The study investigated 17 dependent variables in the familial, personality and vocational areas, with male high school students (n=77) and male school dropouts (n=72), matched on age, as two levels of the independent variables. The study reveals that in comparison to their counterparts in high school, dropouts as a group, had parents of lower educational levels, had fathers whose occupations could be characterized by lower level of difficulty, responsibility and prestige, received less encouragement from parents regarding education, perceived relationships with fathers to be less fruitful, perceived fathers' attitudes toward them to be lower in acceptance and higher in avoidance, showed lower level of achievement motivation, had lower accuracy in perceiving the occupational prestige hierarchy, showed lower occupational aspiration, and chose occupations of the types which are of a lower level of difficulty, responsibility, and prestige. The significant differences were found between the two groups on father concentration, parental interest, fear of failure, and self-esteem. (author/MC)
COMPARISONS OF HIGH SCHOOL STUDENTS AND DROPOUTS ON SELECTED
FAMILIAL, PERSONALITY, AND VOCATIONAL VARIABLES

Meng-shu Tseng
West Virginia University

Paper presented at the 1970 Annual Meeting of the American Educational Research Association, Minneapolis,

March 3, 1970
Comparisons of High School Students and Dropouts on Selected Familial, Personality, and Vocational Variables

Meng-shu Tseng
West Virginia University

ABSTRACT

This study investigated seventeen dependent variables in the familial, personality, and vocational areas with male high school students (N=77) and male school dropouts (N=72), matched on age, as two levels of the independent variable. One-way ANOVA revealed that in comparison to their counterparts in high school, dropouts as a group had parents of lower educational levels (p < .001), had fathers whose occupations could be characterized by lower level of difficulty and responsibility (p < .01) and of prestige (p < .01), received less encouragement from parents regarding education (p < .01), perceived relationship with fathers to be less fruitful (p < .01), perceived fathers' attitudes toward them to be lower in acceptance (p < .01) and higher in avoidance (p < .05), showed lower level of achievement motivation (p < .001), had lower accuracy in perceiving the occupational prestige hierarchy (p < .001), showed lower occupational aspiration (p < .001), and chose occupations of the types which are of lower level of difficulty and responsibility (p < .001) and of prestige (p < .001). No significant differences were found between the two groups on father concentration, parental interest, fear of failure, and self-esteem.
Comparisons of High School Students and Dropouts on Selected Familial, Personality, and Vocational Variables

Meng-shu Tseng
West Virginia University

The primary purpose of this study was to determine if high school students and high-school-age dropouts as two distinct groups would show significant differences in their home backgrounds, relations with parents, personality attributes, and vocational behaviors.

The importance of family background as a factor in the school dropout problem has been stressed by many studies. Although a study carried out by Boggan (1955) showed that education of parents did not significantly differentiate dropouts from graduates, most studies have found that parents of school dropouts tended to have less education than parents of non-dropouts (Van Dyke & Hoyt, 1958; Blesdoe, 1959; Williams, 1963; Duncan, 1965). According to Van Dyke and Hoyt (1958), the question of whether or not the mother worked was of little value in differentiating dropouts from non-dropouts and the chances were nine to one that the child of an unskilled laborer would dropout as compared with the child of a professional man. That parents of graduates were more positive toward education for their children than were parents of dropouts has been reported by some studies (Snepp, 1956; Bowman & Matthews, 1960; Miller, 1963; Schreiber, 1966), but others (Mannino, 1962; Cervantes, 1965) have found no significant differences as far as the attributes of parents toward education was concerned.
In the area of personality traits, Muirhead (1965) reported that dropouts exhibited personality disorders to a greater extent than did graduates, whereas, French and Cardon (1966) found the male dropout to be a fairly sound individual with regard to his mental health. Chilman (1960) concluded that potential dropouts had significantly lower need scores in the areas of achievement, order, and cautious-controlled behavior. Tseng and Thompson (1968) found that significantly fewer school dropouts sought counseling services as compared with nondropouts. No significant differences between dropouts and nondropouts on patterns of self-concept were reported by Fifield (1964) and Beaard (1965).

In connection with school dropouts' occupational interests, a study (Young, 1954) found more dropouts showing interests in the manipulative occupations and fewer dropouts expressing interests in the cogitative occupations.

