



National Library  
of Canada

Acquisitions and  
Sibliographic Services Branch

395 Wellington Street  
Ottawa, Ontario  
K1A 0N4

Bibliothèque nationale  
du Canada

Direction des acquisitions et  
des services bibliographiques

395, rue Wellington  
Ottawa (Ontario)  
K1A 0N4

Your file    votre référence

Our file    notre référence

**The author has granted an irrevocable non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of his/her thesis by any means and in any form or format, making this thesis available to 'interested persons.**

**L'auteur a accordé une licence irrévocable et non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de sa thèse de quelque manière et sous quelque forme que ce soit pour mettre des exemplaires de cette thèse à la disposition des personnes intéressées.**

**The author retains ownership of the copyright in his/her thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without his/her permission.**

**L'auteur conserve la propriété du droit d'auteur qui protège sa thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.**

ISBN 0-612-16485-3

**Canada**

Name Fagan, James Joseph

Dissertation Abstracts International is arranged by broad, general subject categories. Please select the one subject which most nearly describes the content of your dissertation. Enter the corresponding four-digit code in the spaces provided.

Psychology, Clinical

SUBJECT TERM

0622

U-M-I

SUBJECT CODE

## Subject Categories

### THE HUMANITIES AND SOCIAL SCIENCES

#### COMMUNICATIONS AND THE ARTS

Architecture ..... 0729  
Art History ..... 0377  
Cinema ..... 0900  
Dance ..... 0378  
Fine Arts ..... 0357  
Information Science ..... 0723  
Journalism ..... 0391  
Library Science ..... 0399  
Mass Communications ..... 0708  
Music ..... 0413  
Speech Communication ..... 0439  
Theater ..... 0465

#### EDUCATION

General ..... 0515  
Administration ..... 0514  
Adult and Continuing ..... 0516  
Agricultural ..... 0517  
Art ..... 0273  
Bilingual and Multicultural ..... 0282  
Business ..... 0688  
Community College ..... 0275  
Curriculum and Instruction ..... 0727  
Early Childhood ..... 0518  
Elementary ..... 0524  
Finance ..... 0277  
Guidance and Counseling ..... 0519  
Health ..... 0680  
Higher ..... 0745  
History of ..... 0520  
Home Economics ..... 0278  
Industrial ..... 0521  
Language and Literature ..... 0279  
Mathematics ..... 0280  
Music ..... 0522  
Philosophy of ..... 0998  
Physical ..... 0523

Psychology ..... 0525  
Reading ..... 0535  
Religious ..... 0527  
Sciences ..... 0714  
Secondary ..... 0533  
Social Sciences ..... 0534  
Sociology of ..... 0340  
Special ..... 0529  
Teacher Training ..... 0530  
Technology ..... 0710  
Tests and Measurements ..... 0288  
Vocational ..... 0747

#### LANGUAGE, LITERATURE AND LINGUISTICS

Language ..... 0679  
Ancient ..... 0289  
Linguistics ..... 0290  
Modern ..... 0291  
Literature ..... 0401  
General ..... 0294  
Classical ..... 0295  
Comparative ..... 0297  
Medieval ..... 0298  
Modern ..... 0316  
African ..... 0591  
American ..... 0305  
Asian ..... 0352  
Canadian (English) ..... 0355  
Canadian (French) ..... 0593  
English ..... 0311  
Germanic ..... 0312  
Latin American ..... 0315  
Middle Eastern ..... 0313  
Romance ..... 0314  
Slavic and East European ..... 0314

#### PHILOSOPHY, RELIGION AND THEOLOGY

Philosophy ..... 0422  
Religion ..... 0318  
General ..... 0321  
Biblical Studies ..... 0319  
Clergy ..... 0320  
History of ..... 0322  
Philosophy of ..... 0469  
Theology ..... 0323

#### SOCIAL SCIENCES

American Studies ..... 0323  
Anthropology ..... 0324  
Cultural ..... 0326  
Physical ..... 0327  
Business Administration ..... 0310  
General ..... 0272  
Accounting ..... 0770  
Banking ..... 0454  
Management ..... 0338  
Marketing ..... 0385  
Canadian Studies ..... 0501  
Economics ..... 0503  
General ..... 0505  
Agricultural ..... 0508  
Commerce-Business ..... 0509  
Finance ..... 0510  
History ..... 0511  
Labor ..... 0358  
Theory ..... 0366  
Folklore ..... 0351  
Geography ..... 0578  
Gerontology ..... 0578  
History ..... 0578  
General ..... 0578

Ancient ..... 0579  
Medieval ..... 0581  
Modern ..... 0582  
Black ..... 0328  
African ..... 0331  
Asia, Australia and Oceania ..... 0332  
Canadian ..... 0334  
European ..... 0335  
Latin American ..... 0336  
Middle Eastern ..... 0337  
United States ..... 0585  
History of Science ..... 0398  
Law ..... 0615  
Political Science ..... 0616  
General ..... 0617  
International Law and Relations ..... 0814  
Public Administration ..... 0452  
Recreation ..... 0626  
Social Work ..... 0627  
Sociology ..... 0938  
General ..... 0631  
Criminology and Penology ..... 0628  
Demography ..... 0629  
Ethnic and Racial Studies ..... 0630  
Individual and Family Studies ..... 0700  
Industrial and Labor Relations ..... 0344  
Public and Social Welfare ..... 0709  
Social Structure and Development ..... 0999  
Theory and Methods ..... 0453  
Transportation ..... 0999  
Urban and Regional Planning ..... 0453  
Women's Studies ..... 0453

### THE SCIENCES AND ENGINEERING

#### BIOLOGICAL SCIENCES

Agriculture ..... 0473  
General ..... 0285  
Agronomy ..... 0475  
Animal Culture and Nutrition ..... 0476  
Animal Pathology ..... 0359  
Food Science and Technology ..... 0478  
Forestry and Wildlife ..... 0479  
Plant Culture ..... 0480  
Plant Pathology ..... 0817  
Plant Physiology ..... 0777  
Range Management ..... 0746  
Wood Technology ..... 0306  
Biology ..... 0287  
General ..... 0308  
Anatomy ..... 0309  
Biostatistics ..... 0379  
Botany ..... 0329  
Cell ..... 0353  
Ecology ..... 0369  
Entomology ..... 0793  
Genetics ..... 0410  
Limnology ..... 0307  
Microbiology ..... 0317  
Molecular ..... 0416  
Neuroscience ..... 0433  
Oceanography ..... 0821  
Physiology ..... 0778  
Radiation ..... 0472  
Veterinary Science ..... 0786  
Zoology ..... 0760  
Biophysics ..... 0425  
General ..... 0996  
Medical ..... 0575

#### EARTH SCIENCES

Biogeochemistry ..... 0425  
Geochemistry ..... 0996

Geodesy ..... 0370  
Geology ..... 0372  
Geophysics ..... 0373  
Hydrology ..... 0388  
Mineralogy ..... 0411  
Paleobotany ..... 0345  
Paleoecology ..... 0426  
Paleontology ..... 0418  
Paleozoology ..... 0985  
Palynology ..... 0427  
Physical Geography ..... 0368  
Physical Oceanography ..... 0415

#### HEALTH AND ENVIRONMENTAL SCIENCES

Environmental Sciences ..... 0768  
Health Sciences ..... 0566  
General ..... 0300  
Audiology ..... 0992  
Chemotherapy ..... 0567  
Dentistry ..... 0350  
Education ..... 0769  
Hospital Management ..... 0758  
Human Development ..... 0982  
Immunology ..... 0564  
Medicine and Surgery ..... 0347  
Mental Health ..... 0569  
Nursing ..... 0570  
Nutrition ..... 0380  
Obstetrics and Gynecology ..... 0354  
Occupational Health and Therapy ..... 0381  
Ophthalmology ..... 0571  
Pathology ..... 0419  
Pharmacology ..... 0572  
Pharmacy ..... 0382  
Physical Therapy ..... 0573  
Public Health ..... 0574  
Radiology ..... 0575  
Recreation ..... 0575

Speech Pathology ..... 0460  
Toxicology ..... 0383  
Home Economics ..... 0386

#### PHYSICAL SCIENCES

Pure Sciences ..... 0485  
Chemistry ..... 0749  
General ..... 0486  
Agricultural ..... 0487  
Analytical ..... 0488  
Biochemistry ..... 0738  
Inorganic ..... 0490  
Nuclear ..... 0491  
Organic ..... 0494  
Pharmaceutical ..... 0495  
Physical ..... 0754  
Polymer ..... 0405  
Mathematics ..... 0605  
Physics ..... 0986  
General ..... 0606  
Acoustics ..... 0608  
Astronomy and Astrophysics ..... 0748  
Atmospheric Science ..... 0607  
Atomic ..... 0798  
Electronics and Electricity ..... 0759  
Elementary Particles and High Energy ..... 0609  
Fluid and Plasma ..... 0610  
Molecular ..... 0752  
Nuclear ..... 0756  
Optics ..... 0611  
Radiation ..... 0463  
Solid State ..... 0346  
Statistics ..... 0984  
Applied Sciences ..... 0346  
Applied Mechanics ..... 0984  
Computer Science ..... 0984

Engineering ..... 0537  
General ..... 0538  
Aerospace ..... 0539  
Agricultural ..... 0540  
Automotive ..... 0541  
Biomedical ..... 0542  
Chemical ..... 0543  
Civil ..... 0544  
Electronics and Electrical ..... 0348  
Heat and Thermodynamics ..... 0545  
Hydraulic ..... 0546  
Industrial ..... 0547  
Marine ..... 0794  
Materials Science ..... 0548  
Mechanical ..... 0743  
Metallurgy ..... 0551  
Mining ..... 0552  
Nuclear ..... 0549  
Packaging ..... 0765  
Petroleum ..... 0554  
Sanitary and Municipal ..... 0790  
System Science ..... 0428  
Geotechnology ..... 0796  
Operations Research ..... 0795  
Plastics Technology ..... 0994  
Textile Technology ..... 0994

#### PSYCHOLOGY

General ..... 0621  
Behavioral ..... 0384  
Clinical ..... 0622  
Developmental ..... 0620  
Experimental ..... 0623  
Industrial ..... 0624  
Personality ..... 0625  
Physiological ..... 0989  
Psychobiology ..... 0349  
Psychometrics ..... 0632  
Social ..... 0451



## Acknowledgments

A thesis is the end result of the commitment of a team. I wish to thank the team behind the work presented here.

Thanks to Dr. Irmingard Lenzer for agreeing long ago to supervise my thesis. She has been responsible for some of the most difficult, and rewarding lessons in my academic career, not the least of which is the project presented here. I thank her for the faith she showed in my ability, the push to make sure the work happened, and her obvious commitment to the people and subject matter of the paper presented here. Finally, I thank her for the guidance provided and patience taken by her throughout our work together.

I am grateful to Dr. Sam Danquah who was always able to provide succinct direction and guidance throughout the course of our conversations. Thanks also for his ability to instill confidence when that was exactly what was required.

To Dr. Norman Greenberg, who provided encouragement and direction often during casual chats, a heartfelt thanks. The clarification of ideas for the writing and support for the process was appreciated.

The "fourth member" of my committee deserves a special note of thanks. Faizal Junus shared his knowledge effortlessly from our first contact in his office. Truly, the work that follows could not have happened without you. Thanks Faizal

Dr. Michael Vallis, my external reader, also provided seemingly effortless guidance during a very busy schedule. His insights are apparent in the direction the final product has taken.

Without my family the idea for this thesis would still be just that, an idea. I would like to mention my family in several ways.

My Mom and Dad: Thanks for encouraging me always to *think*, for encouraging freedom of expression in our home, and for teaching their children to believe in themselves. It worked for all of us.

My sister Michelle and my brothers Mike and Keith. We have always been able to be there for each other. You make a difference.

My children: For the patience and encouragement of my son, Josh and daughter, Kate as I wrote, read and typed for the last many years when they would rather have been playing some game with their Dad (or just not studying with me), to them; I'm finished!

My wife: My anchor through it all; Mary Jane. If ever there should be a time to add a second name to a diploma, this is it. How many of my papers has she read? How many "scholarly" quotations provided to her, and ideas had "bounced off" her? I have no idea, but it worked. You were able to see the end clearly, sometimes when I could not.

My colleagues at Regional Residential Services Society deserve a tremendous amount of thanks as well. Everyone has supported me at all times in my school work. I would like to thank Bev Wicks and Carol Ann Brennan in particular for their encouragement.

I would like to express my sincere thanks to the staff who gave of their time to complete the assessments with me for this paper.

Finally, I would like to thank the "participants" in this study who, as always, are at the core of why we do what we do in this field of endeavor. Their help in "writing my book" has been invaluable.

**Jim Fagan**

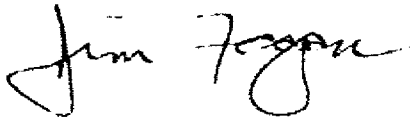
23 Rose Street  
Dartmouth, N. S. E3A 2T4

Telephone 483-2149

August 26, 1996

To whom it may concern:

Permission has been given verbally by the authors of the assessments used in this thesis for the use of the material presented in the appendices. Assessment information presented in the appendices is the only extensively quoted material in the current study.

A handwritten signature in cursive script, appearing to read "Jim Fagan".

Jim Fagan

**Criterion-Related Validation of the California Adaptive Behavior Scale**

**James Joseph Fagan**

**A Thesis Presented in Partial Fulfillment  
of the Requirements for the Degree of  
Master of Science in Applied Psychology (Clinical)**

**Saint Mary's University**

**Halifax, Nova Scotia**

# Table of Contents

	Page
Acknowledgements	i
List of Figures and Tables	4
Abstract	5
Introduction	6
Selection of Appropriate Scale	7
Adaptive Behavior	10
Adaptive Behavior Scales	11
Validity	15
Purpose of Research	15
Hypotheses	16
Method	16
Participants	16
Materials	16
Consent	17
Rater Selection	18
Rater Instruction	18
Statistical Analysis	20
Results	22
Reliability	22
Validity	23
Factor Analysis	24
Basic Life Skills Scale	24
California Adaptive Behavior Scale	26
Combined BLS and CABS	28

	Page
Discussion	32
Limitations	35
Recommendations	36
Conclusions	38
References	39
Appendices	42
A. CABS External Reliability and Validity Research	
B. The Adaptive Behavior Scale (ABS)	
C. The Basic Life Skills Scale (BLS)	
D. The California Adaptive Behavior Scale (CABS)	
E. Sample of the CABS report	
F. CABS Internal Reliability Items	
G. CABS Internal Validity Items	
H. Consent Forms	
I. Correlation Matrix for Similar BLS and CABS Domains	
J. Correlation Matrix for All BLS and CABS Domains	
K. Unrotated Factors' Matrix for the BLS	
L. Rotated Unsorted Factors' Matrix for the BLS	
M. Unrotated Factors' Matrix for the CABS	
N. Rotated Unsorted Factors' Matrix for the CABS	
O. Combined BLS and CABS Unrotated Factors' Matrix	
P. Combined BLS and CABS Rotated, Unsorted Factors' Matrix	



	Page
<b>List of Figures</b>	
1. Relationship with II-T scores and IQ	7
<b>List of Tables</b>	
1. Criteria used for the Selection of Adaptive Behavior Scales	8
2. CABS Domain Headings	13
3. Descriptive Statistics on the Time (in minutes) for Completion of the CABS	22
4. Mean Interrater Reliability Coefficients for Raw CABS Scores	23
5. Validity Coefficients for Similar Domains and Summary Scores (BLS and CABS)	23
6. Principal Component Analysis: BLS Domain Scores	24
7. Rotated Sorted Factor Matrix for the BLS	25
8. Factor Descriptors for the BLS	26
9. Principal Component Analysis: CABS Domain Scores	26
10. Rotated Sorted Factor Matrix for the CABS	27
11. Factor Descriptors for the CABS	28
12. Principal Component Analysis: BLS and CABS Domain Scores	29
13. Combined BLS and CABS Rotated, Sorted Factor Matrix	30
14. Combined BLS and CABS Factor Descriptors	31

Abstract

The California Adaptive Behavior Scale (CABS), an assessment tool for the evaluation of skill levels of mentally handicapped persons, was compared to the Basic Life Skills Scale (BLS) in an attempt to provide criterion-related validation of the CABS as an adaptive behavior scale. Pearson Product Correlation Coefficients were used to demonstrate validity. Principal Component Factor Analysis was conducted to determine the set of variables the CABS may share with the BLS among extracted factors. Results showed that the CABS overall score had a high relationship with the BLS overall score, and there was a high degree of relationship between skills measured by both scales. Extracted factors showed clear differentiation between groups of variables of both scales. Use of the CABS seems to have prescribed limits which must be considered. The findings of the statistical analyses indicated that while the BLS and CABS measure adaptive behavior, they do so in different ways. Further study is required to provide a larger sample base for normative data. The CABS provides a simple, quick assessment of skills in the mentally handicapped population and is a valuable method of measuring adaptive behavior in the population used in this study.

## Criterion-Related Validation of the California Adaptive Behavior Scale

Definitions for mental retardation are derived from either the Diagnostic and Statistical Manual: Fourth Edition ([DSM IV]; American Psychiatric Association [APA], 1994) or the American Association on Mental Retardation (AAMR), formerly the American Association on Mental Deficiency (AAMD, 1992). Both diagnostic systems specify the following criteria: (a) Age of onset before 18 years, (b) an Intelligence Quotient (IQ) of less than 70, and (c) significant impairment in adaptive abilities. McCarver & Campbell (1987) provided two primary reasons for the inclusion of a significant impairment in adaptive behavior in the diagnostic definition of mental retardation: a) To counter the cultural bias of intelligence tests and b) to avoid labeling those whose low IQ scores in school did not present difficulties after their school years (p. 197). DSM IV also stated that an individual with an IQ greater than 75 with significant impairment in adaptive behavior may be considered mentally retarded. Conversely, someone with an IQ of less than 70 but with no significant impairment in adaptive functioning should not be considered mentally retarded (p. 39-40). Greenspan and Granfield (1992) suggested that adaptive behavior and intelligence are not separate: they are points along a continuum of intelligence factors.

The focus of the current study is on adaptive behavior. This is not to minimize the importance of IQ in diagnosis and placement decisions. However, Kamphaus (1987) and DesNoyers Hurley (1989) suggested that adaptive behavior measures can be at least as valid as standard measures of intellectual functioning in determining levels of care for individuals. Harrison (1987) provided data from 41 studies on the relationship between adaptive behavior scales and IQ with the majority of Pearson Product Correlations in the moderate range. Cibiri and Jackson (1981, p. 78) showed the relationship between Independent Functioning Index (IFI) scores on the Basic Life Skills Scale (BLS) and intellectual level (see Figure 1), intellectual levels were categorized according to the

DSM-IV levels of handicap (mild: IQ 50 to 70, moderate: IQ 35 to 49, severe: IQ 20 to 34, and profound: IQ below 20).

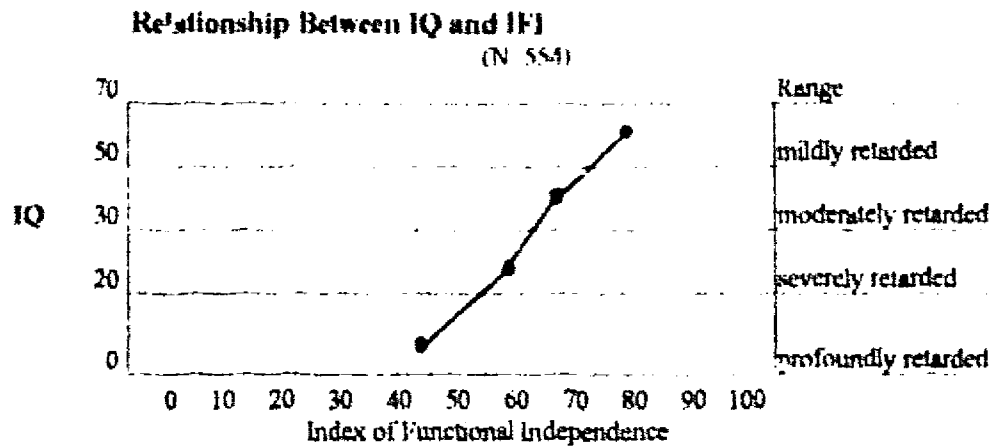


Figure 1

### Selection of an Appropriate Scale

Adaptive behavior assessment scales which have diagnostic utility and are able to provide programmatic direction, are important components in the delivery of service to the mentally handicapped (AAMD 1992; Blacher, Hanneman, & Rousey, 1992; Clinger, Fine, Johnson, Schwartzman & Drude, 1988; Conc, 1987; Hemming, 1986; Langone & Burton, 1987; Raynes, 1991). For this reason careful selection from the range of scales available is warranted (AAMD, 1992; Gresham & Elliot, 1987; Greenspan & Granfield, 1992; DesNoyers Hurley, 1989; Mathias & Nettelbeck, 1992; Raynes, 1991).

The literature has provided direction in the area of scale selection. Criteria suggested for assistance in the selection of an appropriate adaptive behavior assessment scale have included the following: (a) The cost of the administration (Raynes 1991), (b) the various environments in which the individual functions (Bruininks et al., 1987), (c) development of individualized education and training programs (Conc 1987), (d) the ease and speed with which the instrument can be administered (Raynes 1991), (e) appropriateness of the test for clients regarding age, gender and level of disability (Raynes 1991), (f) the number of domains and related items covered (Raynes 1991), and (g)

evidence of reliability and validity of the instrument (Rayner, 1991). Table 1 uses the suggested criterion in the selection of the scales to be used for this research.

In reviewing this table, several important points should be highlighted. First, the purchase prices noted in Table 1 for the Adaptive Behavior Scale (ABS), the BLS, and the California Adaptive Behavior Scale (CABS) are all reasonably cost effective

Table 1  
Criteria used for the Selection of Adaptive Behavior Scales

Selection criteria	Assessment Scale		
	ABS	BLS	CABS
Cost (approx)	\$35(US) per package	\$90(Can) per package	\$200(US) per package
Suitable to environment	yes	yes	yes
Individualized goal planning	no forms	forms provided	report generated
Method of admin.	booklet	booklet	one page checklist
Speed of admin.	2.5 hours	2 hours	10-25 min
Number of domains	24	22	24
Number of skills/criteria	629	393	332
Reliability and validity	available in literature	provided with manual	minimal available

ABS = Adaptive Behavior Scale  
BLS = Basic Life Skills Scale  
CABS = California Adaptive Behavior Scale

(the cost for each scale is \$35, \$90 and \$200, respectively). It should be noted that while the CABS is nearly six times more expensive than the ABS, the reduction possible in scoring time will offset the initial cost. The price includes administration manual, scoring sheets/forms and scale development information. Each scale requires additional scoring booklets/forms obtained for a nominal fee. The booklets and instructions are presented clearly and concisely. There is no renewal fee or cost per client for any of the scales. Second, the BLS has the option of pre-developed Individual Program Plan (IPP) forms for clinicians to use in long or short-term treatment. The complete report of the CABS

clinicians to use in long or short-term treatment. The complete report of the CABS provides a list of identified strengths and needs of the individual being assessed. Third, completion time may vary depending on familiarity with the particular scale and clinical experience. The times noted in Table 1 include time taken to rate each CABS, it did not include time taken to produce a CABS report (which would add only minutes to the total assessment time). Entering raw data does not require a clinician, but can be done by secretarial staff. On the other hand the calculation of the ABS and BLS domain scores must be done by hand; this adds considerably to the time taken to complete the assessment.

The ABS and the BLS referenced in Table 1 meet the selection criteria in all areas for an adaptive behavior scale. The CABS meets criteria for all but one category. The external validity information provided with the administration manual (see Appendix A) by Gardner and Breuer (1985) lacks criterion validation to a recognized, contemporary, adaptive behavior scale such as the BLS.

The ABS is referenced in various reviews of adaptive behavior scales (Cone, 1987; Kamphaus, 1987; Evans & Bradley-Johnson, 1988). Harrison's (1987) comprehensive review of adaptive behavior scales provided reference to 29 studies using the ABS as an adaptive behavior scale with mentally handicapped persons. Within the context of a standard measure of adaptive behavior in the delivery of services to the mentally handicapped, the ABS is presented for comparison of findings in the current study. The BLS is the adaptive behavior scale used in the community setting in this study and has been the assessment tool of choice for the past eleven years. As is clear from Table 1, there is ample justification for the use of the BLS as a referent. It meets selection criteria, and it compares favorably to the ABS.

### Adaptive Behavior

Detailed historical perspectives on the origins of adaptive behavior in service delivery for the mentally handicapped are provided in the literature (Bruininks, Thurlow & Gilman, 1987; Greenspan & Granfield, 1992; Raynes, 1991). Many definitions of adaptive behavior are currently used (AAMR, 1992; Cone, 1987; Greenspan & Granfield, 1992; Raynes, 1991; Mathias & Nettelbeck, 1992; McCarver & Campbell, 1987; Olurin & Sturme, 1989). In the present study three published definitions (from AAMR) of mental handicap will be used to attempt to define the construct of adaptive behavior. No single definition of mental handicap can provide as complete an understanding of adaptive behavior as does the blending of the three definitions. The 1961 definition stated: "Mental retardation refers to the subaverage general intellectual functioning which originates in the developmental period and is associated with impairment in adaptive behavior" (Raynes, 1991 p. 83). Grossman (1983) stated: "Adaptive behavior refers to the quality of everyday performance in coping with environmental demands. The quality of general adaptation is mediated by level of intelligence; thus the two concepts overlap in meaning" (AAMR, 1992, p. 38). Currently AAMR uses limitations in adaptive skills rather than adaptive behaviors in their definition. "... the application of the definition stresses that specific adaptive limitations often coexist with strengths in other adaptive skill areas, the existence in adaptive skills must be documented within the context of community environments typical of the individual's age peers and indexed to the person's individualized needs for support" (AAMR, 1992, p. 25).

The AAMR (1992) then describes the following adaptive skills: (a) communication skills, (b) self care skills, (c) home living, (d) social functioning, (e) community abilities, (f) self direction, (g) health and safety behavior, (h) functional academics, (i) leisure activity, and (10) work activity. Impairment in more than one skill is required in order for an individual to be diagnosed with a mental handicap.

