MEXICAN-AMERICAN MIGRANT STUDENTS' ACADEMIC SUCCESS: SOCIOLOGICAL AND PSYCHOLOGICAL ACCULTURATION

Guy J. Manaster, Jason C. Chan and Randa Safady

ABSTRACT

This study attempted to describe and compare academically successful and academically unsuccessful high-risk Mexican-American migrant high school students. The two groups were compared on sociological and psychological indicators of acculturation, urbanization, and socioeconomic status (SES). It was hypothesized that the successful group would have higher SES, be more acculturated, urbanized, and psychologically adjusted to modern value systems, and have higher occupational aspirations and expectations than the unsuccessful group. In addition, their world views were compared by exploring early recollection data. The results showed that the unsuccessful group came from families that were larger, poorer, more rural, and more "foreign" (i.e., more parents and children born in Mexico) than the successful students' families. Regarding the psychological indicators of acculturation, the successful group was found to score higher on modernism, to be more stably acculturated, to have a clearer sense of themselves, to have higher occupational aspirations and expectations, and tended to desire jobs with greater responsibility and stability than did the unsuccessful group.

INTRODUCTION

This study focused on Mexican-American migrant students, children of, and themselves, itinerant workers. Basic issues, such as ethnic status and identity conflict, are faced by and negatively affect Mexican-American migrant students to a greater extent than they do native Anglo-American students (Jensen, White, & Galliher, 1982; Mendelberg, 1986). Some migrant students are able to solve most problems and be successful in school, while others have more difficulty and are at greater risk of dropping out during adolescence. Attention needs

The authors wish to thank Professor Richard R. Valencia for his constructive comments on a previous draft of this paper.

Jason C. Chan, University of Texas at Austin.
Randa Safady, St. Edward's University, Austin, Texas.
Reprint requests to Guy J. Manaster, Professor, Department of Educational Psychology, University of Texas at Austin, Austin, Texas 78712.

ADOLESCENCE, Vol. 27, No. 105, Spring 1992
Libra Publishers, Inc., 3089C Clairemont Dr., Suite 383, San Diego, CA 92117
to be paid to the heterogeneous variables that describe subgroups of Hispanics, although previous studies have provided information from comparisons of Hispanics with non-Hispanics (Padilla & Lindholm, 1984). The present study attempted to sketch profiles of academically successful and unsuccessful high-risk Mexican-American migrant high school students. Acculturation, suggested as an important construct for investigating migrant students' success or failure in school (Franco, 1983; Gonzales & Roll, 1985) and for predicting the intellectual performance of Mexican-American children (Valencia, Henderson, & Rankin, 1985), and the related constructs of urbanization and socioeconomic background, were considered.

In general, acculturation, a major and complex construct in the behavioral sciences (Domino & Acosta, 1987), refers to "the changes in behaviors and values made by members of one culture as a result of contact with another culture" (Burnam, Telles, Hough, & Escobar, 1987, p. 106). It can be understood as a one-way process in which an individual is assimilated into the host culture, or as a bicultural or multicultural process in which the individual selects, abstracts, or integrates different components from different cultures (Burnam, Telles, Hough, & Escobar, 1987; Domino & Acosta, 1987; Garza & Gallegos, 1985; Padilla & Lindholm, 1984). The bicultural orientation implies that cultural change for a Mexican-American does not necessarily or exclusively entail movement toward Anglo culture; in fact, research has shown that multicultural persons demonstrate adaptive strengths and flexibility (e.g., Ramirez, 1983; Ramirez, Garza, & Cox, 1980). Consequently, the present study investigated particular social and psychological aspects of acculturation, rather than relying on a global measure to make a unidirectional prediction that the academically successful group of Mexican-American students will have a higher level of acculturation toward Anglo culture than will the less successful group.

Olmedo, Martinez, and Martinez (1976) specified criteria for judging acculturation which included family size, dominant language, job/citizenship/education of the head of the household, and scores on a semantic differential measuring father-male potency. Using these criteria, Gonzales and Roll (1985) found that the more acculturated an individual was to the dominant society, the better that individual's verbal skills. However, acculturation was confounded with socioeconomic status (SES) because family size and job/education of household head are also indicators of SES. Valencia, Henderson, and Rankin (1985) found that, for Mexican-American children, the best predictor of general cognitive performance was their score on the Henderson Environmental Learning Process Scale (HELP), which measures the intellectual envi-
vironment of the home (Henderson, Bergan, & Hurt, 1972). In addition
to HELP, a language/schooling factor contributed significantly to the
prediction of cognitive performance. This factor taps the level of accul-
turation because it includes the following indicators: language prefer-
ence, schooling of parents, and country of parents’ schooling. It corre-
lated highly with SES and moderately with family size and the HELP
score (Valencia, Henderson, & Rankin, 1985). Although acculturation
and SES may be intimately related, the two concepts need to be differen-
tiated (Burnam, Telles, Hough, & Escobar, 1987; Mainous, 1989), as
they may have distinct social and psychological bases and implications.

