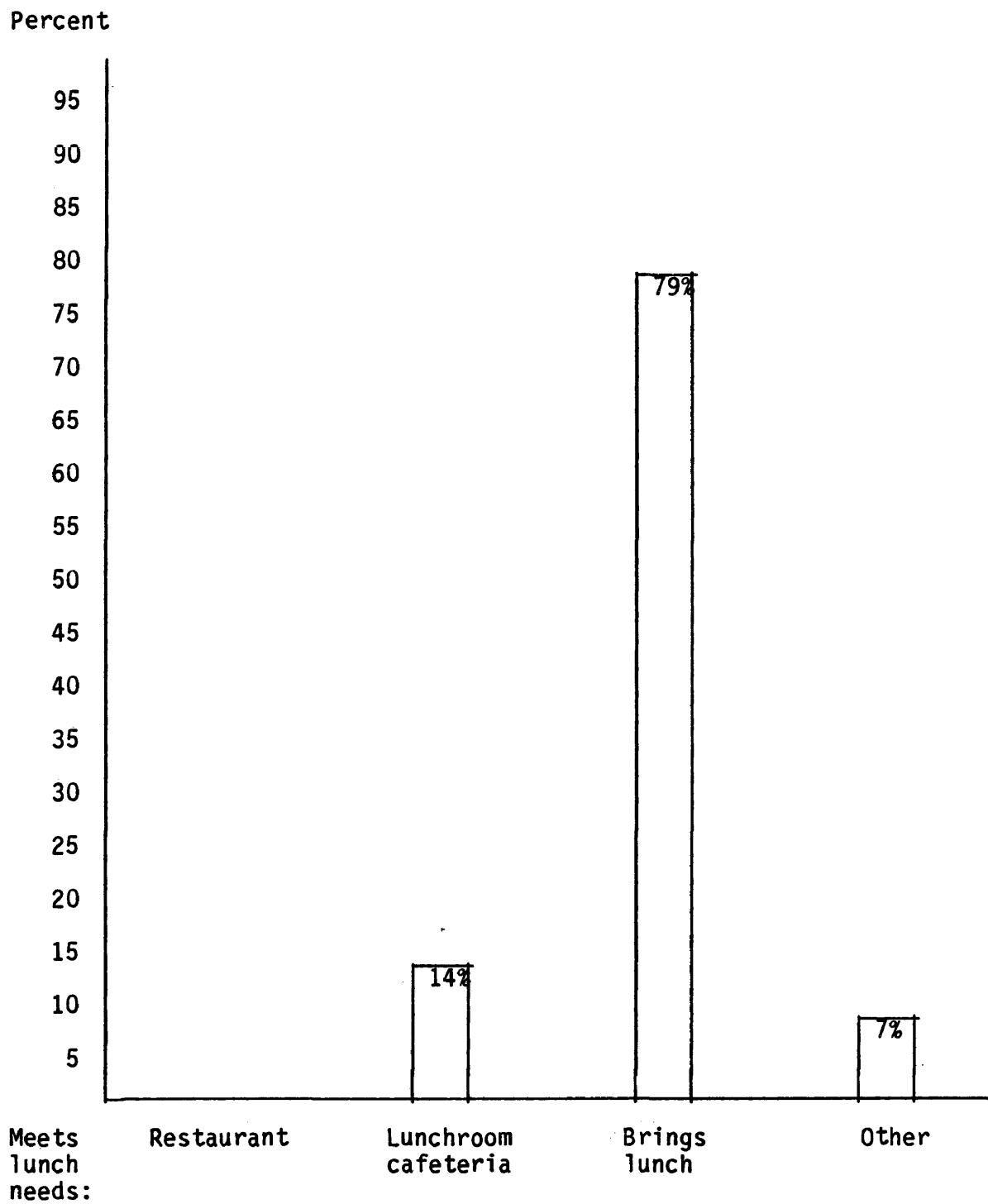


Figure 10
Percent of Total Responses by Category for
Question Number Eighteen

commercial restaurants; 4 subjects, 14%, purchase their lunch from a lunchroom cafeteria; 22 subjects, 79%, bring their lunch from home; and 2 subjects, 7%, either do not eat lunch or the respondents are unaware of where they obtain it.

Question nineteen asked if the subjects have contacted ENCOR (Eastern Nebraska Community Office of Retardation) or Vocational Rehabilitation Services for assistance. Figure 11 shows that 70% have contacted ENCOR, and of that number, 37% are still on a waiting list for a sheltered workshop placement. Twenty-six percent have also contacted Vocational Rehabilitation Services.