### Adaptive Behavior Scales

As noted in Table 1, three adaptive behavior scales have been identified for the purpose of this study. Each may be used as an "all purpose" program planning tool. That is, each scale is suitable for the initial assessment of skill levels and provide treatment direction. Each scale chosen incorporates the theoretical construct of adaptive behavior as presented above and is designed to be completed by the following persons: a) Staff members who are familiar with the individual, b) family members or c) school personnel who are familiar with the individual. Direct testing is not always required, rather, familiarity with the individual to be assessed by the rater is seen as a validity criterion. The three scales chosen are typical of the choice of assessments available.

The Adaptive Behavior Scale ([ABS] [see Appendix B]) developed by Nihira, Foster, Shellhaas, and Leland (1974) stands out from other adaptive behavior scales in the literature as an important assessment tool. The ABS is particularly useful when maladaptive behavior is an issue in treatment. Maladaptive behaviors may be defined as those activities which, although not directly related to a particular skill, affect execution of tasks involving certain skills. For example, the self stimulatory behavior of staring at lights may not be directly related to the ability to wash dishes, but if an individual stares at lights to the exclusion of doing daily chores, his/her ability to "complete the skill" is affected.

The ABS is a two part assessment. Part I is divided into 10 domains. Each domain assesses daily living skills and abilities (e.g., *physical development and socialization*). Part II is divided into 14 domains which identify maladaptive or "problem behaviors" (e.g., violent and destructive behavior and sexually aberrant behavior). All items in each domain are scored by the rater. Summary information for Part I and Part II is displayed by recording domain scores and which are entered in a grid-like *profile summary*. Summary scores are presented in deciles for ease of comparison of individuals to themselves and their peers.



A second scale, the BLS, was developed in Canada (Cibiri & Jackson, 1981); it is composed of six sections (see Appendix C). An important feature of the BLS is its rating of the presence of abilities, rather than deficits, as is the case with the ABS. High scores on the BLS indicate high adaptability. High scores on the ABS indicate high levels of maladaptive behavior. The BLS also provides a measure of the quality of the individual environment. Part I of the BLS is called *basic life skills*. It consists of seven domains of daily living skills which include *self care skills* and *community living skills* (e.g., "wash and dry dishes" and "know own age in years"). The *basic life skills* domains are organized from least to more complex skills. Part I is correlated very highly ( $r=.88$ ,  $r^2=.77$ ,  $p\leq .01$ ) with Part I of the ABS (Dalton, Cibiri, Baker, Malik & Wu, 1981). Part II (*personal social behaviors*) includes 11 domains, which include *adaptability to change* and *frustration tolerance*. Items such as "remaining calm in disputes and arguments" and "predictability of behavior" are rated in these domains. Each of the items in Parts I and II are rated on a scale of 0-5. Although the criterion for rating is slightly different from Part I to Part II, the rating of "0" indicates least adaptive and "5" most adaptive, representing "typical" or adaptive community behavior. Part II of the BLS does not correlate as highly ( $r=.42$ ,  $r^2=.18$ ,  $p\leq .01$ ) with Part II of the ABS (Dalton, et al., 1981). The negative correlation is expected since the "higher ABS score denote maladaptive behavior whereas higher BLS scores denote adaptive behavior" (Cibiri & Jackson, 1981, p. 84). Part III (*moral awareness*) evaluates the person's skills "related to distinguishing right from wrong in daily conduct" (Cibiri & Jackson, 1981, p. 14). Part IV (*physical state*) details information (e.g., *general health* and *vision*) about the individual being assessed. Part V (*services currently received*) establishes care needed (e.g., *staff hours per week*, *type of supervision*). Part VI (*assessment of person's living and program environment*) documents living conditions such as quality of living environment and involvement in leisure activities. Raw scores and averages for each domain are displayed by graphical representation of the scores in two summary sections. Section III is rated with a letter score

([A to D] [least moral awareness to most moral awareness]). The summary rating for the BLS is the Index of Functional Independence (IFI). The IFI is composed of averaged scores from the following BLS sections: (1) *basic life skills*, (2) *personal social behavior*, and (3) *moral awareness*.

The CABS ([shown in Appendix D] [Gardner & Breuer, 1991]) is the assessment tool which will be the focus of the present research. Due to its brief (i.e., 10 to 25 min.) completion time, the CABS may be particularly useful when there is limited time to document abilities. The CABS consists of 24 domains (displayed in Table 3).

Table 3  
CABS Domain Headings

1	Toileting	13	Gross Motor
2	Dressing	14	Perceptual Motor
3	Fastening	15	Prevocational
4	Eating	16	Vocational
5	Bathing	17	Academic
6	Grooming	18	Translocation
7	Toothbrushing	19	Money Handling
8	Personal Interaction	20	Personal Management
9	Group Participation	21	Home Management
10	Receptive Language	22	Health Care
11	Expressive Language	23	Community Awareness
12	Leisure	24	Responsibility

Each domain is composed of daily living skills and abilities with corresponding age referenced norms for each skill. For example, in section 17, *academic*, #7 (prints first name) is referenced to age 5.5. In this manner, when an individual has been assessed using the CABS, the final score of each domain is related to chronological age (see Appendix E). The age referenced scores are displayed to the right of each skill. The final CABS report is computer generated.

The CABS is composed of 332 items distributed over the 24 domains. The number of items in each domain ranges from seven ( in the section labeled *fastening*) to 19 (in sections on *leisure*, *expressive language*, *gross motor*, *perceptual motor*, and *eating*). Domains are organized from the most complex skill (at a rating of "01") to the least

complex (i.e., the highest rating per domain). Only the highest level of performance (i.e., the lowest number) in each domain is selected by the rater. It is assumed that those skills which rank below the highest skill are also accomplished by the individual being rated.

Each individual's scores are displayed in a computer printout (see Appendix D, Gardner & Breuer, 1991). The report includes: (a) The individual's chronological age, (b) computed adaptive age, (c) a listing of individual domain skills with corresponding computed age level, (d) vocational age (if appropriate), and (e) a list of strengths and needs based on the average skill level of the individual.

The CABS computer program has internal measures of validity and reliability. There are 20 reliability items (see Appendix F) and 31 validity items (see Appendix G). Reliability items are "distributed so they occur in all areas and across all age groups. This is designed so that the reliability check can be made with as many items as possible." (Gardner and Breuer, 1991, p. 20). Validity items "are constructed so that each item is paired with a second item which is theoretically a prerequisite for the initial item." (Gardner and Breuer, 1991, p. 21). For example in order to make change to 25 cents (8.5 years) one should be able to count to 25 ([5.0 years] [Gardner and Breuer, 1991, p. 21]). With regard to reliability, if it does not meet a level of 75% or higher (as determined by the program), the assessment cannot be completed as rated and must be readministered. The computer scoring program automatically conducts these internal reliability and validity checks.

The CABS is in use in all 50 states in the continental United States, and is the principal adaptive behavior scale in Texas and South Carolina. It is also one of three scales approved statewide in Michigan. Clearly, the CABS is becoming a scale relied upon in service settings. Until validity data are collected however, strong reliance on the CABS is not scientifically defensible. The current study will help provide needed validity data.

Validity

In their original study, Gardner & Breuer (1985) found that computing the internal validity check the CABS met the criteria for internal validity at a level of 98%. The question of external validity was not as easily answered. The original study demonstrated that the scores were valid in relation to the individuals who participated in the initial research. The study did not support, however, similar validity beyond the scope of that study. While indices of external validity were provided in the original study, the statistical analyses use the Vineland Adaptive Behavior Scale as the adaptive behavior measure referent. Direct comparison to a more accepted scale (e.g., the BLS) is lacking. Validity statements of a qualitative nature ([e.g., staff members answered the question, "Which report is more useful to you in accomplishing your objectives?" ] Gardner & Breuer, 1985, p. 211) were provided by users of the scale. While individual, clinical judgment is critical in practice, face validity is not sufficient.

In the research literature, the BLS has been statistically linked with another valid measure of adaptive behavior, the ABS. In order to be recognized as an alternate choice in measuring adaptive behavior, a similar comparison is required for the CABS. A clinician will then be in a position to make a choice based on the most appropriate measure required. Concurrent validation of the CABS will provide the degree of statistical relationship (if any) between the BLS and the CABS. The CABS is the predictor variable and the BLS is the criterion variable.

Purpose of Research

The purpose of the research presented here is to evaluate the concurrent validity of the CABS as a measure of adaptive behavior, in relation to Part I of the BLS. The design used for this study is similar to that used by Cibiri and Jackson (1981).

### Hypotheses

There are five main hypotheses to be examined in this study; each is stated as the null hypothesis.

(1) CABS raw scores obtained by multiple raters will show no significant relationship when correlation coefficients are used to compare the scores.

(2) When the CABS score for AA (*adaptive age*) is correlated with the IFI (*index of functional independence*) score of the BLS there will be no relationship as shown by correlational analysis.

(3) CABS domains with similar names and similar content as BLS domains will show no relationship.

(4) Principal component factor analysis of the combined domain scores of the CABS and the BLS will show no shared variables among factors when compared to the domain scores of Part I of the BLS.

(5) Principal component factor analysis conducted for the BLS and the CABS separately will show no variables or factors common to the analysis conducted on the combined analysis of the scales.

### Method

#### Participants

There were 38 mentally handicapped individuals from eight group homes in a community agency who participated in the study. While 42 individuals consented and contributed data, only 38 BLS scores were available for final comparison with completed CABS assessments. The participants had varied levels of abilities. IQ values were not available for the participants. There were 16 individuals living in group homes and 22 living in developmental residences. There were three persons with a diagnosis of autism, three with a diagnosis of epilepsy, seven with a physical disability, six with a mental health diagnosis and two individuals with Down's syndrome. There were 23 males and 15

females. The mean chronological age was 38 years ( $SD = 9.17$ ), with ages ranging from 22 to 56 years. The male participants had a mean chronological age of 36 years ( $SD = 9.1$ ), with ages ranging from 21 to 56 years. The female participants had a mean chronological age of 40 years ( $SD = 8.9$ ), with ages ranging from 28 to 54 years.

### Materials

For the purpose of this study, a CABS assessment form (see appendix D) was completed for each participant. A Basic Life Skills Scale (BLS) assessment (see Appendix C) was also used for each participant although, as stated earlier, new BLS assessments were not completed for this study.

BLS assessments for the participants were obtained from house files. Four BLS assessments were obtained prior to 1994; these were dated 1993. It is not expected that this time difference in BLS assessment dates will affect the validity of these data for comparison with the CABS assessments. While adaptive behavior may change over time within the population studied, it remains fairly stable over short periods of time as was the case in the current study.

### Consent

Several steps were followed in order to obtain consent. First, if potential participants were able to provide informed consent, the study was explained and his/her participation requested directly. Ability to consent was determined by discussing with home staff the participants' ability to give consent to scenarios similar to the research proposed, (for example, his/her ability to consent to routine medical examinations or to make plans to engage in social interactions). If he/she was able to adequately evaluate the above scenarios, the individual was considered to be able to consent to participation in this study. Eight persons were able to provide informed consent in this manner. One person required extensive explanation before providing consent (this person was concerned that someone may be able to identify participants by reading the study). Consent was reached when confidentiality was ensured. All participants who were able to give personal consent wished

to be informed of the study outcome. Second, where a participant's informed consent was not considered appropriate, family members were approached for consent. Where family members provided consent, and individuals were typically included in decisions of this type, individual participants were still approached for their final consent. Four persons were approached in this manner. When participants were not able to give consent on their own, family members were contacted. Consent was reached for 26 persons in this manner. Regardless of the consent process, full disclosure of the purpose of the research was made to each family member or participant. Similarly, full disclosure of the purpose of the research was made to each staff member. All participation was voluntary (see Appendix H for consent form and introductory letter).

#### Rater Selection

Individual CABS assessments were conducted on an in house basis by direct care workers of each participant, under supervision of the author. The author's familiarity with the participants was not sufficient to complete a valid assessment. The CABS relies on observational information and does not require direct testing. All direct care workers were completing the CABS on the basis of two criteria: a) Their familiarity with the participant and b) availability to participate in the assessment times scheduled in house. All but one of the direct care workers participating in the study had known the participants they were rating for at least one year. One staff member knew the participants she was rating for eight months. Several staff members had known the participants for more than five years.

#### Rater Instruction

The author met with staff persons from each group home. Staff members received standard instructions from the author regarding the method of administration of the CABS. The instructions were provided verbally to both staff members at the same time. Direction was given in the following manner:

- 1) The instruction section at the beginning of the CABS assessment form, domain section, was read (see Appendix C)

2) Independent functioning was explained to mean that the participant was able to complete a given skill in a particular domain, as much as possible, without assistance (i.e., he/she would initiate the task/skill, and complete it over a variety of settings with a variety of persons).

3) If the exact skill being rated had not been observed directly by the staff, but a similar skill had been observed, competency was assumed for the skill being rated. For example, although staff may not have seen a participant dance (#3, section 13, *gross motor*) there was no reason, given other gross motor skills, to presume the person was not able to dance.

4) Where the chosen skill clearly met the criteria for independent functioning, but one or more skills below did not, referred to as *splintered skills* by Gardner and Breuer (1991, p. 24), and the other lower skills did not affect level of care, staff members had the option to select the higher skill ([staff members were required to provide the author with justification for this decision during the clarification stage] [see rater instruction # 10]).

5) Where a person communicated nonverbally using sign or augmentative communication methods, both were rated as spoken language.

6) Where a person was physically capable of performing a skill with a prosthesis, and actually used that prosthetic device, credit was to be given for that activity. Steps 1 to 5 of the above instructions were consistent with instructions provided by Gardner and Breuer (1991).

7) Clarification of the prescribed rating method was solicited by the author prior to any completion of the CABS.

8) Each staff member was instructed to put a "1" or "2" in a top corner of his/her rating sheet. The author was thus able to contact the staff member at a later time if corrections were required by the internal reliability and validity measures in the CABS program. It was necessary to contact four staff members for correction, as reliability levels had fallen below 75%.



9) For each participant, name and date of birth were recorded on the rating sheet to allow for possible follow-up regarding score inconsistency and for computation of adaptive age.

10) Following presentation of the instructions and subsequent clarification, staff members began completing the CABS in the presence of the author. Staff members were asked not to discuss any questions they might have regarding individual domain criteria during the assessment. When both staff members had completed the assessment, individual questions regarding particular domain criteria were clarified by the author. Questions of clarification referred to one of two categories: (a) Interpretation of domain criteria (e.g., "What does 'Goes about at night unrestricted' mean in section 18 '*translocation*'?") and (b) individual participant skill levels ([e.g., "I'm not quite sure how the resident we are assessing can disassemble simple objects [section 14, *perceptual motor*] I've never seen him do that."]). If clarification resulted in a change in the rating of an item, an asterisk was made next to the original item and the new rating placed on the line at the top of the domain. The clarification process was important in obtaining as accurate an assessment as possible. Raw (uncorrected) scores were noted on the rating sheet for interrater reliability and corrected scores provided the data entered into the CABS computer program. Each participant was rated in this manner.

### Statistical Analysis

Descriptive statistics will be completed on the time it takes both raters to complete the CABS assessment.

Interrater reliabilities ( Pearson Product Coefficients) will be completed on the raw domain scores (i.e., ratings before correction) of the CABS to determine if ratings by more than one rater provide similar AA scores for the individual assessed.

Pearson Product Correlation Coefficients will also be computed on domains which have the same or similar names or when analyzed for content similarity. A positive

correlation will be taken to indicate that the two scales measure similar skills within domains.

The correlation matrix for the combined BLS and CABS factor analysis will be produced. Examination of the correlation matrix will be important in the early analysis of variables to determine the degree of relationship within the domains of the two scales.

Correlation (Pearson Product) coefficients will be completed on the IFI scores of the BLS and AA scores of the CABS. A positive, moderate to high relationship of the IFI to the AA will indicate that a similar relationship exists as that reported by Dalton, et al. (1981) between the BLS and the ABS. The assumption is, that the two scales assess similar skills and/or tap the same construct, i.e., adaptive behavior.

Principal component factor analysis will be conducted separately on the domain scores for Part I of the BLS and domain scores of the CABS. Principal component factor analysis will also be conducted for the combined domain scores of the BLS and the CABS. Separate analysis will be necessary to determine whether factors extracted from each scale separately share common variables when domains are combined. Combined factor analysis will be conducted in an attempt to establish whether there are variables that may be shared among factors extracted from both scales. Similarity in the type of shared variables may indicate that the two sales measure a similar construct, adaptive behavior.

For each principal component factor analysis, factor extraction and varimax rotation will be conducted. Factor extraction will be limited to a few factors for the analysis rotation, thus providing a more accurate examination of variable membership in the factors following rotation. Unrotated and rotated factor matrices will be completed for each of the three analyses. A factor matrix (sorted with a limit of  $r \geq .50$ ) for each scale will be conducted separately and for the BLS and CABS combined, which will permit comparison of variables with a medium to high relationship to the extracted factors.

The Statistics Package for Social Sciences (SPSS) 6.1 for Windows, Student Version, and the SPSS/PC+ 4.0 will be used for statistical analysis of the data collected.

### Results

The mean adaptive age of the sample as computed by the CABS was 6 years, 3 month ([SD=3.9] [with ages ranging from 1 year, 1 month to 14 years, 7 months]). The mean adaptive age of the 23 males in the sample was 6 years 8 months ([SD=3.75] [with ages ranging from 1 year, 5 months to 14 years, 7 months]). The mean adaptive age of the 15 females in the sample was 5 years 2 months ([SD=4.26] [with ages ranging from 1 year, 1 month, to 14 years 3 months]). The mean adaptive age of the 16 individuals living in group homes in the sample was 9 years, 5 months ([SD=3.5] [with ages ranging from 4 year to 14 years 7 months]). The mean adaptive age of the 22 individuals living in developmental residences in the sample was 9 years 5 months ([SD=2.3] [with ages ranging from 1 year, 1 month to 8 years, 7 months]).

Descriptive statistics for time taken to complete the CABS are displayed in Table 3. The mean time it took to rate an individual using a CABS assessment was 11.56 minutes (SD=4.6 with times ranging from 5 to 23 min.). Scores for thirty-three participants were available for analysis; five were not available due to interruptions during assessment.

Table 3  
Descriptive Statistics on the Time (in Minutes)  
for the Completion of CABS

Mean	11.56
SD	4.6
Range	18
Minimum	5
Maximum	23

n = 33

### Reliability

Interrater reliability correlations are presented in Table 4. Thirty five pairs of scores were available for analysis. Due to the inconsistent marking of corrections during rating three assessments could not be used in the analysis. Results indicate that the mean interrater

Pearson Product Moment Correlation was  $r = .77$  ( $SD = .17$ ). Only two pairs of scores were significant at an alpha value of .003 ( $r = .45$   $p < .027$  &  $r = .30$   $p < .15$ ).

Table 4  
Mean Interrater Reliability Coefficients  
(Pearson Product) for Raw CABS Scores

Mean	0.77
SD	0.17
Range	0.69
Minimum	0.30
Maximum	0.99

n=35

### Validity

The IFI scores (see Table 5) of the BLS and the AA scores of the CABS were correlated at  $.72$  ( $r^2 = .52$ ,  $p \leq .001$ ). The proportion of the variance ( $r^2$ ) indicates that 52%

Table 5  
Validity Coefficients for Similar Domains and Summary Scores (BLS and CABS)

	AA	CABS										N=38 2 tailed p < .01 ** .001	
		Toileting	Dressing	Eating	Personal Interac	Group Particp	Recp Lang	Express Lang	Learnng	Gross Motor	Fine Motor	Process Motor	Block Motor
IFI	.72**												
Toileting	.57**	.57**											
Dressing	.67**	.51*	.64**										
Eating	.60**	.41	.57**	.72**									
Social Manners	.65**	.47*	.53**	.63**	.61**								
Human Relations	.36	.21	.47*	.37	.46*	.34**							
Spoken Language	.74**	.47*	.53**	.65**	.71**	.53**	.58**						
Express Language	.79**	.50**	.57**	.64**	.61**	.50**	.59**	.68**					
Fine Skills	.67**	.38	.47*	.64**	.72**	.59**	.44*	.44*	.49*				
Gross Motor	.41**	.2	.21	.58**	.4	.19	.15	.13	.025	.60**			
Fine Motor	.74**	.43*	.45*	.79**	.68**	.49**	.46*	.49**	.52**	.74**	.76**		
Concept of Self	.75**	.43	.56**	.71**	.59**	.57**	.59**	.65**	.60**	.57**	.63**	.71**	
Deliverer	.72**	.46	.56**	.79**	.67**	.47*	.46**	.47*	.59	.70**	.65**	.77**	.80**

of the variance of the AA score of the CABS was accounted for by the IFI score of the BLS.

Pearson Product Moment Coefficients for similarly named or similar content domains of the CABS and BLS are presented in Table 5. A complete correlation matrix for all BLS and CABS domain variables is displayed in Appendix L. Each of the 12 coefficients were significant ( $p \leq .001$ ) [toileting/toileting  $r = .57$ , dressing/dressing  $r = .64$ , eating/eating  $r = .72$ , personal interaction/social manners  $r = .61$ , group participation/human relations  $r = .34$ , receptive language/spoken language  $r = .58$ , expressive language/expressive language  $r = .68$ , leisure/recreation skills  $r = .49$ , gross motor/gross motor  $r = .60$ , perceptual motor/fine motor  $r = .76$ , personal management/concept of self  $r = .77$ , home management/domestic  $r = .80$ ]. Two of the compared variables with correlations below .50 ( $p \leq .001$ ) [group participation/human relations  $r = .34$  and leisure/recreation skills  $r = .49$ ].

A correlation matrix of BLS and CABS domains (presented in Appendix J) showed that all domain variables of the BLS and CABS had coefficients greater than  $r = .50$  ( $p \leq .01$ ).

### Factor Analysis

#### Basic Life Skills Scale

Table 6 displays initial principal component statistics including eigenvalues, percent of variance and cumulative percent of the variance for the extracted variables of the BLS.

Table 6  
Principal Component Analysis: BLS Domain Scores

Factor	Eigenvalue	Percent of Variance	Cumulative Percent
1	16.7118	72.7	72.7
2	1.5883	6.9	79.6
3	1.0303	4.9	84.5

Nearly 85% of the total variance of the 23 variables was explained by the three extracted factors. Factor 1= 72.7% of the variance, Factor 2=6.9% of the variance and Factor 3=4.9% of the variance. The remaining 20 factors accounted for 15.5 % of the total variance of the variables.

The principal component factor analysis, rotated factor matrix (sorted with a limit of  $r=.5$ ) for the BLS is displayed in Table 7. The unrotated and unsorted factor matrices are

Table 7

**Rotated, Sorted Factors' Matrix for the BLS**

Varimax Rotation 1, Extraction 1, Kaiser Normalization.

Varimax converged in 8 iterations.

Variable	Factor 1	Factor 2	Factor 3
GROSS MOTOR			0.84312
FINE MOTOR	0.52787		0.65555
VISUAL DISCRIMINATION	0.74503		
AUDITORY DISCRIMINATION	0.61215	0.50395	
TACTILE DISCRIMINATION	0.72921		
EATING	0.72491		0.53336
TOILETING			0.70425
DRESSING	0.55946		0.68368
PERSONAL HYGIENE	0.51535		0.69084
SPOKEN LANGUAGE	0.78298		
EXPRESSIVE LANGUAGE	0.68354	0.62967	
HUMAN RELATIONS	0.87474		
SOCIAL MANNERS	0.80843		
RECREATION	0.77367		
DOMESTIC	0.50993		0.69452
COMMUNITY		0.71399	
VOCATIONAL	0.62835		
CONCEPT OF SELF	0.75762	0.51918	
CONCEPT OF SPACE	0.5998	0.6464	
CONCEPT OF TIME	0.60536	0.67769	
READING		0.8745	
WRITING		0.79218	
MATH		0.75356	

displayed in Appendix K and L, respectively.

Table 8 displays the sorted variables from Table 7 in groupings with descriptors for each factor extracted. Factor 1 has 11 variables explaining 72.7% of the proportion of total variance. These variables may be described as *daily living skills* based on the

grouping of variables. Factor 2 has six variables explaining 6.9% of the total variance and may be described as *academic skills*. Factor 3 has the 6 remaining variables within its 4.9% of the proportion of variance. Factor 3 may be described as *motor skills*.

Table 8  
Factor descriptions for the BLS

<u>Factor 1= Daily Living Skills</u>	<u>Factor 2=Academic Skills</u>	<u>Factor 3=Motor</u>
VISUAL DISCRIMINATION	COMMUNITY	GROSS MOTOR
AUDITORY DISCRIMINATION	CONCEPT OF SPACE	FINE MOTOR
TACTILE DISCRIMINATION	CONCEPT OF TIME	TOILETING
EATING	READING	DRESSING
SPOKEN LANGUAGE	WRITING	PERSONAL HYGIENE
EXPRESSIVE LANGUAGE	MATH	DOMESTIC
HUMAN RELATIONS		
SOCIAL MANNERS		
RECREATION		
VOCATIONAL		
CONCEPT OF SELF		

#### California Adaptive Behavior Scale.

Table 9 displays the initial principal component statistics including eigenvalues, percentage of variance and cumulative percent of the variance for the extracted variables of the CABS. The four factors accounted for 78.2% of the total variance of the

Table 9  
Principal Component Analysis: CABS Domain Scores

Factor	Eigenvalue	Percent of Variance	Cumulative Percent
1	14.33	59.7	59.7
2	2.153	9	68.7
3	1.267	5.3	74
4	1.014	4.2	78.2

24 variables. Factor 1= 59.7% of the variance, Factor 2=9% of the variance, Factor 3=5.3% of the variance and Factor 4=4.2% of the variance. The remaining 20 factors account for 21.8 % of the total variance of the CABS variables.

The principal component factor analysis rotated factor matrix with Pearson Product Moment Coefficients (sorted with a limit of  $r=.5$ ) for the CABS is displayed in Table 10.

Table 10

**Rotated, Sorted Factors' Matrix for the CABS**

Varimax Rotation 1, Extraction 1, Kaiser Normalization

Varimax converged in 8 iterations.

