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ABSTRACT

This paper describes the development and test of an early-warning instrument for identifying at-risk students aged 10-15. A statistically sound test to identify at-risk high school students existed in the Personal Skills Map--Adolescent version (PSMA-A). This study used a modified version of PSM-A, which was renamed Personal Skills for Achievement (IPSA). IPSA evaluates students in four domains: school, home, peer relationships, and internal dialogue. IPSA was administered to 4,300 students in Grades 5-8 from 26 schools in 8 states. Both rural and urban schools were represented that contained populations of White, Black, Hispanic, Asian, and American Indian students. Responses were analyzed using principle components varimax factor rotation and univariate analysis of variance. IPSA was found to be a valid and reliable instrument to use with this population. The original 11 subscales of PSM-A were regrouped via the factor analysis into nine new factors with reliability of .53-.98. These factors were labeled fulfunctioning, stress and control issues, need to change, decision and time management, anger regulation, striving attitudes, friendship dilemma, peer influence, and crisis potential. The internal consistency of IPSA was .95 on its 189 questions. IPSA differentiated students in regular classrooms from educationally at-risk students on six of the nine factors, and from special education students on eight factors. Rural students were significantly different from urban students on four factors and showed greater variability (standard deviation). This paper contains 63 references. (SV)

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Inventory of Personal Skills for Achievement:

Validity and Reliability Study of an Instrument for

Identifying Educationally At-Risk Junior School Students

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ABSTRACT: Identification of educationally at-risk students has long been a problem. A statistically sound test instrument to identify and remediate at-risk high school students existed in the Personal Skills Nap - Adolescent version (PSN-A). This study has focused on testing junior high age students with a shortened, simplified and expanded written with auditory administration of the PSN-A, and renamed this new test the Inventory of Personal Skills for Achievement (IPSA). IPSA evaluated studends in four domains - school, home, peer relationships and internal dialogue. Subjects for this study consisted of 4300 students in grades 5, 6, 7 and 8 from 26 schools and 8 states from the North, South, Central and Southwest areas of the U.S.. Both urban and rural schools were represented with a population of White, Black, Hispanic, Oriental and Native American students. Responses to the instruments were analyzed using principle components varianx factor rotation and univariate analysis of variance. IPSA was found to be a valid and reliable instrument to utilize with this population. The original 11 subscales of PSN-A did not factor group into the before labeled scales, but in fact re-grouped into nine new factors with reliability from .53 to .98. The internal consistency of IPSA was .95 on 189 questions. Statistical analysis found that IPSA did differentiate students in regular class rooms from educationally at-risk students on 6 of its 9 derived factors and special education students on 8 of the 9 derived factors. Rural students were significantly different from urban students on 4 of the 9 factors.

3 (1)

Nationally, 25 percent of secondary students drop out of school before completing high school (Catterall, 1986). Dropout prevention programs have been in effect in high schools for several decades, yet students continue to dropout of school in large numbers (Catterall, 1986; Hewitt & Johnson, 1979; O'Connor, 1985, Schreiber, 1979; Self, 1985). Some research has suggested that the decision to dropout comes after lengthy consideration (Bean, 1981; NYC Board of Education, 1986; Wagner, 1984). In some states three out of ten students completed fewer than nine years of schooling with studies indicating that the majority of dropouts do not complete minth grade (Catterall, 1986; Curtis, 1983; Robledo, 1986). With this in mind, intervention should begin before minth grade. However, an effective method to identify those students at risk of dropping out of school is needed before ninth grade (Greene, 1987). This study was aimed at developing such an early warning instrument for identification of at-risk junior high age students starting in fifth grade.

In 1979, Nelson and Low constructed an early identification and intervention instrument for potential college freshmen dropouts, the Personal Skills Map (PSM). This was later simplified for high school students and named the Personal Skills Map -Adolescent (PSM-A) version (Nelson & Low, 1979, 1981). purpose of this study was to validate a shortened, simplified version of the PSM-A to utilize with a junior high age population, ages 10 through 15. This revised instrument has been renamed the Inventory of Personal Skills for Achievement (IPSA). It evaluates the student's intrapersonal, interpersonal and life management skills through the student's interactions and behavior in four domains - at school, at home, with friends and in general This studies question asks if IPSA can differentiate atrisk or special education students from those not identified as at-risk. Are there differences between rural and urban students on IPSA factors?

Theoretical Foundations of IPSA

Psychologists Adler (1963a, 1963b), Allport (1968), Bandura (Bandura & Walters, 1963) and Maslow (1971) observed that fully functioning adults evidence intrapersonal competence in specific The fully functioning person displays an openness to experience, spontaneity, self-reliance, imagination and individuality (Maddi, 1980). The less fully functioning person has low activity and underdeveloped social interest (Adler, 1963b). Self-actualizers are problem centered, realistically oriented, and generally accepting of themselves and others (Maslow, 1971). They stated that accomplished individuals have high self-esteem and self-acceptance accompanied by the ability to risk and accept new challenges with drive and motivation to grow. Achievers personality characteristics consist of a desire to continually strive to learn and accomplish (Kaplan & Sadock, 1985; Maddi, 1980). Students who achieve in school have some of the same traits as fully functioning adults in that they are motivated and committed to grow and achieve (Coles 1981). Selfesteem is evident, and they achieve at or above grade level and



do not repeat grades or classes (Purkey, 1970).