Question twenty asked if the subjects participate in outside the home sports. As shown in Table VIII, 39 respondents, 78%, responded yes, while 11 respondents, 22%, said no. When polled to determine which sports they participate in, 89 responses were obtained. As shown in Figure 12, 33% of the responses were bowling, 14% swimming, 12% skating, 1% skiing, 30% Special Olympics, 4% fitness programs, and 6% listed other categories. Not only was bowling the most frequently mentioned response, it was also the one engaged in with the most regularity, with 19 of the 29 respondents stating that the sport is engaged in weekly. In the "other" category, bell choir, soccer, and basketball were mentioned.

Question twenty-one examined the leisure time activities of the subjects. The respondents were asked to reply using the following key: 1) daily, 2) frequently, 3) seldom, 4) never, 5) I don't know. Table IX shows that the mean response to card games was seldom, board games received a mean response of seldom as did reading for

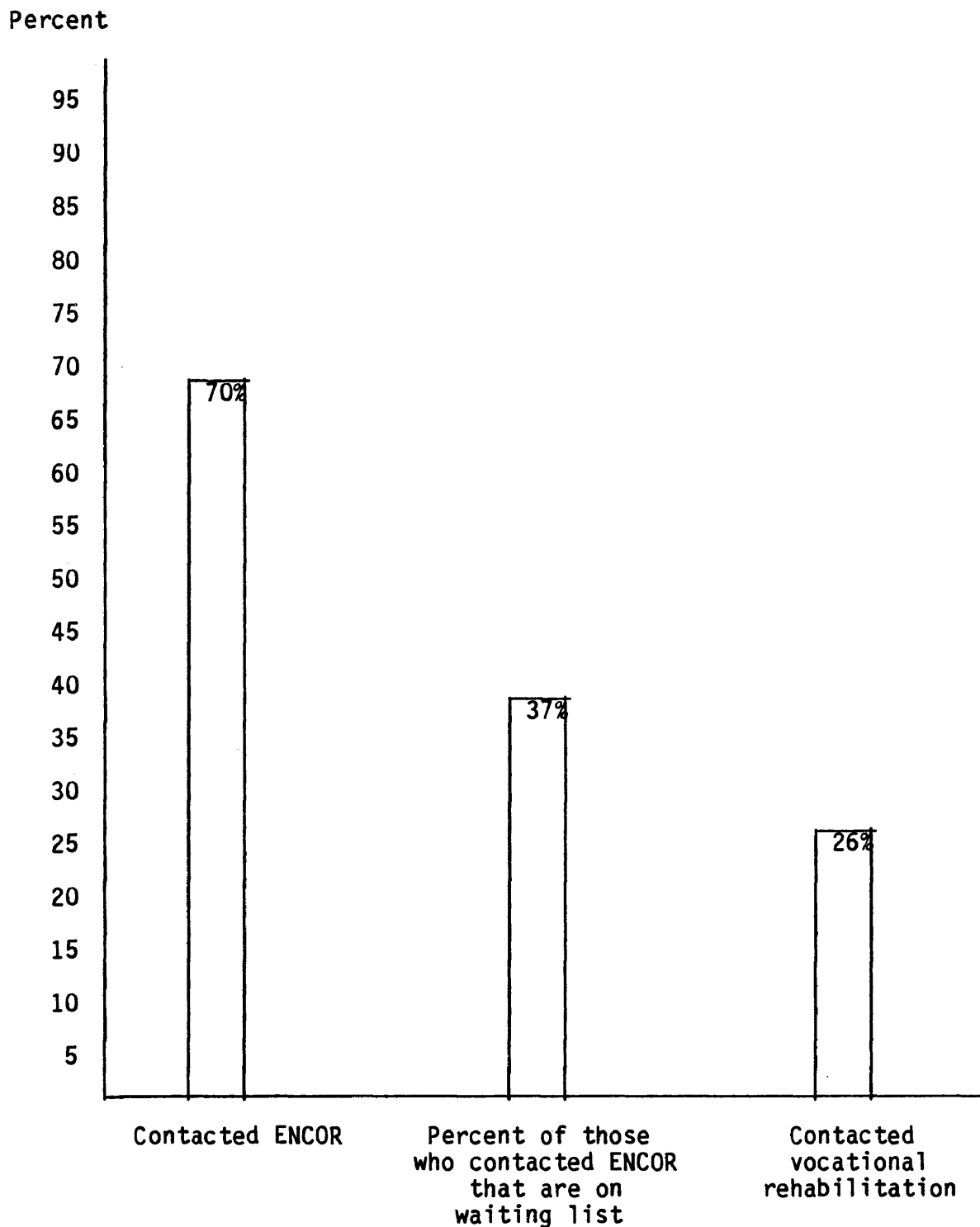


Figure 11

Percent of Respondents by Response for Question Number Nineteen

Table VIII

Number and Percent of Respondents by Response
