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The Methodological Characteristics of an Independent Living Skills Assessment Form for Adolescents in Placement

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THE METHODOLOGICAL CHARACTERISTICS OF AN
INDEPENDENT LIVING SKILLS ASSESSMENT FORM
FOR ADOLESCENTS IN PLACEMENT

BY

SUSAN MARIA LOTTO

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN
PSYCHOLOGY

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ABSTRACT

Due to a recent upsurge in interest over the success of preparing state supervised youth for independent living, New York State has revised the majority of its regulations concerning how adolescents in placement should be prepared for independent living. The new regulations require that all adolescents in placement, fourteen years of age and over, have their independent living skills periodically assessed. The present research study examined a 140 item inventory, designed to measure the independent living skills of adolescents in placement, in terms of its internal consistency and concurrent validity. In this study 210 subjects, who resided in either the group home or Residential Treatment Center level of care, were individually administered the 140-item Independent Living Skills Inventory for Adolescents (ILSFA). Subjects also had their global independent living skills independently appraised by their social workers. Based on New York State's dictates concerning independent living skills, a 7-Factor Model was investigated in terms of identifying practical constructs. Principal Component Analyses, item analyses, and internal consistency analyses were used to develop a 44-item instrument with 2-Factors. This instrument measures information with face validity in the areas of Job Finding and Maintenance, Budgeting, Housecleaning, and Cooking/Care of Food/Nutrition.

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PREFACE

The state regulations that dictate how adolescents in placement should be prepared for independent living have recently been changed in New York State. The new regulations, effective July 1, 1988, require that adolescents, 14 years of age and over, be provided with several different services which will assist them in preparing for independent living. More specifically, it is currently mandated in New York State that every adolescent 14 years of age and over must be provided with structured training and supervised performance in the following living skills: Job Search, Career Counseling, Locating Housing/Apartments, Budgeting of Money, Shopping, Cooking, and Housecleaning. It is also mandated that these adolescents' Independent Living Skills be periodically assessed by the Child Care Agencies that are responsible for them.

Although there are several independent living skills assessment instruments, a review revealed that many are inappropriate for adolescents, particularly adolescents in placement. Furthermore, none have employed rigorous psychometric analyses during instrument development. This study attempts to contribute to the development of an independent living skills instrument by employing several psychometric analyses to contribute to item selection and factor identification.

TABLE OF CONTENTS

Acknowledgement.....	iii
Preface.....	iv
Table of Contents.....	v
List of Tables.....	vi
List of Figures.....	vii
Literature Review.....	1-12
Method.....	13-18
Subjects.....	13-15
Setting.....	15-16
Materials.....	16-17
Procedure.....	17-18
Results.....	19-48
Discussion.....	49-54
Appendix A.....	55-73
Appendix B.....	74-75
Appendix C.....	76-87
Appendix D.....	88-89
Appendix E.....	90
Appendix F.....	91
Appendix G.....	92-109
Bibliography.....	110

LIST OF TABLES

Demographic Data on Subjects' Sex.....	1
Demographic Data on Subjects' Age.....	2
Demographic Data on Subjects' Race.....	3
Post-Item Analysis Item within Sub-Category Internal Consistency Data....	4
A Comparison of the Internal Consistency Data for Sub-Categories Pre-and-Post-Item Analysis.....	5
Post-Item Analysis Item Sub-Category within Category Internal Consistency Data.....	6
Post-Item Analysis Item within Category Internal Consistency Data.....	7
A Comparison of Internal Consistency Coefficients Pre-and-Post-Item Analysis.....	8
Post-Item Analysis PCA.....	9
Eigenvalue Listing with 7 Factors Extracted.....	10
Varimax Rotated Structure Matrix with 7 Factors Extracted.....	11
Post-Item Analysis Eigenvalue Table with 2 Factors Extracted.....	12
Varimax Rotated Factor Matrix with 2 Factors Extracted.....	13
Structure Matrix of Factors with Oblique Rotation.....	14
Communalities on Factor Loading Data.....	15
PCA Performed Post-Item Analysis within Each Category.....	16
A Comparison of each of the ILSFA's PCA Factor Analyses.....	17
Post-Item Analysis Examination of S.W. Reliability Data.....	18
Constructs of the ILSFA.....	19
The Revised ILSFA According to a 2-Factor Model.....	20
Pre-Item Analysis Item within Sub-Category Internal Consistency Data....	21
Pre-Item Analysis Item within Category Internal Consistency Data.....	22
Pre-Item Analysis Sub-Category within Category Internal Consistency Data.....	23
PCA Performed on all 7 Categories Pre-Item Analysis.....	24
PCA Performed on all Sub-Categories Pre-Item Analysis.....	25
Rotated PCA Analysis Pre-Item Analysis with 7 Factors Extracted.....	26

LIST OF FIGURES

Scree Chart of the Post-Item Analysis Factor Analysis.....1

Scree Chart of the Pre-Item Analysis Factor Analysis.....2

Preparing foster adolescents to live on their own can be considered both a relatively old and relatively new concept in child welfare practice. The fact that it is an old concept was evidenced in colonial times when orphaned children were prepared for adult life through the indenture system. The fact that it is a new concept is illustrated in the recent surge in agency programming of independent living for youths 14 to 21 who do not have the life skills or family support to make a successful transition to young adult life, and are becoming numbered among the homeless, mentally unstable, and criminal young adults. These agency programs are concerned that adolescents in placement be provided with structured training and assessment in the major areas of independent living.

While most undomiciled youths were placed in foster home type settings during the 1920's and 1930's, a shortage of foster homes growing out of changes brought by World War II in the late 1940's, combined with a sharply delineated need for care of some nonconforming youngsters who could not live comfortably in typical foster home settings, spurred a regrowth of group care. The trend toward group care for emotionally disturbed children emerged from the realization that children being referred for admission required not only nurturance, education, and kindly supervision, but special psychosocial help as a necessary step toward return to their own communities. This group or "institutional" care evolved into our present Residential Treatment and Group Home levels of restrictive care.

A Residential Treatment Center is an institution for emotionally disturbed children who, because of their own problems and disturbed relationships with other persons, cannot remain in their own homes for treatment - they need the more controlled and therapeutic environment the institution provides. Ideally, residential treatment provides a therapeutic milieu for the children under care. This practice is predicated on the belief that the daily living experiences of the children - their relationships with adults and with each other - may be as

significant for their emotional growth as the hours of clinical therapy they receive (Hylton, 1964).

According to the Child Welfare League of America, the function of a Residential Treatment Center is to provide treatment in a group care therapeutic environment that integrates daily group living, remedial education and treatment services on the basis of an individualized plan for each child, exclusively for children with severe emotional disturbances, whose parents cannot cope with them and who cannot be effectively treated in their own homes, in another family, or in other less intensive treatment-oriented child care facilities. Service elements include: 1) study and diagnosis to determine appropriate service and to develop a treatment plan for each child; 2) work in behalf of or directly with children and youths in a therapeutic milieu during placement (including provision of group living facilities and the essentials of daily living, such as dental care, and child care supervision); 3) provision of treatment services as needed by each child (social work, psychiatry, psychology, remedial education); 4) work with parents while child is in placement; 5) postplacement activities during readjustment period (Child Welfare League of America, 1981).

Many children entering residential placement and, in particular, those entering residential treatment, present a multiplicity of problems - interpersonal, familial, emotional, and educational. Some commonly observed problems include poorly developed impulse controls, low self-image, poorly developed modulation of emotions, deficiencies in forming relationships, and special learning disabilities.

Group homes - small informal homes located in neighborhoods away from the parent institutions - similarly offer a therapeutic transitional experience in preparing young adolescents and testing their readiness to move successfully back to their own homes and communities. A group home placement is also the planned care for adolescents until they attain the legal status of adulthood in order to meet their continuing need for care and protection, when return to their own family is not possible and

adoption or foster family is not preferred by them or their families (Stone, 1987).

According to the Child Welfare League of America, the function of a group home is to provide care and treatment in an agency-owned or operated facility that assures continuity of care and opportunity for community experiences, in combination with a planned group living program and specialized services, for small groups of children and youths whose parents cannot care for them adequately and who, because of their age, problems, or stage of treatment, can benefit by such a program. Service elements include: 1) exploration to determine appropriate service, development of a plan for services, and preparation for placement; 2) work in behalf of or directly with children and youths during placement (including provision of facilities and the essentials of daily living, such as meals, clothing, arrangements for education, recreation, religion, medical - dental care; child care supervision; social work, psychiatry, psychology; special education, vocational and employment counseling; 3) work with parents while child is in placement; 4) postplacement activities during readjustment period (Child Welfare League of America, 1981).

The number of adolescents in foster care is steadily increasing. This increase is attributable to a greater emphasis on providing placement as the least restrictive alternative for status offenders, an increase in the number of dependent adolescents due to unmarried pregnancy, an increase in the disintegration of the family unit due to a rise in alcohol/drug abuse, a greater emphasis on upholding child abuse/neglect laws, and the larger number of children who simply grew up in the system because no permanent plans were made for them at an earlier age (Stone, 1987).

Normal youngsters, that is those who achieve independence with the help of their own families, encounter certain kinds of problems, and they meet these challenges with resources generated by their own families. State-supervised youth are not so lucky. Their problems are usually

greater, but resources must be generated by the system and the caseworker, and these are minimal in comparison to those available to the normal youth. Normal youngsters also have more time and latitude to make mistakes than state-supervised youth, and usually have more emotional stability and better social skills because of their less disrupted lives (Simonitch, 1983).

In addition, there is some research that suggests that the powerful nature of residential treatment in and of itself may actually be harmful to the disturbed client. Easson (1969) stresses this point, stating that the external structure can counter the healthy adolescent emancipation individualization process, perpetuating emotional dependence and confirming the client's view of himself as "crazy" or "bad". Writers such as Goffman (1961) have also drawn attention to the dangers of institutional life, such as depersonalization and iatrogenic disturbance, where disturbance is an adaptation to the culture of the hospital.

The report "Children in Canada in Residential Care" (1971) states that often there is a lack of continuity of care - for example, a lack of specific discharge planning, and that as a result there is danger that the child will adapt to the needs of the institution while ties to the outside community are allowed to wither. This danger is increased further if the values and expectations of the residential unit deviate dramatically from those of society in general or the client's family in particular (Johnson, 1982).

An additional issue that warrants consideration is the widespread belief concerning the strength and significance of the influence of the peer culture in the socialization of children. According to sociological theory, family and peers are the two primary groups that are responsible for a child's social development in America. Typically, the two primary groups complement each other in socializing children. Parents provide love, security, and indoctrination in social values, while the peer group provides friendship, normalizing and leveling influences and reality-testing experiences. The difficulty arises when parents fail to provide

basic structure and support so that children have to rely primarily on their peers for their upbringing. In most residential treatment centers and group homes, the prevailing practice is to place about 10-15 emotionally disturbed and/or delinquent youths together in a group living unit. Typically, two daytime child care counselors supervise each living unit. In this type of group living environment, youngsters inevitably have much more social interaction with each other than with adults. It is possible that extended exposure to a large number of socially deviant peers could have a detrimental effect on children, particularly on the values and skills that will later be needed when they are preparing for autonomous living (Schaefer, 1980)

A key aspect of residential treatment for children is "Milieu Therapy" which can be defined as a scientific or systematic manipulation of the environment aimed at producing changes in the deviant behavior of patients. A basic difficulty that has been found with the milieu approach is that the peer group subcultures within the total milieu operate to undermine the prosocial values of the treatment staff. Regardless of institutional size, peer group communication patterns have been found to maintain the very attitudes and behaviors that led to institutionalization in the first place. Polsky (1959) and Cohen (1955) have graphically described the inner dynamics of how a delinquent sub-culture functions in a Residential Treatment Center. First, there appears to be a strong, authoritarian power structure with the brighter and stronger youths exploiting and tyrannizing the weaker ones. Status, masculine identification and social acceptance are the rewards for delinquent acts. Antisocial norms and values prevail, i.e., an eye-for-an-eye justice, materialistic values and a "take what you can get away with" orientation, as well as an avoidance of constructive activities or meaningful involvement in schools, girls, jobs, or community. Some believe that hostility is so pervasive in this culture that after a while it becomes an automatic response and is displaced readily upon any available target. Delinquent gang leaders are believed to serve as the chief source of

models for superego or conscience development. These leaders have learned to view social authorities as persecutory and punishing. As a result, the relationship between counselors and children is a deadly game, and the main rule is "beat them or they'll beat you." No one trusts here and everyone is hungry for love, acceptance, and affection. In addition to affect hunger, delinquent children reportedly exhibit a constant stimulus hunger. Turned off to school, reading, and other constructive activities, they attempt to relieve their intense feelings of boredom by the quest for excitement and adventure, usually antisocial in nature. In short, the predominant behavior of delinquent youth has been aptly described as malicious (enjoyment of the discomfort of others), negativistic (defined by its negativistic polarity to society's norms), hedonistic (pursuit of immediate pleasure rather than of rational, long-term goals), and non-utilitarian (no rhyme or reason to much of the behavior). (Schaefer, 1980).

In light of the above findings, it seems reasonable to assume that the peer culture within Residential Treatment Center's and group home environments operates to undermine the milieu therapy approach devised by staff. Indeed, it is quite possible, particularly in those institutions that are primarily custodial in nature, that the children may leave the institution even more delinquent than when they entered. Hence, it is easy to understand how the possible harmful effects of residential treatment could be putting the youths from the foster care system at even a further disadvantage as compared to the adolescents who grow up in "normal" family settings. Although children from "normal" family situations may also encounter powerful negative influences from their peers, they also have the love and support from their families to counteract the possible deleterious effects. Since delinquent children "seek excitement and are turned off to constructive activities", it is reasonable to assume that they are not in active pursuit of developing their independent living skills. Instead, in most cases they are developing attitudes and perceptions that run contrary

to the positive goal-minded and responsible attitudes that are requisite for developing independent living skills. The aforementioned difficulties are much more likely to be observed with state-supervised youth as opposed to with youths who are raised at home with their families within their respective communities.

Following a New York State Court case, *Palmer vs. Cuomo*, in which six plaintiffs between the ages of 18 and 21 who were foster care recipients discharged from care to independent living, and also three recipients currently placed in group homes who expected to be discharged, brought suit claiming lack of supervision of those discharged and lack of provision of discharge for the others, New York State's regulations concerning independent living skills training and preparation have become more stringent and complex. Such Independent Living Skills training programs need accurate assessment tools to measure youths' current fund of independent living skills as well as their progress (Stone, 1987). Such an Independent Living Skills assessment tool would be significant to Independent Living Skills training programs, and group home and residential treatment programs.

Although the aforementioned *Palmer vs. Cuomo* Civil Rights case brought widespread attention to the fact that children who have been raised in the foster care system are becoming numbered among the homeless, mentally unstable, and criminal young adults, additional research projects have highlighted the defects in foster care systems with regard to preparing youths for independent living. Four studies have confirmed what has long been hinted in informal surveys of homeless populations: People formerly in foster care systems are vastly over-represented among the homeless. The studies conducted in different parts of the country found that the percentage ranged from 38 percent in Minneapolis to about 13 percent in rural Ohio. There are now more than 360,000 youths in foster care. Reportedly, about one-third of those are at risk of leading chaotic lives, ranging from homelessness to criminality. (Stone, 1987)

A University of California at Berkeley research project studied 55

people who had left foster care in the San Francisco Bay area in the recent years. Twenty-nine percent reported that they had no home or were moving from week to week, while 39 percent said they sometimes or often had problems with housing. (Stone, 1987)

Festinger (1983) studied case data and interviewed nearly 400 young adults who had been discharged from foster care - both family homes and group settings - in 1975 in New York City. She noted several problems specific to the foster care population. Although the proportion of white males from foster care who were employed did not differ from white males in the general population, proportionately more black males from foster care were unemployed than black males nationally. Those discharged from group care settings fared less well than those discharged from foster family homes. Of those from group settings, 19 percent more young men and nearly 31 percent more women were receiving public assistance than males and females their age in the general population.

In general, those from group care faced greater hurdles than those discharged from foster homes. Festinger's study showed that 32.7 percent of the males and 4.9% of the females had been arrested on charges of having committed a misdemeanor or felony. More of the men who were discharged from group settings (40.7 percent) tended to have been arrested than men discharged from foster homes (28.5 percent), and they had been arrested more frequently. Festinger speculates that "it was more difficult for them to get settled following their discharge from care and they had less economic support to fall back on. Their connections to a family were more tenuous, and more of them may have relied on peers as a central source of social support." (Festinger, 1983). However, there is no evidence that the different settings contributed to antisocial behaviors and the populations in these two settings might have been different to begin with.

According to Rich Gordon, Executive Director of Youth and Family Assistance, a private group in Redwood City, California, that helps youths in need, the vast majority of 18 year-olds are not ready to live on their

own in the best of circumstances (Barden, 1991). He further points that since the youngsters in foster care have never had the kind of childhood that is considered normal, they have not had the opportunity to complete the task of being children, and yet in many states, the system demands they become independent at eighteen. Following the Palmer vs. Cuomo case, the New York State foster care system raised its age limit to 21 in the mid 1980's when advocates for the homeless won the civil lawsuit on behalf of a group of young people who had been discharged from the foster care system on their 18th birthdays and subsequently became homeless. Now, advocacy groups are pushing all states to raise their foster care age limits to 21. Congress last year raised the age limit to 21 on the Federal Foster Care Independent Living Program, a program that helps these youths learn to manage life on their own. The American Civil Liberties Union has begun pressing for expanded independent living plans in lawsuits aimed at forcing states to spend more money to improve their systems. (Barden, 1991).