Variable	Factor 1	Factor 2	Factor 3	Factor 4
Toileting		0.71369		
Dressing	0.8369			
Fastening	0.61886			
Eating	0.65524			0.54104
Bathing	0.67096	0.54027		
Grooming	0.86101			
Toothbrushing	0.71658			
Personal Interaction				0.85885
Group Participation			0.6254	0.61928
Receptive Language		0.8367		
Expressive Language		0.65909		
Leisure			0.64084	
Gross Motor				
Perceptual Motor		0.50915		0.53503
Prevocational				0.61479
Vocational		0.63443	0.62402	
Academic		0.57829		0.56049
Community Access			0.74155	
Money Management			0.52763	
Personal Management	0.58509			
Home Management	0.69529			
Health	0.5396			
Community Awareness			0.74936	
Responsibility			0.53227	

The unrotated factor matrix and the unsorted factor matrices are displayed in Appendix M and N, respectively.

Table 11 displays the sorted variables from Table 10 in groupings with descriptors for each factor extracted. Factor 1 has nine variables explaining its 59.7% of the proportion of total variance. Based on their groupings, these variables may be described as *self care skills*. Factor 2 has five variables explaining 9% of the proportion of the



Table 11  
Factor Descriptors for the CABS

<u>Factor 1=Self Care Skills</u>	<u>Factor 2= Personal Development Skills</u>
Dressing	Toileting
Fastening	Receptive Language
Eating	Expressive Language
Bathing	Vocational
Grooming	Academic
Toothbrushing	
Personal Management	
Home Management	
Health	
<u>Factor 3=Recreation Skills</u>	<u>Factor 4= Prevocational Skills</u>
Group Participation	Personal Interaction
Leisure	Perceptual Motor
Community Access	Prevocational
Money Management	
Community Awareness	
Responsibility	

total variance and may be described as *personal development skills*. Factor 3 has six of the remaining variables within 5.3% of the proportion of variance. Factor 3 may be described as *recreation skills*. Factor 4 has three variables which account for 4.2% of the proportion of variance and may be described as *prevocational skills*. Only the domain *gross motor* is not included in the proportion of variance attributed to one of the four factors extracted by factor analysis of the CABS.

#### Combined BLS and CABS

Table 12 displays the principal component analysis initial statistics including eigenvalues, percent of variance, and cumulative percent of the variance for factors. Factor 1 accounts for 62.5% of the variance in the sample. Factor 2 accounts for 6.6% of the variance and Factors 3 to 6 account for 4.7%, 3.9%, 2.9%, and 2.4% of the sample variance respectively. The cumulative percent of the total variance of the 47 variables accounted for by the six factors extracted is 83.1%.

Table 12

## Principal Component Analysis: BLS and CABS Domain Scores

Factor	Eigenvalue	Percent of Variance	Cumulative Percent
1	29.39561	62.5	62.5
2	3.10213	6.6	69.1
3	2.20914	4.7	73.8
4	1.84772	3.9	77.8
5	1.34502	2.9	80.6
6	1.14649	2.4	83.1

Table 13 displays the sorted variables from the combined factor analyses of the BLS and CABS (sorted with a limit of  $r=.5$ ). The unrotated and unsorted factor matrices are displayed in Appendix N and O, respectively. Table 14 groups the variables with descriptors for each extracted factor. Factor 1 has 14 variables explaining 62.5% of the proportion of total variance with 13 of those variables drawn from the BLS and one from the CABS. These variables may be described as *activities of daily living* based on the grouping of variables. Factor 2 has 13 variables explaining 6.6% of the total variance and may be described as *community living skills*. Nine of the variables comprising Factor 2 are drawn from the CABS and 4 drawn from the BLS. Factor 3 has the 11 remaining variables within its 4.7% of the proportion of variance including four from the CABS and seven from the BLS. Factor 3 may be described as *motor skills*, with seven variables from the BLS and four from the CABS. Factor 4 has five variables all drawn from the CABS which account for 3.9% of the proportion of variance and may be described as *personal hygiene skills*. Factor 5 has two variables explaining 2.9% of the proportion of the total variance, both variables are drawn from the CABS. Factor 5 may be described as *concept of self*.

Table 13

Rotated, Sorted Factors' Matrix for the BLS and CABS

Varimax Rotation 1, Extraction 1, Kaiser Normalization. BLS=FULLY CAPITALIZED  
 Varimax converged in 10 iterations. CABS=Normally Capitalized

Variable	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
GROSS MOTOR			0.83281		
FINE MOTOR	0.56965		0.65725		
VISUAL DISCRIMINATION	0.71649				
AUDITORY DISCRIMINATION	0.56348				
TACTILE DISCRIMINATION	0.7274				
EATING	0.72295				
TOILETING			0.5941...		
DRESSING	0.52686		0.59331		
PERSONAL HYGIENE	0.55911		0.62426		
SPOKEN LANGUAGE	0.80011				
EXPRESSIVE LANGUAGE	0.68129				
HUMAN RELATIONS	0.906....				
SOCIAL MANNERS	0.79473				
RECREATION	0.81114				
DOMESTIC	0.57532		0.62283		
COMMUNITY	0.51638	0.59466			
VOCATIONAL	0.67744				
CONCEPT OF SELF	0.75609				
CONCEPT OF SPACE	0.62975	0.51227			
CONCEPT OF TIME	0.61643	0.53223			
READING		0.62624			
WRITING		0.55484	0.51863		
MATH		0.50243			
Toileting					
Dressing				0.75574	
Fastening			0.50749	0.50052	
Eating			0.55384	0.50616	
Bathing				0.57348	
Grooming				0.82364	
Toothbrushing				0.66218	
Personal Interaction	0.54577				
Group Participation		0.68907			
Receptive Language					0.74422
Expressive Language		0.6391			0.5497...
Leisure		0.76224			
Gross Motor		0.58602	0.64061		
Perceptual Motor			0.58619		
Prevocational					
Vocational		0.75402			
Academic					
Community Access		0.71282			
Money Management		0.71629			
Personal Management					
Home Management	0.54371			0.53992	0.7411...
Health		0.55354			0.54771
Community Awareness		0.77656			
Responsibility	0.50482	0.60210			

Table 14

**Combined Factor Descriptors for the BLS and CABS**

Factor 1=Activities of Daily Living

VISUAL DISCRIMINATION  
AUDITORY DISCRIMINATION  
TACTILE DISCRIMINATION  
EATING  
SPOKEN LANGUAGE  
EXPRESSIVE LANGUAGE  
HUMAN RELATIONS  
SOCIAL MANNERS  
RECREATION  
VOCATIONAL  
CONCEPT OF SELF  
CONCEPT OF SPACE  
CONCEPT OF TIME  
Personal Interaction

Factor 2=Community Living Skills

COMMUNITY  
READING  
WRITING  
MATH  
Group Participation  
Expressive Language  
Leisure  
Vocational  
Community Access  
Money Management  
Health  
Responsibility  
Community Awareness

Factor 3=Motor Skills

GROSS MOTOR  
FINE MOTOR  
TOILETING  
DRESSING  
PERSONAL HYGIENE  
DOMESTIC  
RECREATION  
Fastening  
Eating  
Gross Motor  
Perceptual Motor

Factor 4=Personal Hygiene Skills

Dressing  
Bathing  
Grooming  
Toothbrushing  
Home Management

Factor 5=Concept of Self

Receptive Language  
Home Management

Eleven of the 13 BLS variables in Factor 1 of the combined BLS and CABS analysis were also common to Factor 1 of the BLS analysis. All four of the BLS variables in Factor 2 of the combined analysis were also common to Factor 2 of the BLS analysis. All seven of the combined variables in Factor 3 of the combined analysis were also common to the BLS analysis.

The single CABS variable in Factor 1 of the combined analysis was common to Factor 1 of the CABS analysis. Factor 2 of the combined analysis shared only one of the nine CABS variables with Factor 2 of the CABS analysis. There were no common variables with Factor 3 of the CABS analysis when compared to the combined analysis.

One factor in both the CABS and the BLS analyses accounted for the majority of the variance within the scales, 59.7% and 72.7% of the variance, respectively.

There were four domain variables of the BLS and CABS which were correlated at significant levels, and also grouped together in factors of the combined analysis (*personal interaction/social manners*,  $r=.61$  [Factor 1], *gross motor/gross motor*,  $r=.60$  [Factor 3], *perceptual motor/fine motor*,  $r=.76$  [Factor 3], and *personal management/concept of self*,  $r=.77$  [Factor 1]). The language domains in both scales also correlated at significant levels but did not group together in factors in the combined analysis (*receptive language* [Factor 5]/*spoken language* [Factor 1],  $r=.58$ , and *expressive language* [Factor 2]/*expressive language* [Factor 1]),  $r=.68$ ). The domains which measured leisure and recreation in both scales correlated at significant levels, did not group together in the same factor in the combined analysis (*leisure* [Factor 2]/*recreation* [Factor 1]),  $r=.49$ ).

#### Discussion

The CABS has a high level of interrater reliability when instructions were provided for its administration. Based on this finding, the null hypothesis ([1] CABS raw scores obtained by multiple raters will show no significant relationship when correlation coefficients are used to compare the scores.) is rejected. Thus, clinicians receiving data from the CABS from direct care workers may be confident that scores are stable across multiple raters.

The findings regarding time to complete the CABS support claims made by Gardner and Breuer (1991). Thus, the CABS allows for a significant reduction in time from two hours for completion of the BLS, and still provides an adequate examination of an individual's abilities. It also represents a significant decrease in the cost of administration compared to the BLS as a major advantage.

The null hypothesis, ([2] When the CABS score for AA [*adaptive age*] is correlated with the IFI [*index of functional independence*] score of the BLS there will be no relationship as shown by correlational analysis.) can be rejected based on the findings of

this study. The high relationship between the AA of the CABS and the IFI of the BLS indicates that the two scales are measuring adaptive behavior. In a similar way, Cibiri and Jackson (1981) had evaluated the BLS and its ability to test skills which were similar to the ABS.

There was a high level of correlation between the variables of the CABS and BLS, and specifically between the 12 domains which were similar in content or name. The findings indicate that there is a significant proportion of variance common between the two scales for all the similar domains examined. These relationships are indicators that both assessments are measuring similar constructs within adaptive behavior. Considering this relationship, the null hypothesis, ([3] CABS domains with similar names and similar content as BLS domains will show no relationship.) is rejected for this sample.

The principal component factor analysis did not show that the combined analysis of factors consistently shared variables when compared to the separate analysis. There was not sufficient evidence to reject the null hypothesis ([4] Principal component factor analysis of the combined domain scores of the CABS and BLS will show no shared variables among factors when compared to the domain scores of Part I of the BLS) based on the combined and the individual factor analysis.

Specifically, Factor 1 of the combined analysis, *activities of daily living* dominates the skill pool measured by the analysis. Although the CABS contributes to this factor, it does so with only one variable, *personal interaction* (which is correlated with the respective BLS variable, *social manners*, and is also present in this factor).

The remaining factors of *community living skills*, *personal hygiene skills* and *language skills* share common BLS and CABS variables. A significant percent of the variance is already accounted for, however, by the first factor (*activities of daily living*).

On the basis of consistently high levels of correlational information, the two scales adequately evaluate adaptive behavior. While a high degree of relationship between similar domains is present, the correlated domains do not consistently group together in the same

factor groupings; this suggests that, although the BLS and CABS seem to evaluate adaptive behaviors, they do so in different ways.

With regard to this last point, the BLS seems to place more emphasis on an individual's skill level in relation to a community standard. The CABS uses an approach which promotes comparison of an individual to him/herself as the criterion for success. In concrete terms, the BLS would encourage the client to develop eating skills which would enable him/her to eat in a restaurant. The CABS may define success when a client is able to eat with less staff assistance than before; while this client would not be able to eat "adaptively" in a restaurant, he/she would enjoy more personal independence than in the past.

The BLS is a much more powerful assessment tool when analyzed on its own or in combination with the CABS. There were ten of the variables extracted to Factor 1 of the BLS analysis that surfaced in Factor 1 of the combined analysis of the BLS and the CABS. Based on this finding, the null hypothesis, ([5] Principal component factor analysis conducted for the BLS and the CABS separately will show no variables or factors common to the analysis conducted on the combined analysis of the scales.) may be rejected. When compared to the factor analysis of the BLS, the CABS variables do not group in a similar fashion when examined on their own. The BLS seems to drive the assessment and overpower the CABS in its ability to assess skills.

In all three analyses, one factor surfaces as a powerful indicator of assessed abilities: *Daily living skills* from the BLS analysis, *self care skills* from the CABS analysis, and *activities of daily living* from the joint analysis. They all address daily personal needs. Again, the BLS dominates with a more representative skill pool from which to draw.

The combined analysis of the two scales is highly influenced by the BLS. When analyzed on its own, however, the CABS seems to cluster some skills in a more discrete manner than the BLS. The CABS seems to isolate two factors (*self care skills* and

*recreation skills*) in a more homogeneous manner than does the BLS, when its factors, even with regard to Factor 3 of the BLS (*motor skills*) are examined for homogeneity. As is the goal of factor analysis, a great deal of parsimony regarding explanation of the variables has been achieved in the analysis of the CABS and the BLS. Three (BLS), four (CABS) and five (combined BLS and CABS) factors are responsible for most of the total variance of the variables from the two scales. It is thus possible to describe the factors which make up adaptive behavior with a significant reduction from 23 variables to three factors in the BLS, from 24 variables to four factors for the CABS, and from 47 variables to five factors when the two scales are combined. A study by Thackrey (1991) reported similar findings, when a comprehensive Test of Adaptive Behavior (CTAB) had six factors extracted with one factor (*self help skills*) accounting for 86% of the variance.

#### Limitations

The external validity of the results may be increased by using larger samples representing various levels of intellectual impairment, as well as levels of care, representative of institutional and community based agencies. Increasing the sample size in this manner would also provide normative data which are lacking in the literature at this time.

Based on the results of the current study use of the CABS may lead to significant savings of staff time completing assessment information.

The data presented here indicate that the CABS provides a quick, reliable and valid measure of adaptive behavior. Efficiency of the CABS should not be the only criterion for the selection of this scale. The selection criteria presented earlier must be used to choose the scale that will meet the needs for which treatment is required. Furthermore, it may be useful to administer more than one scale: the CABS may be used as the primary assessment tool, with the BLS or a similar scale serving as an adjunct to the information gathered by the CABS.



### Recommendations

Based on the results of this study, the clinician in a community based agency should consider the CABS as a reasonable choice from the available adaptive behavior scales. The CABS is useful as an intake/initial assessment tool which delivers a satisfactory range of information regarding a person being considered for placement/treatment; it may also prove useful when administered to a client soon after admission to an agency. The CABS may also provide an ongoing baseline of ability for individuals in care (i.e., to compare the individual to him/herself over a period of time).

As has been accomplished with the BLS (Cibiri & Jackson, 1981) and the ABS (Harrison, 1987), an understanding of the relationship of the CABS to IQ, should be developed. Considering the lack of intelligence based measures on file for the participants in the current study, future placements of individuals to community agencies would benefit from measures relating IQ to both the BLS and CABS, in other words, a choice of tools is available to the clinician.

An examination of the relationship between level of care and performance on the CABS would also prove useful in future research. The following questions may be pursued: (a) Is the CABS a reliable and valid predictor of the level of care an individual requires? Decisions relating to the placement of individuals are, by definition, made prior to placement, at a time when clinical information regarding the individual's level of ability may be lacking. Although the CABS seems to be limited in the scope of adaptive behaviors it measures, it may provide sufficient information to assist with placement. (b) For what level of care is the CABS most useful (e.g., group homes, developmental residences, or independent care settings)? Findings from this study indicate that the CABS is suitable in the assessment of abilities related to *self care* and *recreation*; there are specific groups of individuals who may benefit from attention to these areas of adaptive behavior. (c) What is the relationship between CABS scores and presence of maladaptive behaviors? The CABS does not measure problem behaviors in any observable way. There may, however, be

relationships between factors of the CABS, the BLS, or the ABS which will help in decisions of a predictive nature based on only scores of the CABS.

The CABS is appropriate for a variety of assessment purposes with the mentally handicapped. Individuals who live in developmental residences often require extensive training in *self care skills* and *recreation skills*. These individuals would benefit from the assessment in these domain areas provided by the CABS, and the development of training programs. Second, persons who are mentally handicapped and living quite independently in the community, also require assistance with skills of recreation and self care, even though they function at a more autonomous level than those living in developmental residences. Thus, the CABS may prove useful by establishing an entry level of recreation and self care skills (i.e., the minimum requirement for independent community living) for this group of clients when admission is considered.

Children with a mental handicap would also benefit from the CABS. The age referenced skills are particularly relevant when dealing with the developmental milestones of childhood. However, at least at the present, the CABS does not appear to provide the requisite information for assessment of the profoundly handicapped. While it would measure skill deficits well at this level, program direction does not seem to be sufficient for adequate planning strategies.

Where a measure of motoric abilities is a consideration for treatment, the CABS provides a satisfactory measure throughout the various domains. Specific measurement and subsequent evaluation of adaptive motor responses of an individual would be possible.

Consideration should be given to develop a package of reporting forms designed to monitor treatment. Quality of treatment provided does not rest solely with the assessment itself, but rather with repeated measurement of change in behavior over time. In the ongoing evaluation and modification of treatment goals, a well constructed tracking system which incorporates the domains of the assessment tool would provide the clinician with a useful method for treatment planning and recording treatment success.

The CABS may become a more powerful adaptive behavior measure if changes were made to the manner in which the scale is administered. While the BLS measures adaptive behavior by providing a discrete score for each skill rated, the CABS rates only the skill which has been determined to be the most independent in each domain. If more lenient scoring (i.e., rating each skill regardless of assistance required) were allowed in the administration of the CABS, several treatment options would be possible: First, by scoring and preserving all ability levels and including those skills in the final report, skill gaps within domains may be effectively identified. Second, the skills rated in this manner may then be used to develop task analyses to address identified deficits. Specifically, this would allow step-by-step instructions to teach the requisite skills for the chosen domain (e.g., *toothbrushing*). Third, this scoring method would permit a more in-depth analysis of individual and group scores of the CABS. For example, scores from the sample used in the current study may be scored in the fashion presented above, and become the basis for additional research using the CABS. Anecdotally, it should be noted that during data entry for the current study, the author observed that some of the staff members participating in the present study, used a method of scoring similar to that suggested above. The information provided in these assessments may then be used to pursue the recommended program direction suggested previously.

### Conclusion

In conclusion, the data from this study support the continued use of the CABS as a valuable addition to our ability to measure adaptive behavior for persons with a mental handicap. The face validity presented in Gardner and Breuer (1985) now has the benefit of empirical validation within a clinical setting.

## References

- American Association on Mental Retardation (1992). Mental retardation: definition, classification, and system of supports 9th edition. Washington, DC: American Association on Mental Retardation.
- American Association on Mental Retardation (1992). Mental retardation: definition, classification, and system of supports: workbook. Washington, DC: American Association on Mental Retardation.
- American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders: fourth edition. Washington, D. C.: American Psychiatric Association.
- Blacher, J. B., Hanneman, R. A., & Rousey, A. B. (1992). Out of home placement of children with severe handicaps: A comparison of approaches. American Journal on Mental Retardation, 96(6), 607-616.
- Bruininks, R. H., Thurlow, M. & Gilman, C. J. (1987). Adaptive behavior and mental retardation. Journal of Special Education, 21(1), 70-88.
- Cibiri, S. M. & Jackson, L. J. (1981). Training developmentally handicapped persons basic life skills: a task analysis approach. Ontario Ministry of Community and Social Services.
- Clinger, M. D. , Fine M. A., Johnson, J., Schwartzman, J., & Drude, K. P. (1988). Assessment of the psychometric properties of the adaptive behavior scale with psychiatric patients. Journal of Consulting and Clinical Psychology, 6 (4), 542-548.
- Cone, J. D. (1987). Intervention planning using adaptive behavior instruments. Journal of Special Education, 21(1), 127-148.
- Dalton, A. J., Cibiri, S. M., Baker, J. G., Malik, H. S., & Wu, B. (1981). Basic life skills scale: manual of norms and standardization. Ontario Ministry of Community and Social Services.
- DesNoyers Hurley, A. (1989). Clinical use of intelligence testing. Psychiatric Aspects of Mental Retardation, 8(7&8), 49-55.

Evans, L. D. & Bradley-Johnson, S. (1988). A review of recently developed measures of adaptive behavior. Psychology in the Schools, 25, 276-287.

Gardner, J. M. & Breuer, A. M. (1991). California adaptive behavior scale. Newport Beach, California, Planet Press.

Gardner, J. M. & Breuer, A. M. (1985). Reliability and validity of a microcomputer assessment system for developmentally disabled persons. Education and Training for the Mentally Retarded. September.

Gresham, F. M., & Elliot, S. N. (1987). The relationship between adaptive behavior and social skills: Issues in definition and assessment. Journal of Special Education, 21(1), 167-181.

Greenspan, S., & Granfield, J. M. (1992). Reconsidering the construct of mental retardation: implications of a model of social competence. Special issue: Social skills. American Journal on Mental Retardation, 96(4), 442-453.

Grossman, H. J. (Ed.). (1983). Classification in mental retardation. Washington, DC: American Association on Mental Deficiency.

Harrison, P. L. (1987). Research with adaptive behavior scales. Journal of Special Education, 21(1), 37-67.

Hemming, H. (1986). Follow-up of adults with mental retardation transferred from large institutions to new small units. Mental Retardation, 24(4), 229-235.

Kamphaus, R. W. (1987). Conceptual and psychometric issues in the assessment of adaptive behaviors. Journal of Special Education, 21(1), 27-35.

Langone, J. & Burton, T. A. (1987). Teaching adaptive behavior skills to moderately and severely handicapped individuals: Best practices for facilitating independent living. Journal of Special Education, 21(1), 149-165.

Mathias, J. I., & Nettelbeck, T. (1992). Validity of Greenspan's models of adaptive and social intelligence. Research in Developmental Disabilities, Vol. 13(2) 113-129.

McCarver, R. B., & Campbell, V. A. (1987). Future developments in the concept and application of adaptive behavior. Special issue: Adaptive behavior. Journal of Special Education, 21(1), 197-207.

Nihira, K., Foster, R., Shellhaas, M. & Ieland, H. (1974). AAMD adaptive behavior scale, 1974 revision. Washington, DC: American Association on Mental Deficiency.

Olurin, J. & Sturmev, P. (1989). The psychometric properties of the social training and achievement record: II. Reliabilities and concurrent validities. Journal of Mental Deficiency Research, 33(5), 423-427.

Rayles, N. V. (1991). Adaptive behavior scales. In J. L. Matson, & A. M. James (Eds.), Handbook of mental retardation (2nd ed.). Pergamon General Psychology Series, 21, 240-259. New York, NY: Pergamon Press, Inc.

Thackrey, M. A. (1991). Principal components analysis of the comprehensive test of adaptive behavior. American Journal on Mental Retardation, 96(2), 213-215.

Appendix A  
CABS External Reliability and Validity Research (copied without correction from the  
CABS administration manual)

Chapter 7

RESEARCH

DEVELOPMENTALLY DISABLED SAMPLE

The reliability and validity of the CABS was examined with 118 severely and profoundly retarded young men and women. They ranged in age from 12 to 29 years (Mean age = 23 years), had been institutionalized for an average of 15 years, and included 4 with visual handicaps, 5 with hearing handicaps, 5 with ambulation problems, and 35 with epilepsy. The average social age as measured by the Vineland Social Maturity Scale was 48 (Range 26 to 81) months.

Over a 12 month period, the CABS and the Vineland were administered to each of the subjects, using the same Informant and the same Informant in order to minimize interscorer reliability problems as a confounding factor. The tests were administered within 2 weeks of each other, not necessarily in the same order, and interspersed with as many as 5 other tests at any one time to reduce memory effects.

7.1 RELIABILITY

7.1.1 Internal Reliability

The internal reliability for each person, based on a comparison of the 28 pairs of items, ranged from 78% to 188% agreement, with an average of 94% agreement for all subjects.

7.1.2 Interscorer Reliability

Interscorer reliability was determined by having two Informants rate the same 18 subjects. For AA and WR, the Pearson r coefficients were .86 and .88 respectively ( $p > .01$ ) and the Spearman Rho coefficients were .91 and .97 respectively ( $p > .00001$ ).

With respect to delineating Strengths and Weaknesses (defined as one or more standard deviations above/below the mean), the Informants agreed on 98% of the possible pairings. In only 1% of the cases were Type I/II errors committed (i.e., a domain identified as a strength by one informant was identified as a weakness by the second informant). These errors were confined to an individual whose overall AA score was 8.58 years and who had received minimal scores on more than half the domains, so that even minute differences in scoring could be reflected in Type I/II errors.

Across the 24 areas, interscorer agreement averaged 63% while in another 22% of the cases, the judgements were within a 12 month range of each other. In only 15% of the cases were judgements greater than 12 months difference made. For these same subjects, interscorer agreement on the Vineland was 58% while disagreements greater than 12 months were 36%.

7.1.3 Intrascorer Reliability

Appendix A (continued)

Intrascorer reliability was determined by having one informant re-rate 18 persons following a period of one week. The resulting Pearson  $r$  coefficients were .81 and .85 for AA and WR respectively, while the Spearman Rho coefficients were .87 and .92.

7.2 VALIDITY

7.2.1 Internal Validity

The internal validity for each person, based on a comparison of the 31 pairs of items, ranged from 78% to 100% agreement, with an average of 98% agreement for all subjects.

7.2.2 Concurrent Validity: AA

Concurrent validity for AA was assessed by comparing the Social Age scores obtained on the Vineland with the Adaptive Age scores obtained on the CABS. The Pearson  $r = .95$ ,  $N=118$ , is significant at the .000000001 level.

A second measure of concurrent validity was taken by having a Psychiatric Technician familiar with a group of 14 subjects rank order them with respect to overall competence, and then the rankings were compared with rank orders generated from the Adaptive Age scores. The Spearman-Rho thus generated was .77 which is significant at the .001 level.

7.2.3 Concurrent Validity: SR

Concurrent validity for the School Readiness score was obtained by comparing scores obtained with the Peabody Picture Vocabulary Test with the CABS SR score. The Spearman-Rho based on a comparison of 15 subjects was .63 which is significant at the .001 level.

7.2.4 Concurrent Validity: WR

Concurrent validity for the Work Readiness Scale was obtained by having Vocational Education Instructors rank order 12 subjects with respect to overall vocational readiness (disregarding behavioral problems), and comparing these rankings with rank orders generated by the WR Scale. The Spearman-Rho was .64 which is significant at the .05 level.