Students who drop out evidence characteristics of poor intrapersonal skills (Peng, Takai & Fetters, 1983; Rumberger, 1983; Schreiber, 1979). Intrapersonally, those who have dropped out generally have poor self-esteem, lower grades and often lower reading levels, with many repeating grades in school. Dropouts lack academic motivation as well as the drive and commitment to complete goals (Beacham, 1980; Irvine, 1979; Martin, 1981; O'Connor, 1985; Rumberger, 1983; Schreiber, 1979). These problems are evidenced over a number of years before they drop out (Martin, 1981; Poole & Low, 1981). Dropouts also have study skills problems, poor organizational skills, low stress management capabilities and a long-time intention to drop out of school (Bean, 1981; Greene, 1987; Haladyna, 1979; NYC Board of Education, 1986; Upp & Colby, 1986; Wagner, 1984; Wintler, 1986).

The interpersonal skills found in the more fully functioning individuals are appropriate communication skills, interpersonal awareness with empathy and intimacy skills, leadership and commitment (Kaplan & Sadock, 1985; Maddi, 1980; Nelson & Low, 1981). These characteristics are defined in the works of Adler (1963a & 1963b; Ansbacher & Ansbacher, 1956), Durkheim (Cockerham, 1981; Grusky & Pollner, 1981), Goldstein, (1939; Boring & Lindzey, 1967), Maslow (1970 & 1971) and Rogers (1961, 1967, 1969, 1977 & 1980). They result in healthy interpersonal relationships within the individual's environment and the society in which he or she lives. These life skills are found in the achieving student's positive integration into groups and activities in their academic setting. At home the achievers generally have supportive family members who have usually completed school (Self, 1935).

The more fully developed interpersonal skills result in an individuals higher self-esteem with effective growth patterns to accomplish personal endeavors (Purkey, 1970). To gain control and direction these individuals are observed to use both concrete and abstract reasoning. Their reasoning ability assists in impulsive-awareness which acts as a deterrent against destructive tendencies and this enhances relationships (Getzlaf, 1984; Kaplan & Sadock, 1985; Maddi, 1980; Rubin, Dorle, & Sandidge, 1977; Taylor, 1964; Weidman, 1985).

The interpersonal deficits of the dropouts are the antithesis of the more fully functioning person. Less accomplished people have an inability to actualize their potential and are defensive, passive or aggressive, and frequently un-accepting of themselves or others (Rogers, 1977, 1980). Students who drop out evidence more concrete thinking as well as more rigid, compulsive, antisocial behavior (Bean, 1981; Greene, 1987; Haladyna, 1979; Rounds, 1984; Upp & Colby, 1986; Wintler, 1986). Dropouts frequently exhibit aggressive behavior,



individual isolation and an overall lack of bonding. This results in difficulty integrating into academic or extra curricular activities (Bianchi & Bean, 1980; Fahs, 1987; Kafer, 1984; Tom, 1982; Waldo, 1986; Young, 1986). Dropouts frequently live in a societal structure evidencing lower levels of accomplishment with marked racial and sexual differences (Clark & Grandy, 1984; Hand & Prather, 1985; Inglehart, 1987; Ironside, 1979; Lay & Wakstein, 1984; Reichard & Hengstler, 1981). Seventy-five percent of dropouts come from families of low socioeconomic status. Dropout's parents and/or friends have a lower education level with apathetic feelings concerning education (Beacham, 1980; Hewitt & Johnson, 1979; Martin, 1981).

In assimilating the above theoretical information IPSA questions focused on the interpersonal as well as intrapersonal domains. The students total environmental influences of school, home, friends and internal thoughts were addressed. Students who are educationally at-risk should reflect deficits in some or all of these areas. Adolescence is a transitional period between childhood and adulthood where youth conform to others expectations, maintaining the social order, or redefine their ego structure to either agree with or to oppose internal and external expectations. Junior is an ideal time to identify conflict, self-doubt and ineffectiveness in order to redirect this student during this pliable transition period.

Method

Subjects

The subjects in this study consisted of 4346 students from eight states in the North, Central, South, and Midwest sections of the United States. These students were from 26 schools*. The grade levels were comprised of 624 fifth, 1504 sixth, 1281 seventh and 727 eighth grade students. The subjects consisted of 55.6% urban and 44.4% rural students. The population consisted of 57.6% urban vs 47.5% rural Males and 52.5% urban vs 42.4% rural female students with overall 48.9% Males and 51.1% Females. Socioeconomic status was inferred from the lunch status and there was .0000 significance between populations with Urban consisting of 25.2% on free lunch, 6.6% on reduced lunch and 68.2% on normal cost lunch schedule with Rural consisting of 11.3% on free lunch, 9.5% on reduced lunch and 79.0% on normal cost lunch.