for Question Number Twenty

	Yes	Percent	No	Percent
Participates in outside the home sports	39	78%	11	22%

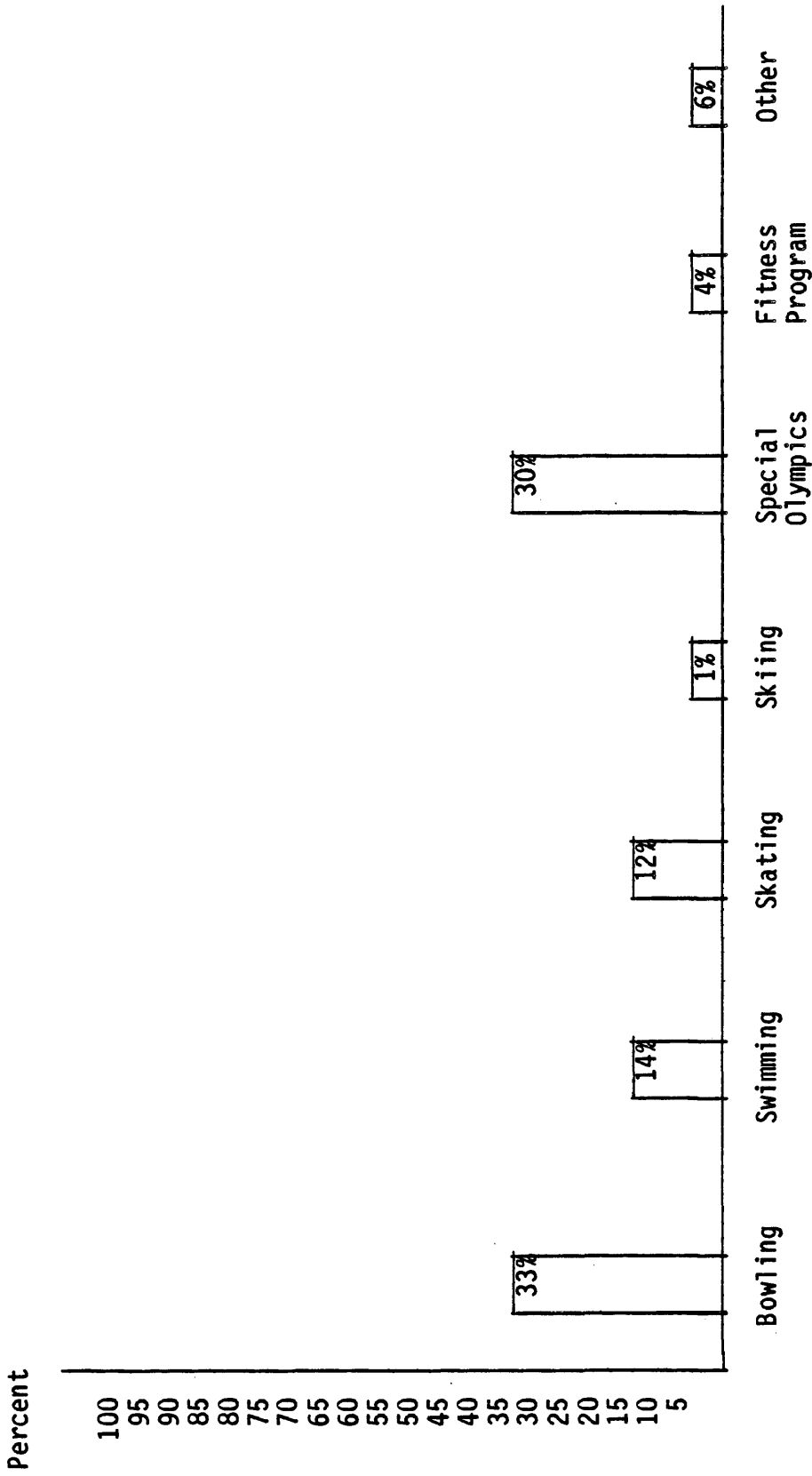


Figure 12
 Percent of Total Responses by Category for Question Number Twenty

Table IX
Number of Respondents by Response for
Question Number Twenty-One

	Daily	Frequently	Seldom	Never	Don't know	Mean Response
a. card games	4	7	14	23	2	seldom
b. board games	1	9	10	29	1	seldom
c. needlework	2	0	5	43		never
d. reading	9	8	8	24	1	seldom
e. television	41	3	6			daily
f. listening to music	42	4	4			daily
g. other						
1) computer games	1	1				
2) writing letters	4					
3) exercise bike	1					
4) horseshoes	1					
5) pool table	1					
6) building set	1					
7) Bingo		1				
8) piano-organ	1					
9) puzzles	1	3	3			
10) model cars		2				
11) train set	1					
12) lift weights	1					

enjoyment. Watching TV and listening to music received a mean response of daily, while needlework yielded a mean response of never. Other leisure time activities mentioned were playing computer games, writing letters, riding an exercise bike, playing horseshoes, pool, bingo, piano, playing with puzzles, building sets, model cars, train sets, and lifting weights.