Concurrent validity was also assessed by comparing scores on the Vocational Interest and Sophistication Assessment with WR scores for these same 12 subjects. The Spearman-Rho was .66 which is significant at the .05 level.

NON-DISABLED SAMPLE

In addition to the study generated by the severely and profoundly retarded young men, a second study with normal children was undertaken. This study involved 48 normal children enrolled in elementary school. They ranged in age from 6 to 12 (Mean age = 8.4), had no psychosensory handicaps, and were from predominately white middle class homes. The CABS was administered by the children's



Appendix A (continued)

teachers and mothers, allowing for comparisons between different judges. School grades were used as the criteria for the SR score in the youngest children, and overall judgements by teachers were used as the criteria for AA scores.

7.3 RELIABILITY

The reliability for each student, based on a comparison of the 20 pairs of items, ranged from 88% to 100%, with an average of 95% agreement.

7.4 VALIDITY

7.4.1 Internal Validity

The internal validity for each student, based on a comparison of the 31 pairs of items, ranged from 68% to 100%, with an average agreement of 97%.

7.4.2. Concurrent Validity: AA

Concurrent validity was assessed by comparing the Teacher's overall evaluation with AA scores for each of the 4 class grades involved. The Spearman-Rho was .81 which was significant at the .01 level.

7.4.3. Concurrent Validity: SR

Concurrent validity was assessed by comparing the academic achievement records of the youngest students with their SR scores. The Spearman-Rho was .77 which is significant at the .05 level.

Appendix B

The Adaptive Behavior Scale

**A A M D**  
**ADAPTIVE BEHAVIOR SCALE**  
**For Children and Adults**  
**1974 Revision**

Name \_\_\_\_\_ Special Identification \_\_\_\_\_  
(last) (first)

Date \_\_\_\_\_ Sex: ☐ M ☐ F Date of Birth \_\_\_\_\_  
(mo) (day) (year) (mo) (day) (year)

Name of person filling out Scale \_\_\_\_\_

Source of information and relationship to person being evaluated (such as "John Doe - Parent," or "Self - Physician") \_\_\_\_\_

Additional Information: \_\_\_\_\_

This Scale consists of a number of statements which describe some of the ways people act in different situations. There are several ways of administering the Scale; these, and detailed scoring instructions, appear in the accompanying *Manual*.

Instructions for the second part of the Scale immediately precede the second half of this booklet.

INSTRUCTIONS FOR PART ONE

There are two kinds of items in the first part of the Scale. The first requires that you select only ONE of the several possible responses. For example:

[2] Eating in Public (Circle only ONE)

Orders complete meals in restaurants	3
Orders simple meals like hamburgers or hot dogs	2
Orders soft drinks at soda fountain or canteen	1
Does not order at public eating places	0

2

Notice that the statements are arranged in order of difficulty 3,2,1,0. Circle the one statement which best describes the *most difficult* task the person can usually manage. In this example, the individual being observed can order simple meals like hamburgers or hot dogs (2), but cannot order a complete dinner (3). Therefore, (2) is circled in the example above. In scoring, 2 is entered in the circle to the right.

Appendix B (continued)

The second type of item asks you to check ALL statements which apply to the person. For example

(4) Table Manners		
(Check ALL statements which apply)		
Swallows food without chewing	—	8-number checked =  <b>6</b>
Chews food with mouth open	✓	
Drops food on table or floor	—	
Uses napkin incorrectly or not at all	✓	
Talks with mouth full	—	
Takes food off others' plates	—	
Eats too fast or too slow	—	
Plays in food with fingers	—	
None of the above	—	
Does not apply, e.g., because he or she is completely dependent on others. (If checked, enter "0" in the circle to the right.)		

In the example above, the second and fourth items are checked to indicate that the person "chews food with mouth open" and "uses napkin incorrectly." In scoring, the number of items checked, 2, is subtracted from 8, and the item score, 6, is entered in the circle to the right. Most items do not, however, require this subtraction; instead, the number checked can be directly entered as the score. The statement "None of the above," which is included for administrative purposes only, is not to be counted in scoring here.

Some items may deal with behaviors that are clearly against local regulations, (e.g., use of the telephone), or behaviors that are not possible for a person to perform because the opportunity does not exist, (e.g., eating in restaurants is not possible for someone who is bedridden). In these instances, you must still complete your rating. Give the person credit for the item if you feel absolutely certain that he or she can and would perform the behavior without additional training had he or she the opportunity to do so. Write "AR" for "Against Regulations" or "HNO" for "Has No Opportunity" next to the rating made in these cases. These notations will not affect the eventual scoring of that item, but will contribute to the understanding and interpretation of the person's adaptive behavior and environment.

Please observe the following general rules in completing the Scale:

1. In items which specify "with help" or "with assistance" for completion of task, these mean with *direct physical assistance*.
2. Give the person credit for an item even if he or she needs verbal prompting or reminding to complete the task unless the item definitely states "without prompting" or "without reminder."

This Scale is prepared for general use. Therefore, some of the items may not be appropriate for your specific setting, but please do try to complete all of them.

Appendix B (continued)

PART ONE

1 INDEPENDENT FUNCTIONING

A Eating

(1) Use of Table Utensils (Circle only ONE.)

- 1 Uses knife and fork correctly and neatly
- 2 Uses table knife for cutting or spreading
- 3 Feeds self with spoon and fork - neatly
- 4 Feeds self with spoon and fork - considerable spilling
- 5 Feeds self with spoon - neatly
- 6 Feeds self with spoon - considerable spilling
- 7 Feeds self with fingers or must be fed
- 8



(2) Eating in Public (Circle only ONE.)

- 1 Orders complete meals in restaurants
- 2 Orders simple meals like hamburgers or hot dogs
- 3 Orders soft drinks at soda fountain or canteen
- 4 Does not order at public eating places
- 5



(3) Drinking (Circle only ONE.)

- 1 Drinks without spilling, holding glass in one hand
- 2 Drinks from cup or glass unassisted - neatly
- 3 Drinks from cup or glass unassisted - considerable spilling
- 4 Does not drink from cup or glass unassisted
- 5



(4) Table Manners (Check ALL statements which apply)

- Swallows food without chewing
- Chews food with mouth open
- Drops food on table or floor
- Uses napkin incorrectly or not at all
- Talks with mouth full
- Takes food off others' plates
- Eats too fast or too slow
- Plays in food with fingers
- Name at the above \_\_\_\_\_
- Does not apply, e.g., because he or she is bedridden, and/or has liquid food only (if checked, enter '0' in the circle to the right)



A Eating

ADD 1-4



B Toilet Use

(5) Toilet Training (Circle only ONE.)

- 4 Never has toilet accidents
- 3 Never has toilet accidents during the day
- 2 Occasionally has toilet accidents during the day
- 1 Frequently has toilet accidents during the day
- 0 Is not toilet trained at all



(6) Self-Care at Toilet

(Check ALL statements which apply.)

- 1 Removes pants at the toilet without help
- 2 Gets on toilet seat without help
- 3 Uses toilet tissue appropriately
- 4 Flushes toilet after use
- 5 Turns on clothes without help
- 6 Washes hands without help
- 7 Name of the above \_\_\_\_\_



B Toilet Use

ADD 5-6



C Cleanliness

(7) Washing Hands and Face

(Check ALL statements which apply.)

- 1 Washes hands with soap
- 2 Washes face with soap
- 3 Washes hands and face with water
- 4 Dries hands and face
- 5 Name of the above \_\_\_\_\_



(8) Bathing (Circle only ONE.)

- 1 Performs and completes bathing unaided
- 2 Washes and dries self completely without prompting or help
- 3 Washes and dries self reasonably well with prompting
- 4 Washes and dries self with help
- 5 Attempts to soap and wash self
- 6 Cooperates when being washed and dried by others
- 7 Makes no attempt to wash or dry self
- 8



(9) Personal Hygiene

(Check ALL statements which apply.)

- 1a. Uses string underarm armpit
- 1b. Uses and changes underwear regularly by self
- 2 Shaves when dirty if not assisted
- 3 Does not keep nails clean by self
- 4 Name of the above \_\_\_\_\_
- 5 Does not apply, e.g., because he or she is completely dependent on others (if checked, enter '0' in the circle to the right)



(10) Teeth Brushing (Circle only ONE.)

- 4 Applies toothpaste and brushes teeth with up and down motion
- 3 Applies toothpaste and brushes teeth
- 2 Brushes teeth without help but cannot apply toothpaste
- 1 Brushes teeth with supervision
- 0 Cooperates in having teeth brushed
- 11 Makes no attempt to brush teeth



3

Appendix B (continued)

[13] Menstruation (Circle only ONE)

(If no menses, Circle "no menstruation")

- No menstruation  
Cares for self completely for menstruation without assistance or reminder  
Cares for self reasonably well during menstruation  
Helps in changing pads during menstruation  
Indicates pad needs changing during menstruation  
Indicates that menstruation had begun  
Will not care for self or seek help during menstruation

C. Cleanliness ———— ADD ————  
7-17

F. Dressing and Undressing

[15] Dressing (Circle only ONE)

- Completely dresses self  
Completely dresses self with verbal prompting only  
Dresses self by pulling or putting on all clothes with verbal prompting and by fastening (zipping, buttoning, snapping) them with help  
Dresses self with help in pulling or putting on most clothes and fastening them  
Comprehends when dressed by extending arms or legs  
Must be dressed completely

D. Appearance

[16] Posture (Check ALL statements which apply)

- Mouth hangs open  
Head hangs down  
Shoulder sticks out because of posture  
Shoulders slumped forward and back bent  
Walks with torso out or leans in  
Walks with feet far apart  
Shuffles, drags, or stomps feet when walking  
Walks on toes  
Name of the above \_\_\_\_\_  
Does not apply, e.g., because he or she is bedridden or non-ambulatory (If checked, enter "0" in the circle to the right)

[17] Clothing (Check ALL statements which apply)

- Clothes do not fit properly if not assisted  
Wears torn or unwashed clothing if not prompted  
Removes dirty or soiled clothing if not prompted  
Wears clothing color combinations if not prompted  
Does not know the difference between work clothes and dress clothes  
Does not change different clothing for formal and informal occasions  
Does not wear special clothing for different weather conditions (raincoat, overshirt, etc.)  
Name of the above \_\_\_\_\_  
Does not apply, e.g., because he or she is completely dependent on others (If checked, enter "0" in the circle to the right)

D. Appearance ———— ADD ————  
12-13

E. Care of Clothing

[18] Care of Clothing

(Check ALL statements which apply)

- Washes and polishes shoes when needed  
Puts clothes in drawer or chest neatly  
Sweat clothes to laundry without being reminded  
Hangs up clothes without being reminded  
Name of the above \_\_\_\_\_  
E. Care of Clothing ———— ENTER ————  
14

[16] Undressing at Appropriate Times (Circle only ONE)

- Completely undresses self  
Completely undresses self with verbal prompting only  
Undresses self by undressing (unzipping, unbuttoning, unsnapping) clothes with help and pulling or taking them off with verbal prompting  
Undresses self with help in undressing and pulling or taking off most clothes  
Comprehends when undressed by extending arms or legs  
Must be completely undressed

[17] Shoes (Check ALL statements which apply)

- Puts on shoes correctly without assistance  
Ties shoe laces without assistance  
Unders shoe laces without assistance  
Removes shoes without assistance  
Name of the above \_\_\_\_\_






F. Dressing and Undressing ———— ADD ————  
15-17

C. Travel

[18] Sense of Direction (Circle only ONE)

- Goes a few blocks from hospital or school ground or several blocks from home without getting lost  
Goes around hospital ground or a few blocks from home without getting lost  
Goes around cottage world or home alone  
Gets lost whenever leaving own living area


Appendix B (continued)


<p>(19) Public Transportation (Check <u>ALL</u> statements which apply)</p> <p>Rides on train, long-distance bus or plane independently _____</p> <p>Rides on taxi independently _____</p> <p>Rides subway or city bus for unfamiliar journeys independently _____</p> <p>Rides subway or city bus for familiar journeys independently _____</p> <p>Name of the above _____</p> <p>C. Travel <span style="float: right;">ADD 18-19</span> </p>	<p>II. PHYSICAL DEVELOPMENT</p> <p>A. Sensory Development (Observable functioning ability)</p> <p>(22) Vision (With glasses, if used) (Circle only ONE)</p> <p>No difficulty in seeing _____</p> <p>Some difficulty in seeing _____</p> <p>Great difficulty in seeing _____</p> <p>No vision at all _____</p> <p>(23) Hearing (With hearing aid, if used) (Circle only ONE)</p> <p>No difficulty in hearing _____</p> <p>Some difficulty in hearing _____</p> <p>Great difficulty in hearing _____</p> <p>No hearing at all _____</p> <p>A. Sensory Development <span style="float: right;">ADD 22-23</span> </p>
<p>H. Other Independent Functioning</p> <p>(20) Telephone (Check <u>ALL</u> statements which apply)</p> <p>Uses telephone directory _____</p> <p>Uses pay telephone _____</p> <p>Makes telephone calls from private telephone _____</p> <p>Answers telephone appropriately _____</p> <p>Takes telephone messages _____</p> <p>Name of the above _____</p> <p>(21) Miscellaneous Independent Functioning (Check <u>ALL</u> statements which apply)</p> <p>Prepares own bed at night _____</p> <p>Cares to bed unsolicited, e.g., getting in bed, covering with blanket, etc. _____</p> <p>Has ordinary control of appetite, eats moderately _____</p> <p>Knows postage rates, buys stamps from Post Office _____</p> <p>Looks after personal health, e.g., changes wet clothing _____</p> <p>Deals with simple injuries, e.g., cuts, burns _____</p> <p>Knows how and where to obtain a doctor's or dentist's help _____</p> <p>Knows about welfare facilities in the community _____</p> <p>Name of the above _____</p> <p>H. Other Independent Functioning <span style="float: right;">ADD 20-21</span> </p>	<p>B. Motor Development</p> <p>(24) Body Balance (Circle only ONE)</p> <p>Stands on "toes" for ten seconds if asked _____</p> <p>Stands on one foot for two seconds if asked _____</p> <p>Stands without support _____</p> <p>Stands with support _____</p> <p>Sits without support _____</p> <p>Can do none of the above _____</p> <p>(25) Walking and Running (Check <u>ALL</u> statements which apply)</p> <p>Walks alone _____</p> <p>Walks up and down steps alone _____</p> <p>Walks down stairs by alternating feet _____</p> <p>Runs without falling often _____</p> <p>Keeps step or jumps _____</p> <p>Name of the above _____</p> <p>(26) Control of Hands (Check <u>ALL</u> statements which apply)</p> <p>Catches a ball _____</p> <p>Throws a ball overhand _____</p> <p>Throws cup or glass _____</p> <p>Cuts up with thumb and finger _____</p> <p>Name of the above _____</p>
<p>I. INDEPENDENT FUNCTIONING <span style="float: right;">ADD TRIANGLES A-H</span> </p>	<p></p>

Appendix B (continued)

[27] Limb Function  
(Check ALL statements which apply.)

- Has effective use of right arm \_\_\_\_\_
- Has effective use of left arm \_\_\_\_\_
- Has effective use of right leg \_\_\_\_\_
- Has effective use of left leg \_\_\_\_\_
- None of the above \_\_\_\_\_


B Motor Development ADD  
24-27 

II PHYSICAL DEVELOPMENT ADD  
TRIANGLES A-B 

[31] Purchasing (Circle only ONE)

- Buys all own clothing \_\_\_\_\_ 5
- Buys own clothing accessories \_\_\_\_\_ 4
- Makes minor purchases without help (candy, soft drinks, etc.) \_\_\_\_\_ 3
- Does shopping with slight supervision \_\_\_\_\_ 2
- Does shopping with close supervision \_\_\_\_\_ 1
- Does no shopping \_\_\_\_\_ 0

B Shopping Skills ADD  
30-31 

III ECONOMIC ACTIVITY ADD  
TRIANGLES A-B 

III ECONOMIC ACTIVITY

A. Money Handling and Budgeting

[28] Money Handling (Circle only ONE)

- Uses banking facilities independently \_\_\_\_\_ 4
- Makes change correctly but does not use banking facilities \_\_\_\_\_ 3
- Adds coins of various denominations, up to one dollar \_\_\_\_\_ 2
- Uses money, but does not make change correctly \_\_\_\_\_ 1
- Does not use money \_\_\_\_\_ 0

[29] Budgeting  
(Check ALL statements which apply.)

- Saves money or tokens for a particular purpose \_\_\_\_\_
- Budgets for meals, etc. \_\_\_\_\_
- Spends money with some planning \_\_\_\_\_
- Controls own major expenditures \_\_\_\_\_
- None of the above \_\_\_\_\_

A Money Handling and Budgeting ADD  
28-29 

B Shopping Skills

[30] Errands (Circle only ONE)

- Goes to several shops and specifies different items \_\_\_\_\_ 4
- Goes to one shop and specifies one item \_\_\_\_\_ 3
- Goes on errands for simple purchasing without a note \_\_\_\_\_ 2
- Goes on errands for simple purchasing with a note \_\_\_\_\_ 1
- Cannot be sent on errands \_\_\_\_\_ 0

IV. LANGUAGE DEVELOPMENT

A. Expression

[32] Writing (Circle only ONE)

- Writes sensible and understandable letters \_\_\_\_\_ 5
- Writes short notes and memos \_\_\_\_\_ 4
- Writes or prints forty words \_\_\_\_\_ 3
- Writes or prints ten words \_\_\_\_\_ 2
- Writes or prints own name \_\_\_\_\_ 1
- Cannot write or print any words \_\_\_\_\_ 0

[33] Preverbal Expression  
(Check ALL statements which apply.)

- Nods head or smiles to express happiness \_\_\_\_\_
- Indicates hunger \_\_\_\_\_
- Indicates wants by pointing or vocal noises \_\_\_\_\_
- Chuckles or laughs when happy \_\_\_\_\_
- Expresses pleasure or anger by vocal noises \_\_\_\_\_
- Is able to say at least a few words (Enter "5" if checked, regardless of other items) \_\_\_\_\_
- None of the above \_\_\_\_\_

[34] Articulation (Check ALL statements which apply - if no speech, check "None" and enter "0" in the circle)


- Speech is low, weak, whispered or difficult to hear \_\_\_\_\_ 4-number checked =
- Speech is slowed, deliberate or labored \_\_\_\_\_
- Speech is hurried, accelerated or pushed \_\_\_\_\_
- Speaks with blocking, faltering, or other irregular interruptions \_\_\_\_\_
- None of the above \_\_\_\_\_

Appendix B (continued)

[35] Sentences (Circle only ONE)

- Sometimes uses complex sentences containing "because," "but," etc.  
Asks questions using words such as "why," "how," "what," etc.  
Speaks in simple sentences.  
Speaks in primitive phrases only, or is non-verbal.


3  
2  
1  
0




[36] Word Usage (Circle only ONE)

- Talks about action when describing pictures.  
Names people or objects when describing pictures.  
Names familiar objects.  
Asks for things by their appropriate names.  
Is non-verbal or nearly non-verbal.

4  
3  
2  
1  
0




A. Expression  $\xrightarrow{\text{ADD 35-36}}$  

B. Comprehension

[37] Reading (Circle only ONE)

- Reads books suitable for children nine years or older.  
Reads books suitable for children seven years old.  
Reads simple stories or comics.  
Reads various signs, e.g., "NO PARKING," "ONE WAY," "MEN," "WOMEN," etc.  
Recognizes ten or more words by sight.  
Recognizes fewer than ten words or none at all.

5  
4  
3  
2  
1  
0




[38] Complex Instructions (Check ALL statements which apply)

- Understands instructions containing prepositions, e.g., "on," "in," "behind," "under," etc.  
Understands instructions referring to the order in which things must be done, e.g., "First do this, then do that."  
Understands instructions requiring a decision, e.g., "If—do this, but if not, do—."  
None of the above.

☐  
☐  
☐



B. Comprehension  $\xrightarrow{\text{ADD 37-38}}$  

C. Social Language Development

[39] Conversation (Check ALL statements which apply)

- Uses phrases such as "please" and "thank you."  
Is sociable and talks during meals.  
Talks to others about sports, family, group activities, etc.  
None of the above.

☐  
☐  
☐



[40] Miscellaneous Language Development (Check ALL statements which apply)

- Can be reasoned with.  
Obviously responds when talked to.  
Talks sensibly.  
Reads books, newspapers, magazines for enjoyment.  
Repeats a story with little or no difficulty.  
Fills in the main stems on application form reasonably well.  
None of the above.

☐  
☐  
☐  
☐  
☐  
☐



C. Social Language Development  $\xrightarrow{\text{ADD 39-40}}$  


IV. LANGUAGE DEVELOPMENT  $\xrightarrow{\text{ADD TRIANGLES A-C}}$  

V. NUMBERS AND TIME

[41] Numbers (Circle only ONE)

- Does simple addition and subtraction.  
Counts ten or more objects.  
Mechanically counts to ten.  
Counts two objects by saying "one, two."  
Discriminates between "one and many" or "a lot."  
Has no understanding of numbers.

5  
4  
3  
2  
1  
0





Appendix B (continued)

[42] Time (Check ALL statements which apply)

- Tells time by clock or watch correctly to the minute \_\_\_\_\_
- Understands time intervals, e.g., between "3:30" and "4:30" \_\_\_\_\_
- Understands time equivalencies, e.g., "15" is the same as "quarter past nine" \_\_\_\_\_
- Associates time on clock with various actions and events \_\_\_\_\_
- Name of the above \_\_\_\_\_

☐

[43] Time Concept  
(Check ALL statements which apply)

- Names the days of the week \_\_\_\_\_
- Refers correctly to "morning" and "afternoon" \_\_\_\_\_
- Understands difference between day-week, minute-hour, month-year, etc. \_\_\_\_\_
- Name of the above \_\_\_\_\_

☐

V NUMBERS AND TIME ADD  
41-43  

VI. DOMESTIC ACTIVITY

A. Cleaning

[44] Room Cleaning (Circle only ONE)

- Cleans room well, e.g., sweeping, dusting and tidying \_\_\_\_\_
- Cleans room but not thoroughly \_\_\_\_\_
- Does not clean room at all \_\_\_\_\_

☐

[45] Laundry (Check ALL statements which apply)

- Washes clothing \_\_\_\_\_
- Dries clothing \_\_\_\_\_
- Folds clothing \_\_\_\_\_
- Iron clothing when appropriate \_\_\_\_\_
- Name of the above \_\_\_\_\_

☐

A. Cleaning ADD  
44-45  

B. Kitchen

[46] Table Setting (Circle only ONE)

- Places all eating utensils, as well as napkins, salt, pepper, sugar, etc. in positions learned \_\_\_\_\_
- Places plates, glasses, and utensils in positions learned \_\_\_\_\_
- Places silver, plates, cups, etc. on the table \_\_\_\_\_
- Does not set table at all \_\_\_\_\_

☐

[47] Food Preparation (Circle only ONE)

- Prepares an adequate complete meal (may use canned or frozen food) \_\_\_\_\_
- Mixes and cooks simple food, e.g., fries eggs, makes pancakes, cooks TV dinners, etc. \_\_\_\_\_
- Prepares simple foods requiring no mixing or cooking, e.g., sandwiches, cold cereal, etc. \_\_\_\_\_
- Does not prepare food at all \_\_\_\_\_

☐

[48] Table Clearing (Circle only ONE)

- Clears table of breakable dishes and glassware \_\_\_\_\_
- Clears table of unbreakable dishes and silverware \_\_\_\_\_
- Does not clear table at all \_\_\_\_\_

☐

B. Kitchen ADD  
46-48  

C. Other Domestic Activities

[49] General Domestic Activity

(Check ALL statements which apply)

- Washes dishes well \_\_\_\_\_
- Makes bed neatly \_\_\_\_\_
- Helps with household chores when asked \_\_\_\_\_
- Does household tasks routinely \_\_\_\_\_
- Name of the above \_\_\_\_\_

☐

C. Other Domestic Activities ENTER  
49  

VI. DOMESTIC ACTIVITY ADD  
TRIANGLES A-C  

VII. VOCATIONAL ACTIVITY

[50] Job Complexity (Circle only ONE)

- Performs a job requiring use of tools or machinery, e.g., shop work, sewing, etc. \_\_\_\_\_
- Performs simple work, e.g., simple gardening, mopping floors, emptying trash, etc. \_\_\_\_\_
- Performs no work at all \_\_\_\_\_

☐

Appendix B (continued)

[51] Job Performance

(Check ALL statements which apply)

(If "0" is circled in item 50, check "None of the above" and enter "0" in the circle)

Endangers others because of carelessness

Does not take care of tools

Is a very slow worker

Does sloppy, inaccurate work

None of the above

4 number  
checked =

[52] Work Habits

(Check ALL statements which apply)

(If "0" is circled in item 50, check "None of the above" and enter "0" in the circle)

Is late from work without good reason

Is often absent from work

Does not complete jobs without constant encouragement

Leaves work station without permission

Crumbles or gripes about work

None of the above

5 number  
checked =

VII. VOCATIONAL ACTIVITY

ADD  
50-52

VIII. SELF-DIRECTION

A. Initiative

[53] Initiative (Circle only ONE)

Initiates most of own activities, e.g., tasks, games, etc.

Asks if there is something to do, or explores surroundings, e.g., home, yard, etc.

Will engage in activities only if assigned or directed

Will not engage in assigned activities, e.g., putting away toys, etc.

3

2

1

0

[54] Passivity

(Check ALL statements which apply)

Has to be made to do things

Has no ambition

Seems to have no interest in things

Finishes task last because of wasted time

Is unnecessarily dependent on others for help

Movement is slow and sluggish

None of the above

Does not apply, e.g., because he or she is totally dependent on others

(If checked, enter "0" in the circle to the right)

6 number  
checked =

A Initiative

ADD  
53-54

B. Perseverance

[55] Attention (Circle only ONE)

Will pay attention to purposeful activities for more than fifteen minutes, e.g., playing games, reading, cleaning up

Will pay attention to purposeful activities for at least fifteen minutes

Will pay attention to purposeful activities for at least ten minutes

Will pay attention to purposeful activities for at least five minutes

Will not pay attention to purposeful activities for as long as five minutes

4

3

2

1

0

[56] Persistence

(Check ALL statements which apply)

Becomes easily discouraged

Fails to carry out tasks

Jumps from one activity to another

Needs constant encouragement to complete task

None of the above

Does not apply, e.g., because he or she is totally incapable of any organized activities (If checked, enter "0" in the circle to the right)

4 number  
checked =

B. Perseverance

ADD  
55-56

C. Leisure Time

[57] Leisure Time Activity

(Check ALL statements which apply)

Organizes leisure time on a fairly complex level, e.g., plays billiards, fishes, etc.