Given New York State's recent mandates concerning training and assessing the independent living skills of children in placement, mental health professionals will need an expedient, reliable, and valid instrument to facilitate their jobs. Instruments that have been designed to assess individual competence are commonly used in the planning of appropriate educational and therapeutic programs for mentally retarded children. These instruments often measure an individual's adaptive behavior in everyday life situations. For example, the Vineland Social Maturity Scale is a developmental schedule concerned with the individual's ability to look after his or her practical needs and to take responsibility for common daily situations in life (Anastasi, 1982). A newer and more comprehensive instrument is the Adaptive Behavior Scale which measures the effectiveness of an individual in coping with the natural and social demands of his or her environment. Other instruments, such as the Cain-Levine Social Competency Scales (Anastasi, 1982) and the T.M.R. School Competency Scales (Anastasi, 1982), are especially designed

to assess the competency of trainable mentally retarded individuals. While the aforementioned instruments tap into such independent living skills as hygiene, socialization, and economic/shopping skills, these instruments would be inappropriate to use with foster care youth because the scales and instruments were primarily designed for mentally retardates and found to be most useful with these populations. In addition, the aforementioned instruments assess various types of "adaptive behaviors" which are not directly relevant to non-retarded adolescent foster care populations (i.e. language development, motor development, etc.). In much the same way, these instruments do not measure specific domains which are especially relevant to obtaining a comprehensive assessment of an adolescent's independent living skills (job search skills, locating housing skills, etc.) (Anastasi, 1982).

Castellani (1988) examined assessment instruments from 11 different sources which purport to measure independent living skills. The instruments reviewed were typical of those developed by programs in New York and several other states. The major finding of the review was that the scope of available instruments varies considerably. While the broad skills areas assessed tend to be quite similar, some sources provide a single document, while others provide an entire package of forms. The instruments vary primarily in the depth to which they explore life skill areas and in their basic approach or style of assessment. However, they have not been as concerned with the statistical properties of the instrument, but more with the face validity.

The "Life Skills Inventory Report for Youth in Foster Care" is an assessment instrument with a broad approach, focusing on 14 life skill areas (Dorothy Ansell and the Independent Living Skills Center, 1988). This instrument is scored by a checklist approach in which a counselor, caseworker, foster parent, or other caregiver observes and rates an individual youth's skill level. This instrument does not come with an accompanying manual on its statistical properties. Other currently used assessment tools such as the PAYA (Preparing Adolescents for Young

Adulthood) engage the youth in the assessment process and in developing a plan for greater self-sufficiency in 10 life skill areas (Castellani, 1988). However, there is no accompanying manual for this tool as well. Only the "Tests for Everyday Living" has an accompanying manual listing the statistical properties of the assessment tool. All other instruments which were reviewed lacked such a manual.

"Tests for Everyday Living (TEL) was developed by three staff members at the University of Oregon (Halpern, Irvin, and Landman, 1979). TEL is an instrument for measuring achievement in the life skills area, designed to be used at both the junior high and senior high school levels. The life skills measured by TEL are components of both regular and special education curriculums in the areas of career education, consumer economics, and health education. The statistical properties of the TEL listed in the manual include the degree of internal consistency of each item with every other item and within the total test, the point-biserial correlation coefficient for each item with its test, difficulty level of each item - percentage of students answering an item correctly, reliability coefficients, and content validity data. Content validity was used because "TEL is meant to be used as a domain-reference test." The authors suggest that TEL possesses adequate content validity because "content sampling and item selection procedures were clearly specified and defined through exhaustive reviews of the literature relevant to life skills education of adolescents" (Halpern, Irvin and Landman, 1979).

While the coefficient alpha internal consistency reliability estimates are adequate, ranging from .72 to .83, it is cited in the manual that "no content area was eliminated on statistical grounds alone". In addition, the fact that the TEL was standardized on youths from Oregon, California, and Alaska who were not living in foster care, and includes content and subcontent areas that are not directly relevant or useful to youths preparing to leave the foster care system, detracts from its usefulness with N.Y.C. adolescents in the N.Y.S. foster care system. Moreover, the TEL is a multiple choice test and therefore does

not tap into a youth's fund of knowledge of independent living skills in the same manner that the present instrument's blank choice items are capable of doing during an assessment. In other words, the ILSFA is capable of tapping into a wider range of responses.

This study attempted to contribute to the development of a sound instrument by examining the psychometric qualities of The Independent Living Skills Form for Adolescents (ILSFA). The ILSFA (Appendix A) consists of 140 face valid items which have been designed to assess the independent living skills of adolescents 14 years of age and over. The categories assessed by the ILSFA are six of those mandated by New York State (e.g. job search, locating housing/apartments, budgeting of money, shopping, cooking, housecleaning) and an additional miscellaneous category. Although items for the ILSFA were written to reflect six New York State categories, this study explored whether these categories were empirically defensible. This study also explored the concurrent validity of the ILSFA by comparing ILSFA data with ratings of social workers who provided an overall judgement of an adolescent's skills in the six areas.

METHOD

SUBJECTS

The initial proposal of the present study indicated that 100 or more adolescents between the ages of 14 and 20, and who were residing in either a group home or the RTC level of care, would be the subjects under investigation. However, since the results of a power analysis indicated that a subject pool of 200 would be necessary, 210 students were used in the actual study. Due to the fact that some of the subjects did not complete their forms, 16 ILSFA forms were discarded. These 16 subjects did not complete their entire assessment forms for a variety of reasons including 1) an excessive amount of resistance towards being assessed which evolved into a complete or partial refusal to cooperate, 2) obvious cognitive deficits which significantly interfered with the subjects' comprehension of the presented material, or 3) emergency removals from their placement sites due to incarceration, hospitalization, or transfer to a different level of restrictive care.

The population investigated includes 194 N.Y.C. youths, between the ages of 14 and 20, who resided in either group home or Residential Treatment Center settings. The two Child Care Agencies that were used are considered to be typical and representative of New York State foster care agencies. Once a diagnosis and/or court decision has been determined regarding an appropriate level of care, there is a random chance that any given adolescent will be placed with any of the various Child Care Agencies in New York State. The severity of the behavioral/emotional/cognitive problems of residents who live in either group homes or the Residential Treatment Center level of care is not significantly different across agencies or institutions' locality.

Although all of the subjects are N.Y.C. residents, the group home and institutional locations were distributed throughout the New York City/Westchester/Rockland County areas. Only the forms of residents who were between the ages of 14 and 20, and who had demographic data available, were used in the analysis.

The demographic data on the 194 subjects are as follows:

TABLE 1

DEMOGRAPHIC DATA ON SUBJECTS' SEX

	<u>Frequency</u>	<u>Percent</u>
Female	64	33
Male	130	67

Thus, approximately 1/3 of the subjects analyzed in this study were female and 2/3 of the subjects were male.

The demographic data concerning age is as follows:

TABLE 2

DEMOGRAPHIC DATA ON SUBJECTS' AGE

<u>Age</u>	<u>Frequency</u>	<u>Percent</u>
14	83	42.8
15	44	22.7
16	30	15.5
17	18	9.3
18	12	6.2
19	5	2.6
20	2	1.0

The following is a list of the racial/ethnic backgrounds of the subjects under investigation:

TABLE 3

DEMOGRAPHIC DATA ON SUBJECTS' RACE

<u>Race</u>	<u>Frequency</u>	<u>Percent</u>
Black	134	69.1
Hispanic	24	12.4
Puerto Rican	12	6.2
White	7	3.6
X	17	8.8

(The miscellaneous [X] category for ethnic origin includes those subjects of mixed ethnicity or who opted to omit that information from their questionnaire.)

Participants were not evaluated until they had resided at their present placement site for at least six months. This was done to ensure that the subjects' social workers had enough familiarity with the subjects' strengths and weaknesses in order to complete an independent appraisal of their independent living skills in all of the major skill areas. As a result, the collection of data frequently needed to be temporarily suspended whenever there was a high turnover rate with the agency social workers.

The ILSFA was administered in accordance with the agencies' overall independent living skills programs. In much the same way as the residents receive annual psychiatric and bi-annual psychological evaluations, they were not given any options concerning having their independent living skills assessed. However, it should be noted that all children and their legal guardians sign formal consent forms concerning treatment and evaluation procedures during the intake process into their respective agencies. In addition, both agencies involved have organized research committees that approved both the use of this instrument, in addition to the collection of anonymous data for future research purposes. Once the test results were presented in the form of a brief summary of each resident's ILS strengths and weaknesses, identifying material was removed from all of the test data that would be used in future analysis. Thus, this study itself used only the archived data, recorded in such a manner that the subjects could not be identified directly or through identifiers linked to the subjects.

SETTING

The research was conducted at two non-profit child care agencies, at either their group home or residential locations. Both of these agencies have contracts with the City and State of New York to serve non-retarded emotionally disturbed children. Both agencies provide comprehensive

programs to help the child and his/her family or surrogate family define the difficulties they are encountering and restructure their relationships and behavior to enable them to cope more successfully with daily situations. In the cases where re-unification with the family is not a viable solution, both agencies provide comprehensive programs to prepare the adolescents for independent living.

The basic treatment team for each adolescent is composed of the cottage staff, social worker, school staff, psychologist, psychiatrist, recreational staff, nursing/medical staff, ILS counselor, and at times, the parents or another significant family member. Treatment modalities are individualized and eclectic. Various therapies in use are milieu (a planned and semi-structured environment and a group living situation in which the individual's needs can be met), behavioral (based on learning theory and different forms of behavior modification programs), relationship (treatment which is oriented toward fostering a positive relationship between a child and his/her therapist or child care worker), and family (parent education and family counseling).

The actual assessment took place in the clinical/staff offices of the institution or group home settings. The Child Care Worker Forms (Part B) were individually administered by one of the subjects' child care workers in their respective cottage or group home settings.

MATERIALS

The assessment tool was the individually administered Independent Living Skills Form for Adolescents (ILSFA). The ILSFA contains 140 items that are scored dichotomously. Topic areas such as Job Finding and Maintenance, Budgeting, Housing, Shopping, Cooking, Housecleaning, and Community Living were included in the test items, which were designed as face valid items to assess the categories of independent living skills mandated by New York State.

Another form (Appendix B) was used to obtain the social workers' global ratings of all of the subjects' independent living skills in the major topic areas.

Finally, an answer key was developed by the examiner to assist in scoring the first 100 test items (Appendix C). This answer key was used by the examiner after the entire test was administered. Prior to administering the ILSFA with the residents for testing purposes, four social work staff used the answer key to check the inter-rater reliability for scoring. The inter-rate reliability was .95.

Noteworthy is the fact that during the construction of the ILSFA, a professor of education was consulted to ensure that the vocabulary used was on an approximate fourth grade level. In this way, the examiner was confident that the population under investigation could understand all of the inventory's inclusive vocabulary.

PROCEDURE

The investigator of this study administered the first 100 items of the ILSFA to all of the 210 subjects on an individual basis as part of her work duties in the agency. Each subject was informed about his/her scheduled testing session by the respective social worker. Each was told that the ILS assessment was an integral component of the agency's overall Independent Living Skills program. The administration of the ILSFA took approximately 45 minutes to 1 1/2 hours, depending upon the individual subjects' verbal productivity and language processing skills. With few exceptions, the entire ILSFA was administered in one day. However, on a few occasions the ILSFA's administration needed to be distributed across two days. This occurred due to the subjects' conflicting schedules with other agency appointments, subjects' resistance, and subjects' short attention spans. Individual test items were administered verbally to ensure that reading limitations did not affect an individual's score. With the exception of four test items, the examiner wrote down the subjects' verbal responses. The four occasions in which subjects were expected to write their responses include 1) two items that require the subject to match various terms with their respectful definitions, and 2) the two test items in the Budgeting section that focus on checking accounts. With these two latter test items, the subjects' ability to

complete a personal check and checking register is inherent to the subject matter under investigation.

The last forty items of the ILSFA (Part B) were administered individually to the subjects by one of their child care workers. These last forty items were always administered verbally and did not require any written response from the subject. Part II of the ILSFA was consistently administered to the subjects within a one to three week time period following the investigator's administration of Part I. The ILSFA was consistently administered in the same manner to all subjects.

The subjects' social workers were given the Social Worker's Global Rating Scale (Form B) to complete on each individual subject after the investigator administered Part I with a subject. The social workers were asked to return this form as soon as possible. With few exceptions, Form B was returned to the investigator within a one to two week period after Part I of the ILSFA was administered. The social workers were selected to rate the subjects on their global fund of independent living skills because they have historically been responsible for keeping abreast of the development of these skills as part of their job description.

RESULTS

The first data analysis to be presented is the item analysis, which was conducted to shorten the original inventory in an attempt to increase the instrument's validity and reliability. Secondly, the reliability and validity data for the original 140-item assessment tool will be summarized, followed by a more comprehensive description of the psychometric properties of the ILSFA post-item analysis (after the original 140 item test was reduced to 96 test questions). Finally, results from the post-item analysis Factor Analyses that suggest that the ILSFA is best described by a 2-Factor Model will be presented.

ITEM ANALYSIS

In quest of an internally consistent and time efficient instrument, item analysis was performed by studying both the internal consistency and frequencies of correctly answered items. Item analysis makes it possible to shorten a test, and at the same time, to increase its validity and reliability (Anastasi, 1982). Given that the ILSFA's purpose is to ascertain whether an individual youth has adequately mastered a basic fund of knowledge about independent living, it is most beneficial to include the test items that contribute the most information about a youth's performance level. A perusal of the "percentage passing" data revealed that several of the items initially included in the ILSFA were nondiscriminating, and therefore contributed minimal or contradictory/confusing information about an individual's overall independent living skills. For the purpose of the present item analysis, all items that were passed by either 95% or 5% of the subjects examined were omitted. (Appendix D). It is believed that the items in the 95% and 5% passing categories provide little information about individual differences concerning fund of independent living skills. Similarly, it is known that the closer an item approaches 1:00 or 0, the less it affects the variability of test scores and contributes relatively nothing to the reliability or validity of the test (Anastasi, 1982).

Second, for the purposes of this item analysis, items that were passed by either 90% or 10% of the subjects examined were also omitted if their internal consistency data indicated that they contributed relatively nothing to the overall reliability of a particular ILS category (i.e. Job Finding, Budgeting, etc.). This was accomplished by looking at the value of the corrected item - total correlation data and by determining whether the deletion of the particular item would significantly impact upon the overall internal consistency (Kuder-Richardson #20).

Following the aforementioned item analysis based on frequency, 114 of the original 140 items remained in the ILSFA. See Appendix E for a list of test items that either 90% or 10% of the subjects correctly passed. These items' internal consistency data are similarly listed to illustrate how the examiner decided whether or not to delete a particular item. The rule of thumb that the examiner decided upon is that if a particularly test item had a percentage passed frequency of 90% or 10% in addition to a corrected item - total correlation coefficient of less than .30, the item was deleted. On the other hand, items with percentage passed frequencies of 90% or 10%, combined with corrected item - total correlation coefficient of greater than .3, were maintained. As a rule, these corrected item - total correlation coefficients that exceeded .3 also markedly decreased the overall internal consistency coefficient alphas (Kuder-Richardson #20) if deleted. The internal consistency data that were analyzed include the analysis of individual test items into categories.

Hence, according to the second item analysis, 10 more items were deleted. Another 9 items could have been deleted based on their poor discriminatory power alone, but were maintained due to the fact that they contributed to the overall internal consistency of a particular ILS category to a significant degree.

A final item analysis was conducted on the basis of the internal consistency data alone. These data looked at particular test items within ILS categories. Items were deleted on the basis that their item/total

correlation coefficients were so small that their inclusion in the test actually lowered the overall internal consistency of the category under discussion. In other words, the alphas (Kuder-Richardson #20) for a particular ILS category increased when these items were removed. The data are located in Appendix F.

An additional 4 items were deleted from the original instrument because if they had been retained, 4 of the remaining sub-categories would have been dichotomous and therefore inappropriate to be used in subsequent factor analyses. In all four cases, the test items contributed minimally to the overall internal consistency of the ILSFA. (These test items include P3V12, P4V17, P5V10, and P6V15.)

As a result of all 4 methods of item analysis, 50 items were deleted from the original 140 item inventory. Thus, 90 items were retained.

FURTHER ANALYSES CONDUCTED PRE-ITEM ANALYSIS

The next section describes in detail the results of further analyses (e.g. internal consistency and factor analyses) which were conducted after 50 items were removed from the 140 item ILSFA pool. However, in order to allow comparison of how the removal of the items affected the results, analyses were also done with the entire set of 140 items. These results are presented in detail in Appendix G and comparisons of pre and post item analysis results are mentioned in the next section. These results are briefly summarized below.

As previously mentioned, the 140 items of the ILSFA are divided into seven categories, each with 20 items. These categories are Job Finding and Maintenance, Apartment Hunting, Budgeting, Shopping, Miscellaneous, Housecleaning, and Cooking/Care of Food/Nutrition. However, all ILSFA items are scored dichotomously and dichotomous items are inappropriate for the kinds of factor analytic analyses desired. Therefore, the 20 items within each category were further divided a posteriori into subcategories that appeared logically related. This would allow the items within each subcategory to be summed, producing non-dichotomous scores. Thirty-six subcategories were created. The range of items within a sub-category was

2 - 6 but most contained 4 or 5 items. The 36 internal consistency coefficients obtained for these sub-categories were consistency quite low, perhaps because they were of few items per category or perhaps because items were categorized into sub-categories incorrectly. In order to check for this possibility, internal consistency coefficients were done with the 20 items in each general category. The standardized item alphas here ranged from .57 to .91, with four of the seven categories above Nunnally's .70 rule of thumb, suggesting that erroneous a priori distribution of items into sub-categories produced the low internal consistency coefficients of sub-categories.