On Question twenty-two, the respondents were asked their opinion as to the importance of the various skills taught currently in the school curriculum. They were asked to respond using the following key: 1) very important, should be a top priority; 2) important; 3) somewhat important; 4) not very important; 5) not important, don't include in curriculum.

As shown in Table X, the respondents listed food selection, first aid procedures, simple money transactions, telephone use, telling time, filling out job applications, and basic reading as very important. They listed bed making, table setting, general cleaning, laundry, personal grooming, knowing clothing sizes, purchasing items in stores, riding buses, purchasing food in restaurants, cooking, washing dishes, assembly line skills, and leisure time skills as important. Listed as somewhat important were: mending, sewing and ironing, and ordering from a catalog. No items were listed as not very important, or not important.

Analysis of Opinionnaire

The second part of this survey consisted of a Sheltered Workshop Supervisor Opinionnaire. The instrument consisted of 26 work-related problems covering vocational skills, communication, and grooming.

Table X

Number of Respondents by Response for Question Number Twenty-Two

	Very Important	Important	Somewhat Important	Not Very Important	Not Important Don't Include	Mean Response
Food selection	34	12	4	0	0	very important
First aid procedures	40	7	0	0	3	very important
Simple money transactions	40	7	1	1	1	very important
Telephone use	41	6	2	0	1	very important
Telling time	39	7	1	1	2	very important
Filling out job applications	38	6	3	0	3	very important
Basic reading	41	5	2	0	2	very important
Bedmaking	30	7	8	2	3	important
Table setting	23	15	10	0	2	important
General cleaning	31	12	5	1	1	important
Laundry	27	9	9	3	2	important
Personal grooming	38	6	2	1	2	important
Knowing clothing sizes	25	16	4	0	5	important
Purchasing items	29	14	3	1	3	important
Riding buses	31	15	0	0	4	important
Eating in restaurants	24	14	6	4	2	important
Cooking	29	15	2	0	4	important
Assembly line skills	34	8	2	2	4	important
Leisure time skills	26	18	5	1	0	important
Mending/sewing	16	10	8	8	8	somewhat important
Ironing	7	11	11	11	10	somewhat important
Ordering from catalog	7	7	15	6	15	somewhat important

A space was also provided to insert other problems not listed in the opinionnaire.

The opinionnaire was conducted by the investigator with 10 supervisors from five community-based sheltered workshops. Three of the workshops were operated by ENCOR, and two were operated by private religious organizations.

The supervisors were asked to circle the 10 most frequently observed workshop-related problems they have encountered in adult trainable workers. They were then asked to number the 10 that they selected on the basis of frequency of occurrence. Thus, the problem that is the most frequent, in their opinion, would receive a rating of 1, with the next most frequently observed receiving a 2, etc.

The responses were then weighted using an inverse position formula. Thus, a response that was selected as 1, would receive a weight of 10. The weighted scores for each problem were then totaled and divided by the number of supervisors answering the survey (10) to obtain mean.

The 10 responses that received the highest means were then placed in rank order. Table XI shows the 10 most frequently observed work-related problems as reported by the sheltered workshop supervisors.

Response (w) was selected by 7 of the 10 supervisors and received the highest mean. Response (s) was selected by 6 supervisors, and placed 2nd. Response (m) was selected by 8 supervisors but placed 3rd in the rank order due to the fact that most supervisors selected it in a lower position. Response (c) was selected by 6 supervisors and placed 4th. Response (t) was selected by 6 supervisors and placed 5th. Response (z) was selected by 8 supervisors but placed 6th due to the

Table XI

Ten Most Frequently Observed Work-Related ProblemsReported by Sheltered Workshop Supervisors

	Mean
1. (w) Does not accept criticism without overt reaction	5.4
2. (s) Is unable to give personal information: name, address, age, birthdate, etc.	5.3
3. (m) Does not reach normal level of productivity within five days after beginning a new task	5.1
4. (c) Does not work continuously at his job for two or more hours	4.3
5. (t) Is unable to follow multi-step directions	4.0
6. (z) Does not maintain clean body, hair, and clothing	3.4
7. (g) Does not independently follow work schedule	3.3
8. (p) Does not continue work without disruption when stranger is observing	2.7
9. (d) Does not begin work routine immediately upon arrival	2.6
10. (q) Engages in disruptive behavior in the work place	2.1
(u) Does not seek help from a supervisor when having difficulty	2.1

low ranking given it by most respondents. Response (g) was selected by 4 supervisors and placed 7th, response (p) was selected by 5 and placed 8th, and response (d) was selected by 4 and placed 9th. Two responses received the same mean and, therefore, tied for 10th position. Responses (q) and (u) were both selected by 4 supervisors.

The summary, conclusions, and recommendations of this study follow.