Has hobby, e.g., painting, embroidery, collecting stamps or coins

Organizes leisure time adequately on a simple level, e.g., watching television, listening to phonograph, radio, etc.

None of the above

3

2

1

0

C Leisure Time

ENTER  
57

VIII SELF-DIRECTION

ADD  
TRIANGLES A-C

IX RESPONSIBILITY

[58] Personal Belongings (Circle only ONE)

Very dependable, always takes care of personal belongings

Usually dependable, usually takes care of personal belongings

Unreliable, seldom takes care of personal belongings

Not responsible at all, does not take care of personal belongings

3

2

1

0

Appendix B (continued)

(19) General Responsibility (Circle only ONE)

Very conscientious and assumes much responsibility—makes a special effort; the assigned activities are always performed  
Usually dependable—makes an effort to carry out responsibility; one can be reasonably certain that the assigned activity will be performed  
Unreliable—makes little effort to carry out responsibility; one is uncertain that the assigned activity will be performed  
Not given responsibility; is unable to carry out responsibility at all

IX. RESPONSIBILITY ADD 58-59

X. SOCIALIZATION

(48) Cooperation (Circle only ONE)

Offers assistance to others  
Is willing to help if asked  
Never helps others

(49) Consideration for Others (Check ALL statements which apply)

Shows interest in the affairs of others  
Takes care of others' belongings  
Directs or manages the affairs of others when needed  
Shows consideration for others' feelings  
None of the above

(50) Awareness of Others (Check ALL statements which apply)

Recognizes own family  
Recognizes people other than family  
Has information about others, e.g., job, address, relation to self  
Knows the names of people close to him, e.g., classmates, neighbors  
Knows the names of people not regularly encountered  
None of the above

(51) Interaction With Others (Circle only ONE)

Interacts with others in group games or activity  
Interacts with others for at least a short period of time, e.g., showing or offering toys, clothing or objects  
Interacts with others reactively with little interaction  
Does not respond to others in a socially acceptable manner

(54) Participation in Group Activities (Circle only ONE)

Initiates group activities (leader and organizer)  
Participates in group activities spontaneously and eagerly (active participant)  
Participates in group activities if encouraged to do so (passive participant)  
Does not participate in group activities

(55) Solidarity (Check ALL statements which apply)

Refuses to take turns  
Does not share with others  
Gets mad if he does not get his way  
Interjects side or teacher who is helping another person  
None of the above  
Does not apply, e.g., because he or she has no social interaction or is profoundly withdrawn (If checked, enter "0" in the circle to the right)

(56) Social Maturity (Check ALL statements which apply)

Is too familiar with strangers  
Is afraid of strangers  
Does anything to make friends  
Likes to hold hands with everyone  
Is at someone's elbow constantly  
None of the above  
Does not apply, e.g., because he or she has no social interaction or is profoundly withdrawn (If checked, enter "0" in the circle to the right)

X SOCIALIZATION

ADD 48-56

## Appendix B (continued)

INSTRUCTIONS FOR PART TWO

Part Two contains only one type of item. The following is an example.

(2) Damages Personal Property	Occasionally	Frequently
Rips, tears, or chews own clothing	(1)	2
Soils own property	1	(2)
Tears up own magazines, books, or other possessions	1	(2)
Other (specify _____)	1	2
_____ None of the above	Total 1	4

Select those of the statements which are true of the individual being evaluated, and circle (1) if the behavior occurs occasionally, or (2) if it occurs frequently. Check "None of the Above" where appropriate. In scoring, total each column on the bottom (Total) line, and enter the sum of these totals in the circle to the right. When "None of the above" is checked, enter 0 in the circle to the right. In the above example, the first statement is true occasionally, and the last two statements are true frequently; therefore, a score of 5 has been entered.

"Occasionally" signifies that the behavior occurs once in a while, or now and then, and "Frequently" signifies that the behavior occurs quite often, or habitually.

Use the space for "Other" when:

- 1 The person has related behavior problems in addition to those circled
- 2 The person has behavior problems that are not covered by any of the examples listed

The behavior listed under "Other" must be a specific example of the behavior problem stated in the item.

Some of the items in Part Two describe behaviors which need not be considered maladaptive for very young children (for example, pushing others). The question of whether a given behavior is adaptive or maladaptive depends on the way that particular behavior is viewed by people in our society. Nonetheless, in completing this Scale you are asked to record a person's behavior as accurately as possible, ignoring, for the moment, your personal biases, then, when you later interpret the impact of the reported behaviors, you should take into consideration societal attitudes.

Appendix B (continued)

PART TWO

I. VIOLENT AND DESTRUCTIVE BEHAVIOR

	Occasionally	Frequently
<b>[1] Threatens or Does Physical Violence</b>		
Uses threatening gestures	1	2
Indirectly causes injury to others	1	2
Spins on others	1	2
Pushes, scratches or punches others	1	2
Pulls others' hair, ears, etc.	1	2
Bites others	1	2
Kicks, strikes or slaps others	1	2
Throws objects at others	1	2
Chokes others	1	2
Uses objects as weapons against others	1	2
Hurts animals	1	2
Other (specify _____)	1	2
None of the above	Total	

	Occasionally	Frequently
<b>[5] Has Violent Temper, or Temper Tantrums</b>		
Cries and screams	1	2
Stamps feet while banging objects or slamming doors, etc.	1	2
Stamps feet, screaming and yelling	1	2
Throws self on floor, screaming and yelling	1	2
Other (specify _____)	1	2
None of the above	Total	
<b>I VIOLENT AND DESTRUCTIVE BEHAVIOR</b>		
	ADD	
	1-5	

**[2] Damages Personal Property**

Rips, tears or chews own clothing	1	2
Soils own property	1	2
Tears up own magazines, books, or other possessions	1	2
Other (specify _____)	1	2
None of the above	Total	

**[3] Damages Others' Property**

Rips, tears, or chews others' clothing	1	2
Soils others' property	1	2
Tears up others' magazines, books, or personal possessions	1	2
Other (specify _____)	1	2
None of the above	Total	

**[4] Damages Public Property**

Tears up magazines, books or other public property	1	2
Is overly rough with furniture (kicks, mutilates, knocks it down)	1	2
Breaks windows	1	2
Stuffs toilet with paper, towels or other solid objects that cause an overflow	1	2
Attempts to set fires	1	2
Other (specify _____)	1	2
None of the above	Total	

II. ANTISOCIAL BEHAVIOR

**[6] Teases or Gossips About Others**

Gossips about others	1	2
Tells untrue or exaggerated stories about others	1	2
Teases others	1	2
Picks on others	1	2
Makes fun of others	1	2
Other (specify _____)	1	2
None of the above	Total	

**[7] Bosses and Manipulates Others**

Tries to tell others what to do	1	2
Demands services from others	1	2
Pushes others around	1	2
Causes fights among other people	1	2
Manipulates others to get them in trouble	1	2
Other (specify _____)	1	2
None of the above	Total	

**[8] Disrupts Others' Activities**

Is always in the way	1	2
Interferes with others' activities, e.g., by blocking passage, upsetting wheelchairs, etc.	1	2
Upsets others' work	1	2
Knocks around articles that others are working with, e.g., puzzles, card games, etc.	1	2
Snatches things out of others' hands	1	2
Other (specify _____)	1	2
None of the above	Total	

Appendix B (continued)

		Occasionally	Frequently	III. REBELLIOUS BEHAVIOR	
				Occasionally	Frequently
<b>I. INCONSIDERATE BEHAVIOR</b>					
(7) Is Inconsiderate of Others					
Keeps temperature in public areas uncomfortable for others, e.g., opens or closes window, changes thermostat		1	2		
Turns TV, radio or phone/ask on too loudly		1	2		
Makes loud noises while others are reading		1	2		
Talks too loudly		1	2		
Spreads over furniture or space needed by others		1	2		
Other (specify _____)		1	2		
Name of the above _____		1	2		
Total		1	2		
<b>(8) Shows Disrespect for Others' Property</b>					
Does not return things that were borrowed		1	2		
Uses others' property without permission		1	2		
Loses others' belongings		1	2		
Damages others' property		1	2		
Does not recognize the difference between own and others' property		1	2		
Other (specify _____)		1	2		
Name of the above _____		1	2		
Total		1	2		
<b>(9) Uses Angry Language</b>					
Uses hostile language, e.g., "rugged", "dirty pig," etc.		1	2		
Swears, curses, or uses obscene language		1	2		
Yells or screams threats of violence		1	2		
Verbally threatens others, suggesting physical violence		1	2		
Other (specify _____)		1	2		
Name of the above _____		1	2		
Total		1	2		
<b>II. ANTISOCIAL BEHAVIOR</b>					
		ADD 6-11			
<b>(12) Ignores Regulations or Regular Routines</b>					
Has negative attitude toward rules but usually conforms		1	2		
Has to be forced to go through waiting lines, e.g., lunch lines, ticket lines, etc.		1	2		
Violates rules or regulations, e.g., enters restricted areas, disobeys traffic signals, etc.		1	2		
Refuses to participate in required activities, e.g., work, school, etc.		1	2		
Other (specify _____)		1	2		
Name of the above _____		1	2		
Total		1	2		
<b>(13) Resists Following Instructions, Requests or Orders</b>					
Gets upset if given a direct order		1	2		
Plays dead and does not follow instructions		1	2		
Does not pay attention to instructions		1	2		
Refuses to work on assigned subject		1	2		
Hesitates for long periods before doing assigned tasks		1	2		
Does the opposite of what was requested		1	2		
Other (specify _____)		1	2		
Name of the above _____		1	2		
Total		1	2		
<b>(14) Has Inappropriate or Rebellious Attitude Toward Authority</b>					
Reviews persons in authority, e.g., teachers, group leaders, ward personnel, etc.		1	2		
Is hostile toward people in authority		1	2		
Mockes people in authority		1	2		
Says that he can live people in authority		1	2		
Says relative will come to kill or harm persons in authority		1	2		
Other (specify _____)		1	2		
Name of the above _____		1	2		
Total		1	2		
<b>(15) Is Absent From, or Late For, the Proper Assignments or Places</b>					
Is late to required places or activities		1	2		
Fails to return to places where he is supposed to be after leaving, e.g., going to toilet, running an errand, etc.		1	2		
Leaves place of required activity without permission, e.g., work, class, etc.		1	2		
Is absent from required activities, e.g., work, class, etc.		1	2		
Stays out late at night from home, hospital, ward dormitory, etc.		1	2		
Other (specify _____)		1	2		
Name of the above _____		1	2		
Total		1	2		

Appendix B (continued)

Occasionally Frequently

(16) Runs Away or Attempts to Run Away

Attempts to run away from hospital home or school grounds  
Runs away from group activities, e.g., games, school buses, etc.  
Runs away from hospital home or school grounds  
Other (specify \_\_\_\_\_)  
None of the above

1 1  
1 2  
1 2  
1 2  
Total

V WITHDRAWAL

(20) Is Inactive

Sits or stands in one position for a long period of time  
Does nothing but sit and watch others play except as a chair  
Lies on the floor all day  
Does not seem to react to anything  
Other (specify \_\_\_\_\_)  
None of the above

1 2  
1 2  
1 2  
1 2  
Total

Occasionally Frequently

(17) Antisocial in Group Settings

Interrupts group discussion by talking about unrelated topics  
Derogates others by refusing to follow rules  
Derogates group activities by making loud noises or by acting up  
Does not stay in seat during lesson period, lunch period, or other group sessions  
Other (specify \_\_\_\_\_)  
None of the above

1 2  
1 2  
1 2  
1 2  
Total

(21) Is Withdrawn

Seems unaware of surroundings  
Is difficult to reach or contact  
Is aloof and unresponsive in feeling  
Has a blank stare  
Has a forced expression  
Other (specify \_\_\_\_\_)  
None of the above

1 2  
1 2  
1 2  
1 2  
Total

III REBELLIOUS BEHAVIOR

ADD  
12-17

IV UNTRUSTWORTHY BEHAVIOR

(18) Takes Others' Property Without Permission

Has been suspected of stealing  
Takes others' belongings if not kept in place or locked  
Takes others' belongings from pockets, purses, drawers, etc.  
Takes others' belongings by opening or breaking locks  
Other (specify \_\_\_\_\_)  
None of the above

1 2  
1 2  
1 2  
1 2  
Total

(19) Lays or Eats

Throws the trash to own advantage  
Eats in others' food assignments  
Eats others' assignments  
Eats others' food  
Eats others' food  
Other (specify \_\_\_\_\_)  
None of the above

1 2  
1 2  
1 2  
1 2  
Total

VI STEREOTYPED BEHAVIOR AND ODD MANNERISMS

(22) Has Stereotyped Behaviors

Repeats language  
Sings (or hums) continuously  
Repeats language in a monotonous  
Manner continuously or with self-stimulatory  
Manner or other (specify \_\_\_\_\_)  
Other (specify \_\_\_\_\_)  
None of the above

1 2  
1 2  
1 2  
1 2  
Total

IV UNTRUSTWORTHY BEHAVIOR

ADD  
18-19

Appendix B (continued)

	Occasionally	Frequently		Occasionally	Frequently
<b>XI SEXUALLY ABERRANT BEHAVIOR</b>					
(70) Has Other Eccentric Habits and Tendencies					
Is overly particular about places to sit or sleep	1	2	(71) Engages in inappropriate masturbation		
Stands in a favorite spot, e.g., by window, by door, etc.	1	2	Has attempted to masturbate openly	1	2
Sits by anything that vibrates	1	2	Masturbates in front of others	1	2
Is afraid to climb stairs or to go down stairs	1	2	Masturbates in group	1	2
Does not want to be touched	1	2	Other (specify _____)	1	2
Screams if touched	1	2	_____ Name of the above	1	2
Other (specify _____)	1	2	Total		
_____ Name of the above	1	2			
<b>IX. UNACCEPTABLE OR ECCENTRIC HABITS</b>					
ADD	ENTER		ADD	ENTER	
27-28	31		27-28	31	
<b>X. SELF-ABUSIVE BEHAVIOR</b>					
(71) Uses Physical Violence to Self			(72) Has Homosexual Tendencies		
Bites or cuts self	1	2	Is sexually attracted to members of the same sex	1	2
Ships or enters self	1	2	Has approached others and attempted homosexual acts	1	2
Bumps head or other parts of the body against objects	1	2	Has engaged in homosexual activity	1	2
Pulls own hair, ears, etc.	1	2	Other (specify _____)	1	2
Scratches or picks self causing injury	1	2	_____ Name of the above	1	2
Sells and tears self	1	2	Total		
Perpetrator provokes abuse from others	1	2			
Picks at any sores he might have	1	2			
Pokes objects in own ears, eyes, nose, or mouth	1	2			
Other (specify _____)	1	2			
_____ Name of the above	1	2			
Total					
<b>XI HYPERACTIVE TENDENCIES</b>					
(72) Has Hyperactive Tendencies			(73) Sexual Behavior That Is Socially Unacceptable		
Talks excessively	1	2	Is overly seductive in appearance or actions	1	2
Will not sit still for any length of time	1	2	Might or carries too intensely in public	1	2
Constantly runs or jumps around the room or hall	1	2	Speech wailing with regard to sexual behavior	1	2
Always or judges constantly	1	2	Lifts or undresses others' clothing to mouth and smush	1	2
Other (specify _____)	1	2	Has sexual relations in public places	1	2
_____ Name of the above	1	2	Is overly aggressive sexually	1	2
Total			Has raped others	1	2
			Is easily taken advantage of sexually	1	2
			Other (specify _____)	1	2
			_____ Name of the above	1	2
			Total		
<b>XI. HYPERACTIVE TENDENCIES</b>					
ENTER	ENTER		<b>XII SEXUALLY ABERRANT BEHAVIOR</b>		
32	32				



Appendix B (continued)

IX. UNACCEPTABLE OR ECCENTRIC HABITS		XII. SEXUALLY ABERRANT BEHAVIOR	
<p>[30] Has Other Eccentric Habits and Tendencies</p> <p>Is overly particular about places to sit or sleep</p> <p>Stands in a favorite spot, e.g., by window, by door, etc.</p> <p>Sets by anything that vibrates</p> <p>Is afraid to climb stairs or to go down stairs</p> <p>Claims not want to be touched</p> <p>Screams if touched</p> <p>Other (specify _____)</p> <p>____ Name of the above</p> <p>Total</p> <p>Occasionally 1</p> <p>Frequently 2</p> <p>ADD <math>\frac{37.50}{37.50}</math></p>	<p>[33] Engages in inappropriate masturbation</p> <p>Has attempted to masturbate openly</p> <p>Masturbates in front of others</p> <p>Masturbates in group</p> <p>Other (specify _____)</p> <p>____ Name of the above</p> <p>Total</p> <p>Occasionally 1</p> <p>Frequently 2</p>	<p>[34] Exposes Body Improperly</p> <p>Exposes body unnecessarily after urinate/defecate</p> <p>Stands in public places with pants down or with dress up</p> <p>Exposes body excessively during activities, e.g., playing, dancing, sitting, etc.</p> <p>Undresses in public places, or in front of high school students</p> <p>Other (specify _____)</p> <p>____ Name of the above</p> <p>Total</p> <p>Occasionally 1</p> <p>Frequently 2</p>	<p>[35] Has Homosexual Tendencies</p> <p>Is sexually attracted to members of the same sex</p> <p>Has approached others and attempted homosexual acts</p> <p>Has engaged in homosexual activity</p> <p>Other (specify _____)</p> <p>____ Name of the above</p> <p>Total</p> <p>Occasionally 1</p> <p>Frequently 2</p>
X. SELF-ABUSIVE BEHAVIOR		XII. SEXUALLY ABERRANT BEHAVIOR	
<p>[31] Does Physical Violence to Self</p> <p>Bites or cuts self</p> <p>Slaps or wrings self</p> <p>Bangs head or other parts of the body against objects</p> <p>Pulls own hair, ears, etc.</p> <p>Scratches or picks self causing injury</p> <p>Self and fingers self</p> <p>Purposely provokes abuse from others</p> <p>Picks at any sores he might have</p> <p>Pokes objects in own ears, eyes, nose, or mouth</p> <p>Other (specify _____)</p> <p>____ Name of the above</p> <p>Total</p> <p>Occasionally 1</p> <p>Frequently 2</p> <p>ENTER <math>\frac{31}{31}</math></p>	<p>[36] Sexual Behavior That is Socially Unacceptable</p> <p>Is overly seductive in appearance or actions</p> <p>Hugs or caresses too intensely in public</p> <p>Needs watching with regard to sexual behavior</p> <p>Lifts or unbuttons others' clothing to touch intimately</p> <p>Has sexual relations in public places</p> <p>Is overly aggressive sexually</p> <p>Manipulates others</p> <p>Is overly taken advantage of sexually</p> <p>Other (specify _____)</p> <p>____ Name of the above</p> <p>Total</p> <p>Occasionally 1</p> <p>Frequently 2</p> <p>ADD <math>\frac{33.50}{33.50}</math></p>	<p>[37] Has Hyperactive Tendencies</p> <p>Talks excessively</p> <p>Will not sit still for any length of time</p> <p>Constantly runs or jumps around the room or hall</p> <p>Always or frequently constantly</p> <p>Other (specify _____)</p> <p>____ Name of the above</p> <p>Total</p> <p>Occasionally 1</p> <p>Frequently 2</p> <p>ENTER <math>\frac{32}{32}</math></p>	<p>[38] SEXUALLY ABERRANT BEHAVIOR</p> <p>ADD <math>\frac{33.50}{33.50}</math></p>

Appendix B (continued)

XIII PSYCHOLOGICAL DISTURBANCES

	Occasionally	Frequently
<b>(42) Has Hypochondriacal Tendencies</b>		
Complains about imaginary physical ailments	1	2
Prevents to be ill	1	2
Acts self after others' names	1	2
Other (specify _____)	1	2
____ Name of the above	Total 1	
<b>(43) Has Other Signs of Emotional Instability</b>		
Changes mood without apparent reason	1	2
Complains of bad dreams	1	2
Cries out while asleep	1	2
Cries for no apparent reason	1	2
Seems to have no emotional control	1	2
Wonders when upset	1	2
Apparent structure or heightened in daily activities	1	2
Talks about people or things that cause unrealistic fears	1	2
Talks about suicide	1	2
Has made an attempt at suicide	1	2
Other (specify _____)	1	2
____ Name of the above	Total 1	
<b>XIII PSYCHOLOGICAL DISTURBANCES</b>		
	ADD 37-43	

(46) Demands Excessive Attention or Praise

	Occasionally	Frequently
Wants excessive praise	1	2
Is jealous of attention given to others	1	2
Demand excessive reassurance	1	2
Acts silly to gain attention	1	2
Other (specify _____)	1	2
____ Name of the above	Total 1	

(47) Seems To Feel Persecuted

	Occasionally	Frequently
Complains of unfairness even when equal shares or privileges have been given	1	2
Complains "Nobody loves me"	1	2
Says "Everybody picks on me"	1	2
Says "People talk about me"	1	2
Says "People are against me"	1	2
Acts suspicious of people	1	2
Other (specify _____)	1	2
____ Name of the above	Total 1	

XIV USE OF MEDICATIONS

(44) Use of Prescribed Medication

Uses tranquilizers	1	2
Uses sedatives	1	2
Uses anticonvulsant drugs	1	2
Uses stimulants	1	2
Other (specify _____)	1	2
____ Name of the above	Total 1	

XIV USE OF MEDICATIONS

ENTER 44
----------

## Appendix C

## The Basic Life Skills Scale

# Answer Booklet

## Basic Life Skills Scale

by  
Stephen M. Cibiri  
Lloyd J. Jackson

Name	Sex <input type="checkbox"/> M <input type="checkbox"/> F	Date of birth	C.B. no.
Date of Assessment	Residence/Location		

Indicate Assessor's  
degree of familiarity  
with individual's  
everyday functioning

Assessor	<input type="checkbox"/>	Low Degree High	1	I do not know him/her with respect to his/her level of functioning.
Assessor	<input type="checkbox"/>		2	I have some idea about his/her functioning but am not sure of my accuracy.
Assessor	<input type="checkbox"/>		3	I know his/her functioning accurately in only a few areas.
Assessor	<input type="checkbox"/>		4	I know his/her functioning accurately in most areas.
Assessor	<input type="checkbox"/>		5	I know his/her functioning accurately in all areas.

Overall average score for:	Part I Basic Life Skills	(a) =	
Overall average score for:	Part II Personal Social Behaviors	(b) =	
Level of:	Part III Moral Awareness	(c) =	
Index of Functional Independence (I.F.I.)		$((a+b) \times 10 + c) =$	

### Basic Life Skills Scale

Assessment of Functional Independence and Program Needs  
of Developmentally Retarded Persons

by: Stephen M. Cibiri & Lloyd J. Jackson

(Computer Answer Form  
available separately.)

Name	Date of birth	CB no
------	---------------	-------

### Levels of Performance

- 5 Performs (specific) task completely independently in the appropriate time and manner. Adapts to situations.
- 4 Knows how to perform the task but is slow and needs to be reminded or motivated to do it.
- 3 Can perform part of the task. Requires physical guidance to complete it.
- 2 Shows interest, makes attempts but does not know how to perform the task.
- 1 Shows no awareness of what is required - expected of him/her. Is unresponsive and passive.
- 0 Unable to perform the task due to the specific physical handicap.