Internal consistency analysis was also performed on the sub-categories within categories. The number of sub-categories in a category ranged from 4-7 and three of the seven categories had internal consistency coefficients above .70.

Principal Component Analysis was performed in two ways. First, with sub-categories within each category. Four categories had only factor and three categories had two factors, but in these cases the second factor added little variance. A Principal Component Analysis with all 36 sub-categories entered into the analysis revealed 2 factors similar to the two factors which are discussed below.

POST-ITEM ANALYSIS INTERNAL CONSISTENCY ANALYSES

As previously indicated, item analyses reduced the original data set from 140 to 90 items. The internal consistency and factor analyses data should be altered as a result of removing the 50 items. The following analyses were performed post-item analysis.

The following is a post-item analysis representation of the internal consistency of each of the sub-categories. In other words, items within sub-category data are being examined.

TABLE 4POST-ITEM ANALYSIS ITEM WITHIN SUB-CATEGORY INTERNAL CONSISTENCY DATACategory 1 = Job Finding and Maintenance

Sub-Category 1 = Job Application Forms and Procedures for Applying
for a Job Sub-Category =

Items P1V1
P1V2
P1V8
P1V10

Standardized Item Alpha = .49

Sub-Category 2 = Job Interviewing Skills Sub-Category =

Items P1V4
P1V5
P1V6

Standardized Item Alpha = .67

Sub-Category 3 = General Job-Related Knowledge and Terms Sub-
Category =

Items P1V11
P1V13
P1V15
P1V16

Standardized Item Alpha = .51

Sub-Category 4 = Job-Related Behavior Sub-Category =

Items P1V18
P1V20

Standardized Item Alpha = .20

Category 2 = Apartment Hunting and Maintenance

Sub-Category 1 = Procedures for Looking for an Apartment Sub-
Category =

Items P2V3
P2V12

Standardized Item Alpha = .20

Sub-Category 3 = Apartment Related Items Sub-Category =

Items P2V5
P2V10
P2V19

Standardized Item Alpha = .44

Sub-Category 4 = Utility and Protective Agencies Sub-Category =

Items P2V8
P2V18

Standardized Item Alpha = .27

Sub-Category 5 = Apartment Living Sub-Category =

Items P2V13
P2V14

Standardized Item Alpha = .39

Sub-Category 6 = Apartment Maintenance Sub-Category =
Items P2V15
P2V16
P2V17
Standardized Item Alpha = .02

Category 3 = Budgeting

Sub-Category 1 = Checking Accounts Sub-Category =
Items P3V1
P3V2
P3V4
P3V5
Standardized Item Alpha = .54

Sub-Category 2 = Concept of Interest and Savings Accounts Sub-Category =
Items P3V7
P3V8
Standardized Item Alpha = .31

Sub-Category 3 = How to Budget Sub-Category =
Items P3V6
P3V15
P3V16
P3V17
Standardized Item Alpha = .41

Sub-Category 4 = Reading and Understanding Paychecks Sub-Category =
Items P3V9
P3V14
P3V18
P3V19
Standardized Item Alpha = .36

Category 4 = Shopping

Sub-Category 1 = Methods and Implications of Comparative Shopping Sub-Category =
Items P4V4
P4V8
P4V13
P4V16
Standardized Item Alpha = .37

Sub-Category 2 = Warranties and Consumer's Rights Sub-Category =
Items P4V1
P4V19
P4V20
Standardized Item Alpha = .26

Sub-Category 4 = Advertising Ploys Sub-Category =
Items P4V6
P4V14
Standardized Item Alpha = .17

Sub-Category 5 = Consumer Terminology and Knowledge About Bargains
 Sub-Category =
 Items P4V5
 P4V12
 P4V15
 P4V18
 Standardized Item Alpha = .25

Category 5 = Miscellaneous

Sub-Category 1 = Transportation and Car Issues Sub-Category =
 Items P5V2
 P5V3
 Standardized Item Alpha = .31

Sub-Category 2 = Alcohol and Drug Issues Sub-Category =
 Items P5V6
 P5V9
 Standardized Item Alpha = .22

Sub-Category 3 = Knowledge About Mature Adult Behavior
 Sub-Category=
 Items P5V16
 P5V20
 Standardized Item Alpha = .28

Sub-Category 4 = Sex Education Issues Sub-Category =
 Items P5V18
 P5V19
 Standardized Item Alpha = .53

Sub-Category 6 = Negotiating Leisure Activities Sub-Category =
 Items P5V8
 P5V12
 Standardized Item Alpha = .42

Category 6 = Housecleaning

Sub-Category 1 = Fundamentals of Housecleaning Sub-Category =
 Items P6V2
 P6V19
 Standardized Item Alpha = .48

Sub-Category 3 = Household Safety Sub-Category =
 Items P6V7
 P6V8
 P6V17
 P6V20
 Standardized Item Alpha = .72

Sub-Category 4 = Care of Clothing Sub-Category =
 Items P6V9
 P6V10
 P6V11
 P6V13
 P6V14
 Standardized Item Alpha = .73

Category 7 = Cooking/Care of Food/Nutrition

Sub-Category 1 = Nutrition Sub-Category =
 Items P7V1
 P7V2
 P7V3
 P7V4
 Standardized Item Alpha = .83

Sub-Category 2 = How to Cook and Prepare Food Sub-Category =
 Items P7V14
 P7V15
 P7V16
 P7V18
 Standardized Item Alpha = .76

Sub-Category 3 = How to Shop for Food Sub-Category =
 Items P7V5
 P7V6
 P7V7
 P7V8
 P7V9
 Standardized Item Alpha = .79

Sub-Category 4 = Food Storage Sub-Category =
 Items P7V10
 P7V11
 P7V13
 P7V17
 Standardized Item Alpha = .71

With the exception of the "Housecleaning" and "Cooking/Care of Food/Nutrition" sub-categories, the internal consistency coefficients obtained were consistently low. This is believed to be true because 1) several of the subcategories were only comprised of two or three items, and 2) the subcategories were superimposed on the items a posteriori due to the examiner's desire not to do factor analyses with dichotomous items.

A comparison of the internal consistency coefficients of each of the sub-categories will now be made pre and post-item analyses.

TABLE 5

A COMPARISON OF THE INTERNAL CONSISTENCY DATA FOR SUB-CATEGORIES PRE AND POST-ITEM ANALYSIS

<u>Job Finding and Maintenance</u>		
<u>Sub-Categories</u>	<u>Pre-Item Analysis</u>	<u>Post-Item Analysis</u>
1	.48	.49
2	.62	.67
3	.46	.51
4	.13	.20
<u>Apartment Hunting and Maintenance</u>		
<u>Sub-Categories</u>	<u>Pre-Item Analysis</u>	<u>Post-Item Analysis</u>
1	.26	.20
2	.12	Omitted Completely
3	.44	.44
4	.09	.27
5	.39	.39
6	.02	.02
<u>Budgeting</u>		
<u>Sub-Categories</u>	<u>Pre-Item Analysis</u>	<u>Post-Item Analysis</u>
1	.53	.54
2	.44	.31
3	.41	.41
4	.36	.36
5	.02	Omitted Completely
<u>Shopping</u>		
<u>Sub-Categories</u>	<u>Pre-Item Analysis</u>	<u>Post-Item Analysis</u>
1	.35	.37
2	.36	.26
3	.02	Omitted Completely
4	.04	.17
5	.36	.25
<u>Miscellaneous</u>		
<u>Sub-Categories</u>	<u>Pre-Item Analysis</u>	<u>Post-Item Analysis</u>
1	.31	.31
2	.22	.22
3	.37	.28
4	.53	.53
5	.14	Omitted Completely
6	.40	.42
7	.10	Omitted Completely

Housecleaning

<u>Sub-Categories</u>	<u>Pre-Item Analysis</u>	<u>Post-Item Analysis</u>
1	.66	.48
2	-.07	Omitted Completely
3	.72	.72
4	.73	.73
5	.26	Omitted Completely

Cooking/Care of Food/Nutrition

<u>Sub-Categories</u>	<u>Pre-Item Analysis</u>	<u>Post-Item Analysis</u>
1	.83	.83
2	.71	.76
3	.79	.79
4	.78	.71

Generally, the item analysis, which resulted in 50 items being omitted from the ILSFA, did not result in any significant changes with regard to the sub-categories' Internal Consistency data.

The next internal consistency data to be re-examined following the item analyses, and the concomitant deletion of the 50 less discriminating test items, is the sub-category within category internal consistency analysis. In other words, the degree to which sub-categories in particular categories hang together will be investigated. The data is as follows:

TABLE 6POST-ITEM ANALYSIS SUB-CATEGORY WITHIN CATEGORY INTERNAL CONSISTENCY DATAJob Finding and Maintenance

<u>Sub-Categories</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
1	.60	.42
2	.35	.62
3	.50	.52
4	.33	.64

Standardized Item Alpha = .64

Apartment Hunting and Maintenance

<u>Sub-Categories</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
1	.35	.54
3	.38	.52
4	.37	.51
5	.31	.55
6	.34	.53

Sub-Category #2 was omitted.

Standardized Item Alpha = .60

Budgeting

<u>Sub-Categories</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
1	.45	.57
2	.42	.60
3	.46	.54
4	.42	.57

Sub-Category #5 was omitted.

Standardized Item Alpha = .66

Shopping

<u>Sub-Categories</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
1	.36	.33
2	.32	.38
4	.23	.45
5	.23	.46

Sub-Category #3 was omitted.

Standardized Item Alpha = .48

Miscellaneous

<u>Sub-Categories</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
1	.20	.60
2	.32	.54
3	.44	.49
4	.37	.52
6	.42	.49

Sub-Category #5 and #7 were omitted.

Standardized Item Alpha = .59

Housecleaning

<u>Sub-Categories</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
1	.63	.63
3	.50	.70
4	.60	.53

Sub-Category #2 and #5 were omitted.

Standardized Item Alpha = .76

Cooking/Care of Food/Nutrition

<u>Sub-Categories</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
1	.70	.81
2	.78	.78
3	.77	.79
4	.65	.85

Standardized Item Alpha = .87

The sub-category within category internal consistency data revealed that two of the seven categories had internal consistency coefficients above .70. They include the "Housecleaning" and "Cooking/Care of Food/Nutrition" categories.

The final internal consistency data that will be examined will be the item within category reliability. In other words, the degree to which all of the items within each category hang together will be investigated. The data is as follows:

TABLE 7

POST-ITEM ANALYSIS ITEM WITHIN CATEGORY INTERNAL CONSISTENCY DATA

Job Finding and Maintenance

<u>Sub-Item</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
P1V1	.21	.72
P1V2	.42	.69
P1V3 Omitted		
P1V4	.35	.70
P1V5	.29	.71
P1V6	.37	.70
P1V7 Omitted		
P1V8	.40	.70
P1V9 Omitted		
P1V10	.52	.68
P1V11	.38	.70
P1V12 Omitted		

<u>Sub-Item</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
P1V13	.34	.70
P1V14 Omitted		
P1V15	.41	.69
P1V16	.31	.71
P1V17 Omitted		
P1V18	.21	.72
P1V19 Omitted		
P1V20	.30	.71

Standardized Item Alpha = .73

Apartment Hunting/Maintenance

<u>Sub-Item</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
P2V1 Omitted		
P2V2 Omitted		
P2V3	.36	.57
P2V4 Omitted		
P2V5	.35	.57
P2V6 Omitted		
P2V7 Omitted		
P2V8	.22	.60
P2V9 Omitted		
P2V10	.26	.59
P2V11 Omitted		
P2V12	.18	.60
P2V13	.31	.58
P2V14	.22	.60
P2V15	.14	.61
P2V16	.23	.60
P2V17	.19	.60
P2V18	.39	.56
P2V19	.34	.57
P2V20 Omitted		

Standardized Item Alpha = .62

Budgeting

<u>Sub-Item</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
P3V1	.42	.66
P3V2	.29	.68
P3V3 Omitted		
P3V4	.41	.66
P3V5	.29	.68
P3V6	.34	.67
P3V7	.18	.69
P3V8	.45	.66
P3V9	.29	.68
P3V10 Omitted		
P3V11 Omitted		
P3V12 Omitted		
P3V13 Omitted		
P3V14	.38	.67
P3V15	.20	.69
P3V16	.26	.68
P3V17	.39	.67
P3V18	.22	.69

<u>Sub-Item</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
P3V19	.19	.69
P3V20 Omitted		

Standardized Item Alpha = .69

<u>Shopping</u>		
<u>Sub-Item</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
P4V1	.37	.47
P4V2 Omitted		
P4V3 Omitted		
P4V4	.23	.50
P4V5	.25	.50
P4V6	.17	.52
P4V7 Omitted		
P4V8	.30	.49
P4V9 Omitted		
P4V10 Omitted		
P4V11 Omitted		
P4V12	.17	.52
P4V13	.25	.50
P4V14	.20	.51
P4V15	.21	.51
P4V16	.21	.51
P4V17 Omitted		
P4V18	.02	.56
P4V19	.02	.55
P4V20	.27	.50

Standardized Item Alpha = .53

<u>Miscellaneous</u>		
<u>Sub-Item</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
P5V1 Omitted		
P5V2	.25	.61
P5V3	.11	.64
P5V4 Omitted		
P5V5 Omitted		
P5V6	.26	.62
P5V7 Omitted		
P5V8	.39	.58
P5V9	.25	.61
P5V10 Omitted		
P5V11 Omitted		
P5V12	.33	.60
P5V13 Omitted		
P5V14 Omitted		
P5V15 Omitted		
P5V16	.32	.60
P5V17 Omitted		
P5V18	.39	.58
P5V19	.35	.69
P5V20	.41	.60

Standardized Item Alpha = .64

Housecleaning

<u>Sub-Item</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
P6V1 Omitted		
P6V2	.54	.79
P6V3 Omitted		
P6V4 Omitted		
P6V5 Omitted		
P6V6 Omitted		
P6V7	.40	.81
P6V8	.50	.80
P6V9	.59	.79
P6V10	.53	.80
P6V11	.36	.81
P6V12 Omitted		
P6V13	.52	.80
P6V14	.41	.81
P6V15 Omitted		
P6V16 Omitted		
P6V17	.62	.79
P6V18 Omitted		
P6V19	.49	.80
P6V20	.41	.81

Standardized Item Alpha = .82

Cooking/Care of Food/Nutrition

<u>Sub-Item</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
P7V1	.60	.91
P7V2	.66	.90
P7V3	.61	.90
P7V4	.67	.90
P7V5	.64	.90
P7V6	.64	.90
P7V7	.62	.90
P7V8	.54	.91
P7V9	.56	.91
P7V10	.49	.91
P7V11	.44	.91
P7V12 Omitted		
P7V13	.56	.91
P7V14	.41	.91
P7V15	.69	.90
P7V16	.75	.90
P7V17	.49	.91
P7V18	.58	.91
P7V19 Omitted		
P7V20 Omitted		

Standardized Item Alpha = .91

The item with category internal consistency data revealed that three of the seven categories had internal consistency coefficients above .70. This suggests that erroneous a priori distribution of items into sub-

categories produced the low internal consistency coefficients of sub-categories.

It should be noted that the reason why the internal consistency coefficients data improve as we examine larger quantities of variables is that correlation coefficients always tend to increase as the number of items increase. Thus, as we move from examining items within sub-categories, to sub-categories within categories, to items within categories, the correlation coefficients, and corresponding alphas, progressively increase.

For the purpose of examining how the standardized item alphas improved as the number of variables increased and less discriminating items were removed, we will look at both the items within categories and sub-categories within categories data, both pre-and-post item analysis. Again, according to Nunnally's rule of thumb, standardized item alphas that are .70 or above will be considered significant for the purpose of this study.

TABLE 8

A COMPARISON OF INTERNAL CONSISTENCY COEFFICIENTS PRE AND POST-ITEM ANALYSIS

<u>Job Finding and Maintenance</u>		
* = Significant Alpha According to Nunnally		
<u>Pre-Item Analysis</u>		<u>Post Item Analysis</u>
		<u>7 Items Removed</u>
Sub-Categories 1-4	.66	.64
Items P1V1 - P1V20	.72*	.73*
<u>Apartment Hunting and Maintenance</u>		
<u>Pre-Item Analysis</u>		<u>Post Item Analysis</u>
		<u>8 Items Removed</u>
Sub-Categories 1-6	.56	.60
Items P2V1-P2V20	.57	.62

Budgeting

<u>Pre-Item Analysis</u>		<u>Post Item Analysis</u>
		<u>6 Items Removed</u>
Sub-Categories 1-5	.73*	.66
P3V1-P3V20	.73*	.69

Shopping

<u>Pre-Item Analysis</u>		<u>Post Item Analysis</u>
		<u>7 Items Removed</u>
Sub-Categories 1-5	.52	.48
Items P4V1-P4V20	.59	.53

Miscellaneous

<u>Pre-Item Analysis</u>		<u>Post Item Analysis</u>
		<u>10 Items Removed</u>
Sub-Categories 1-7	.61	.59
Items P5V1-P5V20	.67	.64

Housecleaning

<u>Pre-Item Analysis</u>		<u>Post Item Analysis</u>
		<u>9 Items Removed</u>
Sub-Categories 1-5	.85*	.76*
Items P6V1-P6V20	.84*	.82*

Cooking/Care of Food/Nutrition

<u>Pre-Item Analysis</u>		<u>Post Item Analysis</u>
		<u>3 Items Removed</u>
Sub-Categories 1-4	.86*	.87*
Items P7V1 - P7V20	.91*	.91*

When looking at the item within category internal consistency data, we find that 3 of the 7 categories are homogeneous at a significant level according to Nunnally's .70 rule of thumb. Although removing less discriminating items improved the alphas in some cases, the item analysis did not cause any category to be homogeneous that was not homogeneous before the item analysis was performed.