Chapter V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to investigate the following questions:

1. What occupational skills are being required of trainable mentally retarded adults in Omaha, Nebraska?
2. What community living skills are being required of trainable mentally retarded adults in Omaha, Nebraska?
3. What leisure time skills are being utilized by trainable mentally retarded adults in Omaha, Nebraska?
4. What curriculum objectives do parents/guardians consider important in the educational program of trainable mentally retarded students?
5. What are the most frequently observed work-related problems in vocational training centers for trainable mentally retarded adults?

The parents or guardians of 50 graduates of a large metropolitan Trainable Mental Retardation Program were polled by telephone for the survey and an opinionnaire was conducted in person by the investigator with 10 supervisors of community-based sheltered workshops.

In answer to Question one, the survey found that only 5 subjects, or 10%, were competitively employed. Of that number, 3 subjects were employed full-time. Forty-five percent of the subjects were placed in a sheltered workshop position. The usual occupation in the workshops was routine benchwork. Assembling and packaging were the most frequently named job responsibilities in the sheltered workshops.

Seventy percent of the subjects had contacted ENCOR for assistance and placement in a sheltered workshop, however, over one third were still waiting for an opening. This is reflected in the large number of the subjects who are spending their time staying at home (41%).

In answer to Question two, the average subject in the survey does some general cleaning in the home, and handles his/her own personal grooming needs. Few of the subjects did the family laundry, ironed, or engaged in mending or sewing.

Four major areas of deficit were: the ability to perform simple first aid procedures, counting money, independent use of public transportation, and basic reading skills.

In answer to Question three, the average subject in the survey participated in outside the home sports. The most frequently mentioned were bowling and Special Olympics.

At home leisure time activities consisted of watching television and listening to music for most subjects. Few of the subjects played card or board games, did needlework, or read for enjoyment.

In answer to Question four, the parents/guardians listed food selection, first aid procedures, making money transactions, telephone use, telling time, filling out job applications, and basic reading as top priorities in curriculum planning.

The parents listed all other skills as important with the exceptions of mending, sewing, ironing, and ordering from a catalog, which were given a somewhat important rating. Many parents commented that these were not daily or even frequent chores in our modern day

and, therefore, were not considered as especially necessary skills for the subjects to learn.

In answer to Question five, the 10 supervisors listed the following as the 10 most frequently observed work-related problems in vocational training centers:

1. Does not accept criticism without overt reaction
2. Is unable to give personal information
3. Does not reach normal level of productivity within 5 days after beginning a new task
4. Does not work continuously at his job for 2 or more hours
5. Is unable to follow multistep directions
6. Does not maintain clean body, hair, and clothing
7. Does not independently follow work schedule
8. Does not continue work without disruption when stranger is observing
9. Does not begin work routine immediately upon arrival
10. Engages in disruptive behavior in the work place
11. Does not seek help from supervisor when having difficulty.

Conclusions

1. Most of the subjects will be spending their adult lives working in sheltered workshops or staying at home.
2. There is an inadequate number of sheltered workshop placement opportunities available in the community.
3. The ability to use public transportation independently would enhance the mobility and utility of the subjects.

4. Unless given specific training in other areas, most subjects will spend leisure time at home watching television or listening to music.

5. The most frequent work-related problems cited by area supervisors could be remediated in the classroom using behavioral modification techniques.

Recommendations

1. Attempts should be made to increase the number of one-on-one job training sites. If careful attention is given to selecting subjects with high likelihood of success for these training sites, this should lead to more opportunities for competitive placement following graduation. In order to accomplish this, a community awareness program should be started to acquaint area businesses with the skills of the students. It is suggested that speaking appearances at community service clubs composed of area businessmen might provide the necessary exposure.

2. State officials should be made aware of the need for more sheltered workshop positions.

3. Since 41% of the subjects remain at home during the day, household cleaning skills should be stressed. This will provide the subject with skills that will permit him/her to be a contributing member of the family circle. Laundry skills appear to be an area of deficit. It is recommended that this task not be simulated for training due to difficulties with generalization and transfer.

4. Research should be undertaken to determine the most effective alternative methods of teaching money skills. Some suggestions are

intensive training of bigger and smaller concepts, estimating, rounding to whole dollars, and calculator use.

5. Training programs in the use of public transportation should be established. Due to difficulties with generalization and transfer, this task should not be simulated.

6. Training in specific leisure time activities by the schools should be implemented. Some suggestions are: card games, needlework, model construction.

7. Training in basic reading skills using actual reading materials from the student's environment should be undertaken. This would include newspapers, ads, TV schedules, package directions, clothing labels, and appliance instructions.

8. A behavior modification program using a charting system in the classroom should be set up aimed at remediating the most frequently observed work-related problems cited by area supervisors.

