This paper reports on a correlational study of the relationship between adolescent alienation, demographic variables, and school variables. Participants were 466 students including Hispanics, Native Americans, and Whites from 4 public high schools in a Southwestern state. Students completed Mackey’s Adolescent Alienation Scale and Ahlgren’s Minnesota School Attitude Survey, which measured three dimensions of alienation: (1) personal incapacity, which reflects an inability to make decisions or cope with problems of daily living; (2) guidelessness, a sense that norms or accepted rules to guide behavior are not available; and (3) cultural estrangement, a voluntary rejection of the middle class value system. Also measured were student attitudes toward support at school, pressure at school, and personal development at school. In addition students were asked to respond to 22 demographic questions. Results of the study indicate that Hispanics and Native Americans scored higher on the involuntary dimensions of alienation (personal incapacity and guidelessness), whereas Anglos scored higher on voluntary alienation (cultural estrangement). There were also significant effects found for sex, grade point average, support at school, pressure at school, and interactions between sex and support at school and between ethnicity and pressure at school. This study offers suggestions for schools to help alleviate the alienated feelings of students. Recommendations for future research also are included. (LP)
Session Title: Psychosocial and Motivational Variables and Achievement

Paper Title: Adolescent Alienation and Attitudes Toward School in Native American, Hispanic, and Anglo High School Students

by

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Adolescent Alienation and Attitudes Toward School in Native American, Hispanic, and Anglo High School Students

This paper reports on a correlational study of the relationship between adolescent alienation and other variables. The objectives of this study were twofold. One purpose was to extend the limited research which has been done looking at adolescent alienation among Native American, Hispanic, and Anglo high school students, to see whether the dimensions of Personal Incapacity, Guidelessness, and Cultural Estrangement are significantly different for members of these three ethnic groups. A second purpose was to identify the multivariate relationship that the variables of ethnicity and sex; grade point average; and students' attitudes toward support at school, pressure at school, and personal development at school have with the three dimensions of adolescent alienation. No other studies have examined the multivariate relationship between demographic variables, school variables, and adolescent alienation.

The theoretical framework was guided by Seeman's multidimensional theory of alienation (Seeman, 1959) and particularly by Mackey's theory of adolescent alienation (Mackey, 1975; Mackey & Ahlgren, 1977), which led him to develop and validate a scale which identified three dimensions of alienation: Personal Incapacity, reflecting an inability to make decisions or cope with problems of living; Guidelessness, a sense that norms or accepted rules to guide behavior are not available; and
Cultural Estrangement, a voluntary rejection of the middle class value system. Cultural Estrangement, as a form of voluntary alienation, is related to many demographic variables in the opposite direction from Guidelessness and Personal Incapacity, which together constitute a form of involuntary alienation imposed on members of a group by their social status.

It was hypothesized that ethnicity would be significantly related to the discriminant functions formed from the scores for the three dimensions of alienation. Hispanics and Native Americans were predicted to score higher on both Personal Incapacity and Guidelessness than Anglos, whereas Anglos were anticipated to score higher on Cultural Estrangement than Hispanics or Native Americans.

Methods

Subjects

Schools. The sample of 466 students came from four public high schools in a Southwestern state. Schools A and B ($n_A = 122$ and $n_B = 136$) were in a large urban school district. Both schools had between 1500 and 2000 students attending them. School C ($n_C = 69$) was in a small town and had a student population of 1000. School D ($n_D = 139$), with a total student population of about 500, was on the Navajo Indian reservation.

Randomization could not be used in selecting schools that took part in the study since not every public high school had the necessary multi-ethnic population. School was not used as a covariate since there was an unequal distribution of ethnic
groups at most of the schools.

**Students.** There were similar numbers of females (242) and males (224) and the majority of the students were 15-17 years old (74%) with a mean age of 16.1 years. There were approximately equal numbers of 9th (119), 10th (127), and 12th (116) graders in the study with slightly fewer 11th (102) graders. Two students did not report their grade level.

The number of Hispanics (171) and Native Americans (168) was fairly equal, with slightly fewer Whites (127) (see Table 1). All but 29 of the Native Americans were Navajo. There were too few Blacks and Asians to include in the analyses.