Ethnic differences were significant between the urban and rural populations. Urban students were comprised of: 55.8% White, 12.3% Black, 27.7% Hispanic, 1.6% Oriental, 2.7% Native American. Whereas rural students consisted of 91.1% white, 4.1% Black, 3.1% Hispanic, .6% Oriental, and 1.1% Native American. The language spoken in urban homes was 74.4% English only with rural home 94.9% English only. English and Spanish was spoken in 24.7% of urban and only 3.9% of rural student homes.

*It will be noted that the figures reported throughout this study may have small population number changes due to missing or incomplete data on different individual subjects.



One significant subject sample evaluated was at-risk students. These subjects were comprised of those students who had repeated a grade and were performing one grade level below their present grade in math and/or English; had repeated two grades and were performing at grade level; or who had never repeated a grade but were performing two grade levels below their placement in math and/or English. In identifying at-risk status 88.9% had never repeated a grade, 9.7% had repeated a grade once, 1.2% had repeated grades twice, .2% had repeated grades three times. There was a total of 198 at-risk students identified through the above definition. An additional sample of 197 were identified as special-education students by their school, this sample of students were all having difficulty performing in a regular classroom setting.

Xeasures

This study used one test instrument the Inventory of Personal Skills for Achievement, IPSA. IPSA is a revision of the PSM-A with the original 300 items reduced to 168 item with 21 new items added for a total of 189 items. IPSA was pilot tested three different times in an urban, mixed-ethnic junior high. After each pilot test the items which were not clear were In this research IPSA was administered rewritten and retested. in groups with an auditory version of the tape played as the students followed along in their test booklet. cooperation and comfort a teenage boy and girl recorded the instructions and all the questions for IPSA in a professional The teen readers randomly alternated groups of sound studio. questions with their opening statement on the tape framed to initiate a positive attitude toward the test of: "Hi, I'm Tracy...I'm Jason. We are here to help you complete this test quickly and easily...". The playback time for the IPSA tape was 33 minutes for 189 items. Adding in the time to distribute and collect the test, fill the demographic information and complete all items the total administration time ranged from 45 to 55 minutes.

IPSA evaluated characteristics and skills that were observed (see Theoretical Foundations) to exist in fully functioning individuals and achieving students. Each question was weighted with a value from one to three, with a value of 3 points give to healthy, functional skills, and one point give to unhealthy, nonfunctioning skills. Each question could be answered in three ways, yes, sometimes yes and sometimes no, or no. The test items categories of achievement oriented skills consisted of: the intrapersonal skills of decision making, drive strength, selfesteem and growth motivation; the interpersonal skills of commitment ethic, empathy, interpersonal awareness, and leadership; and life management skills of communication styles (aggression, assertion, or deference), and stress and time management. One section of items pertaining to change orientation were utilized to ask the student if they were



comfortable with their present skill levels in all of the before mentioned areas. In order to identify students with non-academic at-risk behaviors and thoughts, IPSA was written to also contain questions which addressed statements about hopelessness, running away from home, compliance with peers in harmful behavior, school problems, the presence of supportive adults and friends, negative environmental factors and self-defeating behavior and beliefs.

Procedure

In April and May 1989, some 7000 packets were mailed through the postal system or hand carried to local schools. Each packet contained: student permission forms, IPSA test booklets, answer and demographic sheets and cassette tapes of the IPSA test and instructions. The tests were given during classroom time in the last six weeks period, April, May and June 1989. The test was administered by a counselor or by a teacher who was selected by the counselor. The schools were requested to test a random sample of their students from low (at-risk), middle and high ability classes, but not to test students with an I.Q.s below 70.

Of the 26 participating schools, nine schools tested all of their students and the remaining schools tested from one to three classes per grade. The students were given the right to participate or withdraw. Each student was told that the test was for research and that they would not be individually identified in the results. Prior to testing the students were handed a copy of a letter containing the purpose of the test and that this test was for research purposes. Each student signed this slip prior to testing to testify to their compliance to volunteer. Students were allowed to retain a copy of this letter. The schools had a copy of a letter to send to parents for permission, but only one chose to contact the parents to request the right to test.

Results

Construct validation of IPSA involved a principle components factor analysis with varimax rotation. Only items with factor loadings above .30 were accepted. The factor analysis of IPSA found that the original subscales of PSM-A did not group into the subjectively labeled subscales, but in fact regrouped into 9 new factors which contained a combination of 139 of the 189 items from different PSM-A subscales along with the new items. The new factors were labeled as (1) Fulfunctioning, (2) Stress and Control Issues, (3) Need to Change, (4) Decision and Time Management, (5) Anger Regulation, (6) Striving Attitudes, (7) Friendship Dilemma, (8) Peer Influence and (9) Crisis Potential. High Factor scores would indicate a strength in negotiating the scale contents, where as a low score would be indicative of a difficulty in this scale's area.