9. This study should be replicated at some point in the future to determine if results have been achieved.

REFERENCES

- Bernstein, G. S. (1981). Research issues in training interpersonal skills for the mentally retarded. Education and Training for the Mentally Retarded, 16(1), 70-73.
- Bradley, L. J., & Warrenfeltz, R. B. (1981). The job module: An alternative approach to contract procurement, training, and curriculum development. Education and Training of the Mentally Retarded, 16(4), 289-293.
- Browder, D. M., & Steward, K. L. (1982). Curriculum development for the severely handicapped. Journal of Special Education Technology, 5(3), 43-49.
- Cain, E. J. (1984). The challenge of technology: Educating the exceptional child for the world of tomorrow. Teaching Exceptional Children, 16(3), 239-241.
- Cheney, D., & Foss, G. (1984). An examination of the social behavior of mentally retarded workers. Education and Training of the Mentally Retarded, 19(3), 217-221.
- D'Amico, M. L., Hursh, N. C., Lasky, R. G., & Shrey, D. E. (1982). A career education model for students with special needs. Teaching Exceptional Children, 15(1), 52-57.
- Davis, P., Bates, P., & Cuvo, A. J. (1983). Training a mentally retarded woman to work competitively. Education and Training of the Mentally Retarded, 18(3), 158-163.
- Ford, L., Dineen, J., & Hall, J. (1984). Is there life after placement? Education and Training of the Mentally Retarded, 19(4), 291-296.

- Forness, S. R., Thornton, R. L., & Horton, A. A. (1981). Assessment of applied academic and social skills. Education and Training of the Mentally Retarded, 16(2), 104-109.
- Goodall, P. A., Wehman, P., & Cleveland, P. (1983). Job placement for mentally retarded individuals. Education and Training of the Mentally Retarded, 18(4), 271-275.
- Heller, H., & Schilit, J. (1979). Career education for the future. Career Development for Exceptional Individuals, 14(2), 91-96.
- Hill, J. W., Kochany, L., & Wehman, P. (1979). Development of a community-based pre-employment program for moderately and severely retarded adults. Rehabilitation Literature, 40(11-12), 331-336.
- Hoyt, K. (1976). Career education for special populations. Washington, DC: U.S. Government Printing Office.
- Kokaska, C. (1977, March). Report of study, Committee on Secondary Career/Vocational Education. American Association on Mental Deficiency (unpublished).
- Langone, J. (1981). Curriculum for the trainable mentally retarded . . . or "What do I do when the ditto machine dies?" Education and Training of the Mentally Retarded, 16(2), 150-154.
- Lombardi, T. P., & Hotsinpiller, P. (1979). Strengthening career foundation skills for the developmentally disabled. Career Development for Exceptional Individuals, 14(2), 74-79.
- Miller, S. R. (1981). A crisis in appropriate education: The dearth of data on programs for secondary handicapped adolescents. The Journal of Special Education, 15(3), 351-359.

- Nietupski, J. A., Nietupski, S. H., Welch, J., & Anderson, R. J. (1983). Establishing and maintaining vocational training sites for moderately and severely handicapped students: Strategies for community/vocational trainers. Education and Training of the Mentally Retarded, 18(3), 169-175.
- Rusch, F. R., & Schutz, R. P. (1979). Non-sheltered competitive employment of the mentally retarded adult: Research to reality? Journal of Contemporary Business, 8, 85-98.
- Sandler, A., & Robinson, R. (1981). Public attitudes and community acceptance of mentally retarded persons: A review. Education and Training of the Mentally Retarded, 16(2), 97-101.
- Schipp, S. L., Baker, R. J., & Cuvo, A. J. (1980). The relationship between attention to work task and production rate of a mentally retarded client. Mental Retardation, 18(5), 241-243.
- Schleien, S. J., Certo, N. J., & Muccino, A. (1984). Acquisition of leisure skills by a severely handicapped adolescent: A data-based instructional program. Education and Training of the Mentally Retarded, 19(4), 293-305.
- Schleien, S. J., Kiernan, J., & Wehman, P. (1981). Evaluation of an age-appropriate leisure skills program for moderately retarded adults. Education and Training of the Mentally Retarded, 16(1), 13-19.
- Zohn, C. J., & Bornstein, P. H. (1980). Self-monitoring of work performance with mentally retarded adults. Mental Retardation, 18(1), 19-25.

APPENDIX A

Trainable Mentally Retarded
Graduate Level Parent Questionnaire

Student _____ Age _____

Year of Graduation _____

Your responses to the following questions will assist us as we evaluate the TMR curriculum to determine if the instruction provided is of value to your son/daughter at age 21.