POST-ITEM ANALYSIS FACTOR ANALYSIS DATA

The factor analysis data also changed once the item analysis was performed. Although it is more difficult to interpret, the first factor analysis data to be examined is the Principal Component Analysis on the remaining 29 sub-categories that contain 90 test items. The first analysis that will be presented is the overall factor analysis that extracted factors until all of the variance was used up.

TABLE 9POST-ITEM ANALYSIS PCA

<u>Factor Analysis/Post-Item Analysis</u>			
<u>Category</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
1	7.01	24.2	24.2
2	3.83	13.2	37.4
3	1.38	4.8	42.1
4	1.36	4.7	46.8
5	1.16	4.0	50.8
6	1.14	3.9	54.7
7	1.03	3.6	58.3
8	.95	3.3	61.6
9	.91	3.1	64.7
10	.88	3.0	67.7
11	.83	2.8	70.6
12	.81	2.8	73.4
13	.75	2.6	76.0

As mentioned above, Table 9 depicts an overall factor analysis that extracted factors until the cumulative percent of variance used up equaled 100%. Since the percent of variance explained by factors became ridiculously small as the number of factors extracted increased, only 13 factors are actually represented in Table 9.

If the eigenvalue method is applied to the data, 7 components can be extracted. However, the eigenvalue method is not the preferred method due to the fact that this method often extracts individual factors or components that are not real. In other words, the eigenvalue rule tends to extract factors that do not account for much of the total variance. The a priori method and scree methods being used in this study concur. Thus, we will now examine the data with 7 components extracted once the matrix is rotated, using oblimin oblique rotation. As can be seen, once

the data are rotated, only the first 2 factors can be assumed to be real.

TABLE 10

EIGENVALUE LISTING WITH 7 FACTORS EXTRACTED

<u>Communality</u>	<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
.68	1	7.01	24.2	24.2
.53	2	3.83	13.2	37.4
.57	3	1.38	4.8	42.1
.54	4	1.36	4.7	46.8
.57	5	1.16	4.0	50.8
.48	6	1.14	3.9	54.7
.35	7	1.03	3.6	58.3

The following information includes (1) the scree chart of the Post-Item Analysis Factor Analysis and (2) the rotated structure matrix with 7 factors extracted.

Figure 1

Post-item Factor Analysis
Scree Chart

TABLE 11VARIMAX ROTATED STRUCTURE MATRIX WITH 7 FACTORS EXTRACTED

<u>SUB-CATEGORY</u>	<u>FACTOR 1</u>	<u>FACTOR 2</u>	<u>FACTOR 3</u>	<u>FACTOR 4</u>	<u>FACTOR 5</u>	<u>FACTOR 6</u>	<u>FACTOR 7</u>
P1C3	.74		.22				-.32
P3C1	.72		.40	.36			-.31
P1C1	.71		.36	.44		.35	-.44
P3C3	.67		.32	.27		.27	-.21
P2C3	.66	.22		.23		.24	
P3C4	.60			.31			-.39
P4C2	.57		.29	.29			-.26
P4C5	.57	.21	.21		.33		
P2C4	.42			.35		.38	-.21
P7C2	.22	.85					
P7C3		.84					
P7C1		.81					
P7C4		.80				.27	
P6C4	.23	.78				.28	
P6C3		.76		.22			-.28
P6C1		.71				.43	
P4C1	.35		.71				
P4C4			.68		.30		
P2C5	.32		.55		-.23	.21	-.35
P1C4	.43		.45	.26		-.32	
P5C3	.21		.20	.72	.20		-.34
P5C2	.37			.71			
P5C6	.33		.37	.50	.49		-.23
P5C1	.20				.80		
P2C6	.30	.27	.27			.63	-.31
P5C4	.34	.23	.21	.48		.52	
P2C1	.32					.23	-.73
P1C2	.23		.27	.35			-.68
P3C2	.40					.45	-.52

As can be seen from Table 11, the varimax rotated structure matrix with 7 factors extracted generated a complex factor matrix where several of the subcategories have moderately high factor loadings on more than one factor. In addition, bipolar factors were generated, indicating that factors exist with substantial positive and negative loadings. Thus, it appears that the varimax rotation was unable to produce a factor matrix where the principles of simple structure were followed. This is particularly evident by examining subcategories P2C4, P1C4, P5C6, and P3C2. All of these subcategories (variables) load moderately high on three or four factors. In fact, the latter two contain moderately high negative loadings on at least one factor as well.

POST-ITEM ANALYSIS PCA WITH 2 FACTORS EXTRACTED

Due to the fact that the previous PCA data strongly suggest that only two real factors can be extracted, the following PCA analysis will examine the 29 sub-categories post-item analysis with two factors

extracted. As can be seen from the following table, 37.4% of the variance can be accounted for by the two extracted factors.

TABLE 12

POST-ITEM ANALYSIS EIGENVALUE TABLE WITH 2 FACTORS EXTRACTED

<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
1	7.01	24.2	24.2
2	3.83	13.2	37.4

The following table (Table 13) is the rotated factor matrix. As can be seen, the Varimax rotation produced a much clearer definition of variables in terms of the two factors. As shown, several of the ILSFA's items are quite "pure" in terms of loading high on one factor, but not the other.

TABLE 13

VARIMAX ROTATED FACTOR MATRIX WITH 2 FACTORS EXTRACTED

<u>SUB-CATEGORIES</u>	<u>FACTOR 1</u>	<u>FACTOR 2</u>
P1C1 = Job Application Forms and Procedures for Applying to a Job	.81	.12
P3C1 = Checking Accounts	.70	.04
P1C3 = General Job-Related Knowledge and Terms	.66	.06
P3C3 = How to Budget	.66	.14
P4C2 = Warranties and Consumer's Rights	.61	-.08
P3C4 = Reading and Understanding Paychecks	.56	.06
P2C3 = Apartment Related Items	.56	.18
P5C6 = Negotiating Leisure Activities	.53	.07
P2C4 = Utility and Protective Agencies	.51	.01
P5C4 = Sex Education Issues	.50	.22
P1C2 = Job Interviewing Skills	.50	.08
P2C1 = Procedures for Looking for an Apartment	.48	.11
P3C2 = Concept of Interest and Savings Accounts	.47	.12
P5C3 = Knowledge About Mature Adult Behavior	.47	.05
P4C5 = Consumer Terminology and Knowledge About Bargains	.46	.18
P5C2 = Alcohol and Drug Issues	.46	.01
P4C1 = Methods and Implications of Comparative Shopping	.45	.14
P1C4 = Job-Related Behavior	.44	-.02
P2C5 = Apartment Living	.42	.14
P2C6 = Apartment Maintenance	.41	.28
P4C4 = Advertising Ploys	.32	-.09
P5C1 = Transportation and Car Issues	.27	.01
P7C2 = How to Cook and Prepare Food	.11	.85
P7C4 = Food Storage	-.02	.82
P7C3 = How to Shop for Food	.06	.82
P6C4 = Care of Clothing	.13	.79
P7C1 = Nutrition	.13	.78
P6C1 = Fundamentals of Housecleaning	.05	.74
P6C3 = Household Safety	.13	.73

Whereas orthogonal rotations maintain the independence of factors; that is the angles between the axes are kept at 90 degrees, rotations in which the factor axes are allowed to form acute or obtuse angles are called oblique. Thus, orthogonal rotations assume that factors are uncorrelated, while obliqueness means that factors are correlated. According to Kerlinger, "there is no doubt that factor structures can be better fitted with oblique axes and the simple structured criteria better satisfied. (Kerlinger, 1973)

Thus, an oblique rotation was also performed on the post-item analysis data with two factors extracted. The delta value for direct oblimin rotation was set at zero. Table 14 depicts the factor loadings.

TABLE 14

STRUCTURE MATRIX OF FACTORS WITH OBLIQUE ROTATION

<u>SUB-CATEGORIES</u>	<u>FACTOR 1</u>	<u>FACTOR 2</u>
P1C1 = Job Application Forms and Procedures for Applying to a Job	.82	.20
P3C1 = Checking Accounts	.70	.10
P3C3 = How to Budget	.67	.20
P1C3 = General Job-Related Knowledge and Terms	.66	.12
P4C2 = Warranties and Consumer's Rights	.59	-.03
P2C3 = Apartment and Related Items	.57	.23
P3C4 = Reading and Understanding Paychecks	.56	.11
P5C6 = Negotiating Leisure Activities	.54	.12
P5C4 = Sex Education Issues	.52	.27
P2C4 = Utility and Protective Agencies	.50	.05
P1C2 = Job Interviewing Skills	.50	.13
P2C1 = Procedures for Looking for an Apartment	.49	.15
P3C2 = Concept of Interest and Savings Accounts	.48	.17
P4C5 = Consumer Terminology and Knowledge About Bargains	.48	.22
P5C3 = Knowledge About Mature Adult Behavior	.47	.09
P4C1 = Methods and Implications of Comparison Shopping	.46	.18
P5C2 = Alcohol and Drug Issues	.46	.05
P2C6 = Apartment Maintenance	.44	.32
P2C5 = Apartment Living	.44	.18
P1C4 = Job-Related Behavior	.43	.02
P4C4 = Advertising Ploys	.30	-.06
P5C1 = Transportation and Car Issues	.27	.03
P7C2 = How to Cook and Prepare Food	.21	.85
P7C3 = How to Shop for Food	.16	.82
P7C4 = Food Storage	.08	.82
P6C4 = Care of Clothing	.23	.80
P7C1 = Nutrition	.23	.79
P6C1 = Fundamentals of Housecleaning	.14	.74
P6C3 = Household Safety	.22	.74

Since the data output from the orthogonal and oblique rotations do not significantly differ, and since oblique rotation is viewed as the preferred method, we will examine the oblique rotation data in terms of the factor loadings.

According to Kerlinger, there is no generally accepted standard rule of factor loadings. A crude rule of thumb is to use the standard error of r - or, easier, to find the r that is significant for the N of the study. For example, with $N = 200$ an r of about .18 is statistically significant at the .01 level. Some factor analysis in some studies do not bother with factor loadings less than .30, or even .40. Others do. Given the fact that the present analyses are exploratory in nature, the researcher has established the following criteria to differentiate between strong, moderate, and weak factors. (Kerlinger, 1973)

Factor loadings .6 and higher = Strong

Factor loadings from .4 - .59 = Moderate

Factor loadings .39 and lower = Weak

The following table (Table 15) will examine the sums of squares of the factor loadings, in addition to the common factor variance of the ILSFA. The entries in the last column are called communalities, or h^2 's. They are the sums of squares of the factor loadings of a test or variable. From the sums of squares of the factor loadings, it will be determined whether the components have strong, moderate, or weak factor loadings. The aforementioned determination will be made by rounding off the square factor loadings to two decimals.

TABLE 15

COMMUNALITIES ON FACTOR LOADINGS DATA

<u>ILSFA Sub-Category</u>	<u>Factor 1</u>	<u>Factor 2</u>	<u>h^2</u>
P1C1 Strong	.67	.04	.71
P3C1 Moderate	.49	.01	.50
P3C3 Moderate	.45	.04	.48
P1C3 Moderate	.44	.01	.45
P4C2 Weak	.35	.00	.35
P2C3 Weak	.33	.05	.38
P3C4 Weak	.32	.01	.33
P5C6 Weak	.29	.01	.30
P5C4 Weak	.27	.07	.34

<u>ILSFA Sub-Category</u>	<u>Factor 1</u>	<u>Factor 2</u>	<u>h²</u>
P2C4 Weak	.25	.00	.26
P1C2 Weak	.25	.02	.27
P2C1 Weak	.24	.02	.26
P3C2 Weak	.23	.03	.26
P4C5 Weak	.23	.05	.28
P5C3 Weak	.22	.01	.23
P4C1 Weak	.21	.03	.25
P5C2 Weak	.21	.00	.22
P2C6 Weak	.19	.10	.28
P2C5 Weak	.19	.03	.22
P1C4 Weak	.19	.00	.19
P4C4 Weak	.09	.00	.10
P5C1 Weak	.07	.00	.07
P7C2 Strong	.04	.73	.77
P7C3 Strong	.03	.67	.70
P7C4 Strong	.01	.67	.68
P6C4 Strong	.05	.63	.68
P7C1 Strong	.05	.62	.67
P6C1 Moderate	.02	.55	.57
P6C3 Moderate	.05	.55	.59

For the purpose of this study, only sub-categories that had strong or moderate factor loadings will be considered as psychometrically sound. The ILSFA has 11 sub-categories that fall into this category. For example, subcategories in Factor 1 include Job Application Forms and Procedures for Applying to a Job, General Job-Related Knowledge and Terms, Checking Accounts, and How to Budget. Factor 2 includes Nutrition, How to Cook and Prepare Food, How to Shop for Food, Food Storage, Fundamentals of Housecleaning, Household Safety, and Care of Clothing.

Inspection of the data also reveals that 18 of the 29 subcategories did not load high on either of the constructs.

Another factor analysis to be investigated is the Principal Component Analysis performed with the sub-categories in each category following the item analysis.

TABLE 16

PCA PERFORMED POST-ITEM ANALYSIS WITH EACH CATEGORY

Job Finding and Maintenance Sub-Categories 1-4:				
<u>Communality</u>	<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
1.00	1	1.96	49.0	49.0
1.00	2	.86	21.4	70.4
1.00	3	.74	18.4	88.8
1.00	4	.45	11.2	100.0

There is one component extracted from this category. The final

statistics after the varimax rotation and principal components extracted are as follows:

<u>Communality</u>	<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
.70	1	1.96	49.0	49.0
.37				
.56				
.33				

Apartment Hunting and Maintenance Sub-Categories 1,3,4,5, and 6:

<u>Communality</u>	<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
1.00	1	1.91	38.3	38.3
1.00	2	.84	16.8	55.1
1.00	3	.80	16.0	71.0
1.00	4	.77	15.3	86.4
1.00	5	.68	13.6	100.0

There is one component extracted from this category. The final statistics following the rotation and principal components extracted are:

<u>Communality</u>	<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
.38	1	1.91	38.3	38.3
.42				
.41				
.32				
.37				

Budgeting Sub-Categories 1-4:

<u>Communality</u>	<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
1.00	1	1.98	49.6	49.6
1.00	2	.77	19.1	68.7
1.00	3	.66	16.4	85.1
1.00	4	.59	14.9	100.0

Again, there is one component extracted. The final statistics following the varimax rotation and principal components extracted are:

<u>Communality</u>	<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
.49		1.98	49.6	49.6
.47				
.52				
.49				

Shopping Sub-Categories 1,2,4, and 5:

<u>Communality</u>	<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
1.00	1	1.58	39.5	39.5
1.00	2	.97	24.2	63.6
1.00	3	.77	19.1	82.8
1.00	4	.69	17.2	100.0

Here, there is 1 component extracted. The final statistics following the varimax rotation and principal components extracted are:

<u>Communality</u>	<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
.53	1	1.58	39.5	39.5
.45				
.31				
.29				

Miscellaneous Sub-Categories 1,2,3,4, and 6

<u>Communality</u>	<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
1.00	1	1.94	38.9	38.9
1.00	2	1.00	20.1	58.9
1.00	3	.74	14.9	73.8
1.00	4	.67	13.4	87.2
1.00	5	.64	12.8	100.0

In this case, there are two components extracted. However, since the second component rounded off to the tenth decimal is just one, it is suggested that there is only one component operating in this category. The final statistics following the varimax rotation and principal components extracted are:

<u>Communality</u>	<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
.84	1	1.94	38.9	38.9
.59	2	1.00	20.1	58.9
.55				
.43				
.53				

Housecleaning Sub-Categories 1,3, and 4:

<u>Communality</u>	<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
1.00	1	2.03	67.8	67.8
1.00	2	.60	20.2	87.9
1.00	3	.36	12.1	100.0

Here, there is 1 component extracted. The final statistics following the varimax rotation and principal components extracted are:

<u>Communality</u>	<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
.73	1	2.03	67.8	67.8
.56				
.74				

Cooking/Care of Food/Nutrition Sub-Categories 1-4

<u>Communality</u>	<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
1.00	1	2.88	71.9	71.9
1.00	2	.52	13.0	85.0
1.00	3	.33	8.2	93.2
1.00	4	.27	6.8	100.0

Again, there is 1 component extracted. In this case the final statistics following the varimax rotation and principal components extracted are:

<u>Communality</u>	<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
.68	1	2.87	71.9	71.9
.76				
.64				

Overall, 6 out of the 7 categories seem to be homogeneous. However, in the case where there is two factors, the second factor has an eigenvalue that is nearly at the value of one. Thus, the data suggests that all of the ILSFA's categories are basically measuring one distinct area.