The IPSA had sufficient homogeneity within scales to provide a minimum acceptable internal consistency of .60 in Factors 1, 2, 3, 4, 7, 8 and 9 (see Table 2). Cronbach's alpha was used to



identify factors which had the minimum reliability needed for research, .60. The factors (5 & 6) which did not reach this level were very close (.57 and .53). Factors 5 and 6 appeared useful in identifying at-risk junior high age students, hence these scales were retained. When all 189 items were tested for reliability with 3245 subjects, an Alpha of .95 was obtained.

Table 1
Factor Means, Standard Deviations and Internal Consistency
of IPSA Factor Analysis - Urban vs. Rural

Factor Mean			S.D.		#	Reliability	F	
	Urban	Rural	Urban	Rural	Items.	Prob	Probability	
<u> </u>	133.324	133.857	37.441	38.625	70	.980	.311	
2	31.585	30.953	5.976	6.244	14	.820	.001	
3	23.308	23.242	5.335	5.490	11	.787	.954	
4	29.124	28.984	5.313	5.687	11	.813	.744	
5	22.927	22.737	3.469	3.623	10	.573	.098	
6	17.647	17.603	3.418	3.537	11	.534	.983	
7	21.488	20.350	4.020	5.455	9	.734	.000	
8	14.378	13.658	2.636	3.275	6	.631	.002	
9	15.883	15.577	2.486	3.054	€	.653	.002	

Urban vs Rural on 9 Pactors

ISPA factors were not significantly different between urban vs rural students on Factors 1, 3, 4, 5 or 6. With Factor 1 pertaining to an overall combination of factors indicating empathy, assertive communication, decision making and commitment to follow through on tasks the urban and rural students were not significantly different. There was no significant difference in the students felt need to change. The urban and rural students evidenced an equal ability to manage time and make decisions. Although there was some difference between population in the ability regulate anger it was not significant at the .05 level. There was no significant difference in conscientious, striving student attitudes between the two groups.

There were significant differences on Factors 2, 7, 8 and 9 between the urban and rural students. Urban students were significantly higher (more accomplished) than rural students on the stress and control issues and in the severity of crisis type behavior such as school tardiness or suspension or running away from home. The urban student related that they managed friendship themmas better and withstood peer influence more adequately than the rural student. Rural students appear to have greater variability (standard deviation) than the urban students, despite the fact that there was greater ethnic homogeneity.



At-Risk, Special Education vs Non-Labeled Students

IPSA discriminated between subjects labeled at-risk and those not found at risk. This was determined in two ways. First, a total IPSA score comparison was used to differentiate between students at-risk vs. those not at-risk. Secondly, a comparison of means using an ANOVA was made between the nine factors in relationship to students at-risk or in special education vs. those not labeled at-risk.

Table 2

At-Risk, Special Education vs. Non-Labeled Students
Mean. Standard Deviation and Probability of Significant

Fac	tors	At-ris	k	Special	Ed.	Norm	
	Prob.	Mean	S.D.	Mean	s.D.	Mean	S.D.
1.	.000	130.970	34.656	123.912	32.751	134.096	37.586
2.	.000	27.657	5.681	27.685	6.041	31.907	5.735
3.	.000	23.254	5.378	24.680	5.484	23.278	5.323
4.	.000	25.587	4.961	26.075	5.599	29.650	5.257
5.	.000	20.911	3.500	21.076	3.617	23.209	3.280
6.	.005	17.051	2.949	17.537	3.364	17.613	3.449
7.	.000	17.098	3.574	15.625	3.517	21.661	3.612
8.	.000	12.608	2.492	12.359	2.854	14.430	2.444
9.	.000	13.466	2.887	12.868	2.875	16.177	2.251

In order to further evaluate the significance of the individual nine factors with an at-risk population, an ANOVA was executed between three populations of students. Group 1 consisted of 178 at-risk students Group 2 included 175 students who had been placed in Special Classes by their school counselors due to the fact that they could not function in a regular class room setting. Group 3 included 3466 students who had not been categorized in Group 1 or 2 and were not considered at-risk by this research defination. Each of the nine factors were evaluated comparing these groups. The results are summarized in Table 4. It is important to remember that not all of the 26 schools in this study chose to put labels on their students. All schools did give sufficient information to place a student in Group 1, at-risk. There may have been many more students who could have been placed in group 2. These ANOVAs indicate that there was a significant difference between students labeled at risk or in special education and those not labeled at risk on six of the nine new IPSA factors.

Students in Group 1 who had been identified by this research as at risk, scored significantly lower on six of the nine factors which were: Stress and Control Issues, Decision and Time Management, Anger Regulation, Friendship Dilemma, Peer Influence and Crisis Potential. These were the factors which seemed to support deficit skills. At-risk students did not score



significantly different from the comparison group on the Fulfunctioning, Need to Change or Striving Attitude Scales. Students in special education classes, Group 2, scored significantly lower than the comparison group on eight factors with Factor 6, Striving Attitudes, the only nonsignificant difference.

Table 3

Factor 1 - 9 At-Risk. Special Education vs Non Labeled

Students - Tukeys Comparisons for Significance

	At-Risk Group 1	Sp. Ed. Group 2	Norm. Group 3	*
	1-3-7*			
ŀ	2-4-5 7-8-9	1-2-3-4 5-7-8-9		

Note: Groups significantly different at .050.
* The numbers represent their factor number.