Please circle the number which most closely describes your child's performance level, using the following key:

- (1) always
- (2) usually
- (3) seldom
- (4) never
- (5) I don't know

HOME/COMMUNITY LIVING SKILLS

1. In which residential setting is your son/daughter living?
 - a. Own apartment
 - b. Shared apartment with minimal supervision
 - c. Supervised community living arrangements outside your home
 - _____
 - d. Your home
 - e. Institutional setting

2. In what residential setting was your son/daughter living during childhood? Circle all that apply.
 - a. Own apartment How long? _____
 - b. Shared apartment with minimal supervision How long? _____
 - c. Supervised community living arrangements outside your home
_____ How long? _____
 - d. Your home How long? _____
 - e. Institutional setting How long? _____

3. Does your son/daughter perform household chores? Yes ___ No ___

If so, what chores does he/she perform?

a. Bed making	1	2	3	4	5
b. Table setting	1	2	3	4	5
c. Food selection	1	2	3	4	5
d. Snack selection	1	2	3	4	5
e. General cleaning	1	2	3	4	5
f. Laundry	1	2	3	4	5
g. Mending/sewing	1	2	3	4	5
h. Ironing	1	2	3	4	5
i. Other	1	2	3	4	5

4. Does your son/daughter independently perform the following grooming skills?

a. Selects clothes worn daily	1	2	3	4	5
b. Coordinates outfits	1	2	3	4	5
c. Bathes and showers self	1	2	3	4	5
d. Shaves own self	1	2	3	4	5
e. Washes own hair	1	2	3	4	5

5. Does your son/daughter know his/her own size for shoes and wearing apparel?

Yes ___ No ___

6. Does your son/daughter care for his/her own simple medical needs?

a. Applies a bandaid	1	2	3	4	5
b. Independently takes prescription medicine	1	2	3	4	5
c. Treats a simple cut or burn	1	2	3	4	5

7. Has your son/daughter had the opportunity to order items from a catalog?

Yes ___ No ___

8. On which level of independence does your son/daughter participate in shopping expeditions?

a. Independently purchases items at

1. Grocery store	1	2	3	4	5
2. Clothing store	1	2	3	4	5
3. _____	1	2	3	4	5

b. Assist you in shopping by locating items to be purchased at

1. Grocery store	1	2	3	4	5
2. Clothing store	1	2	3	4	5
3. _____	1	2	3	4	5

c. Purchases simple items and correctly counts the change for money transactions of

1. under \$1.00	1	2	3	4	5
2. under \$5.00	1	2	3	4	5
3. under \$10.00	1	2	3	4	5
4. over \$20.00	1	2	3	4	5

9. What level of independence does your son/daughter demonstrate in using available transportation systems?

a. Independently rides MAT buses or taxi

b. Rides MAT bus with assistance in the area of

1. making change for fare
2. locating boarding and deboarding sites
3. maintaining appropriate social skills

c. Accompanies adults but does not assume responsibility for getting on or off bus at right location

d. Does not use public transportation

e. Drives vehicle

10. Has or could your son/daughter use the telephone independently to:

a. Call home in an emergency	1	2	3	4	5
b. Call 911 in an emergency	1	2	3	4	5
c. Cancel own van transportation or report sick to work when ill	1	2	3	4	5
d. Talk socially with friends	1	2	3	4	5
e. Seek information relating to time and temperature	1	2	3	4	5
f. Order delivery of fast food	1	2	3	4	5
g. Locate information in telephone directory	1	2	3	4	5
h. Relate a phone message or number	1	2	3	4	5

11. Does your son/daughter have the opportunity to eat at commercial eating establishments?

Yes ___ No ___

If yes, does he/she:

a. Independently order from the menu	1	2	3	4	5
b. Make the purchase independently at fast food restaurant	1	2	3	4	5
c. Estimate the amount of money needed to purchase the food	1	2	3	4	5
d. Need assistance to select food items	1	2	3	4	5
e. Other _____	1	2	3	4	5

12. Are the child's acquired reading skills useable in the following situations:

a. Follows label directions	1	2	3	4	5
b. Follows directions given by signs in the community	1	2	3	4	5
c. Locates weather, ads, TV schedule in the newspaper	1	2	3	4	5
d. Reads for enjoyment	1	2	3	4	5
e. Other _____	1	2	3	4	5

WORK RELATED SKILLS

13. Is your son/daughter employed?

Yes ___ No ___

If yes, circle one:

- a. competitively employed
- b. placed in a work station with limited supervision
- c. placed in a sheltered workshop
- d. Other _____

14. Since graduation, what type of work has your son/daughter done?

- a. food service worker
- b. custodial
- c. laundry
- d. maid
- e. routine benchwork
- f. Other _____

15. Please circle all job responsibilities your son/daughter has had.

- a. washing dishes
- b. packaging (please describe) _____
- c. emptying wastebaskets
- d. cleaning tables
- e. sweeping
- f. preparing food (please describe) _____
- g. serving food
- h. washing windows
- i. cleaning bathrooms
- j. folding laundry
- k. dusting
- l. making beds
- m. assembling a product (please describe) _____
- n. Other _____