A comparison of each of the ILSFA's categories' factor analyses will be investigated to see if the item analysis improved the homogeneity of each of the categories under question. The final statistics for both the pre-and-post item analyses data will be presented.

TABLE 17

A COMPARISON OF EACH OF THE ILSFA's PCA FACTOR ANALYSES

	<u>Job Finding Category</u>	<u>Apartment Hunting</u>
	1 Factor	2 Factors
Pre -	2.02 Eigenvalue	1.96 1.02 = Eigenvalue
	1 Factor	1 Factor
Post -	1.96 Eigenvalue	1.91 Eigenvalue
	<u>Budgeting</u>	<u>Shopping</u>
	1 Factor	2 Factors
Pre -	2.39 Eigenvalue	1.75 1.02 = Eigenvalue
	1 Factor	1 Factor
Post -	1.98 Eigenvalue	1.58 = Eigenvalue
	<u>Miscellaneous</u>	<u>Housecleaning</u>
	2 Factors	1 Factor
Pre -	2.19 1.09 = Eigenvalue	3.17 = Eigenvalue
	2 Factors	1 Factor
Post -	1.94 1.00 = Eigenvalue	2.03 = Eigenvalue

	<u>Cooking/Care of Food/Nutrition</u>
Pre -	1 Factor
	2.85 Eigenvalue
<hr/>	
Post -	1 Factor
	2.87 Eigenvalue

The final data to be examined following the item analysis are the social worker reliability data. As previously indicated, social workers were asked to rate each subject in terms of their abilities on a Likert-type Scale in 6 of the categories of independent living. (The Miscellaneous Category was not rated.) These ratings were then correlated with the subject's performance in each of the post-item analysis remaining 29 sub-categories. The correlations are as follows:

TABLE 18

POST-ITEM ANALYSIS EXAMINATION OF SOCIAL WORKER RELIABILITY DATA

	SW1	SW2	SW3	SW4	SW5	SW6
Job Finding	.25**					
Apartment Hunting		.15				
Budgeting			.19*			
Shopping				.01		
Housecleaning					.14	
Cooking						.18*
1-Tailed Signif: $p \leq .01$	$p^{**} \leq .001$					

Here we find that in 3 out of the 6 categories, Social Worker correlations reached a statistically significant level. While these correlations were significant in the Apartment Hunting and Maintenance Category prior to the item analyses, this category did not reach a level of significance post-item analyses. All of the other categories are quite similar pre- and post-item analysis. Thus, post-item analyses, we seem to find concurrent validity in the areas of Job Finding, Budgeting, and Cooking; whereas, we found concurrent reliability in the categories of Job Finding, Apartment Hunting, Budgeting, and Cooking during the analyses of the original 140 test items. Social workers ratings did not concur with subjects' performance in the Shopping and Housecleaning areas to a

significant degree with either the pre or post-analyses.

DISCUSSION

As previously indicated, recent humanistic, political, and financial interest in the fate of children who grow up in the foster care system, has resulted in several significant changes in the laws and guidelines that dictate how agencies that are responsible for state supervised youth have to run their programs. More specifically, New York State currently mandates that every adolescent 14 years of age and over must be provided with structured training and periodic assessment in independent living. Although these regulations have been in existence over the last five years, up to the present time, agencies have been choosing assessment instruments in a haphazard, random manner, with little thought given to the psychometric properties of the instruments they have chosen to employ.

The Independent Living Skills Form for Adolescents (ILSFA) was specifically designed to assess the independent living skills of adolescents in placement and this study, to the investigator's knowledge, is the first to conduct extensive psychometric examination on such an instrument. The results of all of the statistics and other analyses performed on the data contribute a great fund of information about the instrument's methodological characteristics and practical usefulness as an instrument to be used in the future with adolescents in placement.

At the broadest level, this study challenges the seven category approach established by New York State as representing independent living skills. While the ILSFA's test items were constructed based on an intuitive face validity according to this 7 factor model, the factor analyses performed failed to confirm such a model. Instead, the exploratory PCA Factor Analysis suggests a 2 - Factor Model. Although an inspection of the data reveals that only 1/3 of the ILSFA's variance is accounted for by the two factors, it is simultaneously evident that these two factors are "real" and account for practically all of the explained variance, although this was not very much.

An examination of the factor loadings data reveals some very useful pragmatic information about the underlying constructs of these two

factors. All of the subcategories that load heavily on Component 1 are directly related to independent living skills that involve an individual's interaction with the community. On the other hand, Component 2 contains items that are directly related to domestic types of independent living skills. This latter construct is very much akin to what the literature has been referring to as "Daily Living Skills" for years. It is possible that a 2-Factor Model also exists because what is really being tapped into are two different forms of skills. These include 1) pragmatic, performance type of skills, and 2) more conceptual thinking operations. In other words, while domestic-related skills tend to be more straightforward, pragmatic, and dependent upon gross motor coordination and learning through observation and practice, community-related skills tend to be more abstract, complex, people-oriented, and learned via a more multimodal approach to instruction. Thus, it appears that the didactic skills could be presented from a concrete didactic approach, while the community-related skills would need to be presented over a longer period of time, and in such a manner, that the new abstract material could be understood. It would be interesting to pursue this hypothesis with future research that compares I.Q. with scores earned on each of the components of the ILSFA.

The two factor ILSFA model that emerged contains information from 4 out of the 7 of the original New York State categories. The following is a list of the categories or topics (according to their face validity) in terms of the construct the data suggests that they fall under.

TABLE 19

CONSTRUCTS OF THE ILSFA

Component 1 = Community-Related
Independent Living Skills

Job Finding and Maintenance Items
Budgeting Items

Component 2 = Domestic-Related
Independent Living Skills

Housecleaning Items
Cooking/Care of Food/Nutrition Items

The eleven subcategories which represent these four general categories contain the final forty-four items which will comprise the

revised ILSFA. The items are presented in Table 20.

TABLE 20

THE REVISED ILSFA ACCORDING TO THE 2 - FACTOR MODEL

(Refer to Appendix A to see which test questions will be used in the revised version.)

The Revised ILSFA

Community-Related Independent Living Skills

Job Finding Original Test Items #1, 2, 8, 10, 11, 13, 15, and 16

Budgeting Original Test Items #1, 2, 4, 5, 6, 15, 16, and 17

Domestic-Related Independent Living Skills

Housecleaning Original Test Items #2, 7, 8, 9, 10, 11, 13, 14, 17, 19, and 20

Cooking/Care of Food/Nutrition Original Test Items #1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, and 18

Three of the four general categories in the Revised ILSFA, Job Finding and Maintenance, Housecleaning, and Cooking/Care of Food/Nutrition had internal consistency coefficients above .70, and the fourth, Budgeting, had an internal consistency coefficient of .69. Further, three of these categories, Job Finding, Budgeting, and Cooking/Care of Food/Nutrition demonstrated concurrent validity through statistically significant, if weak relationships, with social workers' ratings.

The three general categories whose subcategories loaded only weakly on Factor 1 and 2 were Apartment Hunting, Shopping, and Miscellaneous. Not surprisingly, the internal consistency data were poor for these categories and they demonstrated no significant relationship with the social workers' ratings. Future research should address the idea of constructing new items for these categories which would increase their internal consistency.

There are several limitations of this study. It should be noted that the proposed study was limited to the exploration of the methodological characteristics of the ILSFA with the sample of adolescents who were in placement either in the group home or RTC level of care. Hence, generalizations about the validity of the ILSFA with adolescents

who are in foster homes, Division for Youth Facilities, or more intensive psychiatric placement may not be possible on the basis of this study. In addition, adolescents who live with their families and attend school in their respective community schools were not investigated in the present study. Hence, the data obtained from the present study cannot be applied to adolescents who are living in "normal" environments. However, the ILSFA can be administered to other kinds of adolescent populations in the future once statistical data for these populations is available. Finally, the sample under present investigation included adolescents who were 14 years of age and over, New York City residents, and are currently residing in a Residential Treatment Center or Group Home located in the New York City/Westchester area. Therefore, it is assumed that the participating subjects were all exposed to inner city living and had similarly incorporated independent living skills which relate to inner city living into their repertoire of autonomous skills. For this reason, it is probably not advisable for the results of this study to be generalized to rural populations. Lastly, it is assumed that the Residential Treatment Centers in the aforementioned geographical area did not significantly differ in terms of structure, population served, or available clinical services. It is similarly assumed that the group home residences of different agencies did not significantly differ in terms of level of structure, populations served, and available clinical services. Thus, it is believed that the subjects in this study were representative sample of the population of adolescents who reside in N.Y.C./Westchester Residential Treatment Centers and Group Home residences.

Another limitation of the present study resides in the fact that concurrent validity was measured by obtaining social workers' appraisals of the adolescents studied in the original six components of independent living, as prescribed by New York State's current description of independent living skills. Future research should be geared towards assessing whether social workers' global ratings in the two construct areas (Domestic-Related and Community-Related Independent Living Skills)

are significantly and positively correlated with their scores in both of these areas.

An additional issue deserving of mention is the fact that administering the ILSFA on an individual basis is markedly more time consuming than administering the test to a group of youths at one time. (The Community-Related items could only be administered to a group since the Domestic-Related items require individualized administration by a child care worker who is familiar with the youth.) Future research could examine whether youths' performance on the Community-Related test items vary from group to individualized administration.

On a positive note, the fact that the ILSFA was successfully reduced from a 140 to a 44-item instrument makes the administration of the ILSFA significantly more time efficient and less effected by adolescents' deteriorating moods/attention spans over time. Based on the fact that Form A of the ILSFA (100 items) took approximately 45 minutes to 1 1/2 hours to administer, it is estimated that the revised Form A (16 Community-Related items) will take 10 minutes to 20 minutes for its entire individualized administration.

In sum, according to a 2 - Factor Model, which defines the ILSFA as an instrument that measures an adolescents' fund of Community and Domestic-related Independent Living Skills, 44 items of the original 140 item inventory can confidently be used in the form of a revised test to assess these skills. The revised ILSFA contains individual items with face validity from 4 out of the 7 categories that New York State lists as important in terms of a comprehensive definition of independent living skills. The three categories that do not have any items represented in the revised 2 - Factor Instrument include the "Apartment Hunting", "Shopping" and "Miscellaneous" categories. Future research should be geared towards creating new test items with face validity in both of these areas and then performing statistical analyses on them to obtain information about their psychometric properties. Hopefully, items can be constructed in these three areas that load heavily on Factor 1 or 2, and

possess adequate internal consistency and concurrent validity data. Overall, the present research has resulted in a methodologically sound 44 item instrument that measures Community and Domestic-Related Independent Living Skills that contains individual items with face validity in the areas of Job Finding and Maintenance, Budgeting, Housecleaning, and Cooking/Care of Food/Nutrition.

APPENDIX A

Child's Name: _____
(1-4)

Date of Birth: _____
(5-10)

Date: _____
(11-16)

Date of Admission: _____
(17-22)

Sex: _____
(23)

Race: _____
(24-26)

Age:
 (27-28)

To be completed by examiner with resident.

Form A - Part 1 - JOB SEARCH AND MAINTENANCE

0 = No Score 1 = Score

- 1) Name at least three places where you can get information about jobs.

Score _____
(29)

- 2) Name at least four types of information/documents that you will need before you apply for a job.

Score _____
(30)

- 3) Before I apply for a job, I should find out about the goals and policies of the particular company/agency and understand what skills are being asked of me to fulfill the available position.

True False

Score
(31)

- 4) List three good things to do on a job interview.

Score _____
(32)

- 5) List three bad things to do on a job interview.

Score _____
(33)

- 6) Name three important things you would want to ask the person who interviews you for a job.

Score
(34)

- 7) You should follow-up a job interview with a phone call or a letter thanking the interviewer for his or her time and saying that your are still interested in the job.

True False

Score
(35)

- 8) Define: U.S. Citizen

Score _____
(36)

- 9) You should complete a job application very quickly and in a sloppy manner.

True _____ False _____ Score _____
(37)

- 10) What kinds of information should be listed on a resume? (Name at least 3)

_____ Score _____
(38)

- 11) Do you know how to fill out a tax form? (W4-Form) How?

_____ Score _____
(39)

- 12) If you have a disagreement with another employee, what should you do?

_____ Score _____
(40)

- 13) Match the following terms with their correct definitions:

A) Time Clock	_____	a) Health Insurance
B) Salary	_____	b) # of days you work in a week
C) Hourly Wage	_____	c) When you work 35+ hours per week
D) A Fringe Benefit	_____	d) Total Income
E) Work Week	_____	e) Registers amount of hours you work in a day
F) Overtime	_____	f) Amount of \$ you earn per hour
G) Full-time	_____	g) When you work above and beyond your regular work week

Score _____
(41)

- 14) It is acceptable for a person to come ten minutes late to work on a daily basis.

True _____ False _____ Score _____
(42)

- 15) What are the advantages of being in a union?

_____ Score _____
(43)

- 16) Define "Sick and Vacation Days."

_____ Score _____
(44)

- 17) You should be responsible and dependable on your job.

True _____ False _____ Score _____
(45)

- 18) How much notice do you need to give to your employer when you are resigning from a job?

2 days _____ 2-4 weeks _____ Score _____
4 months _____ 2 years _____ (46)

- 19) Good hygiene habits are important for keeping a job.

True _____ False _____ Score _____
(47)

- 20) It is O.K. to make several personal phone calls from your job.

True _____ False _____ Score _____
(48)

Child's Name: _____
(1-4)

Date of Birth: _____
(5-10)

Date: _____

Social Worker: _____

FORM A - PART 2 - APARTMENT HUNTING/MAINTENANCE

To be completed by social worker with resident.

- 1) Name at least two ways you can go about finding an apartment?

Score _____
(49)

- 2) In the classified ad below, what do the following abbreviations mean?

br = _____
shop/trans = _____
vic = _____

South Side Vic. - 2 br apt.,
1 bth. Near shop/trans.
Call 381-2407

Score _____
(50)

- 3) What are three things you should ask about when looking at an apartment that you're thinking about renting.

1. _____
2. _____
3. _____

Score _____
(51)

- 4) You will have several expenses when you first move into an apartment. Name at least four of them.

1. _____
2. _____
3. _____
4. _____

Score _____
(52)

- 5) What is a security deposit?

Score _____
(53)

- 6) When a person first moves out to live on his or her own, about how much would it cost to buy the least amount of necessary furniture for one person: sofas, chairs, beds, etc.?

Score _____
(54)

- 7) How much do you think that same person would need to spend on moderately priced kitchen supplies: pots, pans, utensils, cups, and plates?

Score _____
(55)

- 8) How do you go about getting utilities and telephone services?

Score _____
(56)

- 9) How much would you have to spend on gas, electricity, and telephone each month, if you were living modestly by yourself? Give a realistic example of each expense.

Score _____
(57)

- 10) Match the following:

_____ 1. lease	a. Money that is given as a pledge that will only be returned if property is not damaged.
_____ 2. security deposit	b. The owner of property that he/she leases or rents to another.
_____ 3. landlord	c. The person in an apartment building who is paid to handle day to day problems.
_____ 4. superintendent	d. A legal contract by which a person exchanges property for a period of time for rent

Score _____
(58)

- 11) Provide a fair estimate of the amount of money you would need to make to live on your own in a modest studio apartment by yourself in New York. _____

Score _____
(59)

- 12) A landlord or landlady may legally refuse to rent to you if you do not have a steady source of income.

True _____ False _____ Score _____
(60)

- 13) A best friend always makes a good roommate.

True _____ False _____ Score _____
(61)

- 14) If you are paying the rent for an apartment on a regular monthly basis, you have the right to blast your stereo and have wild parties.

True _____ False _____ Score _____
(62)

- 15) If you are renting an apartment and your plumbing system needs to be repaired, you are always responsible to pay for it.

True _____ False _____ Score _____
(63)

- 16) If you are renting an apartment that was recently painted an off-white color and you want to paint your bedroom blue, you should expect the landlord to pay for it.

True _____ False _____ Score _____
(64)

17) What would you do if your toilet were stopped up? _____

What would you do if all the lights in your apartment went off? _____

Score _____
(65)

18) What is the thing to do if you feel you are being discriminated against in your efforts to rent an apartment? _____

Score _____
(66)

19) What does the term "absentee landlord" mean? _____

Score _____
(67)

20) What is a rental application fee? _____
How much do you usually have to pay a real estate agent to help you get an apartment? _____

Score _____
(68)

Child's Name: _____
(1-4)Date of Birth: _____
(5-10)

Date: _____

Social Worker: _____

FORM A - PART 3 - BUDGETING

- 1) You just bought a new alarm clock on November 8, 1993 from Sears. The total cost of the clock is \$31.50 and you want to pay for it with a check. Using the blank check below, show how you would write a check to pay for the alarm clock.

	100
Pay to the	_____
Order of _____	\$ _____
Green Meadow Bank	
item _____	_____
Score _____	
(1)	

- 2) How do you endorse a check?

Score _____	
(2)	

- 3) What is a checking register?

What is a checking service charge/fee?

Score _____	
(3)	

- 4)

No.	Date	Check Issued To:	Check Amount	Deposit	Balance
	11/6/93				\$200.00

- a) Your check register currently has a balance of \$200.00. Using the Check Register, write in the check you wrote for the alarm clock.

- b) Now put thirty more dollars into your checking account on December 29th. Record this in the Check Register.

- c) What is your new balance? \$ _____

Score _____
(4)

- 5) A "bounced" check means that you had enough money in your checking account to pay for what you bought.

True _____ False _____ Score _____
(5)

- 6) You need to consider your monthly _____ and _____ when figuring out your monthly budget.