Conclusions

We have shown that the Inventory of Personal Skills for Achievement, IPSA, is a valid and reliable test instrument and can differentiate students who appear educationally at-risk or who are in special education classes from those not labeled. This study did not delve into intelligence nor socioeconomic status, it simply looked at the outward signs of interpersonal, intrapersonal and life management skills of junior high age students at school, at home, with friends and in general. Students who received special education classes or have repeated grades and are below grade level in reading and/or math were found to reveal measurable signs of distress. Those at-risk students showed interpersonal problems with friends and a lack of assertiveness to peer pressure more often than other students. At-risk students seemed to have trouble managing their anger and evidenced stress and control issue problems and often outward crisis type behavior.

There is a difference between the rural and urban students on the identified factors. There is greater deviation on the rural students responses. The rural students evidence less ability to manage stress and control in their lives. The rural students evidence greater dilemma's with friendships and are more easily influenced by peers. The rural population have more students evidencing crisis potential behavior such as running away, school behavior problems, tardiness and school suspension. IPSA factors were not significantly different between urban vs rural students on the Fulfunctioning Scale, Need to Change Scale,

Decision and Time Management Scale, Anger Regulation Scale or on the Striving Attitude Scale.

This research has shown that junior high age students will openly admit their concerns and problems. The present study is significant in four ways. First, this study resulted in an instrument for use in identification of potential school dropouts before the decisions have been finalized. Second, widespread use of IPSA as a key element in a dropout prevention program could save large amounts of tax dollars. Third, early adolescence is an ideal time for intervention to form a basic new sound structure for the imminent adult. Fourth, data available from IPSA responses can be used by school counselors to develop intervention strategies to prevent a student from eventually dropping out. Fifth, individual item analysis can indicate ethnic, age, and regional differences which exist and could give direction as to specific community based intervertion programs (see Appendix 1).



References

- Adler, A. (1963 a). The practice and theory of individual psychology. Patterson, NJ: Littlefield Adams.
- Adler, A. (1963 b). The problem child. New York: Capricorn Books.
- Allport, G. (1968). The person's psychology: Selected essays.
 Boston: Beacon Press.
- Ansbacher, H. I. & Ansbacher, R. R. (Eds.). (1956). The individual psychology of Alfred Adler: A systematic presentation in selections from his writings. New York: Basic Books.
- Bandura, A. & Walters, R. H. (1963). <u>Social learning and personality development</u>. New York: Holt, Rinehart & Winston.
- Bandura, A. (1977). <u>Social Learning theory</u>. Englewood Cliffs, NJ: Prentice-Hall.
- Beacham, H. C. (1980). Reading and helping high school dropouts and potential school leavers. (Research Project ED236451). Conducted for Florida A&M University, Tallahassee, FL.
- Bean, J. P. (1981). Student attrition, intentions, and confidence: interaction effects in a Path Model, PartI, the 23 variable model. (Research Report ED202443). Paper presented at the Annual Meeting of the American Educational Research Association, Los Angeles, CA.
- Bianchi, J. R. & Bean, A. G. (1980). The prediction of voluntary withdrawals from college: an unsolved problem. <u>Journal of Experimental Education</u>, <u>49</u>, 29-33.
- Boring, E. G. & Lindzey, G. (Eds.). (1967). A history of psychology in autobiography (Vol. 5). New York: Appleton-Century-Crofts.
- Catterall, J. S. (1986). A process model of dropping out of school: Implications for research and policy in an era of raised academic standards. (Research Report ED281137). Office Educational Research and Improvement, Washington, DC.Cendese, W. I. (1979). Valley High School: Dropout prevention school. National Association of Secondary School Principals Bulletin, 63 (425), 124-125.
- Clark, M. J. & Grandy, J. (1984). <u>Sex difference in the academic performance of scholastic aptitude test takers</u>. (Research Report ED253584). Sponsored by College Entrance Examination Board, New York, NY.
- Cockerham, W. C. (1981). Sociology of mental disorders. Englewood Cliffs, NJ: Prentice Hall.
- Coles, H. W. III (1981). College student perceptions, four year follow-up: 1973-77, characteristics of freshmen associated with retention. (Research Report ED200125). State University of NY, Buffalo, NY.
- Curtis, J. (1983). <u>Dropout prediction</u>. (Research Report ED233282). Compiled for Texas Office of Research and Evaluation, Austin, TX.