In the present study, seventeen dependent variables in familial, personality, and vocational areas were investigated. These variables included father's educational level, mother's educational level, father's occupation as coded in terms of its degree of difficulty and responsibility, father's occupation as measured by its prestige level, family encouragement with regard to education, relationship with father, perceived father's attitude relative to acceptance, perceived father's attitude relative to avoidance, perceived father's attitude relative to concentration, parental interest, achievement motivation, fear of failure, self-esteem, perception of occupational prestige, occupational aspiration, occupational choice as measured by the level of difficulty and responsibility of the occupation, and occupational choice as represented by the prestige level of occupation. It was hypothesized that high-school-age male dropouts would, in comparison
to their counterparts in high school, show significantly

(a) less favorable family backgrounds as evidenced by lower father's educational level, lower mother's educational level, lower level of difficulty and responsibility associated with the father's occupation, and lower prestige level associated with the father's occupation;

(b) less family encouragement on matters concerning education;

(c) less fruitful relationship with father;

(d) lower acceptance, higher avoidance, and higher concentration with regard to perceived father's attitudes toward them;

(e) lower level of perceived parental interest in them;

(f) lower level of achievement motivation;

(g) higher fear of failure;

(h) lower self-esteem level;

(i) less accurate perception of the occupational prestige hierarchy;

(j) lower occupational aspiration level; and

(k) lower level of responsibility and difficulty as well as lower level of prestige associated with the occupation chosen.

METHOD

Subjects

A sample of 149 male Ss was involved in the study. Of these Ss, 77 were drawn from a high school (grades 10, 11, 12; representing the non-dropout group) and 72 were drawn from neighborhood youth corps centers (representing the dropout group) with their ages matched.

Instruments

The instruments used in this study included the Relationship with Father
Scale (Rosenberg, 1965), the Parental Interest Scale (Rosenberg, 1965), the Family Relation Inventory (Brunkan & Crites, 1964), a self-esteem scale (Rosenberg, 1965), the Need Achievement Thematic Apperception Test (Atkinson, 1958), the Test Anxiety Questionnaire for High School Students (Mandler & Cowan, 1958), a modified NORC Scale of Occupational Prestige (National Opinion Research Center, 1947), the Occupational Aspiration Scale (Haller & Miller, 1967), and a questionnaire designed to collect information concerning the S's vocational choice, his father's occupation, parents' educational levels, and so on.

The Relationship with Father Scale (RFS) consists of six items with the scoring done by identifying positive responses made to the items. The higher the RFS score, the more positive relationship the S has with his father.

The Parental Interest Scale (PIS) is a seven-item instrument with the scoring done in such a way that a high PIS score would indicate a high perceived parental interest in the S.

The Family Relations Inventory (FRI) is scored for mother and father Acceptance, Avoidance, and Concentration. In the present study, only the eighteen items which yield measures of the perceived father's attitudes toward the S in terms of acceptance, avoidance, and concentration were used. The higher the father acceptance score the higher is the perceived father's acceptance of the S as a full-fledged member of the family who is characterized as having the capacity to assume responsibility. The higher the father avoidance score the higher is the perceived father's neglect or rejection of the S. And, the higher the father concentration score the higher is the perceived attitude of the father who devotes a disproportionate amount of his time and energy to the direction and con-
trol of the S. The test-retest reliability of the father acceptance, father avoidance, and father concentration subscales are reported to be .93, .97, and .73, respectively.

The Rosenberg's self-esteem scale is a ten-item Guttman scale which has a reported reproducibility of 93 percent. The higher the self-esteem score the higher is the S's self-respect, self-satisfaction, and self-content.

The Need Achievement Thematic Apperception Test (TAT), as used in this study, consists of four pictures (1, 2, 7, 8; Atkinson, 1958) presented in a neutral classroom situation. Scoring was done by two trained graduate assistants with an interrater reliability of .91. The higher the TAT score the higher is the level of achievement motivation (or need achievement) which is conceived as a disposition to strive for success.

A short form of the Test Anxiety Questionnaire (TAQ) used in this study is a 32-item instrument which has a reported correlation of .95 with the 48-item long form. Each item is graded on a 9-point scale with 1 representing low anxiety and 9 representing high anxiety level. A high TAQ score, therefore, would indicate a high level of anxiety or fear of failure.

The modified NORC Occupational Prestige Scale (OPS) consists of twenty occupations which were selected from the list of ninety used in the National Opinion Research Center Study (1947). Ss were instructed to rank these occupations on the basis of prestige. Scoring was done, first, by finding the difference between the ranks assigned by the S and the ranks provided by the Scale for each occupation, and then by adding these discrepancy scores for all the twenty occupations. The OPS score, therefore, indicates the deviation of the S's perception of occupational prestige hierarchy from that of the norm.
The Haller's Occupational Aspiration Scale (OAS) is an eight-item instrument designed primarily for use among male high school students. The total score is "interpreted" as a relative indicator of the prestige level on the occupational hierarchy which the S views as a goal. This scale has a reported reliability of .80.