16. How does your son/daughter spend his/her time?
- a. Employed Number of hours weekly _____
 Type of business _____
 How many jobs has he/she held
 since graduation _____
 - b. Volunteer Number of hours weekly _____
 Type of facility _____
 Specific duties _____
 - c. Sheltered workstation
 Number of hours weekly _____
 - d. Other _____
17. If your son/daughter is employed, a volunteer, or goes to a sheltered workshop, how does he/she travel to that destination?
- a. MAT bus
 - b. Taxi
 - c. Special van
 - d. Private vehicle
18. While there, how does your son/daughter fulfill his/her lunch needs?
- a. purchases lunch from a nearby restaurant
 - b. purchases lunch from a lunchroom cafeteria
 - c. brings lunch from home
19. Have you contacted any of the following agencies for job/work placement assistance?
- a. ENCOR
 - b. Vocational Rehabilitation Services

LEISURE TIME SKILLS

20. Does your son/daughter participate in outside the home sports?

Yes ___ No ___

If so, which sports:

- | | |
|---------------------|------------------|
| a. Bowling | How often? _____ |
| b. Swimming | How often? _____ |
| c. Skating | How often? _____ |
| d. Skiing | How often? _____ |
| e. Special Olympics | How often? _____ |
| f. Fitness Program | How often? _____ |
| g. Other _____ | How often? _____ |

21. What leisure time activities does your son/daughter enjoy in his home?

	Daily	Frequently	Seldom	Never	I don't know
a. Card games	1	2	3	4	5
b. Board games	1	2	3	4	5
c. Needlework	1	2	3	4	5
d. Reading books, magazines	1	2	3	4	5
e. Television	1	2	3	4	5
f. Listening to music	1	2	3	4	5
g. Other _____	1	2	3	4	5

22. How important do you consider the following skills? Should they be included in the curriculum for trainable mentally retarded students? Use the following key for your answers?

- (1) very important, should be a top priority
 (2) important
 (3) somewhat important
 (4) not very important
 (5) not important, don't include

a. Bed making	1	2	3	4	5
b. Table setting	1	2	3	4	5
c. Food selection	1	2	3	4	5
d. General cleaning	1	2	3	4	5
e. Laundry	1	2	3	4	5
f. Mending/sewing	1	2	3	4	5
g. Ironing	1	2	3	4	5
h. Personal grooming skills (shaving, bathing, deodorant use)	1	2	3	4	5
i. Simple first aid procedures	1	2	3	4	5
j. Ordering from a catalog	1	2	3	4	5
k. Knowing own clothing sizes	1	2	3	4	5
l. Purchasing items from a store	1	2	3	4	5
m. Making simple money transactions	1	2	3	4	5
n. Independently riding public transportation	1	2	3	4	5
o. Telephone use	1	2	3	4	5
p. Purchasing food in a restaurant	1	2	3	4	5
q. Cooking	1	2	3	4	5
r. Washing dishes	1	2	3	4	5
s. Assembly line skills	1	2	3	4	5
t. Telling time	1	2	3	4	5
u. Filling out a job application	1	2	3	4	5
v. Leisure time skills (sports, games, hobbies)	1	2	3	4	5
w. Basic reading skills	1	2	3	4	5

APPENDIX B

Sheltered Workshop Supervisor Questionnaire

Below is a list of work-related problems. Please circle the ten you have most frequently observed in adult trainable workers. On the line next to the statement circled, please number the ten you have selected on the basis of frequency of occurrence. Place number one beside the problem that you feel occurs the most frequently, number two beside the next most frequently occurring problem, etc.

Vocational

- ___ a. Does not come to work daily, as scheduled.
- ___ b. Arrives at work late.
- ___ c. Does not work continuously at his job for two or more hours.
- ___ d. Does not begin work routine immediately upon arrival.
- ___ e. Does not correct work on a task after second correction.
- ___ f. Does not complete a task without constant direction.
- ___ g. Does not independently follow work schedule.
- ___ h. Does not demonstrate basic color, size, shape discrimination.
- ___ i. Leaves work station inappropriately more than twice daily.
- ___ j. Does not return to work promptly following break.
- ___ k. Does not organize his/her own work area.
- ___ l. Does not clean his own work area without prompts.
- ___ m. Does not reach normal level of productivity within five days after beginning a new task.
- ___ n. Does not follow safety rules in the work area.
- ___ o. Does not continue work without disruption when supervisor is observing.
- ___ p. Does not continue work without disruption when stranger is observing.
- ___ q. Engages in disruptive behavior in the work place.

Communication

- ___ r. Is unable to communicate basic needs; e.g., thirst, hunger, restroom.
- ___ s. Is unable to give personal identification information: name, age, address, birthdate, telephone number, social security number, etc.
- ___ t. Is unable to follow multi-step directions.
- ___ u. Does not seek help from a supervisor when having difficulty.

- v. Does not speak clearly enough to be understood by anybody on the second try.
- w. Inappropriately converses with other workers during work period.
- x. Does not accept criticism without overt reaction.

Grooming

- y. Does not dress appropriately for working conditions.
- z. Does not maintain clean body, hair, and clothing.
- Other. _____