- Durken, J. H. (1981). <u>Secondary school dropouts</u>. (Research Report ED205684). Minnesota Department of Education. St. Paul, MN.
- Fahs, M. E. (1986, April). Coping in school: Correlations among perceptions of stress, coping styles, personal attributes, and academic achievement in inner-city junior high school students. (Research Report ED270537). Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.
- Fahs, M. E. (1987, April). Students coping with academic and social stress in an inner-city middle school. (Research Report ED283914). Paper presented at the Annual Meeting of the American Educational Research Association, Washington, DC.
- Getzlaf, S. (1984). Two types of undergraduate attrition: application of Tinto's Model. Research in Higher Education, 20(3), 257-268.
- Goldstein, K. (1939). The organism. New York: American Book. Greene, B. Z. (1987). What works for school dropouts? Updating School Board Policies, 18 (11), 1-3.
- Grusky, O. & Pollner, M. (1981). The sociology of mental illness:

 Basic studies. New York: Holt, Rinehart & Winston.
- Haladyna, T. (1979, November). <u>Correlates of attitudes toward</u>
 <u>social science</u>. (Report: ED179456). Paper presented at
 the Annual Conference for Social Studies. Portland, OR.
- Hand, C. A. & Prather, J. E. (1985, April). The predictive validity of scholastic aptitude test scores for minority college students. (Research Report ED261093). Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.
- Hewitt, J. D. & Johnson, W. S. (1979). Dropping out in Middletown. The High School Journal, 62 (6), 252-256.
- Inglehart, M. R. (1987, May). Gender differences in academic achievement -The result of cognitive or affective factors? (Research Report ED285064).Paper presented at the Annual Meeting of the Midwestern Psychological Association, Chicago, IL.
- Ironside, E. M. (1979, October). <u>Voluntary withdrawal: Why don't they return</u>. (Research Report ED180371). Paper presented at the Annual Meeting of the Southern Association for Institutional Research, Orlando, FL.
- Irvine, R. W. (1979). Structure of school, personality, and high school dropouts. <u>Journal of Negro Education</u>, <u>48</u>(1), 67-
- Kafer, N., F. (1984). <u>Interpersonal relationships of children and adolescents: symposium IIB</u>. (Research Report ED273362). Conference paper at Third Asian Workshop on Child and Adolescent Development, New South Wales, Australia.
- Kaplan, H. I. & Sadock, B. (Eds.) (1985). <u>Comprehensive</u>

 <u>Textbook of Psychiatry/IV</u> (4th ed). Baltimore, MD:
 Williams & Wilkins.



- Lay, R. & Wakstein, J. (1984, May). Race, academic achievement, and self-concept of ability. AIR annual 1984 forum paper. (Research Report ED246773). Paper presented at the Annual Forum of the Association for Institutional Research, Fort Worth, TX.
- Maddi, Salvatore R. (1980). <u>Personality Theories: A Comparative Analysis</u>. Homewood, IL: Dorsey Press.
- Martin, D. L., Jr. (1981). <u>Identifying potential dropouts: A</u>

 <u>research report</u>. (Research Report ED216304). Kentucky

 State Department of Education, Frankfort, KY.
- Maslow, A. H. (1970). <u>Motivation and personality</u>. New York: Harper and Row.
- Maslow, A. H. (1971). <u>The further reaches of human nature</u>. New York: Viking Press.
- Nelson, D. B. and Low, G. R. (1979). <u>Personal Skills Map. A</u>
 <u>positive assessment of career/life effectiveness skills</u>
 <u>manual.</u> Corpus Christi, TX: IDHR, Corp..
- Relson, D. B. and Low, G. R. (1981). <u>Personal Skills Map. A</u>
 <u>positive assessment of career/life effectiveness skills</u>
 <u>manual revision.</u> Corpus Christi, TX: Individual
 Directions in Human Resources.
- Hew York City Board of Education (1986). Model practices in the 1985-86 attendance improvement and dropout prevention program. (OEA Evaluation Report: ED279766). Brooklyn, NY.
- O'Connor, P. (1985). <u>Dropout prevention programs</u> that work. (Information analysis ED275065). Oregon School Study Council, University of Oregon, Eugene, OR.
- Peng, S., Takai, R. T. & Fetters, W. B. (1983, November). High school dropouts: Descriptive information from high school and beyond. (Research Project ED236366). Paper presented at 1983 Annual meeting of the American Educational Research Foundation, National Center for Educational Statistics, Washington, DC.
- Poole, M. E. & Low, B. C. (1981, April). Who stays? Who leaves?

 An examination of sex differences in staying and leaving. (Research Paper ED203528). Faper presented at the Annual Meeting of the American Educational Research Association, Los Angeles, CA.
- Purkey, W. W. (1970). <u>Self-concept and school</u> <u>achievement</u>. Englewood Cliffs, NJ: Prentice Hall.
- Reichard, D. J. & Hengstler, D. D. (1981). A comparison of black and white student backgrounds and perceptions of predominantly white campus environment: Implications for institutional research and program development.

 (Research Report ED205127). Paper presented at the Annual Forum of the Association for Institutional Research, Minneapolis, MN.
- Robledo, M. (1986, October). <u>Texas school dropout survey</u>
 <u>project: A summary of findings</u>. (Research Report
 ED279752). Inter-cultural Development Research
 Association, San Antonio, TX.