	1. Motor Skills															2. Perceptual Skills															3. Self Care Skills														
	<b>A. Gross Motor Skills</b> (total = )															<b>B. Fine Motor Skills</b> (total = )																													
	<b>A. Visual Discrimination</b> (total = )															<b>B. Auditory Discrimination</b> (total = )															<b>C. Tactile Discrimination</b> (total = )														
	<b>A. Eating Skills</b> (total = )															<b>B. Toilet Skills</b> (total = )																													
	<b>C. Dressing Skills</b> (total = )															<b>D. Personal Hygiene Skills</b> (total = )																													

Appendix C (continued)

Name

Date of birth

CB no

Basic Life Skills

4. Communication Skills																																																																																					
<p><b>A. Comprehension of Spoken Language</b> (total = )</p> <table border="1"> <tr><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr> <tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td><td>f</td></tr> <tr><td>g</td><td>h</td><td>i</td><td>j</td><td>k</td><td>l</td></tr> <tr><td>m</td><td>n</td><td>o</td><td>p</td><td>q</td><td>r</td></tr> <tr><td>s</td><td>t</td><td>u</td><td>v</td><td>w</td><td>x</td></tr> <tr><td>y</td><td>z</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="6">Total</td></tr> </table>	5	4	3	2	1	0	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z					Total						<p><b>B. Expressive Language</b> (total = )</p> <table border="1"> <tr><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr> <tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td><td>f</td></tr> <tr><td>g</td><td>h</td><td>i</td><td>j</td><td>k</td><td>l</td></tr> <tr><td>m</td><td>n</td><td>o</td><td>p</td><td>q</td><td>r</td></tr> <tr><td>s</td><td>t</td><td>u</td><td>v</td><td>w</td><td>x</td></tr> <tr><td>y</td><td>z</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="6">Total</td></tr> </table>	5	4	3	2	1	0	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z					Total					
5	4	3	2	1	0																																																																																
a	b	c	d	e	f																																																																																
g	h	i	j	k	l																																																																																
m	n	o	p	q	r																																																																																
s	t	u	v	w	x																																																																																
y	z																																																																																				
Total																																																																																					
5	4	3	2	1	0																																																																																
a	b	c	d	e	f																																																																																
g	h	i	j	k	l																																																																																
m	n	o	p	q	r																																																																																
s	t	u	v	w	x																																																																																
y	z																																																																																				
Total																																																																																					

5. Social Skills																																																																																																																																
<p><b>A. Human Relations</b> (total = )</p> <table border="1"> <tr><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr> <tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td><td>f</td></tr> <tr><td>g</td><td>h</td><td>i</td><td>j</td><td>k</td><td>l</td></tr> <tr><td>m</td><td>n</td><td>o</td><td>p</td><td>q</td><td>r</td></tr> <tr><td>s</td><td>t</td><td>u</td><td>v</td><td>w</td><td>x</td></tr> <tr><td>y</td><td>z</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="6">Total</td></tr> </table>	5	4	3	2	1	0	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z					Total						<p><b>B. Social Manners</b> (total = )</p> <table border="1"> <tr><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr> <tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td><td>f</td></tr> <tr><td>g</td><td>h</td><td>i</td><td>j</td><td>k</td><td>l</td></tr> <tr><td>m</td><td>n</td><td>o</td><td>p</td><td>q</td><td>r</td></tr> <tr><td>s</td><td>t</td><td>u</td><td>v</td><td>w</td><td>x</td></tr> <tr><td>y</td><td>z</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="6">Total</td></tr> </table>	5	4	3	2	1	0	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z					Total						<p><b>C. Recreational Skills</b> (total = )</p> <table border="1"> <tr><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr> <tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td><td>f</td></tr> <tr><td>g</td><td>h</td><td>i</td><td>j</td><td>k</td><td>l</td></tr> <tr><td>m</td><td>n</td><td>o</td><td>p</td><td>q</td><td>r</td></tr> <tr><td>s</td><td>t</td><td>u</td><td>v</td><td>w</td><td>x</td></tr> <tr><td>y</td><td>z</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="6">Total</td></tr> </table>	5	4	3	2	1	0	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z					Total					
5	4	3	2	1	0																																																																																																																											
a	b	c	d	e	f																																																																																																																											
g	h	i	j	k	l																																																																																																																											
m	n	o	p	q	r																																																																																																																											
s	t	u	v	w	x																																																																																																																											
y	z																																																																																																																															
Total																																																																																																																																
5	4	3	2	1	0																																																																																																																											
a	b	c	d	e	f																																																																																																																											
g	h	i	j	k	l																																																																																																																											
m	n	o	p	q	r																																																																																																																											
s	t	u	v	w	x																																																																																																																											
y	z																																																																																																																															
Total																																																																																																																																
5	4	3	2	1	0																																																																																																																											
a	b	c	d	e	f																																																																																																																											
g	h	i	j	k	l																																																																																																																											
m	n	o	p	q	r																																																																																																																											
s	t	u	v	w	x																																																																																																																											
y	z																																																																																																																															
Total																																																																																																																																

6. Community Living																																																																																																																																
<p><b>A. Domestic Skills</b> (total = )</p> <table border="1"> <tr><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr> <tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td><td>f</td></tr> <tr><td>g</td><td>h</td><td>i</td><td>j</td><td>k</td><td>l</td></tr> <tr><td>m</td><td>n</td><td>o</td><td>p</td><td>q</td><td>r</td></tr> <tr><td>s</td><td>t</td><td>u</td><td>v</td><td>w</td><td>x</td></tr> <tr><td>y</td><td>z</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="6">Total</td></tr> </table>	5	4	3	2	1	0	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z					Total						<p><b>B. Community Skills</b> (total = )</p> <table border="1"> <tr><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr> <tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td><td>f</td></tr> <tr><td>g</td><td>h</td><td>i</td><td>j</td><td>k</td><td>l</td></tr> <tr><td>m</td><td>n</td><td>o</td><td>p</td><td>q</td><td>r</td></tr> <tr><td>s</td><td>t</td><td>u</td><td>v</td><td>w</td><td>x</td></tr> <tr><td>y</td><td>z</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="6">Total</td></tr> </table>	5	4	3	2	1	0	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z					Total						<p><b>C. Vocational Skills</b> (total = )</p> <table border="1"> <tr><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr> <tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td><td>f</td></tr> <tr><td>g</td><td>h</td><td>i</td><td>j</td><td>k</td><td>l</td></tr> <tr><td>m</td><td>n</td><td>o</td><td>p</td><td>q</td><td>r</td></tr> <tr><td>s</td><td>t</td><td>u</td><td>v</td><td>w</td><td>x</td></tr> <tr><td>y</td><td>z</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="6">Total</td></tr> </table>	5	4	3	2	1	0	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z					Total					
5	4	3	2	1	0																																																																																																																											
a	b	c	d	e	f																																																																																																																											
g	h	i	j	k	l																																																																																																																											
m	n	o	p	q	r																																																																																																																											
s	t	u	v	w	x																																																																																																																											
y	z																																																																																																																															
Total																																																																																																																																
5	4	3	2	1	0																																																																																																																											
a	b	c	d	e	f																																																																																																																											
g	h	i	j	k	l																																																																																																																											
m	n	o	p	q	r																																																																																																																											
s	t	u	v	w	x																																																																																																																											
y	z																																																																																																																															
Total																																																																																																																																
5	4	3	2	1	0																																																																																																																											
a	b	c	d	e	f																																																																																																																											
g	h	i	j	k	l																																																																																																																											
m	n	o	p	q	r																																																																																																																											
s	t	u	v	w	x																																																																																																																											
y	z																																																																																																																															
Total																																																																																																																																

7. Academic Skills																																																																																																																																
<p><b>A. Concept of Self</b> (total = )</p> <table border="1"> <tr><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr> <tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td><td>f</td></tr> <tr><td>g</td><td>h</td><td>i</td><td>j</td><td>k</td><td>l</td></tr> <tr><td>m</td><td>n</td><td>o</td><td>p</td><td>q</td><td>r</td></tr> <tr><td>s</td><td>t</td><td>u</td><td>v</td><td>w</td><td>x</td></tr> <tr><td>y</td><td>z</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="6">Total</td></tr> </table>	5	4	3	2	1	0	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z					Total						<p><b>B. Concept of Space</b> (total = )</p> <table border="1"> <tr><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr> <tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td><td>f</td></tr> <tr><td>g</td><td>h</td><td>i</td><td>j</td><td>k</td><td>l</td></tr> <tr><td>m</td><td>n</td><td>o</td><td>p</td><td>q</td><td>r</td></tr> <tr><td>s</td><td>t</td><td>u</td><td>v</td><td>w</td><td>x</td></tr> <tr><td>y</td><td>z</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="6">Total</td></tr> </table>	5	4	3	2	1	0	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z					Total						<p><b>C. Concept of Time</b> (total = )</p> <table border="1"> <tr><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr> <tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td><td>f</td></tr> <tr><td>g</td><td>h</td><td>i</td><td>j</td><td>k</td><td>l</td></tr> <tr><td>m</td><td>n</td><td>o</td><td>p</td><td>q</td><td>r</td></tr> <tr><td>s</td><td>t</td><td>u</td><td>v</td><td>w</td><td>x</td></tr> <tr><td>y</td><td>z</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="6">Total</td></tr> </table>	5	4	3	2	1	0	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z					Total					
5	4	3	2	1	0																																																																																																																											
a	b	c	d	e	f																																																																																																																											
g	h	i	j	k	l																																																																																																																											
m	n	o	p	q	r																																																																																																																											
s	t	u	v	w	x																																																																																																																											
y	z																																																																																																																															
Total																																																																																																																																
5	4	3	2	1	0																																																																																																																											
a	b	c	d	e	f																																																																																																																											
g	h	i	j	k	l																																																																																																																											
m	n	o	p	q	r																																																																																																																											
s	t	u	v	w	x																																																																																																																											
y	z																																																																																																																															
Total																																																																																																																																
5	4	3	2	1	0																																																																																																																											
a	b	c	d	e	f																																																																																																																											
g	h	i	j	k	l																																																																																																																											
m	n	o	p	q	r																																																																																																																											
s	t	u	v	w	x																																																																																																																											
y	z																																																																																																																															
Total																																																																																																																																
<p><b>D. Reading</b> (total = )</p> <table border="1"> <tr><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr> <tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td><td>f</td></tr> <tr><td>g</td><td>h</td><td>i</td><td>j</td><td>k</td><td>l</td></tr> <tr><td>m</td><td>n</td><td>o</td><td>p</td><td>q</td><td>r</td></tr> <tr><td>s</td><td>t</td><td>u</td><td>v</td><td>w</td><td>x</td></tr> <tr><td>y</td><td>z</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="6">Total</td></tr> </table>	5	4	3	2	1	0	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z					Total						<p><b>E. Writing</b> (total = )</p> <table border="1"> <tr><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr> <tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td><td>f</td></tr> <tr><td>g</td><td>h</td><td>i</td><td>j</td><td>k</td><td>l</td></tr> <tr><td>m</td><td>n</td><td>o</td><td>p</td><td>q</td><td>r</td></tr> <tr><td>s</td><td>t</td><td>u</td><td>v</td><td>w</td><td>x</td></tr> <tr><td>y</td><td>z</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="6">Total</td></tr> </table>	5	4	3	2	1	0	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z					Total						<p><b>F. Arithmetic</b> (total = )</p> <table border="1"> <tr><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr> <tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td><td>f</td></tr> <tr><td>g</td><td>h</td><td>i</td><td>j</td><td>k</td><td>l</td></tr> <tr><td>m</td><td>n</td><td>o</td><td>p</td><td>q</td><td>r</td></tr> <tr><td>s</td><td>t</td><td>u</td><td>v</td><td>w</td><td>x</td></tr> <tr><td>y</td><td>z</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="6">Total</td></tr> </table>	5	4	3	2	1	0	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z					Total					
5	4	3	2	1	0																																																																																																																											
a	b	c	d	e	f																																																																																																																											
g	h	i	j	k	l																																																																																																																											
m	n	o	p	q	r																																																																																																																											
s	t	u	v	w	x																																																																																																																											
y	z																																																																																																																															
Total																																																																																																																																
5	4	3	2	1	0																																																																																																																											
a	b	c	d	e	f																																																																																																																											
g	h	i	j	k	l																																																																																																																											
m	n	o	p	q	r																																																																																																																											
s	t	u	v	w	x																																																																																																																											
y	z																																																																																																																															
Total																																																																																																																																
5	4	3	2	1	0																																																																																																																											
a	b	c	d	e	f																																																																																																																											
g	h	i	j	k	l																																																																																																																											
m	n	o	p	q	r																																																																																																																											
s	t	u	v	w	x																																																																																																																											
y	z																																																																																																																															
Total																																																																																																																																

Appendix C (continued)

Name	Date of birth	C.B. no.
------	---------------	----------

Part I SUMMARY PROFILE of Basic Life Skills

Skill Area	Raw Score	Divide by no. of items	Average Score		Percent					
			Sec- tion	Area	0	1	2	3	4	5
1	A. Gross Motor Skills	25								
	B. Fine Motor Skills	15								
	Overall Motor Skills	40								
2	A. Visual Discrimination	7								
	B. Auditory Discrimination	6								
	C. Tactile Discrimination	6								
	Overall Perceptual Skills	19								
3	A. Eating Skills	12								
	B. Toilet Skills	12								
	C. Dressing Skills	20								
	D. Personal Hygiene	17								
	Overall Self Care Skills	61								
4	A. Comprehension of Spoken Language	10								
	B. Expressive Language	9								
	Overall Communication Skills	19								
5	A. Human Relations	7								
	B. Social Manners	8								
	C. Recreational Skills	9								
	Overall Social Skills	24								
6	A. Domestic Skills	11								
	B. Community Skills	15								
	C. Vocational Skills	15								
	Overall Community Living Skills	41								
7	A. Concept of Self	12								
	B. Concept of Space	5								
	C. Concept of Time	11								
	D. Reading	6								
	E. Writing	8								
	F. Arithmetic	11								
	Overall Academic Skills	55								
Overall Average Score (a)		259								

NOTE: 1. ADDITIONAL INFORMATION  
SHOULD BE PROVIDED IN THE  
APPENDIXES.

Appendix C (continued)

Name	Date of birth	C.B. no.
------	---------------	----------

Part II Personal-Social Behaviors

Levels of Personal-Social Behaviors

- 5 His/her typical reaction in a given situation approximates the reaction of most people in the community. It would be acceptable to the general public. Shows understanding of and respect for social norms.
- 4 His/her typical reaction in a given situation would most probably be acceptable to the general public, but he/she requires continuing social guidance. Has limited understanding of social norms.
- 3 His/her reaction in a given situation is acceptable within the residential setting but would not be acceptable to the general public. Has little or no understanding of social norms.
- 2 His/her reaction in a given situation presents occasional problems in the residential setting but can be handled without special therapeutic intervention.
- 1 His/her reaction in a given situation presents difficult problems, which may require special therapeutic intervention.
- 0 His/her reaction in a given situation presents difficult and frequent management problems. Requires long-term therapeutic treatment in a specialized setting.

<p>1. Adaptability (total = )</p> <table border="1"> <tr><td>5</td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td></tr> <tr><td>1</td><td></td><td></td><td></td></tr> <tr><td>0</td><td></td><td></td><td></td></tr> <tr><td></td><td>a</td><td>b</td><td>c</td></tr> </table> <p>Items/ Situations</p>	5				4				3				2				1				0					a	b	c	<p>2. Relating to Others (Sociality) (total = )</p> <table border="1"> <tr><td>5</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>1</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>0</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td></tr> </table> <p>Items/ Situations</p>	5						4						3						2						1						0							a	b	c	d	e	<p>3. Cooperation (total = )</p> <table border="1"> <tr><td>5</td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td></tr> <tr><td>1</td><td></td><td></td><td></td></tr> <tr><td>0</td><td></td><td></td><td></td></tr> <tr><td></td><td>a</td><td>b</td><td>c</td></tr> </table> <p>Items/ Situations</p>	5				4				3				2				1				0					a	b	c	<p>4. Motivation (total = )</p> <table border="1"> <tr><td>5</td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td></tr> <tr><td>1</td><td></td><td></td><td></td></tr> <tr><td>0</td><td></td><td></td><td></td></tr> <tr><td></td><td>a</td><td>b</td><td>c</td></tr> </table> <p>Items/ Situations</p>	5				4				3				2				1				0					a	b	c
5																																																																																																																																	
4																																																																																																																																	
3																																																																																																																																	
2																																																																																																																																	
1																																																																																																																																	
0																																																																																																																																	
	a	b	c																																																																																																																														
5																																																																																																																																	
4																																																																																																																																	
3																																																																																																																																	
2																																																																																																																																	
1																																																																																																																																	
0																																																																																																																																	
	a	b	c	d	e																																																																																																																												
5																																																																																																																																	
4																																																																																																																																	
3																																																																																																																																	
2																																																																																																																																	
1																																																																																																																																	
0																																																																																																																																	
	a	b	c																																																																																																																														
5																																																																																																																																	
4																																																																																																																																	
3																																																																																																																																	
2																																																																																																																																	
1																																																																																																																																	
0																																																																																																																																	
	a	b	c																																																																																																																														
<p>5. Attention Span (total = )</p> <table border="1"> <tr><td>5</td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td></tr> <tr><td>1</td><td></td><td></td><td></td></tr> <tr><td>0</td><td></td><td></td><td></td></tr> <tr><td></td><td>a</td><td>b</td><td>c</td></tr> </table> <p>Items/ Situations</p>	5				4				3				2				1				0					a	b	c	<p>6. Frustration Tolerance (total = )</p> <table border="1"> <tr><td>5</td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td></tr> <tr><td>1</td><td></td><td></td><td></td></tr> <tr><td>0</td><td></td><td></td><td></td></tr> <tr><td></td><td>a</td><td>b</td><td>c</td></tr> </table> <p>Items/ Situations</p>	5				4				3				2				1				0					a	b	c	<p>7. Tolerance toward Pressure (total = )</p> <table border="1"> <tr><td>5</td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td></tr> <tr><td>1</td><td></td><td></td><td></td></tr> <tr><td>0</td><td></td><td></td><td></td></tr> <tr><td></td><td>a</td><td>b</td><td>c</td></tr> </table> <p>Items/ Situations</p>	5				4				3				2				1				0					a	b	c	<p>8. Activity Level (total = )</p> <table border="1"> <tr><td>5</td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td></tr> <tr><td>1</td><td></td><td></td><td></td></tr> <tr><td>0</td><td></td><td></td><td></td></tr> <tr><td></td><td>a</td><td>b</td><td>c</td></tr> </table> <p>Items/ Situations</p>	5				4				3				2				1				0					a	b	c														
5																																																																																																																																	
4																																																																																																																																	
3																																																																																																																																	
2																																																																																																																																	
1																																																																																																																																	
0																																																																																																																																	
	a	b	c																																																																																																																														
5																																																																																																																																	
4																																																																																																																																	
3																																																																																																																																	
2																																																																																																																																	
1																																																																																																																																	
0																																																																																																																																	
	a	b	c																																																																																																																														
5																																																																																																																																	
4																																																																																																																																	
3																																																																																																																																	
2																																																																																																																																	
1																																																																																																																																	
0																																																																																																																																	
	a	b	c																																																																																																																														
5																																																																																																																																	
4																																																																																																																																	
3																																																																																																																																	
2																																																																																																																																	
1																																																																																																																																	
0																																																																																																																																	
	a	b	c																																																																																																																														
<p>9. Emotional Maturity (total = )</p> <table border="1"> <tr><td>5</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>1</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>0</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td></tr> </table> <p>Items/ Situations</p>	5						4						3						2						1						0							a	b	c	d	e	<p>10. Absence of Abnormal Behaviour (total = )</p> <table border="1"> <tr><td>5</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>1</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>0</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td></tr> </table> <p>Items/ Situations</p>	5						4						3						2						1						0							a	b	c	d	e	<p>11. Predictability of Behaviour (total = )</p> <table border="1"> <tr><td>5</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>1</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>0</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td></tr> </table> <p>Items/ Situations</p>	5						4						3						2						1						0							a	b	c	d	e	
5																																																																																																																																	
4																																																																																																																																	
3																																																																																																																																	
2																																																																																																																																	
1																																																																																																																																	
0																																																																																																																																	
	a	b	c	d	e																																																																																																																												
5																																																																																																																																	
4																																																																																																																																	
3																																																																																																																																	
2																																																																																																																																	
1																																																																																																																																	
0																																																																																																																																	
	a	b	c	d	e																																																																																																																												
5																																																																																																																																	
4																																																																																																																																	
3																																																																																																																																	
2																																																																																																																																	
1																																																																																																																																	
0																																																																																																																																	
	a	b	c	d	e																																																																																																																												

Appendix C (continued)

Name	Date of Birth	C.B. no.
------	---------------	----------

Part II ESTIMATED PROFILE of Personal-Social Behaviors

Main Personality Traits	Raw Score	Divide by no of items	Average Score	Profiles					
				0	1	2	3	4	5
1 Adaptability		4							
2 Relating to Others (Sociability)		8							
3 Cooperation		3							
4 Motivation		4							
5 Attention Span		3							
6 Frustration Tolerance		4							
7 Tolerance toward Pressure		4							
8 Activity Level		4							
9 Emotional Maturity		10							
10 Absence of Abnormal Behaviour		8							
11 Predictability of Behaviour		7							
Overall Average Score (b)		66							
				Undesirable      Tolerable      Desirable					

Part III Moral Awareness

Levels of Moral Awareness

- A Demonstrates respect for normal rules of community conduct by acting in a responsible and acceptable manner. This person is capable of living in the community with no moral supervision.
- B Displays respect for normal rules of community conduct but with limited understanding of them. This may result in occasional lapses into minor unacceptable acts towards self, others or property. This person is capable of living in an appropriately supervised community setting, but requires limited moral supervision.
- C Demonstrates little or no understanding of normal rules of community conduct by acting in an unpredictable manner. Such behaviour is occasionally antisocial or even dangerous. This person is capable of living in the community only under structured and supervised conditions.
- D This person appears to have full understanding of normal rules of community conduct but deliberately chooses not to respect them. There is a high probability that the person will plan and perform dangerous, harmful or immoral acts towards others. This person requires a highly controlled, closely supervised setting.

Level (c)
-----------



Appendix C (continued)

Name	Date of birth	C.B. no.
------	---------------	----------

**Part VI Assessment of Person's Living & Program Environment**

Please circle one digit only, and add a recommendation if appropriate

Factor	Question/Consideration	Present	Recommendation if appropriate
Type of present living environment	What type of living environment does he/she presently live in?	4 - has room of his/her own 3 - shares room with 2-6 other persons 2 - lives in ward with 7-20 other persons 1 - lives in large ward with 20+ persons	
Quality of living environment	How would you rate his/her living environment re cleanliness, furnishing and decoration?	4 - clean, furnished and decorated with taste 3 - adequately clean, furnished and decorated 2 - deficient in cleanliness and furnished with bare necessities only 1 - serious lack of necessities in all areas	
Social climate in the living environment	Indicate level of functioning of persons with whom he/she shares living space and comes in contact during the day	4 - very high functioning 3 - high functioning 2 - low to moderate 1 - very low functioning	
Emotional climate in the living environment	Indicate the type of emotional climate that exists in his/her living environment (consider noise, rapid changes, threats to personal security)	4 - consistently calm, relaxed, free from emotional upsets and personal threats 3 - mostly calm and relaxed 2 - rather tense with frequent emotional upsets 1 - very tense, stressful and insecure	
Personal possessions appropriate for age	Does this person own objects for personal enjoyment appropriate for his/her physical age?	4 - has complete ownership and control over personal possessions 3 - owns few objects 2 - does not have objects for personal use 1 - not capable of utilizing personal possessions	
Personal freedom - autonomy	Indicate the degree of autonomy this person has in his/her free time to move or travel independently	4 - has full autonomy - freedom 3 - has to ask for permission 2 - restricted - requires supervision 1 - requires controlled environment	
Involvement in leisure activities	Indicate degree of involvement and level of person's participation in leisure activities	4 - interactively participates in any activities 3 - interactively participates in some activities 2 - noninteractively in most activities 1 - does not get involved - out of contact	
Opportunities to apply various learned skills	Does this person have an opportunity outside training to apply acquired skills? (eg. cooking, etc.)	4 - opportunity available for any skill areas 3 - opportunity available for most skill areas 2 - opportunity limited to some skills only 1 - rare or no opportunities available	
Participation in planning major changes in personal life	Does he/she participate in planning - determining or influencing own future?	4 - actively participates - makes final choice 3 - he/she is consulted 2 - he/she is informed of decision before changes 1 - he/she is not informed before changes take place	
Social learning and community exposure opportunities	Indicate frequency of contacts (beside staff) with independent, socially mature persons and a degree of exposure this person has to the life in the community	4 - comes in daily contact with independent and mature persons (beside staff) 3 - mature social contact limited to few hours per week 2 - mature social contact limited to few hours per month 1 - rare or no opportunities	
Environmental performance expectations to display independence	Indicate the degree of environmental pressure for him/her to display independence in meeting his/her needs	4 - must meet own needs independently, receives occasional guidance only 3 - has close supervision, receives immediate guidance when necessary 2 - receives help if too slow or unmotivated 1 - requires complete personal care	
Performance incentives - rewards	How are rewards for appropriate behaviour administered?	4 - immediately on a point system basis 3 - once a day evaluation of performance 2 - once a week evaluation of performance 1 - depends on situation	
Estimate of potential to learn skills and behaviour for independent living	In your opinion what potential does this person have to learn skills and behaviour required for more independent community living?	4 - he/she is capable of learning 3 - complex tasks (eg. Voc. skills, Academics) 2 - moderately complex tasks (eg. Preworkshop) 1 - simple tasks only (Self Care Skills) 1 - not capable of learning at present	
Intensity of training and personal attention	Indicate to what degree does he/she receive personal attention during training	4 - receives personalized training on 1:1 3 - training in small groups of 2 thru 5 2 - training in groups of 6 thru 12 1 - training in large groups	
Program environment	Indicate type of environment in which major training took place during last year	4 - special training area 3 - room outside living area 2 - separate section within living area 1 - bedside training only	
Length of stay in present environment	Indicate how long he/she has been in the present environment	4 - more than a year 3 - more than 6 months 2 - more than 3 months 1 - less than 3 months	

Appendix C (continued)

Name _____	Date of birth _____	ICB no. _____
------------	---------------------	---------------

**Part IV Physical State**

<p><b>1. General Health</b></p> <p>Check one  <input type="checkbox"/> Normal requires regular check-up only  <input type="checkbox"/> Has special condition requires frequent medical services  <input type="checkbox"/> Poor</p> <p>Remarks (list special conditions such as Diabetes, Dementia, etc.) _____</p> <p>Present Medication _____</p> <p>Self-administered  <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p><b>2. Dental Health</b></p> <p>Check one  <input type="checkbox"/> Normal requires regular check-up only  <input type="checkbox"/> Has special condition requires frequent dental services  <input type="checkbox"/> Other</p> <p>Remarks (list special conditions such as Dentures, etc.) _____</p>	<p><b>3. Vision</b></p> <p>Check one  <input type="checkbox"/> Left Eye Normal <input type="checkbox"/> Impaired <input type="checkbox"/> Blind  <input type="checkbox"/> Right Eye Normal <input type="checkbox"/> Impaired <input type="checkbox"/> Blind</p> <p>Remarks _____</p>			
<p><b>4. Hearing</b></p> <p>Check one  <input type="checkbox"/> Left Ear Normal <input type="checkbox"/> Impaired <input type="checkbox"/> Deaf  <input type="checkbox"/> Right Ear Normal <input type="checkbox"/> Impaired <input type="checkbox"/> Deaf</p> <p>Remarks _____</p>	<p><b>5. Use of Legs</b></p> <p>Check one  <input type="checkbox"/> Normal <input type="checkbox"/> Partial use ambulatory <input type="checkbox"/> Uses Wheel Chair <input type="checkbox"/> Non ambulatory</p> <p>Remarks _____</p>	<p><b>6. Use of Arms/Hands</b></p> <p>Check one  <input type="checkbox"/> Left Normal <input type="checkbox"/> Impaired <input type="checkbox"/> No functional use  <input type="checkbox"/> Right Normal <input type="checkbox"/> Impaired <input type="checkbox"/> No functional use</p> <p>Remarks _____</p>			
<p><b>Part V Services Currently Received</b></p>					
<p><b>Program Attendance</b></p> <p>7 No means total hours per week a resident usually attends programs given by other staff direct care staff and not as a volunteer              D direct care staff Check one  <input type="checkbox"/> 30 or more hours per week <input type="checkbox"/> 15 to 29 hours per week <input type="checkbox"/> 1 to 14 hours per week <input type="checkbox"/> usually less than 1 hour per week</p>					
<p>Indicate current type of residential care dispensing temporary arrangements such as respite, hospital or other acute health care under 30 days Check one</p> <table style="width: 100%;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> Independent living  <input type="checkbox"/> Residential independent living arrangement  <input type="checkbox"/> Residential care and nursing home  <input type="checkbox"/> Residential care (boarding unit, shelter, blind etc.)                 </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> Fully independent  <input type="checkbox"/> Semi-independent  <input type="checkbox"/> Residential care (boarding unit, shelter, blind etc.)                 </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> Hospital or other acute health care  <input type="checkbox"/> Hospital or other acute health care  <input type="checkbox"/> Hospital or other acute health care                 </td> </tr> </table>			<input type="checkbox"/> Independent living <input type="checkbox"/> Residential independent living arrangement <input type="checkbox"/> Residential care and nursing home <input type="checkbox"/> Residential care (boarding unit, shelter, blind etc.)	<input type="checkbox"/> Fully independent <input type="checkbox"/> Semi-independent <input type="checkbox"/> Residential care (boarding unit, shelter, blind etc.)	<input type="checkbox"/> Hospital or other acute health care <input type="checkbox"/> Hospital or other acute health care <input type="checkbox"/> Hospital or other acute health care
<input type="checkbox"/> Independent living <input type="checkbox"/> Residential independent living arrangement <input type="checkbox"/> Residential care and nursing home <input type="checkbox"/> Residential care (boarding unit, shelter, blind etc.)	<input type="checkbox"/> Fully independent <input type="checkbox"/> Semi-independent <input type="checkbox"/> Residential care (boarding unit, shelter, blind etc.)	<input type="checkbox"/> Hospital or other acute health care <input type="checkbox"/> Hospital or other acute health care <input type="checkbox"/> Hospital or other acute health care			
<p><b>Type of Care</b></p> <p>Indicate current type of residential care dispensing temporary arrangements such as respite, hospital or other acute health care under 30 days Check one</p> <table style="width: 100%;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> Residential care and nursing home  <input type="checkbox"/> Residential care (boarding unit, shelter, blind etc.)                 </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> Fully independent  <input type="checkbox"/> Semi-independent  <input type="checkbox"/> Residential care (boarding unit, shelter, blind etc.)                 </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> Hospital or other acute health care  <input type="checkbox"/> Hospital or other acute health care  <input type="checkbox"/> Hospital or other acute health care                 </td> </tr> </table>			<input type="checkbox"/> Residential care and nursing home <input type="checkbox"/> Residential care (boarding unit, shelter, blind etc.)	<input type="checkbox"/> Fully independent <input type="checkbox"/> Semi-independent <input type="checkbox"/> Residential care (boarding unit, shelter, blind etc.)	<input type="checkbox"/> Hospital or other acute health care <input type="checkbox"/> Hospital or other acute health care <input type="checkbox"/> Hospital or other acute health care
<input type="checkbox"/> Residential care and nursing home <input type="checkbox"/> Residential care (boarding unit, shelter, blind etc.)	<input type="checkbox"/> Fully independent <input type="checkbox"/> Semi-independent <input type="checkbox"/> Residential care (boarding unit, shelter, blind etc.)	<input type="checkbox"/> Hospital or other acute health care <input type="checkbox"/> Hospital or other acute health care <input type="checkbox"/> Hospital or other acute health care			

Appendix D

The California Adaptive Behavior Scale

CALIFORNIA ADAPTIVE BEHAVIOR SCALE

Organization \_\_\_\_\_ (Code \_\_\_\_\_) Name \_\_\_\_\_ (Code \_\_\_\_\_)  
 Address \_\_\_\_\_ Date of Birth \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Informant Name \_\_\_\_\_ (Code \_\_\_\_\_)  
 Phone \_\_\_\_\_ Examiner Name \_\_\_\_\_ (Code \_\_\_\_\_)  
 Signature \_\_\_\_\_ Date Prepared \_\_\_\_\_ Date Sent \_\_\_\_\_ Contract No. \_\_\_\_\_

INSTRUCTIONS Select the highest level of performance in each area. Assume independent functioning unless otherwise indicated. Put the number of the item in the blank space next to each title.