Choose two words to complete the above sentences: desires; interest; taxes; income; expenses; account.

Score _____
(6)

- 7) Most banks require that you have a minimum balance in your savings account to keep your account active.

True _____ False _____ Score _____
(7)

- 8) Define Interest.

Score _____
(8)

- 9) Name at least two types of information that are normally found on payroll checks.

Score _____
(9)

- 10) What is a stop payment? _____

Score _____
(10)

- 11) You receive more interest on savings accounts that require that you do not make withdrawals for a specified period of time.

True _____ False _____ Score _____
(11)

- 12) What is a credit card and how do credit card companies work with you? _____

Score _____
(12)

- 13) You will not maintain a good credit rating if you do not pay your bills on time.

True _____ False _____ Score _____
(13)

- 14) When do we file income taxes? _____

Score _____
(14)

- 15) Money that you spend on recreation should be part of your monthly budget.

True _____ False _____ Score _____
(15)

- 16) It is not a good idea to put aside your transportation money when you get paid.

True _____ False _____ Score _____
(16)

17) What is a W2 Form? _____

Score _____
(17)

18) For which item is the largest amount of money deducted from your pay?
A. Federal Tax
B. Social Security
C. City Tax
D. State Tax
Score _____
(18)

19) What is health insurance? _____

Score _____
(19)

20) Where would be a safe place to keep your money?
a. Hidden in your house _____
b. In your wallet _____
c. In the Bank _____
Score _____
(20)

Child's Name: _____
(1-4)

Date of Birth: _____
(5-10)

Date: _____

Social Worker: _____

FORM A - PART 4 - SHOPPING

1) What is "Consumer's Rights"? _____

Score _____
(21)

2) A pair of Puma sneakers is the same price in all stores.
True _____ False _____ Score _____
(22)

3) Describe the differences between a full warranty and a limited warranty. _____

Score _____
(23)

4) When items are put on sale they are usually of poorer quality than the items that are regularly priced.
True _____ False _____ Score _____
(24)

5) What is a "rain check"? _____

Score _____
(25)

6) Name at least two techniques that store clerks use to trick or "take in" consumers.

Score _____
(26)

7) Which Candy is the best buy?

#1

Item Price	Unit Price
\$1.00	\$1.60
	per pound
Sweety's Candy	10 oz.

#2

Item Price	Unit Price
.84	\$1.67
	per pound
Tasty Treats	8 oz.

Score _____
(27)

8) If you are going to make a big purchase, how should you go about determining how you can get the best buy for your money? (i.e. purchasing a VCR)

Score _____
(28)

- 9) Store owners usually put attractive items in their show windows to get consumers to come inside.
True _____ False _____ Score _____
(29)
- 10) Before making any significant purchases, you should find out what the store's policy is for returning merchandise.
True _____ False _____ Score _____
(30)
- 11) You should buy items because you like them and not because you really need them.
True _____ False _____ Score _____
(31)
- 12) What does the term "lay-away" mean?

Score _____
(32)
- 13) Brand name clothing/items are always of better quality than non-brand names.
True _____ False _____ Score _____
(33)
- 14) Most mail advertisements that offer to send you items for free are good examples of companies sincere generous natures.
True _____ False _____ Score _____
(34)
- 15) When you are making a large purchase, it is usually cheaper to have it delivered to your home as opposed to bringing it home yourself.
True _____ False _____ Score _____
(35)
- 16) You can always find the best bargains at huge shopping malls.
True _____ False _____ Score _____
(36)
- 17) What is the current amount of sales tax in the City of New York?

Score _____
(37)
- 18) It is often cheaper to buy summer clothes after the summer season has just passed.
True _____ False _____ Score _____
(38)
- 19) With a limited warranty, you must pay the postage and handling fees when sending the item to the manufacturer.
True _____ False _____ Score _____

- 20) With a full warranty, you must pay the manufacturer for repairing an item if you bought it broken.

True _____ False _____ Score _____

Child's Name: _____
(1-4)

Date of Birth: _____
(5-10)

Date: _____

Social Worker: _____

FORM A - PART 5 - MISCELLANEOUS

To be completed by social worker and child.

- 1) Name four types of transportation.

a) _____
b) _____
c) _____
d) _____

Score _____
(41)

- 2) How do you get a bus or train schedule?

Score _____
(42)

- 3) You must have car insurance in order to drive your car.

True _____ False _____ Score _____
(43)

- 4) Give an estimate of how much car insurance costs in your state for one year with minimum coverage when an individual is in his/her early twenties with no previous accidents.

Score _____
(44)

- 5) How do you find a doctor?

Score _____
(45)

- 6) What are the signs of alcoholism?

Score _____
(46)

- 7) What should you do if you thought you were addicted to drugs or alcohol?

Score _____
(47)

- 8) Describe how you would look up the name and telephone number of a particular restaurant in the Yellow Pages?

Score _____
(48)

- 9) When you drink alcohol you become more alert and energetic?

True _____ False _____ Score _____
(49)

- 10) Name two over the counter medications. What are they used for?

a) _____
b) _____

Score _____
(50)

- 11) When a medicine label says to take a pill 2 x a day, and you feel very sick, should you take that pill four times a day?
 Yes _____ No _____ Score _____
 (51)
- 12) What are three free leisure activities?
 1. _____
 2. _____ Score _____
 3. _____ (52)
- 13) Name at least four of the things you need to do to plan a party.
 1. _____
 2. _____
 3. _____
 4. _____
 Score _____
 (53)
- 14) When you need to ask for help or emotional support from other people that means you are a weak individual.
 True _____ False _____ Score _____
 (54)
- 15) What should you do if you committed a crime and got arrested? _____

 Score _____
 (55)
- 16) List at least three problems you are likely to have when living on your own.
 1. _____
 2. _____ Score _____
 3. _____ (56)
- 17) It is important to be able to control your temper in social situations.
 True _____ False _____ Score _____
 (57)
- 18) Do you know how to prevent unwanted pregnancies? Name at least three methods of birth control.
 1. _____
 2. _____ Score _____
 3. _____ (58)
- 19) What are the signs of sexually transmitted diseases? Name at least two.
 1. _____
 2. _____
 Score _____
 (59)

20) Name at least three responsibilities of a parent.

1. _____
2. _____
3. _____

Score _____
(60)

Child's Name: _____
(1-4)

Date of Birth: _____
(5-10)

Date: _____

Social Worker: _____

FORM B - HOUSECLEANING

To be completed by child care worker or examiner. It is recommended that the child care worker invite the child to participate in the assessment process. The child care worker or examiner should ask the resident questions that clarify whether he or she knows the following facts. Where applicable, ask resident to demonstrate their knowledge of a skill through body language.

- 1) Child knows how to mop and sweep a floor thoroughly. Child has a good understanding of the appropriate equipment and cleaning products to use on a floor.
Yes _____ No _____ Score _____
(1)
- 2) Child can clean and defrost a refrigerator. Child understands what cleaning products to use on a refrigerator.
Yes _____ No _____ Score _____
(2)
- 3) Child knows how to clean a kitchen and a bathroom, with an adequate understanding of appropriate cleaning products.
Yes _____ No _____ Score _____
(3)
- 4) Child knows how to make a bed, demonstrating an adequate knowledge about how often bed linen should be changed.
Yes _____ No _____ Score _____
(4)
- 5) Child is able to use small kitchen appliances (i.e. toaster, can opener).
Yes _____ No _____ Score _____
(5)
- 6) Child is able to use a vacuum cleaner.
Yes _____ No _____ Score _____
(6)
- 7) Child understands the safety precautions involving electrical outlets and wires.
Yes _____ No _____ Score _____
(7)
- 8) Child understands the importance of storing flammable cleaning products in designated places.
Yes _____ No _____ Score _____
(8)
- 9) Child is able to distinguish which types of clothing need to be dry cleaned.
Yes _____ No _____ Score _____
(9)
- 10) Child knows what colors get washed in hot or cold water.
Yes _____ No _____ Score _____
(10)

- 11) Child has demonstrated that they can effectively use a washing machine and dryer.
Yes _____ No _____ Score _____
(11)
- 12) Child has demonstrated that they can iron.
Yes _____ No _____ Score _____
(12)
- 13) Child has some basic sewing skills.
Yes _____ No _____ Score _____
(13)
- 14) Child knows what the purposes of bleach are for the care of their clothes.
Yes _____ No _____ Score _____
(14)
- 15) Child knows what Teflon pots are and how to clean them.
Yes _____ No _____ Score _____
(15)
- 16) Child knows what the following cleaning products are used for:
a) Brillo/Scouring Pads
b) Ajax/Comet Cleanser
c) Floor Wax
d) Polish (Furniture)
e) Disinfectant (i.e. Lysol)
Yes _____ No _____ Score _____
(16)
- 17) Child knows how to take preventive measures against having their apartment become infested with pests/rodents.
Yes _____ No _____ Score _____
(17)
- 18) Child knows how to change a light bulb; change a vacuum bag.
Yes _____ No _____ Score _____
(18)
- 19) Child knows how to clean an oven.
Yes _____ No _____ Score _____
(19)
- 20) Child knows what to do in case of an oven gas leak.
Yes _____ No _____ Score _____
(20)

Child's Name: _____
(1-4)

Date of Birth: _____
(5-10)

Date: _____

Social Worker: _____

FORM B - COOKING/PURCHASING AND CARE OF FOOD/NUTRITION

To be completed by child care worker or examiner. It is recommended that the child care worker invite the child to participate in the assessment process. The child care worker or examiner should ask the resident questions that clarify whether they know the following facts.

- 1) Child is able to plan varied and balanced meals.
Yes _____ No _____ Score _____
(21)
- 2) Child knows the four basic food groups and is able to determine how many servings of each group he/she should consume in one day.
Yes _____ No _____ Score _____
(22)
- 3) Child understands the importance of consuming foods that are enriched with vitamins and minerals.
Yes _____ No _____ Score _____
(23)
- 4) Child understands which foods should be limited to maintain good health.
Yes _____ No _____ Score _____
(24)
- 5) Child can shop for food, with an understanding of how the concept of comparative shopping for groceries.
Yes _____ No _____ Score _____
(25)
- 6) Child understands the practical usefulness of coupons and no frill brands.
Yes _____ No _____ Score _____
(26)
- 7) Child understands the concept of unit pricing with regard to determining the best buy.
Yes _____ No _____ Score _____
(27)
- 8) Child understands why it is better to shop in a large supermarket as opposed to a small grocery store.
Yes _____ No _____ Score _____
(28)
- 9) Child understands what a reasonable weekly food bill is for a single person.
Yes _____ No _____ Score _____
(29)
- 10) Child recognizes signs of food spoilage.
Yes _____ No _____ Score _____
(30)

- 11) Child understands which foods need to be frozen.
Yes _____ No _____ Score _____
(31)
- 12) Child understands which foods need to be refrigerated.
Yes _____ No _____ Score _____
(32)
- 13) Child knows how to store left-overs.
Yes _____ No _____ Score _____
(33)
- 14) Child understands the difference between frying, baking and broiling.
Yes _____ No _____ Score _____
(34)
- 15) Child knows how to read and use recipes.
Yes _____ No _____ Score _____
(35)
- 16) Child knows how to adequately measure ingredients.
Yes _____ No _____ Score _____
(36)
- 17) Child knows how to defrost a refrigerator.
Yes _____ No _____ Score _____
(37)
- 18) Child knows which foods must be rinsed prior to eating or cooking.
Yes _____ No _____ Score _____
(38)
- 19) Child knows how to set a table.
Yes _____ No _____ Score _____
(39)
- 20) Child knows how to clean up table and dishes after meals.
Yes _____ No _____ Score _____
(40)

APPENDIX BSOCIAL WORKERS GLOBAL RATINGS OF RESIDENTS'
INDEPENDENT LIVING SKILLS

All residents who are fourteen years of age and older need to have their independent living skills assessed. While a comprehensive assessment will be performed by an individual counselor, your global appraisal of each of the residents would be greatly appreciated. Please complete the demographic information on each resident, and then using the descriptors presented below, provide an appraisal of each of the skills listed below.

Resident's Name _____ (1-4) Date of Birth _____ (5-10)

Date _____ (11-16) Date of Admission _____ (17-22)

I JOB SEARCH AND MAINTENANCE

(An individual who is knowledgeable in this area would know about: where to look for a job; the job application process; job interviewing; job jargon; appropriate on-the-job behavior; work benefits; unions, payroll deductions.)

II APARTMENT HUNTING/MAINTENANCE

(An individual who is knowledgeable in this area would know about: how to find an apartment; renting terms and policies; roommates; initial and continued apartment care costs.)

III BUDGETING

(An individual who is knowledgeable in this area would know about: checking accounts, concept of interest and savings accounts; how to budget; reading and understanding paychecks; credit buying and ratings.)

IV SHOPPING

(An individual who is knowledgeable in this area would know about: methods and implications of comparative shopping; warranties and consumer's rights; unit pricing and sales tax; advertising ploys; and consumer terminology and knowledge about bargains.)

V HOUSECLEANING

(An individual who is knowledgeable in this area would know about: the fundamentals of housecleaning; use of cleaning appliances; household safety; care of clothing; cleaning products and accessories.)

VI COOKING/PURCHASING AND CARE OF FOOD/NUTRITION

(An individual who is knowledgeable in this area would know about: nutrition; how to cook and prepare food; shopping for food; food storage.)

RATINGS

1. Knows nothing/almost nothing
2. Has a slight knowledge
3. Has a moderate knowledge
4. Has a good knowledge
5. Knows everything/almost everything

Please use the above rating scale and descriptions to evaluate each of the following skill domains:

	<u>SKILL DOMAIN</u>	<u>RATING</u>
I	Job Search and Maintenance	<u>(23)</u>
II	Apartment Hunting/Maintenance	<u>(24)</u>
III	Budgeting	<u>(25)</u>
IV	Shopping	<u>(26)</u>
V	Housecleaning	<u>(27)</u>
VI	Cooking/Purchasing and Care of Food/Nutrition	<u>(28)</u>

APPENDIX C

INDEPENDENT LIVING SKILLS ASSESSMENT FORM

This form (Form A) should be completed by a trained examiner during an individualized session with a resident. The examiner should read each question aloud in a clear, articulate manner and copy down the resident's response. Actual scores should be determined in the resident's absence. There are six (6) areas of independent living skills which need to be assessed for each youth. They include: (1) Job Search and Maintenance, (2) Apartment Hunting and Maintenance, (3) Budgeting, (4) Shopping, (5) Housecleaning, and (6) Cooking/Purchasing and Care of Food/Nutrition. The other independent living skills, which are not easily classified, but serve to be integral components of a comprehensive I.L.S. assessment, will be classified into a seventh category entitled "Miscellaneous." The Housecleaning, and Cook/Purchasing and Care of Food/Nutrition domains constitute Form B, and should preferably be administered by child care staff since they are most familiar with residents' housecleaning and cooking habits.

TESTING SCHEDULE

Form A should be administered in one or two sessions. However, the testing can be extended to more sessions if necessary. Form B should be administered in one session. Normally, the entire battery should be completed within one week. Avoid scheduling tests on days just before or after vacations, important school functions, or immediately after strenuous physical exercise. Also, avoid causing residents to miss classes and activities they enjoy (i.e. art, recreation). The counselor should always be sensitive to resident fatigue. Although the tests are not timed, some reasonable time constraint should be followed.

EXAMINER'S RESPONSIBILITY

Standard testing procedures must be followed with all residents to ensure that every resident has an equal opportunity to respond correctly to test items.

Firstly, the examiner should organize all test materials before the testing session begins. Secondly, a quiet, comfortable room should be used for testing, and only the examiner and resident should be in the room where the testing takes place. Thirdly, make sure that auditory or perceptual problems, in addition to language difficulties or severe physical handicaps, do not interfere with the resident's ability to comprehend orally presented inquiries. Fourthly, make sure that the residents know what they have to do before testing begins. Explain that there is no special need to prepare for the test and that they cannot fail the ILSFA and that its purpose is to help plan future training emphases.

Although praise can be given for test performance in general, it should not be given for correctness of response.

TESTING CAUTIONS

Coaching - Examiners should not provide clues to help residents answer the test items. It is important that this is a test taking situation and not a learning activity. Correct responses should not be indicated. Examiners should also not explain words unless they are completely unrelated to the question being asked by a particular item. Finally, voice changes and/or inflections on key words, such as "usually" or "never", should be avoided.

Use answer key to determine whether credit should be given to a particular response.

Record child's responses while in session so score can be determined later.

FORM A - PART I - JOB SEARCH & MAINTENANCE KEY

Questions - Each question receives 1-point credit.