- Rogers, C. (1961). On becoming a person. Boston: Houghton Mifflin.
- Rogers, C. (1967). A plan for self-directed change in an educational system. <u>Educational Leadership</u>, <u>24</u>, 717-731.
- Rogers, C. (1969). Freedom to learn. Columbus, OH: Merrill.
- Rogers, C. R. (1977). Personal power. New York: Delacorte.
- Rogers, C. R. (1980). A way of being. Boston: Houghton Mifflin.
- Rounds, J. C. (1984). Attrition and retention of community college students: problems and promising practices. (Review Literature ED242377), CA.
- Rubin, R. A., Dorle, J. & Sandidge, S.(1977). Self-esteem and school performance. <u>Psychology in the Schools</u>, <u>14</u>, 503-507.
- Rumberger, R. W. (1983). Dropping out of high school: The influence of race, sex, and family background. American Educational Research Journal, 20, 199-220.
- Schreiber, D. (1979) Dropout causes and consequences. In The Encyclopedia of Educational Research (pp. 308-316).

 Toronto: MacMillian.
- Self, T. C. (1985). <u>Dropouts: A review of literature.</u> <u>Project Talent Search</u>. (Research Report ED260307). Northeast Louisiana University, Monroe, LA.
- Taylor, R. G. (1964). Personality traits and discrepant achievement: a review. <u>Journal of Counseling Psychology</u>, 11, 76-81.
- Tom, A. K. (1982). Non-traditional predictors of academic success for special action admissions. (Research Report ED256268). Test Questionnaire, Office of Student Affairs Research Information, Davis, CA.
- Upp, R. & Colby, A. (1986). <u>Improving student retention in Community Colleges</u>. <u>Eric Digest</u>. (Report ED276493).

 Office of Education Research and Improvement, Washington, DC.
- Wagner, H. (1984). Why kids quit attending school. Education, 105(2), 185-188.
- Waldo, M. (1986). Academic achievement and retention as related to students personal and social adjustment in university residence halls. <u>Journal of College and University Student Housing</u>, 16(1), 19-23.
- Webb, J. (1988). <u>Interpersonal Skills Relationship Mapping in distressed vs. non-distressed marriages</u>. Unpublished Doctoral Dissertation, Fieldings Institute, CA.
- Weidman, J. C. (1985, March). <u>Retention of nontraditional</u>
 <u>students in post secondary education</u>. (Research report
 ED 261195). Paper presented at the Annual Meeting of the
 American Educational Research Association, Chicago, IL.
- Wintler, A. (1986, April). <u>Differential validation of a Path analytic Model of university dropout</u>. (Research Report: ED270501). Paper presented at Annual Meeting of the American Educational Research Association, San Francisco, CA.



You: g, E. D. (1986). Retention of culturally diverse students: A successful teaching strategy. (Project Description ED268944). Philadelphia, PA.



Appendix 1 Significant Item Statistics

In assessing certain IPSA questions this research evidenced the following powerful statistics on certain IPSA crisis items. This is a summary of over 4300 student's replies.

% Of replies by question: 11. When I am with friends they can push me to try new and scary things, even if I don't want to do it. • 11.9% YES 28.4% SOMETIMES 59.8% NO WHITE 10.5% YES 27.3% SOMETIMES 62.2% NO BLACK 11.5% YES 28.3% SOMETIMES 60.2% NO HISPANIC 27.7% SOMETIMES 61.7% NO **ORIENTAL** - 10.6% YES AM. INDIANS -58.8% NO 10.0% YES 31.32 SOMETIMES 60.1% NO - 11.6% YES 28.3% SOMETIMES .9928 TOTAL 28.7% SOVETIMES - 13.9% YES 57.4% NO Male 27.8% SCMETINES 62.LX NO .0000 Females 9.6% YES - 11.5% YES 25.6% SOMETIMES 62.9% NO Age 11 - 12.0% YES 33.8% SOMETIMES 54.2% NO .0028 Age 14 28.1% SCHETIMES 61.6% NO - 10.4% YES URBAN 55.4% NO . 15.6% YES 28.9% SOMETIMES .0000 RURAL 84. I haven't got a chance in school, I have given up hope. 9.8% SOMETIMES 82.9% NO 7. 1% YES UnitE 9.2% SOMETIMES 76.8% NO 14.0% YES BLACK 74.6% NO HISPANIC - 11.6% YES 13.8% SOMETIMES 6.4% SOMETIMES 89.4% NO 4.3% YES ORIENTAL AM. INDIANS - 16.3% YES 15.0% SOMETIMES 68.8% NO 80.7% NO .0000 TOTAL 8.6X YES 10.5% SOMETIMES - 10.9% YES 11.4% SOMETIMES 77.5% NO Males 6.5% YES P.6% SOMETIMES 83.8% NO .0000 Females 82.4% NO 9.4% SOMETIMES - 8.2% YES Age 11 81.1% NO 9.1% YES 9.8% SOMETIMES .8094 Age 14 - 9.5% YES 11.5% SOMETIMES 79.0% NO URBAN