1. TOILETING \_\_\_\_\_

01. Uses toilet before going out
02. Flushes without supervision
03. Wipes without supervision
04. Wipes with instructions/directions
05. Comes for aid at toilet
06. Goes by self, occasional accidents
07. Habit trained
08. Indicates need to use toilet
09. Has regular movements
10. Cleans in toilet
11. Remains on toilet supervised
12. Shows discomfort at being wet/soiled
13. Maintained by caretaker

2. DRESSING \_\_\_\_\_

01. Purchases entire wardrobe
02. Purchases small clothing items
03. Dresses self completely
04. Dresses neatly without reminder
05. Removes pullover shirt
06. Puts on shoes
07. Puts on coat/dress
08. Removes coat/dress
09. Removes socks
10. Maintained by caretaker

3. FASTENING \_\_\_\_\_

01. Zips jacket zippers
02. Ties shoelaces
03. Laces shoes
04. Buckles and unbuckles
05. Buttons
06. Unbuttons
07. Buttons
08. Maintained by caretaker

4. EATING \_\_\_\_\_

01. Has complete eating skills
02. Cuts meat with knife and fork
03. Uses napkin appropriately
04. Sets table appropriately
05. Spreads soft foods with knife
06. Spreads butter
07. Serves self
08. Holds cup by handle
09. Uses straw appropriately
10. Gets drink/pours from pitcher
11. Eats appropriately with fork
12. Unwraps candy
13. Discriminates edible substances
14. Eats appropriately with spoon
15. Drinks from cup/glass unaided
16. Chews/masticates food
17. Does not drool
18. Drinks from cup/glass assisted
19. Holds spoon with palmar grasp
20. Maintained by caretaker

5. BATHING \_\_\_\_\_

01. Showers
02. Bathes unaided
03. Enjoys and cleans tub
04. Bathes with minimal verbal prompts
05. Adequately cleans nose
06. Washes face thoroughly
07. Dries body thoroughly
08. Washes hands thoroughly
09. Washes body thoroughly
10. Dries head thoroughly
11. Soaps washcloth
12. Applies soap to body parts
13. Applies soap to hands
14. Places hands in water
15. Maintained by caretaker

6. GROOMING \_\_\_\_\_

01. Shaves without reminder
02. Grooms independently
03. Uses lipstick
04. Combs/brushes hair adequately
05. Shampooes
06. Combs/brushes, but not to style
07. Blows nose unaided
08. Blows nose aided
09. Wipes nose
10. Puts comb/brush through hair
11. Allows hair to be washed
12. "Combs" with assistance
13. Maintained by caretaker

7. TOOTHBRUSHING \_\_\_\_\_

01. Uses water pik effectively
02. Uses dental floss effectively
03. Brushes teeth correctly
04. Knows when to brush teeth
05. Puts toothpaste on brush
06. Rinses mouth
07. Brushes teeth with minimal verbal prompts
08. Makes brushing strokes
09. Puts toothbrush in mouth
10. Holds toothbrush
11. Maintained by caretaker

8. PERSONAL INTERACTION \_\_\_\_\_

01. Dates
02. Relates comfortably with opposite sex
03. Empathizes with others
04. Practices most social conventions
05. Engages in imaginary play
06. Follows rules
07. Sustains interest for 90 minutes
08. Initiates interaction
09. Responds to verbal greetings
10. Expresses affection without cues
11. Gives eye contact when called
12. Gestures to make needs known
13. Shows affection when cued
14. Demands personal attention
15. Reaches for familiar persons
16. Minimal: Does not enjoy personal interaction

9. GROUP PARTICIPATION \_\_\_\_\_

01. Active member of a team or club
02. Enjoys social gatherings
03. Enters competitions/tournaments
04. Plays occasional sports
05. Active in 4-H or scouts
06. Plays preadolescent games
07. Observes group routines
08. Plays follow the leader
09. Plays competitive exercise games
10. Sings in groups
11. Plays loosely structured group games
12. Knows to wait turn
13. Plays with peers
14. Parallel plays
15. Enjoys social walks
16. Minimal: Does not engage in group activities

10. RECEPTIVE LANGUAGE \_\_\_\_\_

01. Uses newspaper for information
02. Reads and understands "how"
03. Recognizes basic sight vocabulary
04. Reads on preprimer level
05. Carries out 3 successive commands
06. Reads by way of pictures
07. Follows directions with 2 prepositions
08. Identifies action in pictures
09. Identifies objects by function
10. Listens to simple stories
11. Follows 2 simple related successive commands
12. Points to body parts when named
13. Points to common objects
14. Knows own name
15. Understands simple commands
16. Orients to sound
17. Minimal

11. EXPRESSIVE LANGUAGE \_\_\_\_\_

01. Corresponds regularly by letter
02. Writes simple stories or poems
03. Makes long distance telephone calls
04. Writes occasional short letters
05. Writes with pencil
06. Can tell familiar story
07. Repeats songs and rhymes
08. Prints simple words
09. Uses compound sentences
10. Uses past tense
11. Relates experiences
12. Act out short stories
13. Gives own full name
14. Uses short sentences or phrases
15. Names familiar objects
16. Gestures to make needs known
17. Imitates words
18. Babbles, makes sounds like words
19. Vocalizes
20. Minimal: Does not attempt words

Appendix D (continued)

42. **LEISURE TIME** \_\_\_\_\_
01. Fashions current events
  02. Designs special labels
  03. Plays tennis, basketball, chess, etc.
  04. Enjoys various modeling material
  05. Reads on own initiative
  06. Takes new ways of doing things
  07. Reads fiction
  08. Plays follow the leader
  09. Plays checkers, cards, dominoes, etc.
  10. Reads
  11. Makes simple clay vehicles
  12. Competes ring on playground
  13. Reads with books
  14. Creates with sand, mud, clay
  15. Does with scissors
  16. Imitates and play activities
  17. Kicks ball
  18. Carries familiar objects
  19. Plays alone for up to 30 minutes
  20. Does not engage in usual leisure activities
43. **GROSS MOTOR** \_\_\_\_\_
01. Walks, runs, climbs
  02. Moves vehicles
  03. Climbs
  04. Balms bicycles
  05. Balms alternating feet
  06. Jumps over objects
  07. Walks downstairs
  08. Catches
  09. Balances in place on each foot
  10. Jumps in place
  11. Runs
  12. Walks upstairs
  13. Walks
  14. Stands by self
  15. Moves about on floor
  16. Pushes and tugs
  17. Sits
  18. Kicks over
  19. Balances head
  20. Does not move
44. **PERCEPTUAL MOTOR** \_\_\_\_\_
01. Draws complex designs from memory
  02. Uses can opener
  03. Cuts and pastes
  04. Cuts to line neatly
  05. Fashions shoes completely
  06. Draws with pencil or crayon
  07. Draws triangle accurately
  08. Draws square accurately
  09. Does simple 2-4 piece puzzles
  10. Catches
  11. Throws a ball
  12. Assembles simple objects
  13. Ties shoelaces
  14. Ties paper and by one
  15. Dismantles simple objects
  16. Unwraps candy packages
  17. Transfers objects
  18. Places for nearby objects
  19. Groups objects within reach
  20. Measures
45. **PERSONAL** \_\_\_\_\_
01. Uses single tools
  02. Assembles toys, models and kits
  03. Matches by number/color
  04. Counts up after activity
  05. Shows, asks, sings, records starts record
  06. Finds errors
  07. Sorts by color
  08. Strings beads
  09. Matches shapes
46. **PERSONAL** \_\_\_\_\_
10. Matches colors
  11. Finds beads in box
  12. Attempts to talk to 50 minutes
  13. Occupies self independently
  14. Matches
47. **VOCATIONAL** \_\_\_\_\_
01. Knows a job
  02. Reads and repairs
  03. Compares with safety rules
  04. Finds job through word descriptions
  05. Fits and job application needed
  06. Performs responsible tasks for job
  07. Fits and job application needed
  08. Does odd jobs for pay
  09. Knows basic apt. vocabulary
  10. Knows how vocational system
48. **ACADEMIC** \_\_\_\_\_
01. Does simple arithmetic with
  02. Uses fractions
  03. Names days of the week
  04. Tells time to half hour
  05. Adds to 10
  06. Copies words
  07. Prints first name
  08. Names primary colors
  09. Counts to 25
  10. Counts to 4
  11. Counts to 3
  12. Compares sizes
  13. Counts to 2
  14. Recognizes
  15. Reads
  16. Matches academic skills
49. **TEACHING** \_\_\_\_\_
01. Shows and is right understood
  02. Shows to do what he/she does
  03. Shows to do what he/she does
  04. Shows to do what he/she does
  05. Shows to do what he/she does
  06. Shows to do what he/she does
  07. Shows to do what he/she does
  08. Shows to do what he/she does
  09. Shows to do what he/she does
  10. Shows to do what he/she does
  11. Shows to do what he/she does
  12. Shows to do what he/she does
50. **MONEY HANDLING** \_\_\_\_\_
01. Earns own spending money
  02. Budgets expenses/savings
  03. Makes purchases by cash
  04. Buys small articles
  05. Changes up to a dollar
  06. Names quarters, half dollar, dollar
  07. Changes up to 25
  08. Adds to 10
  09. Is trusted with money
  10. Names penny, nickel, dime
  11. Does not handle money
51. **PERSONAL MANAGEMENT** \_\_\_\_\_
01. Purchases and/or washes
  02. Assumes care for clothing
  03. Selects proper clothes for all occasions
  04. Budgets time
  05. Selects clothes for weather
  06. Knows own address
  07. Knows own phone number
  08. Tells caretaker's name
  09. Tells own age
  10. Tells first and last name
  11. Tells first name
  12. Assumes own self
  13. Increases natural personal management
52. **HEALTH CARE** \_\_\_\_\_
01. Manages personal health care
  02. Knows basic first aid
  03. Goes to own medication
  04. Follows safety rules
  05. Recognizes symptoms of illness
  06. Takes own medication for short periods
  07. Knows when to go to hospital
  08. Knows when to go to hospital
  09. Admits when sick
  10. Location rules of hospital
  11. Knows own class
  12. Indicates when sick or injured
  13. Admits simple injuries
  14. Understands when called or sent
  15. Managed by caretaker
53. **COMMUNITY AWARENESS** \_\_\_\_\_
01. Uses public transport system
  02. Uses resources to locate others
  03. Uses public transport direct route
  04. Buys complete meals
  05. Uses library
  06. Buys first foods
  07. Uses public transport system
  08. Buys small snacks
  09. Goes to school by self
  10. Has natural community awareness
54. **RESPONSIBILITY** \_\_\_\_\_
01. Outlines future plans
  02. Schedules activities with timing
  03. Is very responsible tasks
  04. Saves for large purchase
  05. Responsible for others
  06. Does small jobs for pay
  07. Responsible for pet
  08. Tracks younger person
  09. Goes to bed regularly
  10. Plans immediate future
  11. Respects property
  12. Plans errands
  13. Pays for money after using
  14. Takes care of materials
  15. Follows natural responsibility

Appendix E

Sample CABS Report

Copyright 1985. Planet Press Enterprises. All rights reserved

CLIENT'S NAME:

DATE OF EVALUATION : 06/28/91

ADAPTIVE BEHAVIOR

The client's level of adaptive behavior was measured using the California Adaptive Behavior Scale, yielding an adaptive age equivalence of 11.67 years. Based on a chronological age of 9.50 years, adaptive age appears to be within normal limits.

With regard to specific areas, the highest level of functioning and the corresponding age equivalencies are given below:

1 TOILETING	Uses toilet before going out	(8.0 yrs)
2 DRESSING	Dresses self completely	(12.3 yrs)
3 FASTENING	Zip jacket zippers	(8.0 yrs)
4 EATING	Has complete eating skills	(9.1 yrs)
5 BATHING	Bathes with minimal verbal prompts	(6.2 yrs)
6 GROOMING	Combs/brushes, but not to style	(5.0 yrs)
7 TOOTHRUSHING	Brushes teeth correctly	(8.0 yrs)
8 PERSONAL INTERACTION	Empathizes with others	(10.0 yrs)
9 GROUP PARTICIPATION	Plays seasonal sports	(11.0 yrs)
10 RECEPTIVE LANGUAGE	Reads and understands "how to" directions	(8.0 yrs)
11 EXPRESSIVE LANGUAGE	Writes simple stories or poems	(11.25 yrs)
12 LEISURE TIME	Plays tennis, basketball, chess, etc	(12.3 yrs)
13 GROSS MOTOR	Dances	(6.5 yrs)
14 PERCEPTUAL MOTOR	Draws complex designs from memory	(12.0 yrs)
15 PREVOCATION	Uses simple tools	(8.5 yrs)
16 VOCATIONAL	Knows basic sight vocabulary	(7.0 yrs)
17 ACADEMIC	Does simple creative work	(11.25 yrs)
18 TRANSLOCATION	Goes to school unattended	(5.8 yrs)
19 MONEY HANDLING	Buys small articles	(9.3 yrs)
20 PERSONAL MANAGEMENT	Selects clothes for weather	(8.0 yrs)
21 HOME MANAGEMENT	Adequate table manners	(10.5 yrs)
22 HEALTH CARE	Treats minor injuries with help	(8.0 yrs)
23 COMMUNITY AWARENESS	Buys fast foods	(9.0 yrs)
24 RESPONSIBILITY	Teaches younger person	(8.0 yrs)

STRENGTHS AND WEAKNESSES

The client's relative strengths and weaknesses are presented below. They represent scores one or more standard deviations above/below the mean.

Client's relative strengths:

Appendix E (continued)

CALIFORNIA ADAPTIVE BEHAVIOR SCALE

Page 2

CLIENT'S NAME: .

DATE OF EVALUATION : 06/28/91

02 DRESSING  
12 LEISURE TIME  
14 PERCEPTUAL MOTOR  
25 READING  
26 WRITING  
28 ATTENTION SPAN

Client's relative weaknesses:

05 BATHING  
06 GROOMING  
13 GROSS MOTOR  
16 VOCATIONAL  
18 TRANSLOCATION

Reliability Evaluation

Reliability for this evaluation is 95% based on a comparison of 20 pairs of items embedded within the various domains.

Inconsistencies were found between the following pairs of items.

05	NO	Empties and cleans tub	(7.0 yrs)
21	YES	Empties and cleans tub	(7.0 yrs)

Note: These items should have been scored in a similar fashion (i.e., both yes or both no).

VALIDITY EVALUATION

Certain specific skills require prerequisite skills in order to be performed. The validity scale compares responses in one domain with prerequisite levels in another domain, to determine whether the responses are consistent, (e.g., a client who enjoys social walks must first be able to walk; a client who indicates a need to use the toilet must be able to gesture to make his needs known). On this basis, validity for this examination was 100 % based on a comparison of 30 pairs of items.

INFORMANT  
-----

Appendix F. (continued)

CALIFORNIA ADAPTIVE BEHAVIOR SCALE

Page 3

CLIENT'S NAME:

DATE OF EVALUATION : 06/28/91

Information for this evaluation was provided by Jim Fagan

California Adaptive Behavior Scale. Copyright 1985 Planet Press Enterprises.

## Appendix F

## CABS Internal Reliability Items

---

CABS RELIABILITY ITEMS			
ITEM	AREAS		AGE
Shows discomfort when soiled/wet	1	22	1.0
Uses toilet before going out	1	23	8.0
Purchases entire wardrobe	2	20	17.4
Ties shoelaces	3	14	6.0
Unwraps	4	14	1.9
Empties and clean tub	5	20	7.0
Keeps nose clean	6	22	4.5
Knows when to brush teeth	7	22	6.0
Gestures to make needs known	8	12	1.2
Plays follow-the-leader	9	10	6.0
Knows basic sight vocabulary	11	16	7.0
Washes, irons clothes	13	21	16.0
Cleans up after activity	15	21	5.5
Runs errands	15	24	4.0
Occupies self for 30 minutes	15	10	1.0
Does small jobs for pay	16	24	10.9
Follows safety rules	16	22	14.0
Adds to 10	17	19	6.5
Goes to school by self	18	23	5.0
Tells full name	21	12	2.5



Appendix G

CABS Internal Validity Items

CABS VALIDITY ITEMS			
AREA	INITIAL ITEM(AGE)	AREA	PREREQUISITE SKILL (AGE)
1	Indicates need to go to the toilet(1.9)	11	Gestures to make needs known (1.2)
2	Removes coat/dress(2.8)	4	Holds spoon palmar grasp (0.5)
4	Spreads butter(5.8)	14	Transfers objects (1.2)
4	Gets drink unassisted(2.4)	14	Transfers objects (1.2)
5	Bathes unassisted(8.8)	24	Adjusts water temperature (5.8)
6	Wipes nose(3.8)	4	Holds spoon palmar grasp (0.5)
7	Puts toothbrush in mouth(2.8)	4	Holds spoon palmar grasp (0.5)
8	Sustains interest 90 min(4.5)	16	Attends to task 30 min (1.8)
9	Observes group routines(7.8)	8	Follows rules (5.5)
9	Enjoys social walks(1.8)	13	Walks (1.8)
10	Reads on preprimer level(6.8)	17	Copies words (6.8)
11	Gives full name(2.5)	18	Knows own name (1.8)
12	Reads on own initiative(8.5)	17	Copies words (6.8)
12	Carries familiar objects(1.4)	14	Reaches for nearby objects (0.3)
13	Climbs(3.8)	4	Drinks from cup (1.4)
14	Draws triangle(5.8)	17	Scribbles (2.8)
15	Runs errands(4.8)	18	Goes about residence (1.6)
15	Matches by amount(6.8)	17	Compares sizes (3.8)
15	Puts beads in box(1.3)	14	Transfers objects (1.2)
16	Builds, repairs (16.8)	15	Uses simple tools (8.5)
17	Prints first name (5.5)	11	Gives full name (2.5)
17	Marks (1.8)	14	Grasps objects within reach (0.3)
18	Goes to nearby places (15.9)	23	Uses public transportation (12.8)
19	Changes up to 0.25 (8.5)	17	Counts to 25 (5.8)
20	Tells first/last name (2.5)	18	Knows own name (1.8)
21	Empties/cleans tub (7.8)	5	Bathes assisted (6.2)
21	Helps at household tasks(3.5)	18	Goes about residence (1.6)
22	Adjusts water temperature(5.8)	14	Turns knob/unscrews (2.2)
22	Indicates when sick (3.8)	11	Gestures to make needs known(1.2)
23	Buys small snacks (6.8)	19	Is trusted with money (5.8)
24	Runs errands (4.8)	18	Goes about residence (1.6)

Appendix II

Consent Forms

Dear :

My name is Jim Fagan I am a graduate student in Psychology at St. Mary's University. I am also Program Director for Regional Residential Services Society (RRSS). We spoke on the phone recently about a research project I am pursuing. The project I am proposing is for completion of my Masters in Clinical Psychology from St. Mary's.

During the conversation we had you told me you would give permission to involve your family member in that research. The project I am working on is described in this letter. Also attached is a letter of approval from Beverley Wicks, Executive Director of RRSS and a letter of consent for you to sign and return to me. The letter of consent will be the official record of your consent to the involvement of your family member in the project.

As part of the care we provide for each resident within RRSS, we complete assessments to help determine the best way to support each person where they live. The purpose of the project I am working on is to try to help us determine the type of supports/home people not yet living with us may need. In order to do this, I am proposing that information collected by myself and other RRSS staff on approximately 60 people living within RRSS be examined and compared to the level of care they are getting at this time. The information gathered may then be useful in determining the level of care people who need community residences may need. In other words I am hoping that by looking at the ability levels of people now living in a particular type of group home, we may be able to do two things. First we may be better able to predict the kind of care new residents may need. Secondly, that we will be able to do this before they actually move in to their new home. This assessment would happen during our admissions interview.

Essentially that is the goal of the project I am proposing. I will now describe the way the information for the project will be collected.

Appendix II (continued)

Over a period of about one month, I will collect assessment information on each person selected for the study. This information will be gathered by myself by completing an assessment in consultation with staff in the house where each person lives. The staff selected for the project will know each person well. Time taken to complete the assessment will not take any time away from any of the residents involved. There will be no direct involvement by any individuals beyond the data collected during the assessment. Nor will any testing of any participant occur during the project. The assessment is completed based on the detailed knowledge from the staff in the resident's home.

No information beyond the current level of care of each person will be included in the study. There will be no way for anyone to determine where any of the residents live, their names, diagnosis or any other personal information from the study. Each assessment will be coded to protect their identity completely. None of this information is relevant to the purpose of the project. The project proposal has been approved by the Ethics Committee of St. Mary's University.

As indicated in the letter of consent, you have the ability to withdraw your permission at any time during the project and you may have access to the project upon its completion by making arrangements directly with me.

I hope this answers any questions you may have. If not please do not hesitate to call me at any time for more information. The number at my office is 465-4022. Thank you very much for your consideration and I look forward to contact when the project is completed late this summer.