1. Only give credit to a response which includes at least 3 of the following:
 - 1) newspaper - classified section
 - 2) through a friend
 - 3) store windows - help wanted signs
 - 4) private or district employment agency
 - 5) bulletin boards (i.e. school)
 - 6) job placement site
 - 7) through your present job (promotion)
 - 8) personal contact - Yellow Pages1 - Point
2. A correct response must include 4 of the following:
 - 1) working papers/birth certificate
 - 2) social security card - and/or number
 - 3) proof of educational status and/or educational background
 - 4) addresses and phone numbers of personal references
 - 5) addresses and phone numbers of supervisors at previous employment sites
 - *6) If child responds "resume", only give credit if they are able to list the important information which is usually listed on resume.
 - 7) citizenship papers
 - 8) phone number of person to notify in case of emergency
 - 9) extracurricular activities1 - Point
3. True 1 - Point
4. Correct response should include any form of non-verbal body language, projected attitude, or speech style. For example:
 - 1) shaking hands with interviewer
 - 2) having a polite and motivated attitude
 - 3) impressive attire
 - 4) being on time
 - 5) level of eye contact
 - 6) good body posture
 - 7) articulate speech/grammar
 - 8) responding in complete sentences
 - 9) asking appropriate questions1 - Point
5. Correct response can include any negative of Question #4 or:
 - 1) bringing a friend to the interview
 - 2) being unprepared
 - 3) chewing gum/smoking
 - 4) foul language or street jargon
 - 5) other logical statements1 - Point
6. Correct answer should include any of the following:
 - 1) salary
 - 2) hours required
 - 3) supervision
 - 4) fringe benefits
 - 5) union vs non-union
 - 6) job description
 - 7) when they will be making their decision

- 8) chances for promotion or further training
9) other logical facts 1 - Point
7. True 1 - Point
8. An adequate definition would connect the term U.S. citizen with native or nationalized person of the U.S. who owes allegiance to a government and is entitled to reciprocal protection from it. If resident responds "born here", question them further to give a more in depth response. 1 - Point
9. False 1 - Point
10. Correct response should include at least 3 of the following:
- 1) Name
 - 2) Address - Current/Permanent
 - 3) Job Experience
 - 4) Educational Background
 - 5) Special Recognition or Honors
 - 6) Special interests/hobbies
 - 7) Career Objectives
 - 8) Extracurricular Activities
 - 9) References 1 - Point
11. Correct response should indicate that child has knowledge about listing number of dependents, as well as an understanding that their taxes will be based on the number of dependents that they claim. 1 - Point
12. Score only if child demonstrates such appropriate job relations tactics as 1) attempting to verbally settle conflicts and 2) taking matter up with supervisor. 1 - Point
13. Score 1 point only if child provides all of the correct matches.
- A) Time Clock = e - Registers amount of hrs. you work in a day
 - B) Salary = d - Total Income
 - C) Hourly Wage = f - Amount of \$ you earn per hour
 - D) A Fringe Benefit = a - Health Insurance
 - E) Work Week = b - # of days you work in a week
 - F) Overtime = g - When you work above & beyond your regular work week
 - G) Full-time = c - When you work 35+ hours per week
14. False 1 - Point
15. An adequate response should include at least one of the following advantages: 1) you can take up grievances between you and your supervisor with a union representative, 2) you have input into your work policy, 3) a boss must substantiate his reasons for suspending somebody, 4) less room for unequal treatment of employees - fixed salary scale, fringe benefits, vacation days, fixed overtime rules, etc., 5) negotiates raises with company, and 6) defends you in case you are being treated unfairly by employer. 1 - Point
16. A scorable response should indicate that both "Sick" and "Vacation" days are paid days off which are usually earned after being on the job for a specified period of time. Answers such as "time off" are not acceptable. Child should indicate that Sick days are to be taken if the illness would hamper job performance or worsen a health condition and after advance notice has been given to an employer. 1 - Point

17.	True	1 - Point
18.	2-4 Weeks	1 - Point
19.	True	1 - Point
20.	False	1 - Point

FORM A - PART 2 - APARTMENT HUNTING/MAINTENANCE KEY

1. Correct response should include seeking information from at least two of the following: Newspaper; Community Bulletin Board, Real Estate Agency, Asking Landlords. 1 - Point
2. Score 1 point if completely correct.
br = bedroom
shop/trans = shopping/transportation
vic = vicinity 1 - Point
3. Correct responses should include three or more of the issues mentioned below:
pets; accessibility to transportation; questions about lease, utilities; accessibility to stores and other community resources; permission to have a roommate; questions about rent; are stove and refrigerator included; safe neighborhood; furniture included. 1 - Point
4. Correct response include:
rent; security deposit; electricity; gas; telephone installation; necessary household items (i.e. plates, toilet items, basic foods). 1 - Point
5. An adequate definition of security deposit should indicate that it is when the landlord is given an extra month's rent in advance. 1 - Point
6. Score if amount is within the range of \$700 - \$1500. 1 - Point
7. Score if amount is within range of \$75 - \$150. 1 - Point
8. Child demonstrates adequate knowledge regarding obtaining utilities (i.e. calling or visiting utility offices, installation charges, previous credit, employment, or income information). 1 - Point
9. Child provides fair estimate and is able to itemize each expense. Scorable responses should fall within the range of: gas - \$18.00 - \$30.00 bi-monthly or \$9.00 - \$50.00 monthly. 1 - Point
10. Correct response: 1) D, 2) A, 3) B, 4) C 1 - Point
11. A correct response should fall within the range of \$350 - \$550 weekly. 1 - Point
12. True 1 - Point
13. False 1 - Point
14. False 1 - Point
15. False 1 - Point
16. False 1 - Point
17. A correct response should reflect a knowledgeable understanding of appropriate problem-solving skills in these domains. More specifically, a scorable response for solving a stopped up toilet problem should include steps as using a plunger and call a plumber. A scorable response to the electrical failure issue should include turning off all electrical appliances, investigating fuse box and correcting blown fuse problem if applicable, and calling an electrician if problem is extensive. 1 - Point

18. A correct response should include making complaints to City or County Housing Bureau, Bureau of Discrimination, NAACP, and seeking legal assistance. 1 - Point
19. Correct response should include a definition of term in addition to the significance of having an absentee landlord. An absentee landlord is a landlord who does not reside in the house or building in which he/she rents. Therefore, they are less available for complaints, repairs, and other problems. 1 - Point
20. A rental application fee is specific amount of money that is required in order for rental organization/office to process an application for housing. Amount of money to real estate broker should be the equivalent of one month's rent. 1 - Point

FORM A - PART 3 - BUDGETING - KEY

1. Score if child completes check correctly. 1 - Points

November 8,	100
1993	
Pay to the	
Order of <u>Sears</u>	\$ 31.50
<u>Thirty one dollars</u>	50/100
Green Meadow Bank	
Item <u>Re: Alarm Clock</u>	<u>John Doe</u>

2. By putting your signature as it is written on the check across the back of the check widthwise. 1 - Point
3. A correct response should closely resemble the following definitions: Checking Register = A register with columns in which all checking transactions are listed; Checking Service Charge/Fee = A fee (usually monthly) that the bank charges to keep your checking account active. 1 - Point
4. Child completes check register accurately. 1 - Point

No.	Date	Check Issued To:	Check Amount	Deposit	Balance
	11/6/93				\$ 200.00
a)	100 11/8/93	Sears	\$31.50		31.50
					\$ 168.50
	12/29/93	Deposit		\$30.00	30.00
b)					\$ 198.50

- c) New Balance = \$198.50 1 - Point
5. False 1 - Point
6. Income, Expense 1 - Point
7. True 1 - Point
8. An adequate definition of interest includes a charge for borrowed money - generally a percentage of the amount borrowed and/or an excess above what is due. 1 - Point
9. A correct response can include your name; pay period; hours worked; hourly wage; taxes deducted, (Social Security, Federal, State, City); union dues deducted; insurance fees deducted; your job account number; name of bank. 1 - Point
10. An adequate definition includes - a procedure you go through to keep the bank from paying a check. 1 - Point
11. True 1 - Point
12. Child demonstrates adequate knowledge of credit system. A response should indicate that credit cards allow an individual to purchase things or borrow money and pay at a later date with interest. When you fill out a credit application, you sign an installment agreement. 1 - Point

13. True 1 - Point
14. January - April 1 - Point
15. True 1 - Point
16. False 1 - Point
17. An adequate definition would include "a form which lists your annual salary and tax deductions, place of employment, and social security number." 1 - Point
18. A 1 - Point
19. An adequate definition would include a company which pays all or a portion of your medical expenses. You receive this benefit by either you or your employer paying a check. 1 - Point
20. c - in the bank. 1 - Point

FORM A - PART 4 - SHOPPING KEY

1. An adequate definition would indicate that they are the legal rights you have as a purchaser of goods or services. 1 - Point
2. False 1 - Point
3. Correct response should include specifications of a limited warranty and an understanding of benefits of full warranty. A full warranty usually means that a defective product will be fixed or replaced within a reasonable period of time at no cost to you. A limited warranty usually means that something is missing, i.e. labor, costs of parts, charge for handling, or the first purchaser will only be covered. 1 - Point
4. False 1 - Point
5. An adequate definition would define a raincheck as an agreement between a store and a consumer that the store will sell the consumer an item at the sale price as soon as a new shipment of the item arrives. 1 - Point
6. Correct response includes the bait and switch technique, complimenting consumer, pressuring consumer to buy an item immediately, lowballing, loss leaders or conditional purchases. 1 - Point
7. #1 1 - Point
8. Correct response should include description of comparison shopping techniques (i.e. comparing the prices in different stores of different brand names, checking the consumer magazines, etc.). 1 - Point
9. True 1 - Point
10. True 1 - Point
11. False 1 - Point
12. An adequate definition would include "putting a deposit on merchandise to put on hold on its sale until you return with the full payment. 1 - Point
13. False 1 - Point
14. False 1 - Point
15. False 1 - Point
16. False 1 - Point
17. 8 1/4% or 8.25 1 - Point
18. True 1 - Point
19. True 1 - Point
20. False 1 - Point

FORM A - PART 5 - MISCELLANEOUS - KEY

1. Correct response should include at least four items from the following list: car, taxi, bus, train, plane, boat, walking, motorcycle, bicycle. 1 - Point
2. Correct response should illustrate that child has knowledge of transit authority, community transportation facilities, etc. Child should know that they can obtain schedules from bus/train stations, community information centers. 1 - Point
3. True 1 - Point
4. A realistic estimate should be within the range of \$800 - \$2400. 1 - Point
5. Correct response should include 1-AMA, 2-Recommendations from a friend/family, 3-Yellow Pages, 4-Clinic, 5-HIP Center, etc. 1 - Point
6. Correct response should include mentioning of the effects of alcohol on an individual's physical, emotional, social functioning, family and intellectual functioning. 1 - Point
7. Correct response should include seeking help from a substance abuse agency, doctor, therapist, friend, or clergy, etc. 1 - Point
8. Correct response should include an adequate demonstration of knowledge about yellow pages. For example, knowing that an individual needs to look under a broader category for most services as well as in alphabetical order. 1 - Point
9. False 1 - Point
10. Correct response should include mentioning of two over-the-counter drugs (i.e. aspirin, cough medicine, allergy medicine, acne medicine, muscle ache relief, appetite suppressor, etc.) 1 - Point
11. No 1 - Point
12. Responses such as going to the beach, a park, a museum, bicycling on bike path, hiking, library, etc. are correct. 1 - Point
13. Appropriate response should include alerting landlord/neighbors, planning menu, planning guest list and inviting guests, planning music and/or activities, budgeting for party expenses, etc. 1 - Point
14. False 1 - Point
15. Responses should reflect the child's understanding of his rights, the Miranda Warnings and importance of legal counsel prior to making any statements. 1 - Point
16. Any logical difficulty should be recognized as correct. (i.e. being a crime victim, sticking to a budget, maintaining a job, maintaining a household, taking responsibilities for your actions, staying away from drugs/alcohol, getting along in a community, taking care of medical issues, self-discipline, etc.) 1 - Point
17. True 1 - Point

18. Responses can include condoms, the pill, diaphragm, IUD, Sponges, Spermicide, or rhythm method, and abstinence. 1 - Point
19. An adequate description would include 1) painful urination, 2) itching, 3) mucous discharge, 4) pus and/or blood in urine, 5) lymph glands in groin enlarge and become tender, chancre sores on genitalia or mouth region, 6) body rash, 7) hair loss, 8) wart/blisters or 9) finding lice or eggs. 1 - Point
20. A response should be logical and realistic in order to be scored correct. A scorable response would indicate that parents provide shelter, food, medical services, affection, guidance, discipline, and love to their children. 1 - Point

APPENDIX D

Items that were omitted from the original inventory because either 95% or 5% of the subjects examined passed them as follows:

P = Category / V = Test Item
 P1 = Job Finding Category
 P2 = Apartment Hunting Category
 P3 = Budgeting Category
 P4 = Shopping Category
 P5 = Miscellaneous Category
 P6 = Housecleaning Category
 P7 = Cooking/Nutrition/Storage of Food Category

0 = Incorrectly Answered
 1 = Correctly Answered

<u>Items Deleted</u>	<u>Value</u>	<u>Frequency</u>	<u>Percent</u>
P1V3	0	3	1.5
	1	191	98.5
P1V9	0	1	.5
	1	193	99.5
P1V17	0	2	1.0
	1	192	99.0
P1V19	0	7	3.6
	1	187	96.4
P2V2	0	185	95.4
	1	9	4.6
P2V9	0	187	96.4
	1	7	3.6
P2V20	0	194	100.0
	1	0	
P3V13	0	8	4.1
	1	186	95.9
P3V20	0	3	1.5
	1	191	98.5
P4V2	0	3	1.5
	1	191	98.5
P4V3	0	185	95.4
	1	9	4.6
P4V9	0	2	1.0
	1	192	99.0
P4V10	0	2	1.0
	1	192	99.0
P5V1	0	2	1.0
	1	192	99.0
P5V11	0	5	2.6
	1	189	97.4
P5V17	0	5	2.6
	1	189	97.4

<u>Items Deleted</u>	<u>Value</u>	<u>Frequency</u>	<u>Percent</u>
P6V1	0	5	2.6
	1	189	97.4
P6V3	0	7	3.6
	1	187	96.4
P6V4	0	8	4.1
	1	186	95.9
P6V5	0	3	1.5
	1	191	98.5
P6V6	0	2	1.0
	1	192	99.0
P6V16	0	3	1.5
	1	191	98.5
P6V18	0	8	4.1
	1	186	95.9
P7V12	0	5	2.6
	1	189	97.4
P7V19	0	4	2.1
	1	190	97.9
P7V20	0	2	1.0
	1	192	99.0

APPENDIX E

	<u>Value</u>	<u>Frequency</u>	<u>Percent</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
P1V4	0	16	8.2		.70
Maintained	1	178	91.8	.37	when Alpha is .71
P1V5	0	11	5.7		.70
Maintained	1	183	94.3	.32	when Alpha is .71
P1V7	0	17	8.8		.71
Deleted	1	177	91.2	.18	when Alpha is .71
P1V14	0	12	6.2		.70
Deleted	1	182	93.8	.26	when Alpha is .71
P2V1	0	19	9.8		.54
Deleted	1	175	90.2	.19	when Alpha is .56
P3V3	0	178	91.8		.73
Deleted	1	16	8.2	.23	when Alpha is .74
P3V10	0	176	90.7		.73
Deleted	1	18	9.3	.22	when Alpha is .74
P4V11	0	16	8.2		.57
Deleted	1	178	91.8	.23	when Alpha is .58
P5V7	0	10	5.2		.62
Deleted	1	184	94.8	.24	when Alpha is .63
P5V13	0	10	5.2		.62
Deleted	1	184	94.8	.20	when Alpha is .63
P5V14	0	16	8.2		.62
Deleted	1	178	91.8	.18	when Alpha is .63
P5V20	0	10	5.2		.60
Maintained	1	184	94.8	.42	when Alpha is .63
P6V7	0	19	9.8		.83
Maintained	1	175	90.2	.39	when Alpha is .83
P6V11	0	10	5.2		.83
Maintained	1	184	94.8	.41	when Alpha is .83
P6V12	0	10	5.2		.83
Deleted	1	184	94.8	.28	when Alpha is .83
P6V14	0	16	8.2		.83
Maintained	1	178	91.8	.43	when Alpha is .83
P7V10	0	17	8.8		.90
Maintained	1	177	91.2	.50	when Alpha is .91
P7V11	0	11	5.7		.91
Maintained	1	183	94.3	.46	when Alpha is .91
P7V13	0	17	8.8		.90
Maintained	1	177	91.2	.57	when Alpha is .91

APPENDIX F

<u>Items Deleted</u>	<u>Corrected Item - Total Correlation</u>	<u>Alpha if Item Deleted</u>
P1V12	.02	.73 when Alpha is .71
P2V4	.06	.57 when Alpha is .56
P2V6	.08	.57 when Alpha is .56
P2V7	.10	.56 when Alpha is .56
P2V11	.01	.58 when Alpha is .56
P3V11	.14	.74 when Alpha is .74
P4V7	.11	.59 when Alpha is .58
P5V4	.01	.65 when Alpha is .63
P5V5	.00	.65 when Alpha is .63
P5V15	.11	.64 when Alpha is .64

APPENDIX G

INTERNAL CONSISTENCY DATA PRIOR TO ITEM ANALYSIS

Three forms of internal consistency analyses were performed on the original data. For all of these analyses, Nunnally's rule of thumb was used which considers internal consistency coefficients of .70 and greater to be indicative of statistical reliability. (Nunnally, 1978). Since the data contains dichotomously - scored items, what is stated as Cronbach's alphas, are actually Kuder-Richardson's #20 coefficients.

The first and least successful internal consistency analyses performed looked at each individual test item within sub-categories. In other words, these internal consistency analyses examined whether the individual test items actually tested what the sub-category stated it was testing. Each category was broken down into 4-6 sub-categories a priori based upon face validity, or in other words, the different logical components of the larger subject area. For example, it was predicted that the first Job Search and Maintenance Skills category was comprised of four smaller topic areas. They include:

- Job Application Forms and Procedure for Applying for a Job
- Job Interviewing Skills
- General Job-Related Knowledge and Terms
- Job-Related Behavior

The 20 original individual items from the Job Search and Maintenance Skills Category were then respectfully distributed into the sub-category with which they were most similar.