Table 1

**Ethnic Distribution for Each School**

<table>
<thead>
<tr>
<th>School</th>
<th>White</th>
<th>Hispanic</th>
<th>Native American</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>25</td>
<td>90</td>
<td>7</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>(20%)</td>
<td>(74%)</td>
<td>(6%)</td>
<td>(26%)</td>
</tr>
<tr>
<td>B</td>
<td>80</td>
<td>49</td>
<td>7</td>
<td>136</td>
</tr>
<tr>
<td></td>
<td>(59%)</td>
<td>(36%)</td>
<td>(5%)</td>
<td>(29%)</td>
</tr>
<tr>
<td>C</td>
<td>22</td>
<td>31</td>
<td>16</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>(32%)</td>
<td>(45%)</td>
<td>(23%)</td>
<td>(15%)</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>138</td>
<td></td>
<td>139</td>
</tr>
<tr>
<td></td>
<td>(1%)</td>
<td>(99%)</td>
<td></td>
<td>(30%)</td>
</tr>
</tbody>
</table>

|       | 127   | 171     | 168            | 466   |
|       | (27%) | (37%)   | (36%)          |       |

All but 36 of the students were born in the United States. Thirty-one (7%) of the students were born in Mexico. The
majority of students said English was the primary language spoken in their homes, although 16% of the students reported Spanish, Navajo, or another language as the primary language.

Instruments

Along with filling out Mackey's (1975) Adolescent Alienation Scale and Part 2 of the Upper Form of Ahlgren's (1983) Minnesota School Attitude Survey, the subjects were asked to respond to 22 demographic questions. All responses were in written form, and the three instruments took approximately 35 minutes to complete.

Adolescent Alienation Scale. The Adolescent Alienation Scale (Mackey, 1975) contains 41 4-point items scored from agree to disagree, with a higher score indicating more alienation. There were 14 Personal Incapacity items, 12 Guidelessness items, and 15 Cultural Estrangement items.

Minnesota School Attitude Survey. The Minnesota School Attitude Survey (Ahlgren, 1983) contains 40 items scored on four point scales. The survey consists of three summary clusters. Support at school is made up of 14 statements about academic support, personal support, acceptance, and fairness. A high score on this variable means that the student perceives the school as supportive. Pressure at school comprises 11 statements about academic pressure, competition, and external motivation. A high score on this variable reflects a feeling of experiencing a lot of pressure. Personal development at school is composed of 15 statements about personal worth as a student, need for structure, cooperation, and internal motivation. A high score on personal development means that the student feels that he or she develops
personally at school.

In addition to the above instruments, GPA was attained from school records for those students who granted permission.

**Procedures**

After permission was received from the principal, all of the teachers in the four schools were presented with a written summary of the study along with a request to use one class period in one or more of their classes to have students participate in the study. Nineteen teachers gave permission to use their classes.

Two weeks before the date to administer the survey, parent permission forms in both English and Spanish were sent home. Those students for whom parent permission was attained were administered the questionnaire in their classroom by the senior author. They were assured that they did not have to respond to it and would not be penalized in any way if they did not respond.

**Cleaning Up Data**

Before analyses were performed, the data were "cleaned" (Tabachnick & Fidell, 1989) in order to check assumptions for statistical tests and to eliminate univariate outliers since most statistical analyses are affected by the presence of outlying scores. All statistical procedures were performed using SPSS-X.

Thirteen potential univariate outliers, i.e., scores falling outside 13.001 standard deviations around the mean of their cells, were identified within the cells of the most complex interaction (Ethnicity x Sex).

**Bartlett-Box F Test** was used to check the assumption of
univariate homogeneity of variance for the dependent variables in all the analyses. Personal Incapacity was the only variable in both MANOVAs for which Tabachnick and Fidell’s (1989) criterion ($p<.001$) for univariate homogeneity of variance was not met. Box’s $M$ was used to check the assumption of homogeneity of variance-covariance matrices for the combination of the dependent variables. There was multivariate homogeneity for the three school attitude variables in the preliminary MANOVA, but Tabachnick and Fidell’s ($p<.001$) criterion for multivariate homogeneity of variance was not met in the primary analysis.

The assumption of linearity and the assumption of multivariate normality were checked using the residual plots to look for evidence of deviation from linearity. No grave problems were apparent.

Multicollinearity was examined using the correlation matrices to identify high correlations among any dependent and/or independent variables. Similar to Mackey’s finding, Personal Incapacity and Guidelessness were correlated at .51. Mackey (1975) found the correlation to be .43. The correlation between support at school and personal development at school was .61. No other correlations were greater than .36.

Using the $\chi^2$ test of Mahalanobis' Distance, no cases with unusual combinations of independent variables were identified for either MANOVA.

Two multivariate outliers among the simplified functions were eliminated in both the preliminary and primary MANOVAs. Based on the above analyses, data from only 16 subjects were
Results

Internal Consistency

Adolescent Alienation Scale. Cronbach's alpha coefficient was used to establish the internal consistency reliabilities of the three dimensions of adolescent alienation. The subscale reliabilities—.82 for Personal Incapacity, .67 for Guidelessness, and .52 for Cultural Estrangement—were almost identical to Mackey's (1975), except for Cultural Estrangement. Mackey's reliabilities for the individual dimensions were .80, .67, and .70, respectively.