The S's occupational choice and father's occupation taken from the occupational questionnaire yielded two scores each. The occupational choice DOT score and father's occupation DOT score were the first kind of measures which were used to indicate the level of difficulty and responsibility associated with the occupation. These DOT scores were generated on the basis of a weighting system which was developed from the one-digit Dictionary of Occupational Titles classification (1965) and was used to organize the occupational data into skill level categories. The higher the DOT score the lower is the skill level. The occupational choice NORC score and father's occupation NORC score were another kind of measures generated to indicate the prestige levels associated with the occupations. The NORC scores were obtained by assigning the prestige ranks to occupations in accordance with the National Opinion Research Center system. NORC scores of 2, 10, and 60, for example, would represent physician, banker, and plumber, respectively.

The family encouragement on matters concerning education was tapped by a five-point scale item in the questionnaire which requires the S to choose one of the alternatives ranging from 1, (your family) feels you should quit school and go to work, to 5, (your family) gives strong encouragement to continue your education.
RESULTS

With the D (dropouts) and ND (nondropouts) groups as two levels, one-way analyses of variance were conducted on the seventeen dependent variables. The mean scores, resultant F-ratios, and the levels of significance are summarized in Table 1.

Insert TABLE 1 here

Statistically significant mean differences were found on father's educational level, mother's educational level, father's occupation as coded by the Dictionary of Occupational Titles (DOT) system and that as coded by the National Opinion Research Center (NORC) scheme, family encouragement concerning education, relationship with father, perceived father's attitudes relative to acceptance and avoidance, need achievement, perception of occupational prestige, occupational aspiration, and occupational choice as coded by the DOT system and that coded by the NORC scheme. These mean differences showed that high-school-age male dropouts as a group differed significantly from their counterparts in high school as another group in that their father's and mother's educational levels were lower (p < .001), their father's occupation were of lower level of difficulty and responsibility (p < .01), and of prestige (p < .01), they received less encouragement from parents on matters concerning education (p < .01), they perceived their fathers' attitudes toward them to be lower in acceptance (p < .01) and higher in avoidance (p < .05), they showed lower level of achievement motivation (or need achievement, (p < .001), they had lower level of accuracy in perceiving the occupational prestige hierarchy (p < .001), they showed higher occupational aspiration (p < .001), and the occupations they chose
were of lower level of difficulty and responsibility (p < .001) and of prestige (p < .001).

No significant differences were found between the dropout and non-dropout groups, however, on their perception of fathers' attitudes relative to concentration, parental interest, fear of failure, and self-esteem.

These findings supported Hypothesis (a) that high-school-age male dropouts would, in comparison to nondropouts, show significantly less favorable family backgrounds as evidenced by lower father's educational level, lower mother's educational level, lower level of difficulty and responsibility associated with the father's occupation, and lower prestige level associated with the father's occupation; Hypothesis (b) that male school dropouts would have significantly less family encouragement on matters concerning education; Hypothesis (c) that male dropouts would have significantly less fruitful relationship with father; Hypothesis (f) that dropouts would have significantly lower level of achievement motivation (or need achievement); Hypothesis (i) that dropouts would have significantly less accurate perception of the occupational prestige hierarchy; Hypothesis (j) that dropouts would show significantly lower occupational aspiration level; and Hypothesis (k) that the occupations chosen by male school dropouts would be of significantly lower level of responsibility and difficulty as well as of prestige.

Hypotheses that high-school-age male dropouts would have significantly lower level of perceived parental interest (Hypothesis e), higher fear of failure (Hypothesis g), and lower self-esteem level (Hypothesis h) were refuted by the findings which showed that, in fact, there were no signif
significant mean differences between the dropout and nondropout groups on parental interest, fear of failure, and self-esteem.

The hypothesis set up in connection with perceived father's attitudes toward the S (Hypothesis d) was partially supported by the findings. That dropouts would have significantly lower acceptance and higher avoidance with regard to perceived father's attitudes were confirmed, but that the dropout group would have significantly higher concentration relative to perceived father's attitudes was rejected by the findings. Results showed that the S's perception of father's attitudes relative to concentration did not significantly differentiate dropouts from nondropouts.

DISCUSSION

This study investigated a selected number of variables in familial, personality, and vocational areas which might be used to differentiate male school dropouts from high school students.

Education of parents, levels of difficulty and responsibility and of prestige associated with the father's occupation, and the degree of family encouragement on matters concerning education proved to be rather powerful variables in differentiating the two distinct groups, with significantly less favorable measures yielded for the dropout group.