The following is a listing of all of the predicted sub-categories of the ILSFA, in addition to the items within sub-category internal consistency data.

TABLE 21PRE-ITEM ANALYSIS ITEMS WITHIN SUB-CATEGORY INTERNAL CONSISTENCY DATACategory I - Job Search and Maintenance SkillsJob Application Forms and Procedures for Applying for a Job Sub-Category

Items P1V1
 P1V2
 P1V8
 P1V9
 P1V10

Standardized Item Alpha = .48

Job Interviewing Skills Sub-Category

Items P1V4
 P1V5
 P1V6
 P1V7

Standardized Item Alpha = .62

General Job-Related Knowledge and Terms Sub-Category

Items P1V3
 P1V11
 P1V13
 P1V15
 P1V16

Standardized Item Alpha = .46

Job Related Behavior Sub-Category

Items P1V12
 P1V14
 P1V17
 P1V18
 P1V19
 P1V20

Standardized Item Alpha = .13

Category II - Apartment Hunting/MaintenanceProcedures for Looking for an Apartment Sub-Category

Items P2V1
 P2V2
 P2V3
 P2V12

Standardized Item Alpha = .26

Knowledge About Initial and Continued Apartment Care Costs Sub-Category

Items P2V4
P2V6
P2V7
P2V11
Standardized Item Alpha = .12

Apartment Related Items Sub-Category

Items P2V5
P2V10
P2V19
P2V20
Standardized Item Alpha = .44

Utility and Protective Agencies Sub-Category

Items P2V8
P2V9
P2V18
Standardized Item Alpha = .09

Apartment Living Sub-Category

Items P2V13
P2V14
Standardized Item Alpha = .39

Apartment Maintenance Sub-Category

Items P2V15
P2V16
P2V17
Standardized Item Alpha = .02

Category III - Budgeting

Checking Accounts Sub-Category

Items P3V1
P3V2
P3V3
P3V4
P3V5
P3V10
Standardized Item Alpha = .53

Concept of Interest and Savings Accounts Sub-Category

Items P3V7
P3V8
P3V11
P3V20
Standardized Item Alpha = .44

How to Budget Sub-Category

Items P3V6
P3V15
P3V16
P3V17

Standardized Item Alpha = .40

Reading and Understanding Paychecks Sub-Category

Items P3V9
P3V14
P3V18
P3V19

Standardized Item Alpha = .36

Credit Buying and Rating Sub-Category

Items P3V12
P3V13

Standardized Item Alpha = -.02

Category IV - Shopping

Methods and Implications of Comparative Shopping Sub-Category

Items P4V2
P4V4
P4V8
P4V13
P4V16

Standardized Item Alpha = .35

Warranties and Consumer's Rights Sub-Category

Items P4V1
P4V3
P4V19
P4V20

Standardized Item Alpha = .36

Unit Pricing and Sales Tax Sub-Category

Items P4V7
P4V17

Standardized Item Alpha = .02

Advertising Ploys Sub-Category

Items P4V6
P4V9
P4V14

Standardized Item Alpha = .04

Consumer Terminology and Knowledge About Bargains Sub-Category

Items P4V5
P4V10
P4V11
P4V12
P4V15
P4V18

Standardized Item Alpha = .36

Category V - Miscellaneous

Transportation and Car Issues Sub-Category

Items P5V1
P5V2
P5V3
P5V4

Standardized Item Alpha = .31

Alcohol and Drug Issues Sub-Category

Items P5V6
P5V7
P5V9

Standardized Item Alpha = .22

Knowledge About Mature Adult Behavior Sub-Category

Items P5V16
P5V17
P5V20

Standardized Item Alpha = .37

Sex Education Issues Sub-Category

Items P5V18
P5V19

Standardized Item Alpha = .53

Medical Issues Sub-Category

Items P5V5
P5V10
P5V11

Standardized Item Alpha = .14

Negotiating Leisure Activities Sub-Category

Items P5V8
P5V12
P5V13

Standardized Item Alpha = .40

Knowledge of Emotional/Legal Supports in Community Sub-Category

Items P5V14
P5V15

Standardized Item Alpha = .10

Category VI - Housecleaning

Fundamentals of Housecleaning Sub-Category

Items P6V1
P6V2
P6V3
P6V4
P6V19

Standardized Item Alpha = .66

Use of Cleaning Appliances Sub-Category

Items P6V5
P6V6
P6V12

Standardized Item Alpha = -.07

Household Safety Sub-Category

Items P6V7
P6V8
P6V17
P6V20

Standardized Item Alpha = .72

Care of Clothing Sub-Category

Items P6V9
P6V10
P6V11
P6V13
P6V14

Standardized Item Alpha = .73

Knowledge of Cleaning Products and Accessories Sub-Category

Items P6V15
P6V16
P6V18

Standardized Item Alpha = .26

Category VII - Cooking/Care of Food/Nutrition

Nutrition Sub-Category

Items P7V1
P7V2
P7V3
P7V4

Standardized Item Alpha = .83

How to Cook and Prepare Food Sub-Category

Items P7V14
P7V15
P7V16
P7V18
P7V19
P7V20

Standardized Item Alpha = .71

How to Shop for Food Sub-Category

Items P7V5
P7V6
P7V7
P7V8
P7V9

Standardized Item Alpha = .79

Food Storage Sub-Category

Items P7V10
P7V11
P7V12
P7V13
P7V17

Standardized Item Alpha = .78

As can be gleaned from the above Table, with the exception of the Cooking/Care of Food/Nutrition category, the internal consistency coefficients obtained from the remaining categories were consistently low. The original inventory's 7 categories were initially broken down into smaller sub-categories because it would not be statistically sound for dichotomous items to be used in statistical analyses. This indicates that the examiner's apriori choices about distributing individual items into smaller sub-categories were incorrect. It is possible that the individual items do not hang together within each category at all, and therefore should not be grouped together. However, it is also possible that the

examiner's decisions about which individual items should be grouped together to form specific sub-categories were erroneous, and therefore largely contributed to the low Standardized Item Alphas obtained. The following is an internal consistency analysis of items within categories. In other words, each of the seven major categories will be examined in terms of determining how well their 20 individual sub-items that comprise them hang together.

TABLE 22

PRE-ITEM ANALYSIS ITEM WITHIN CATEGORY INTERNAL CONSISTENCY DATA

Category 1

P1V1 - P1V20 = Job Search and Maintenance Skills Category
Standardized Item Alpha = .72

Category 2

P2V1 - P2V20 = Apartment Hunting/Maintenance Category
Standardized Item Alpha = .57

Category 3

P3V1 - P3V20 = Budgeting Category
Standardized Item Alpha = .73

Category 4

P4V1 - P4V20 = Shopping Category
Standardized Item Alpha = .59

Category 5

P5V1 - P5V20 = Miscellaneous Category
Standardized Item Alpha = .67

Category 6

P6V1 - P6V20 = Housecleaning Category
Standardized Item Alpha = .84

Category 7

P7V1 - P7V20 = Cooking/Care of Food/Nutrition Category
Standardized Item Alpha = .91

The above findings suggest that Categories 1,3,6, and 7 have acceptable internal consistency coefficients according to Nunnally's .70 rule of thumb. This similarly indicates that the significantly lower findings associated with the items within sub-category data resulted from the erroneous a priori distribution of items into small sub-category groups.

The final internal consistency analysis performed on the original data, which contains 7 main categories that are comprised of 20 individual

items each, examined each sub-category within each category. In other words, these standardized item alphas (Kuder-Richardson #20) are based upon the average correlation of all the sub-categories with one another within a particular category.

TABLE 23

PRE-ITEM ANALYSIS SUB-CATEGORY WITHIN CATEGORY INTERNAL CONSISTENCY DATA

Within the Job Search and Maintenance Skills Category there are 4 sub-categories. They include:

- Job Application Forms and Procedures for Applying for a Job
- Job Interviewing Skills
- General Job-Related Knowledge and Terms
- Job-Related Behavior

Standardized Item Alpha = .66

Within the Apartment Hunting/Maintenance Category there are 6 sub-categories. They include:

- Procedures for Looking for an Apartment
- Knowledge about Initial and Continued Apartment Care Costs
- Apartment - Related Issues
- Utility and Protective Agencies
- Apartment Living
- Apartment Maintenance

Standardized Item Alpha = .56

Within the Budgeting Category there are 5 sub-categories. They include:

- Checking Accounts
- Concept of Interest and Savings Accounts
- How to Budget
- Reading and Understanding Pay Checks
- Credit Buying and Rating

Standardized Item Alpha = .73

Within the Shopping Category there are 5 sub-categories. They include:

- Methods and Implications of Comparative Shopping
- Warranties and Consumer's Rights
- Unit Pricing and Sales Tax
- Advertising Ploys
- Consumer Terminology and Knowledge About Bargains

Standardized Item Alpha = .52

Within the Miscellaneous Category there are 7 sub-categories. They include:

- Transportation and Car Issues
- Alcohol and Drug Issues
- Knowledge About Mature, Adult Behavior
- Sex Education Issues
- Medical Issues
- Negotiating Leisure Activities
- Knowledge of Emotional/Legal Supports in Community

Standardized Item Alpha = .61

Within the Housecleaning Category there are 5 sub-categories. They include:

- Fundamentals of Housecleaning
- Use of Cleaning Appliances
- Household Safety
- Care of Clothing
- Knowledge of Cleaning Products and Accessories

Standardized Item Alpha = .85

Within the Cooking/Care of Food/Nutrition Category there are 4 sub-categories. They include:

- Nutrition
- How to Cook and Prepare Food
- How to Shop for Food
- Food Storage

Standardized Item Alpha = .86

With regard to the sub-categories within category internal consistency analysis, there are three acceptable internal consistency coefficients according to Nunnally's .70 rule of thumb. This includes the internal consistency data obtained for categories 3,6, and 7.

Inconsistent with the internal consistency data obtained by examining items within categories, the internal consistency data obtained by examining sub-categories within categories did not suggest acceptable internal consistency for the Job Search and Maintenance Skills Category (.66).

FACTOR ANALYSIS ON PRE-ITEM ANALYSIS DATA

The next data analysis that was performed on the original data of 7 categories with 20 items each was a factor analysis. First, a Principal Component Analysis was performed with the sub-categories for each item. The results of these factor analysis were marginally promising in terms of tapping into one major component in all of the 7 categories.

TABLE 24

PCA PERFORMED ON ALL 7 CATEGORIES PRE-ITEM ANALYSIS

<u>Category</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
1	2.02	50.4	50.4
	.83	20.8	71.2
	.71	17.7	88.9
	.44	11.1	100.0

Thus, there appears to be only one significant component within the Job Finding/Maintenance Category.

The data concerning how much variance is predicted by this factor

for each of the sub-categories are as follows:

<u>Sub-Category</u>	<u>Communality</u>
1	.69
2	.39
3	.58
4	.36

<u>Category</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
2	1.96	32.7	32.7
	1.02	16.9	49.6
	.87	14.5	64.1
	.80	13.3	77.1
	.71	11.8	89.2
	.65	10.8	100.0

Thus, there appear to be two major components operating within the Apartment Hunting/Maintenance Category. However, the first component is much stronger and meaningful than the second.

<u>Sub-Category</u>	<u>Communality</u>
1	.41
2	.93
3	.48
4	.50
5	.28
6	.37

<u>Category</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
3	2.39	47.9	47.9
	.80	16.1	64.0
	.73	14.5	14.5
	.64	12.8	12.8
	.44	8.8	8.8

Thus, there appears to be one primary component within the Budgeting Category.

<u>Sub-Category</u>	<u>Communality</u>
1	.56
2	.38
3	.49
4	.39
5	.58

<u>Category</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
4	1.75	35.0	35.0
	1.02	20.3	55.3
	.89	17.8	73.1
	.72	14.3	87.4
	.63	12.6	100.0

Thus, the factor analyses suggest that there are two components

operating within the Shopping Category. However, as with the Apartment Hunting Category, the first component is markedly stronger and accounts for more of the variance than the second.

<u>Sub-Category</u>	<u>Communality</u>
1	.53
2	.50
3	.48
4	.79
5	.47

<u>Category</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
5	2.19	31.3	31.3
	1.09	15.5	46.9
	.95	13.6	60.5
	.79	11.3	71.7
	.72	10.3	82.1
	.70	10.0	92.1
	.55	7.9	100.0

Thus, there appear to be two components operating within the Miscellaneous Category. However, the first component is stronger and accounts for more of the variance than the second.

<u>Sub-Category</u>	<u>Communality</u>
1	.68
2	.40
3	.53
4	.43
5	.17
6	.45
7	.60

<u>Category</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
6	3.17	63.3	63.3
	.79	15.8	79.1
	.60	12.1	91.1
	.33	6.6	97.7
	.11	2.3	100.0

Thus, there appears to be one major component operating within the Budgeting Category.

<u>Sub-Category</u>	<u>Communality</u>
1	.50
2	.26
3	.42
4	.69
5	1.00

<u>Category</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
7	2.85	71.2	71.2
	.53	13.3	84.5
	.34	8.4	92.9
	.28	7.1	100.0

Thus, there appears to be one main component within the Cooking/Care of Food/Nutrition Category.

<u>Sub-Category</u>	<u>Communality</u>
1	.68
2	.78
3	.76
4	.63

With the aforementioned data, the latent root criterion (Eigenvalue) was used to determine how many factors should be considered. (Hair, Anderson, and Tatham, 1987). However, it should be noted that Eigenvalues that are close to 1 are not very high, and are therefore not suggestive of clear-cut factors. In addition, the percentage of variance accounted for by these factors should be considered in determining the presence of actual factors.

The next statistical data that was examined is the Principal Component Analysis (PCA) of all of the ILSFA's sub-categories. An orthogonal rotation (Varimax) was employed to achieve the simplest and theoretically most meaningful factor pattern. (Hair, Anderson, and Tatham, 1987).

TABLE 25

PCA PERFORMED ON ALL SUB-CATEGORIES PRE-ITEM ANALYSIS

The data are as follows:

Components that contribute up to 70% of the ILSFA's cumulative variance will be listed. The remaining factors are quite small and therefore meaningless.

<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
1	8.18	22.7	22.7
2	4.46	12.4	35.1
3	1.56	4.3	39.5
4	1.54	4.3	43.7
5	1.31	3.6	47.4
6	1.26	3.5	50.9

<u>Factor</u>	<u>Eigenvalue</u>	<u>Pct. of Var.</u>	<u>Cum. Pct.</u>
7	1.21	3.4	54.2
8	1.06	3.0	57.2
9	1.05	2.9	60.1
10	1.00	2.8	62.9
11	.93	2.6	65.5
12	.91	2.5	68.0
13	.87	2.4	70.4

According to the latent root criterion, 10 components would be extracted since 10 components have eigenvalues over 1. However, the a priori criterion was utilized in determining the number of factors to be extracted since it is deemed to be an appropriate method when a hypothesis about the number of components to be extracted is being tested. (Hair, Anderson, Tatham, 1987). Noteworthy is the fact that the Guttman-Kaiser rule has been shown to be faulty and leads to over-factoring. The Cattell Scree plot is said to reveal more "real" and meaningful components. In this case, the Scree Chart reveals 2 real components.

In addition, in this case the scree test criterion for the number of components to be extracted does not coincide with the number of factors extracted by using the a priori criterion. (See Figure 2)

Figure 2

Pre-item Analysis
Scree Chart

As can be seen from the eigenvalues of this Principal Component Analysis, there appears to be one very significant component, and one second strong, but lesser component, operating in the ILSFA. These findings shall be interpreted in the discussion section of this paper. However, it should be remembered that the PCA performed on the ILSFA following the item analysis is likely to generate a much clearer and meaningful factor pattern.

Table 26 presents the rotated factor matrix that can be used to reflect the contents of the various 7 dimensions.

TABLE 26

ROTATED PCA ANALYSIS PRE-ITEM ANALYSIS

Rotated Factor Matrix:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7
P6C5	.85				.27		
P7C2	.84						
P6C4	.81						
P7C4	.80						
P7C3	.80						
P7C1	.78						
P6C1	.77						
P6C3	.74		.28				
P1C3		.72					
P3C1		.72					
P3C5		.68					
P3C3		.64					
P2C3		.60					
P1C1		.60	.39		.33		
P4C2		.57					
P3C4		.57					
P4C5		.48					
P1C4		.45					-.34
P3C2		.42	.40				.29
P1C2			.73				
P5C3			.62	.28			
P2C1		.35	.55				
P5C6			.49	.32	.28		
P5C2		.30	.40				
P4C4				.65			
P4C1		.31		.58			
P5C5				.55	.32		.27
P2C5		.37		.43			
P6C2	.36				.61		
P2C4		.31	.27		.56		
P5C4			.31		.44		
P2C6			.27		.31	-.30	
P4C3		.29				.69	
P5C1			.27			.48	
P5C7		.32		.28		-.47	
P2C2							.75

Factor Transformation Matrix:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
FACTOR 1	.54	.66	.38	.25	.25
FACTOR 2	-.83	.44	.28	.18	.04
FACTOR 3	.04	-.24	.59	-.31	-.13
FACTOR 4	.00	-.47	.14	.84	.17
FACTOR 5	.00	.23	-.61	.15	.09
FACTOR 6	.05	.18	-.16	.13	-.58
FACTOR 7	-.09	-.07	-.12	.26	.74

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