Minnesota School Attitude Survey. The reliabilities for the three subscales of the Minnesota School Attitude Survey were .86 for support at school, .65 for pressure at school, and .72 for personal development at school. Alhgren (1983, p. 45) does not discuss specific subscale reliabilities but reports that two separate studies found that the alpha for the clusters was usually above .6.

Preliminary Analyses

Several preliminary analyses—two ANOVAs and a multivariate multiple regression—were conducted to determine how variables were related to each other, in order to facilitate the interpretation of the primary analysis (see Table 2). Socio-economic status (SES) could not be controlled for since over 18% of the sample reported an unclassifiable response, no response, or "don't know" to the question about father's and/or mother's occupation(s).
Table 2

Summary of Results of Significant Preliminary Analyses

1. The was a greater mean difference between internal motivation (personal development at school) and external motivation (support at school and pressure at school) for males than for females, Effect Size (ES) = .25.

2. Students who attended school B had a higher mean GPA than students who attended schools C (ES = .51) or A (ES = .41).

3. Anglos had a higher mean GPA than minorities (Hispanics, ES = .83; Native Americans, ES = .72).

4. Minorities (Hispanics, ES = .43; Native Americans ES = .48) had higher mean scores on personal development at school than Anglos.

A Bonferroni family-wise adjustment was used to obtain the experiment-wise alpha for all post hoc tests including tests of simplified functions. Unweighted means were used for all post hoc Scheffe tests and Harris' (1985) post hoc procedures for the simplification of the discriminant function were followed. Any continuous variables that were involved in an interaction with a categorical variable were transformed "around their mean," i.e., the mean of the continuous variable was subtracted from the score for each individual to obtain a deviation score. This simple linear transformation (Harris, 1985) helped avoid multicollinearity problems.

Primary Analysis

In the primary analysis, a multivariate multiple regression using MANOVA analyzed the relationships among sex, ethnicity, GPA, the three school attitude variables, all the interactions involving only categorical variables, all the interactions that did not involve more than one continuous variable, and the three
dimensions of adolescent alienation.

Significant effects were found for each of the six main effects: ethnicity, sex, GPA, support at school, pressure at school, and personal development at school, as well as the two first-order interactions: Sex x Support at School and Ethnicity x Pressure at School. (see Table 3).

Table 3

Summary of Results of Significant Primary Analyses

Ethnic Differences
1. Anglos had higher mean scores than minorities (Hispanics, ES = .92; Native Americans, ES = 1.52), and Hispanics had higher mean scores than Native Americans, ES = .61, on unmodified differentiated alienation (the difference between the voluntary and involuntary dimensions of alienation).

2. Minorities (Native Americans, ES = .75; Hispanics, ES = .43) had higher mean scores on Guidelessness than Anglos.

3. Anglos had higher mean scores on Cultural Estrangement than minorities (Hispanics, ES = .66; Native Americans, ES = 1.08), and Hispanics had higher mean scores than Native Americans, ES = .41.

Sex Differences
1. Females had higher mean scores on Personal Incapacity, ES = .54, and Cultural Estrangement, ES = .35, than males.

School Variable Relationships
1. Personal development at school was negatively related to the difference between the combination of Guidelessness and Cultural Estrangement, and Personal Incapacity sharing 5% of the variance.

2. Pressure at school was negatively related to unmodified differentiated alienation (13%).

3. Pressure at school was positively related to Personal Incapacity (8%) and to Guidelessness (10%).

4. Support at school was negatively related to Guidelessness (3%) and Personal Incapacity (2%).
5. Personal development at school was negatively related to Cultural Estrangement (3%).

6. GPA was negatively related to Personal Incapacity (2%) and Guidelessness (1%).

Interactions

1. Pressure at school was positively related to modified differentiated alienation (the difference between Personal Incapacity and Cultural Estrangement) for Hispanics (7%), Anglos (18%), and Native Americans (8%) with a stronger relationship for Anglos than for either Hispanics or Native Americans.

2. Support at school was positively related to modified differentiated alienation for females (4%), but not for males.

3. Support at school was negatively related to Personal Incapacity for females (7%), but not for males.

Discussion

Summarizing the results led to the following conclusions:

1. Anglos differentiated more strongly between voluntary and involuntary dimensions of alienation.

2. Anglos tended to be higher on the voluntary dimension of alienation, while minorities tended to be higher on the involuntary dimensions.