The S's perceptions of his relationship with father, of father's attitudes toward him in terms of acceptance and avoidance, and of occupational prestige hierarchy were also found to be important factors. Dropouts would perceive their relationship with father to be significantly less fruitful, they would perceive their fathers' attitudes toward them to be significantly lower in acceptance and higher in avoidance, and they would perceive the occupational prestige hierarchy in a fashion which would be significantly less accurate.
The S's perceptions of father's attitudes toward him in connection with concentration, of parental interest in him, and of his own esteem level did not prove to be useful in determining whether or not he would be a school dropout.

Of the two motivational variables, achievement motivation and fear of failure, the motive to approach success (achievement motivation) was found to be a differentiating factor, but the motive to avoid failure (fear of failure) was not. Dropouts, as compared with their counterparts in high school, would exhibit significantly lower level of motive to approach success.

Among Ss who expressed their choice of occupations, levels of responsibility and difficulty and of prestige associated with the occupations chosen were found to be differentiating factors. Dropouts would tend to choose occupations of the type which could be characterized by significantly lower levels of responsibility and difficulty and of prestige.

It must be mentioned, however, that a good number of Ss included in the present study answered "uncertain" to the question about their future occupations (see Table 2).

---

Insert TABLE 2 here

---

Of the 77 nondropouts, 34 expressed their occupational choice and 43 marked uncertain. Among the 72 dropouts, 16 were certain and 56 were uncertain. These frequencies yielded a Chi-square value of 8.11 which is significant beyond the .01 level.

This would indicate that the S's uncertainty about his future occupations could be considered as a variable in the school-dropout problems and that the
probability that dropouts are uncertain about future occupations would be significantly greater than the probability that their counterparts in high school are uncertain about future occupations.
REFERENCES


Miller, L. M. "The Dropout: Schools Search for Clues to His Problems." *School Life* 45: 5-7, 30-33; May 1963.


Snepp, D. W. "Can We Salvage the Dropouts?" *Clearing House* 31: 49-54; September 1956.


Young, J. M. "Lost, Strayed, or Stolen." *Clearing House* 29: 89-92; October 1954.
FOOTNOTE

1 The author would like to thank Donald Thompson for his assistance with the collection of data.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Means</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father's educational level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=35)</td>
<td>(N=59)</td>
<td>12.799</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Mother's educational level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=44)</td>
<td>(N=60)</td>
<td>21.395</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Father's occupation DOT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=34)</td>
<td>(N=50)</td>
<td>7.677</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Father's occupation NORC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=34)</td>
<td>(N=50)</td>
<td>10.013</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Family encouragement of education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=72)</td>
<td>(N=73)</td>
<td>9.101</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Relationship with father (RFS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=66)</td>
<td>(N=73)</td>
<td>7.038</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Father acceptance (FRI)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=68)</td>
<td>(N=56)</td>
<td>9.018</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Father avoidance (FRI)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=68)</td>
<td>(N=56)</td>
<td>6.21</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Father concentration (FRI)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=67)</td>
<td>(N=55)</td>
<td>0.076</td>
<td>NS</td>
</tr>
<tr>
<td>Parental interest (PIS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=68)</td>
<td>(N=67)</td>
<td>0.925</td>
<td>NS</td>
</tr>
<tr>
<td>Need Achievement (TAT)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=71)</td>
<td>(N=77)</td>
<td>29.846</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Fear of Failure (TAQ)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=66)</td>
<td>(N=75)</td>
<td>1.512</td>
<td>NS</td>
</tr>
<tr>
<td>Self-esteem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=71)</td>
<td>(N=77)</td>
<td>3.023</td>
<td>NS</td>
</tr>
<tr>
<td>Perception of occ. prestige (OPS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=55)</td>
<td>(N=75)</td>
<td>53.695</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Occupational aspiration (OAS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=62)</td>
<td>(N=75)</td>
<td>30.475</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Occupational choice DOT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=16)</td>
<td>(N=34)</td>
<td>22.075</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Occupational choice NORC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=16)</td>
<td>(N=34)</td>
<td>19.479</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>
TABLE 2
Certainty and Uncertainty of Occupational Choice
Dropouts versus Nondropouts

<table>
<thead>
<tr>
<th>Occupational Choice</th>
<th>Total</th>
<th>Chi Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certain</td>
<td>Uncertain</td>
<td></td>
</tr>
<tr>
<td>Dropouts</td>
<td>16</td>
<td>56</td>
</tr>
<tr>
<td>Nondropouts</td>
<td>34</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>99</td>
</tr>
</tbody>
</table>

* p < .01