Respectfully,

Jim Fagan

## Appendix 11 (continued)

I \_\_\_\_\_ give my permission for the information collected by myself and Jim Fagan from the \_\_\_\_\_ to be used as described in the attached cover letter for the purpose of the project also described in the cover letter. I understand that there will be no direct testing carried out during the project and that no program changes will result from the research. I also understand that if at any point I wish to withdraw my permission to be involved in the project I may do so with no effect of any kind to me or anyone associated with the project. If I wish, information collected during the project will be made available to me upon completion of the project.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Appendix H (continued)

I \_\_\_\_\_ give my permission for the information collected on me by Jim Fagan and other Regional Residential Services staff to be used as explained to me for the purpose of the project also explained to me by Jim. I understand that there will be no direct testing carried out during the project and that no program changes will result from the research. I also understand that if at any point I wish to withdraw my permission I may do so with no effect of any kind to me or anyone associated with the project. If I wish, information collected during the project will be made available to me upon completion of the project.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Appendix H (continued)

I \_\_\_\_\_ give my permission for assessment information collected on \_\_\_\_\_ by Jim Fagan and other Regional Residential Services staff to be used as described in the attached cover letter for the purpose of the project also described in the cover letter. I understand that there will be no direct testing carried out during the project, and that no program changes will result from the research. I also understand that if at any point I wish to withdraw my permission I may do so with no effect of any kind to my family member or anyone associated with the project. If I wish, information collected during the project will be made available to me upon completion of the project.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix I

## Pearson Product Correlation Matrix for Similar Name or Similar Content BLS and CABS Domains

	AA	Toileting	Dressing	Eating	Personal Interaction	Group Participation	Receptive Language
IFI	.7195**	.5067*	.5815**	.6777**	.6382**	.5142**	.5298**
TOILETING	.5747**	.5662**	.5772**	.5898**	.4567*	.3256	.4193*
DRESSING	.6738**	.5115*	.6412**	.7461**	.6137**	.4255*	.4570*
EATING	.6626**	.4102	.5679**	.7157**	.7095**	.4576*	.4518*
SOCIAL MANNERS	.6529**	.4665*	.5255**	.6321**	.6089**	.3666	.5167**
HUMAN RELATIONS	.3779	.2110	.4265*	.3176	.4573*	.3446	.3405
SPOKEN LANGUAGE	.7444**	.4703*	.5255**	.6471**	.7111**	.5292**	.5840**
EXPRESSIVE LANGUAGE	.7928**	.5841**	.5696**	.6550**	.6145**	.5035*	.5940**
RECREATION	.6735**	.3779	.4745*	.6611**	.7200**	.5907**	.4342*
GROSS MOTOR	.4138*	.2044	.2107	.5785**	.4007	.1948	.1564
FINE MOTOR	.7364**	.4303*	.4543*	.7874**	.6783**	.4889*	.4402*
CONCEPT OF SELF	.7878**	.4526*	.5572**	.7231**	.7615**	.5489**	.5896**
DOMESTIC	.7243**	.4592*	.5754**	.7930**	.6211**	.4246*	.4360*

	Expressive Language	Leisure	Gross Motor	Perceptual Motor	Personal Mgmt	Home Mgmt
IFI	.5373**	.4504*	.5599**	.6550**	.7201**	.7134**
TOILETING	.4327*	.2342	.5532**	.5625**	.5212**	.5270**
DRESSING	.4425*	.4181*	.6249**	.6412**	.5657**	.6550**
EATING	.4765*	.4361*	.6372**	.7081**	.6524**	.6998**
SOCIAL MANNERS	.5373**	.5193**	.5027*	.5641**	.6616**	.7011**
HUMAN RELATIONS	.2768	.2361	.2171	.3394	.4249*	.5529**
SPOKEN LANGUAGE	.5786**	.5429**	.5356**	.6516**	.7282**	.7766**
EXPRESSIVE LANGUAGE	.6760**	.5748**	.5822**	.6695**	.7975**	.7286**
RECREATION	.4434*	.4857*	.5987**	.6186**	.6116**	.7019**
GROSS MOTOR	.1271	.2486	.5958**	.5181**	.3237	.3763
FINE MOTOR	.4927*	.5229**	.7447**	.7613**	.6033**	.7161**
CONCEPT OF SELF	.6460**	.6001**	.5772**	.6780**	.7709**	.7741**
DOMESTIC	.4728*	.3923	.6979**	.6514**	.6303**	.8032**

n=38 \*\*p &lt; .001, two-tailed \* p &lt; .01, two-tailed

Appendix J

Pearson Product Correlation Matrix for All BLS and CABS Domains

	Toileting	Dressing	Fastening	Eating	Bathing	Grooming
GROSS MOTOR	.2044.	.2107	.3867	.5785**	.4186*	.3503
FINE MOTOR	.4303*	.4543*	.7006**	.7874**	.5753**	.4440*
VISUAL DISCRIMINATION	.4316*	.6385**	.6447**	.7176**	.5875**	.5335**
AUDITORY DISCRIMINATION	.4632*	.4751*	.4976*	.5680**	.3295	.3953
TACTILE DISCRIMINATION	.4063	.5077*	.5925**	.6776**	.5755**	.4180*
EATING	.4102	.5679**	.6811**	.7157**	.5001*	.4657*
TOILETING	.5662**	.5772**	.6023**	.5898**	.4895*	.3963
DRESSING	.5115*	.6412**	.7599**	.7461**	.6308**	.5214**
PERSONAL HYGIENE	.5064*	.5731**	.7717**	.7392**	.6836**	.5004*
SPOKEN LANGUAGE	.4703*	.5255**	.5662**	.6471**	.6570**	.5245**
EXPRESSIVE LANGUAGE	.5841**	.5696**	.6501**	.6550**	.6968**	.5925**
HUMAN RELATIONS	.2110	.4265*	.2526	.3176	.3860	.3051
SOCIAL MANNERS	.4665*	.5255**	.5617**	.6321**	.6508**	.5292**
RECREATION	.3779	.4745*	.5596**	.6611**	.5818**	.4605*
DOMESTIC	.4592*	.5754**	.7268**	.7930**	.6780**	.5327**
COMMUNITY	.5645**	.4720*	.6027**	.6862**	.6544**	.4911*
VOCATIONAL	.3890	.5364**	.5431**	.7151**	.5838**	.4980*
CONCEPT OF SELF	.4526*	.5572**	.6339**	.7231**	.6343**	.5149**
CONCEPT OF SPACE	.4673*	.4392*	.6118**	.7361**	.5665**	.4717*
CONCEPT OF TIME	.5078*	.4979*	.6933**	.7599**	.6865**	.5451**
READING	.6076**	.3948	.6823**	.6996**	.7005**	.5545**
WRITING	.4507*	.4003	.7014**	.6804**	.6231**	.4761*
ARITHMETIC	.4678*	.3791	.6371**	.6649**	.5969**	.4558*

n=38 \*\*p < .001, two-tailed

\*p < .01, two-tailed



## Appendix J (continued)

## Pearson Product Correlation Matrix for All BLS and CABS Domains

	Tooth - Brushing	Personal Interaction	Group Interaction	Receptive Language	Expressive Language	Leisure
GROSS MOTOR	.3113	.4007	.1948	.1564	.1271	.2486
FINE MOTOR	.5647**	.6783**	.4889*	.4402*	.4927*	.5229**
VISUAL DISCRIMINATION	.6297**	.6895**	.5276**	.5711**	.5763**	.5543**
AUDITORY DISCRIMINATION	.4208*	.6425**	.5058*	.4837*	.5528**	.5702**
TACTILE DISCRIMINATION	.5021*	.7302**	.6134**	.6282**	.5896**	.6114**
EATING	.5131**	.7095**	.4576*	.4518*	.4765*	.4561*
TOILETING	.5162**	.4567*	.3256	.4193*	.4327*	.2342
DRESSING	.6814**	.6137**	.4255*	.4579*	.4425*	.4181*
PERSONAL HYGIENE	.6830**	.6650**	.4919*	.5045*	.5101*	.4433*
SPOKEN LANGUAGE	.5672**	.7111**	.5292**	.5840**	.5786**	.5429**
EXPRESSIVE LANGUAGE	.6696**	.6145**	.5035*	.5940**	.6760**	.5748**
HUMAN RELATIONS	.3071	.4573*	.3446	.3405	.2768	.2361
SOCIAL MANNERS	.5219**	.6089**	.3666	.5167**	.5373**	.5193**
RECREATION	.5830**	.7200**	.5907**	.4342*	.4434*	.4857*
DOMESTIC	.7010**	.6211**	.4246*	.4360*	.4728*	.3923
COMMUNITY	.7101**	.6477**	.6032**	.5534**	.6470**	.6083**
VOCATIONAL	.6306**	.5854**	.4581*	.4767*	.4655*	.3893
CONCEPT OF SELF	.5518**	.7615**	.5489**	.5896**	.6460**	.6001**
CONCEPT OF SPACE	.5434**	.6790**	.5126*	.6230**	.6434**	.6725**
CONCEPT OF TIME	.6245**	.7199**	.5714**	.6786**	.7165**	.6973**
READING	.6806**	.5281**	.4620*	.6718**	.7795**	.7122**
WRITING	.6841**	.5258**	.4867*	.4911*	.5971**	.5714**
ARITHMETIC	.6038**	.5661**	.4532*	.4074	.7017**	.5155**

n=38 \*\*p &lt; .001, two-tailed

\* p &lt; .01, two-tailed

Appendix J (continued)

Pearson Product Correlation Matrix for All BLS and CABS Domains

	Gross Motor	Perceptual Motor	Prevoca- tional	Vocational	Academic	Trans- location
GROSS MOTOR	.5958**	.5181**	.3847	.2503	.3417	.2195
FINE MOTOR	.7447**	.7613**	.6901**	.4351*	.6948**	.4566*
VISUAL DISCRIMINATION	.5711**	.6159**	.8331**	.4268*	.7031**	.4762*
AUDITORY DISCRIMINATION	.5318**	.4880*	.6298**	.3959	.6994**	.4987*
TACTILE DISCRIMINATION	.5269**	.6797**	.8495**	.4735*	.7453**	.4745*
EATING	.6372**	.7081**	.7695**	.2784	.7092**	.3706
TOILETING	.5532**	.5625**	.5961**	.2784	.5824**	.3679
DRESSING	.6249**	.6412**	.7027**	.3139	.6798**	.4218*
PERSONAL HYGIENE	.6960**	.7112**	.7091**	.4296*	.7057**	.4637*
SPOKEN LANGUAGE	.5356**	.6516**	.7745**	.4413*	.7242**	.5347**
EXPRESSIVE LANGUAGE	.5822**	.6695**	.7375**	.4732*	.7785**	.5973**
HUMAN RELATIONS	.2171	.3394	.4834*	.1419	.3784	.2268
SOCIAL MANNERS	.5027*	.5641**	.6689**	.3171	.6444**	.4939*
RECREATION	.5987**	.6186**	.6873**	.3666	.6105**	.4305*
DOMESTIC	.6979**	.6514**	.6991**	.3693	.5930**	.4497*
COMMUNITY	.6952**	.6309**	.6639**	.6198**	.7058**	.6672**
VOCATIONAL	.5932**	.5597**	.7012**	.4548*	.5326**	.5112*
CONCEPT OF SELF	.5772**	.6708**	.8326**	.4308*	.7862**	.5707**
CONCEPT OF SPACE	.7574**	.7027**	.8097**	.5256**	.7582**	.6426**
CONCEPT OF TIME	.7143**	.7226**	.8451**	.5764**	.8271**	.6876**
READING	.7747**	.7227**	.7193**	.6643**	.7974**	.7712**
WRITING	.8013**	.7173**	.6420**	.6105**	.6790**	.6661**
ARITHMETIC	.7226**	.6552**	.6412**	.5989**	.6549**	.5100*

n=38 \*\*p < .001, two-tailed

\* p < .01, two-tailed

Appendix J (continued)

Pearson Product Correlation Matrix for All BLS and CABS Domains

	Money Handling	Personal Management	Home Management	Health	Community Access	Respons- ibility
GROSS MOTOR	.3100	.3237	.3763	.3369	.3001	.3978
FINE MOTOR	.6207**	.6033**	.7161**	.6417**	.4988*	.6501**
VISUAL DISCRIMINATION	.6670**	.6856**	.7625**	.7096**	.5335**	.6664**
AUDITORY DISCRIMINATION	.6865**	.6738**	.4748*	.5820**	.5564**	.6055**
TACTILE DISCRIMINATION	.7073**	.7023**	.7208**	.6543**	.5038*	.6521**
EATING	.6111**	.6524**	.6998**	.6205**	.4002	.6088**
TOILETING	.5322**	.5212**	.5270**	.5052*	.3216	.4716*
DRESSING	.5495**	.5657**	.6550**	.5939**	.4221*	.6192**
PERSONAL HYGIENE	.6625**	.6365**	.7884**	.6797**	.4594*	.7270**
SPOKEN LANGUAGE	.6877**	.7282**	.7766**	.6717**	.5491**	.6707**
EXPRESSIVE LANGUAGE	.7235**	.7975**	.7286**	.7151**	.6205**	.6602**
HUMAN RELATIONS	.3720	.4249*	.5529**	.3945	.2834	.3707
SOCIAL MANNERS	.5410**	.6616**	.7011**	.5777**	.5141**	.5475**
RECREATION	.6306**	.6116**	.7019**	.5742**	.5389**	.7041**
DOMESTIC	.6298**	.6303**	.8032**	.6846**	.4894*	.6944**
COMMUNITY	.8603**	.7406**	.7307**	.7523**	.7152**	.8498**
VOCATIONAL	.6662**	.6049**	.7834**	.6946**	.5474**	.6804**
CONCEPT OF SELF	.7301**	.7709**	.7741**	.6956**	.5898**	.6815**
CONCEPT OF SPACE	.7826**	.7801**	.6689**	.6662**	.6795**	.7071**
CONCEPT OF TIME	.8293**	.8495**	.7784**	.7298**	.7188**	.7518**
READING	.8222**	.8362**	.6432**	.7340**	.7539**	.6880**
WRITING	.7411**	.7101**	.6526**	.7358**	.6511**	.6840**
ARITHMETIC	.7441**	.6937**	.6599**	.7600**	.5946**	.6554**

n=38 \*\*p < .001, two-tailed

\*p < .01, two-tailed

## Appendix A

## Unrotated Factors' Matrix for BLS Domains

	FACTOR 1	FACTOR 2	FACTOR 3
GROSS MOTOR	.50242	.67965	.20027
FINE MOTOR	.89740	.20435	.15422
VISUAL DISCRIMINATION	.90034	-.15399	.10809
AUDITORY DISCRIMINATION	.74653	-.24877	-.14510
TACTILE DISCRIMINATION	.89501	-.16631	.05156
EATING	.90274	-.03097	.26982
TOILETING	.66446	.39669	.19067
DRESSING	.83986	.18337	.31319
PERSONAL HYGIENE	.90045	.23767	.17372
SPOKEN LANGUAGE	.92551	-.23661	.01734
EXPRESSIVE LANGUAGE	.91778	-.19614	-.17313
HUMAN RELATIONS	.68118	-.47886	.29667
SOCIAL MANNERS	.87538	-.32076	.03088
RECREATION	.90470	-.14382	.19864
DOMESTIC	.89464	.24301	.17918
COMMUNITY	.87044	.06648	-.26640
VOCATIONAL	.85906	-.03959	.06639
CONCEPT OF SELF	.94039	-.20469	-.02397
CONCEPT OF SPACE	.92558	-.05424	-.16544
CONCEPT OF TIME	.94300	-.05972	-.19266
READING	.83207	.12654	-.14792
WRITING	.81949	.32108	-.35581
ARITHMETIC	.82133	.02644	-.32588

## Appendix I.

## Rotated Unsorted Factors' Matrix for BLS Domains

	FACTOR 1	FACTOR 2	FACTOR 3
GROSS MOTOR	.02919	.20676	.84312
FINE MOTOR	.52787	.40310	.65555
VISUAL DISCRIMINATION	.74503	.39538	.36689
AUDITORY DISCRIMINATION	.61215	.50395	.10747
TACTILE DISCRIMINATION	.72921	.43702	.32960
EATING	.72491	.28058	.53336
TOILETING	.25953	.26814	.70425
DRESSING	.55946	.23806	.68368
PERSONAL HYGIENE	.51535	.39323	.69084
SPOKEN LANGUAGE	.78298	.47285	.27605
EXPRESSIVE LANGUAGE	.68354	.62967	.21692
HUMAN RELATIONS	.87474	.07571	.10209
SOCIAL MANNERS	.80843	.42265	.19476
RECREATION	.77376	.32508	.41743
DOMESTIC	.50993	.38621	.69452
COMMUNITY	.44851	.71399	.34944
VOCATIONAL	.62835	.42142	.41418
CONCEPT OF SELF	.75762	.51918	.28860
CONCEPT OF SPACE	.55980	.64640	.33078
CONCEPT OF TIME	.60536	.67769	.32280
READING	.30777	.87450	.28021
WRITING	.21715	.79218	.47647
ARITHMETIC	.30367	.75356	.40415

## Appendix M

## Unrotated Factors' Matrix for CABS Domains

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
Toileting	.61630	-.05879	.47020	-.11639
Dressing	.55059	.65535	-.08375	-.01528
Fastening	.81571	.24592	.08696	-.24637
Eating	.82915	.28409	-.14035	-.19520
Bathing	.79072	.25989	.33655	.09693
Grooming	.64305	.57802	.02608	.24596
Toothbrushing	.80410	.29300	.11463	.25137
Personal Interaction	.70962	-.12096	-.50370	-.32030
Group Participation	.62824	-.40317	-.46869	.06131
Receptive Language	.69416	-.23243	.49034	-.15646
Expressive Language	.81734	-.29225	.18595	-.04723
Leisure	.76427	-.39850	.02787	.15338
Gross Motor	.77660	-.18865	-.07067	.01933
Perceptual Motor	.77430	-.20199	-.00763	-.21553
Prevocational	.85163	.06772	-.10410	-.27084
Vocational	.66887	-.57995	.19894	.14397
Academic	.89889	-.07092	.04362	-.25289
Community Access	.75762	-.05635	-.05318	.46414
Money Handling	.90389	-.20536	-.05155	-.00762
Personal Management	.84388	.15250	.04219	-.01165
Home Management	.79885	.33432	-.04386	-.10970
Health Care	.84292	.09295	-.15637	.08453
Community Awareness	.08645	-.05115	-.17898	.39843
Responsibility	.83268	-.04497	-.11309	.11789

Appendix N

Rotated Unsorted Factors' Matrix for CABS Domains

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
Toileting	.28862	.71369	.12511	.07927
Dressing	.83609	.00631	-.00062	.19859
Fastening	.61886	.46459	.08889	.43287
Eating	.65524	.27397	.16992	.54104
Bathing	.67096	.54027	.26486	.05664
Grooming	.86101	.08831	.24243	.02988
Toothbrushing	.71658	.32678	.42254	.09970
Personal Interaction	.22399	.10633	.27459	.65885
Group Participation	-.00368	.07764	.62540	.61928
Receptive Language	.18417	.83670	.20243	.16071
Expressive Language	.20334	.65909	.43787	.35041
Leisure	.10586	.49250	.64084	.32058
Gross Motor	.26529	.39371	.48357	.42993
Perceptual Motor	.22536	.50915	.30095	.53503
Prevocational	.47990	.40350	.20728	.61479
Vocational	-.09068	.63443	.62402	.20956
Academic	.39893	.57829	.26678	.56049
Community Awareness	.42242	.23157	.74155	.11608
Money Handling	.31791	.48504	.52763	.49718
Personal Management	.58509	.41052	.32426	.34828
Home Management	.69525	.29136	.17461	.40637
Health	.53960	.25347	.46557	.42259
Community Awareness	.43977	.17805	.74396	.25531
Responsibility	.42576	.31630	.53272	.39617

Appendix O

Unrotated Principal Component, Factors' Matrix for the Combined BLS and CABS Domains

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
GROSS MOTOR	.48537	-.14869	.38911	-.56036	-.08143	.07532
FINE MOTOR	.86112	-.22665	.02829	-.32497	.01088	.02758
VISUAL DISCRIMINATION	.87780	-.23902	-.15190	.07546	.01131	.06097
AUDITORY DISCRIMINATION	.74053	-.01304	-.50989	.08245	.00247	.23447
TACTILE DISCRIMINATION	.87008	-.16363	-.29565	-.02489	.07474	.11482
EATING	.84731	-.38552	-.10801	-.14677	.10785	.11930
TOILETING	.66229	-.18393	.30665	-.15438	.28767	.06348
DRESSING	.81567	-.32122	.16669	-.13486	.11663	.07759
PERSONAL HYGIENE	.87889	-.24803	.14942	-.18739	.09281	-.08227
SPOKEN LANGUAGE	.88896	-.21390	-.25521	.09692	.02550	-.09906
EXPRESSIVE LANGUAGE	.90557	-.08282	-.14067	.19474	.08430	-.10018
HUMAN RELATIONS	.58187	-.47336	-.41774	.16783	-.02137	-.29186
SOCIAL MANNERS	.82253	-.27827	-.23302	.18213	.06551	-.10538
RECREATION	.84633	-.32204	-.21285	-.09646	-.12590	-.16624
DOMESTIC	.86232	-.30468	.19873	-.16282	-.02279	-.16344
COMMUNITY	.89078	.10407	-.02962	-.01670	-.14684	-.22845
VOCATIONAL	.82586	-.23519	-.04157	.00674	-.14577	-.22037
CONCEPT OF SELF	.91585	-.17334	-.25058	.07282	.02350	.05836
CONCEPT OF SPACE	.91135	-.01229	-.19482	-.07254	-.02809	.00573
CONCEPT OF TIME	.95367	.02700	-.14299	.03268	-.00430	-.01105
READING	.88399	.29450	.06095	.04491	.04252	-.11752
WRITING	.84173	.15059	.17179	-.18359	-.09752	-.19230
ARITHMETIC	.82645	.08278	.06957	-.14201	-.06430	-.23296
Toileting	.58641	.20344	.15270	.08549	.47247	-.18887
Dressing	.58726	-.38834	.27692	.43290	-.06761	.21019
Fastening	.78813	.00789	.35710	.01617	.17475	.21151
Eating	.83425	-.09298	.28617	-.05712	-.07489	.24838
Bathing	.75826	.06136	.33441	.24182	.12778	-.21779
Grooming	.61746	-.11138	.41886	.41416	-.21147	.19802
Toothbrushing	.75737	.08943	.41173	.21310	-.10943	-.15233
Personal Interaction	.74557	-.07664	-.27420	-.20818	-.17575	.29538



Appendix O (continued)

Unrotated Principal Component, Factors' Matrix for the Combined BLS and CABS Domains

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
Group Participation	.60831	.23358	-.32904	-.22700	-.29789	.06554
Receptive Language	.65741	.30201	-.14289	.17558	.49004	-.03806
Expressive Language	.74147	.46494	-.10339	.11339	.20540	.06153
Leisure	.69177	.49644	-.21710	.01245	-.01981	.15136
Gross Motor	.77163	.23907	.17984	-.38797	-.06526	.00608
Perceptual Motor	.78079	.14059	.04685	-.35030	.14624	.03162
Prevocational	.86276	-.02489	-.06876	.05836	.07737	.30326
Vocational	.59703	.60789	-.13328	-.19308	.09880	-.24132
Academic	.86359	.20098	-.02748	.04757	.21052	.29685
Community Access	.68738	.40077	.08825	.02841	-.20706	.03851
Money Handling	.85949	.34054	-.07922	-.00087	-.04332	.03922
Personal Management	.83484	.10624	.04066	.24407	.00182	.08543
Home Management	.82698	-.18860	.13271	.18775	-.06924	-.08091
Health	.81935	.12217	.10807	.09887	-.19711	.00104
Community Awareness	.73099	.37865	.05189	.16387	-.38224	.07030
Responsibility	.81490	.15775	.03284	-.02565	-.19415	-.09945

## Appendix P

## Rotated Unsorted, Principal Component, Factors' Matrix for the Combined BLS and CABS Domains

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
GROSS MOTOR	.08107	.13843	.83281	.11074	-.05895	.01908
FINE MOTOR	.56965	.29061	.65725	.16275	.13718	.11803
VISUAL DISCRIMINATION	.71649	.29351	.28545	.31884	.19296	.20039
AUDITORY DISCRIMINATION	.56348	.42388	.11084	.16531	.17076	.37473
TACTILE DISCRIMINATION	.72740	.35713	.27825	.14452	.22940	.28814
EATING	.72295	.14263	.49696	.19743	.17041	.26008
TOILETING	.28223	.03298	.59410	.29872	.36999	.13147
DRESSING	.52686	.11017	.59331	.34462	.21830	.16104
PERSONAL HYGIENE	.55911	.21278	.62426	.30130	.26131	.01177
SPOKEN LANGUAGE	.80011	.33136	.21008	.24799	.24485	.07370
EXPRESSIVE LANGUAGE	.68129	.37747	.17711	.35303	.36776	.06237
HUMAN RELATIONS	.90600	.03572	-.00962	.10662	.06895	-.11238
SOCIAL MANNERS	.79473	.22269	.14542	.28984	.25680	.06760
RECREATION	.81114	.30172	.36483	.17946	.04921	-.03685
DOMESTIC	.57532	.19850	.62283	.36728	.16370	-.09834
COMMUNITY	.51638	.59466	.32208	.29523	.21953	-.14103
VOCATIONAL	.67744	.31702	.34113	.32785	.09515	-.12890
CONCEPT OF SELF	.75609	.37643	.24222	.25806	.22882	.22335
CONCEPT OF SPACE	.62975	.51227	.33623	.18162	.22207	.14281
CONCEPT OF TIME	.61643	.53223	.29348	.28233	.29397	.12792
READING	.33532	.62624	.29711	.32711	.43500	.02010
WRITING	.32701	.55484	.51863	.27970	.23772	-.14969
ARITHMETIC	.42423	.50243	.44531	.23525	.24850	-.15961
Toileting	.17554	.20933	.22889	.20078	.71049	-.05152
Dressing	.40401	-.05004	.14272	.75574	.05557	.21953
Fastening	.20721	.25667	.50794	.50052	.37808	.25385
Eating	.31975	.33159	.55384	.50616	.12138	.25925
Bathing	.28161	.28417	.27833	.57348	.47081	-.15721
Grooming	.21076	.19587	.16669	.82364	.05838	.05103
Toothbrushing	.21123	.38803	.32059	.66218	.26406	-.15986
Personal Interaction	.54577	.47160	.35090	.06332	-.06287	.38347

Appendix P (continued)

Rotated Unsorted, Principal Component, Factors' Matrix for the Combined BLS and CABS Domains

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
Group participation	.36921	.68907	.19818	-.07397	-.07251	.12763
Receptive Language	.30119	.36422	.03834	.10292	.74422	.16411
Expressive Language	.21519	.63910	.09401	.17484	.54970	.19748
Leisure	.20785	.76224	.07847	.08264	.30823	.25175
Gross Motor	.17222	.58602	.06401	.13135	.19558	.02745
Perceptual Motor	.30061	.45731	.58619	.04400	.34030	.12585
Prevocational	.49010	.39760	.30685	.33378	.26704	.11939
Vocational	.10193	.74502	.19362	-.12043	.46201	-.13460
Academic	.33836	.49828	.29727	.28763	.45163	.12551
Community Access	.13756	.71282	.07718	.45201	.14218	.03944
Money Handling	.33797	.71629	.24774	.23538	.31947	.13511
Personal Management	.40320	.46975	.16713	.48340	.32048	.17370
Home Management	.54371	.26745	.29570	.53992	.19323	-.01253
Health	.35511	.55354	.28067	.46142	.14582	.03354
Community Awareness	.18647	.77656	.11012	.45120	.03620	.15908
Responsibility	.38219	.60219	.32158	.31783	.15010	.15001