3. For voluntary alienation, when the two minority groups were compared with each other, Hispanics indicated higher levels than Native Americans.

4. Anglos felt less personal development at school than either Hispanics or Native Americans.

5. Females felt more incompetent (Personal Incapacity) and more rejecting of societal middle class values (Cultural Estrangement) than males.

6. Females who tended to perceive that they received support from teachers felt less incompetent (Personal Incapacity).
7. The pressure students experienced at school was associated with more dimensions of alienation than any other school attitude variable. It was positively associated with feelings of incompetence (Personal Incapacity) and the uncertainty of achieving success through socially-accepted means (Guidelessness).

8. GPA was associated with the same dimensions of alienation as pressure students experienced at school. Lower GPAs were associated with feelings of incompetence (Personal Incapacity) and uncertainty of success through socially-accepted means (Guidelessness).

9. Students who chose to reject the traditional societal values (Cultural Estrangement) felt that they personally developed less at school.

10. Students who felt they received more support from teachers felt less uncertainty that they could attain success through socially-accepted means (Guidelessness).

11. For all three ethnic groups, as the perceptions of pressure they experienced at school increased, the modified differentiated alienation increased. This was especially true for Anglos.

12. For females, as the support they felt they received at school increased, the modified differentiated alienation increased.

13. Lower feelings of developing personally at school correlated with greater alienation on social and cultural norms. (The difference between the combination of Cultural Estrangement
and Guidelessness and Personal Incapacity.)

14. Pressure to do well at school was related to a greater distinction between the one voluntary and the two involuntary dimensions of alienation, or unmodified differentiated alienation.

**Implications for Schools**

The findings in this study suggest that there are several concerns that schools could address which might alleviate some of the alienated feelings of its students.

1. One suggestion that might help attenuate the feelings of guidelessness for Hispanic and Native American students would be exposure to role models with whom these students can identify. Some instances where role models might be utilized are in mentoring situations, job shadowing experiences, outside speakers on careers, and motivational presentations.

2. Even though culturally estranged Anglo students cannot be forced to believe in the traditional value system of this country, they need to be given the opportunity to be genuinely involved in the system with the potential to effect change.

Giving Anglo students real life experiences—rather than textbook indoctrination—would mean immediate involvement. Service learning, e.g., volunteering time at a social service agency like a day care center for children from low income families, is an alternative to didactic methods of teaching students about some of the positive and negative aspects of this country's traditional values. Involvement might also help to empower students so that they choose to accept the traditional
value system of our society with all its flaws, but also feel the urgency and mission to change it.

Internships in government agencies may also help to give some culturally estranged students a sense of how the political system works so that they have a better understanding and appreciation of it.

3. Anglo students' perceptions that they do not develop personally at school may indicate that they need more of a challenge. Feelings of experiencing little personal development at school were associated with feelings of increased Cultural Estrangement. Teachers, and school staffs in general, need to look at ways to present academic material that will challenge a wider spectrum of students. More student self-directed projects may be one strategy to challenge Anglo students so that they feel they are benefiting more from school.

4. Teachers and other school personnel should be aware of the greater feelings of incompetence that females harbor, as compared to males, so that they can find and implement strategies to improve females' self-esteem and feelings of competence. It is important to remember that lesser feelings of incompetence were associated with perceptions of increased support at school.

5. Pressure at School appears to be the school attitude variable that is most frequently related to the dimensions of alienation. Pressure at School was positively related to Guidelessness and Personal Incapacity. It might be helpful if more constructive and efficient ways to impel or induce students to learn were found. Piling on school work, assuming students
have the necessary skills to do a task, and creating environments that do not foster questions are pressures that students experience negatively.

**Recommendations for Future Research**

In addition to testing the suggestions in the previous section, before Mackey's (1975) Adolescent Alienation Scale is used in future research with minorities, it should be validated with minority populations to determine if the three factors (Personal Incapacity, Guidelessness, and Cultural Estrangement) are the same for each of the groups of minorities as they are for Anglos. A Confirmatory Factor Analysis using LISREL would be the best analysis to use.

A structural equation model would be useful to determine the direct and indirect effects of demographic variables, formal aspects of schooling, and aspects of the peer group subculture on the separate dimensions of adolescent alienation. Separate models could be set up for various ethnic groups to determine whether the same equation predicts alienation for all groups.

To extend the results to individuals who were so alienated that they did not remain in school, a study could be done comparing the feelings of Personal Incapacity, Guidelessness, and Cultural Estrangement of normal students and those who are more alienated, e.g., incarcerated youth or dropouts.
References