139. I am good at talking my friends into doing something that is not right, something that might get then into trouble.

80.6% NO

```
20.0% SOMETIMES 66.5% NO
                 - 13.4% YES
      CHITE
                    15.6% YES
                                20.2% SOMETIMES
                                                 64.2% NO
      BLACK
                    17.1% YES
                                23.3% SCHETIMES
                                                 59.6% NO
      HISPANIC
                                14.9% SOMETIMES
                                                 76.6% NO
      ORIENTAL
                    8.5% YES
      AM. INDIANS -
                                23.5% SOMETIMES
                                                 56.8% NO
                    19.8% YES
                                20.6% SOMETIMES
                - 14.3% YES
                                                 65.0% NO
.0191 TOTAL
                                23.4% SOMETIMES
                                                 56.8% NO
                 - 19.7% YES
      MALES
                                                 72.8% NO
                 - 9.2% YES
                                18.0% SCHETIMES
.0000 FEMALES
                                15.6% SOMETIMES
                                                 73.2% NO
      Age 11
                 - 11.2% YES
                                23.1% SOMETIMES
                                                 57.6% NO
                - 19.3% YES
.0000 Age 14
                - 14.1% YES 20.9% SCHETIMES 65.0% NO
      URBAN
                - 14.4% YES 20.5% SOMETIMES 65.0% NO
.9238 AURAL
```

- 8.5% YES 10.9% SOMETIMES

.3975 RURAL





151. When I am with my friends I do whatever they want, even if it might be wrong.

```
7.4% YES
                                                     65.9% NO
      WHITE
                                  26.7% SOMETIMES
                                  24.3% SOMETIMES
                                                     69.4% NO
                      6.4% YES
      BLACK
      HISPANIC
                      8.2% YES
                                  26.9% SOMETIMES
                                                     64.9% NO
                      4.3% YES
                                  12.8% SOMETIMES
                                                     83.0% NO
      ORIENTAL
      AM. INDIANS - 14.8% YES
                                  25.9% SONETINES
                                                     59.3% NO
                      7.5% YES
                                  26.3% SOMETIMES
                                                     66.1% NO
.0624 TOTAL
                                                     62.4% NO
                      8.8% YES
                                  28.8% SOMETIMES
      Males
                      6.4% YES
                                  24.1% SOMETIMES
                                                     69.4% NO
.0000 Females
                                  22.6% SOMETIMES
                                                     70.1% NO
      Age 11
                      7.2% YES
                                                     61.4% NO
.0039
      Age 14
                      9.2% YES
                                  29.3% SOMETIMES
                                  24.8% SOMETIMES
                                                     68.6% NO
                      6.6% YES
      LIPRAM
                      9.1% YES
                                  29.0% SOMETIMES
                                                     61.9% NO
.0000 RURAL
```

177. I feel so trapped and hopeless that I don't care what happens to me.

```
12.7% YES
17.6% YES
                                    26.5% SOMETIMES
                                                       60.8% NO
      WHITE
                                                       59.4% NO
                                    23.1% SOMETIMES
      BLACK
                                                       55.9% NO
                       14.8% YES
                                    29.3% SOMETIMES
      HISPANIC
                                    23.9% SOMETIMES
                                                       67.4% NO
                       8.7% YES
      ORIENTAL
                                    28.8% SOMETIMES
                                                       50.5% NO
      AM. INDIANS -
                       21.3% YES
                       13.6% YES
                                    26.7% SOMETIMES
                                                       57.7% NO
.0173 TOTAL
                       13.7% YES
                                    25.1% SOMETIMES
                                                       61.2% NO
      Males
                                    27.9% SOMETIMES
                                                       58.5% NO
. 1225
      females
                       13.6% YES
                                    23.7% SOMETIMES
                                                       61.7% NO
       Age 11
                       14.6% YES
                       12.6% YES
                                    29.6% SOMETIMES
                                                       57.8% NO
.0481 Age 14
                                    27.3% SOMETIMES
                                                       59.0% NO
                       13.7% YES
      URBAN
                                  25.8% SCHETIMES
                                                       60.3% NO
                       13.8% YES
.5869 RURAL
```

179. Whenever I need help, I have an adult who will be there for me.

```
36.2% NO
                                   30.3% SOMETIMES
      WHITE
                      33.4% YES
                      37.0% YES
                                   25.1% SOMETIMES
                                                     37.9% NO
      BLACK
                                                     42.9% NO
                      27.0% YES
                                   30.0% SOMETIMES
      HISPANIC
                                   28.9% SOMETIMES
                                                     26.7% NO
      CRIENTAL
                      44.4% YES
                                                     41.3% NO
      AM. INDIANS -
                      32.5% YES
                                   26.3% SOMETIMES
                                   29.7% SOMETIMES
                                                     39.5% NO
.0044 TOTAL
                      32.7% YES
                                  32.5% SOMETIMES
                                                     31.7% NO
                      35.7% YES
      Males
                                   26.8% SOMETIMES
                                                     33.7% NO
.0004 Females
                      39.5% YES
                                  31.0% SOMETIMES
                                                     30.8% NO
                      38.2% YES
      Age 11
                                  31.7% SOMETIMES
                                                     30.6% NO
                     37.7% YES
.9563 Age 14
                                                     38.8% NO
      URBAN
                     31.8% YES
                                 29.4% SOMETIMES
                      34.2% YES 30.2% SOMETIMES
                                                     35.6% NO
.0902 RURAL
```