In this study, we were concerned with two groups of Mexican-American
migrant students who participated in summer enrichment pro-
grams at St. Edward’s University in Austin, Texas. The successful
group was composed of academically promising poverty-level migrant
students, while the unsuccessful group was composed of students of
the same background who had been retained once or twice and had not
passed the TEAMS (Texas Educational Assessment of Minimum
Skills) test. The two groups were compared on demographic/sociologi-
cal and psychological variables.

Demographic variables included subjects’ and parents’ birthplaces,
subjects’ school size and school location, parents’ years of education,
and parents’ occupations. Subjects (and their parents) who were born in
the United States should adapt psychosocially to the majority cultural
environment with greater ease, and consequently were predicted to
have a higher likelihood of academic success than those subjects who
were, and whose parents were, born in Mexico.

School size and location are indicators of urbanization. Immigration
of Mexicans to the United States is part of a worldwide pattern of
urbanization (Kagan 1981). When acculturated to urban norms, mi-
grants have been found to have a more competitive social orientation,
which is positively correlated with IQ and academic achievement (for
a review, see Kagan, 1981). Therefore, it was predicted that the aca-
demically successful group of Mexican-American migrant students
would be more urbanized than would the group that was at high risk
for school failure.

Family size and parents’ education and occupation were considered
indicators of SES. Since they have been shown to have a consistent
positive effect on academic performance, it was predicted that the suc-
cessful group’s parents would have more education and higher status
occupations, with smaller family size, than would the unsuccessful
group’s parents.

In summary, for the background variables, it was predicted that the
successful group would be more likely to be born in the United States
than in Mexico, to live in larger towns, attend larger schools, have parents with more education and higher status occupations, and to come from smaller families as compared to the group of unsuccessful students.

Since acculturation is a process by which behaviors and values are changed through cultural contact, examination of behaviors and values is important. It has been found that acculturation has an impact on self-concept (Franco, 1983), choice of instrumental and terminal values (Domino & Acosta, 1987), political orientation (Alva, 1985), and familism (Sabogal, Marin, & Otero-Sabogal, 1987). The values indicated by attitudes toward modernity, intuitive beliefs, world views, and occupational decisions would seem to reflect acculturation. Consequently, the following internal and psychological indicators of acculturation to North American culture were examined: modernism (vs. traditionalism), risk-taking propensity, and occupational aspirations and expectations. Early recollections were analyzed for deep psychological indications of values and attitudes related to acculturation.

Modernism, as measured by a short version of Kahl's (1968) instrument, reflects individual attitudes and belief systems in a Western society, such as (a) planning for the future, (b) universalism (vs. particularism), (c) feelings of control, (d) trusting friends as well as people in general, and (e) inner direction (vs. other direction). In a study of Brazilian students, Havighurst and Gouveia (1969) found the following factors prevalent in traditionalism: (a) everyone for himself in a world which does not reward real merit and enterprise; (b) urban society is cold and unfriendly; and (c) live for the present, conform to the mores, and count on your family for help. It seems that modernism reflects the degree of acculturation to the middle-class value systems of modern society, while traditionalism reflects a negative attitude toward and adjustment to modern society. Therefore it was predicted that the academically successful group would adhere to modern values to a greater degree than would the unsuccessful group of Mexican-American migrant students, who would hold more traditional values.

Risk taking is defined as the propensity to take risks to achieve greater success and upward mobility as opposed to taking fewer risks in order to maintain job security (Williams, 1962). We surmised that a more stable and secure successful group of migrant students would tend to consider taking risks in order to seek better, more fulfilling jobs, that is, they would have higher occupational aspirations and expectations than would unsuccessful students, who would be more likely to take and try to hold onto whatever jobs they could get.

Early recollections (earliest clear memories) are usually interpreted as indicating enduring individual sense of self, view of the world, and
preferred or demanded mode of operating in the world (Manaster & Corsini, 1982). When used to investigate group similarities and intergroup differences, as when scored with the Manifest Content Scoring Manual (Manaster & Perryman, 1974), early recollections are interpreted along the same lines. Since acculturation could be manifested in self-concept and world view, we were interested in seeing how the two groups in this study might differ on the early recollection data. However, anticipating that differential writing ability between the academically successful and unsuccessful groups might affect their production of scoreable and interpretable early recollections, no directional predictions were made.

In conclusion, two predicted profiles for the academically successful and unsuccessful groups of Mexican-American migrant high school students were sketched. The successful group was predicted to be more urbanized, more acculturated, more psychologically adjusted to modern value systems, and to have higher aspirations and expectations than the high-risk group.

METHOD

Sample

The data were collected from all students at the conclusion of summer enrichment programs for migrant children held at St. Edward’s University. The sample referred to here as “successful” consisted of students in the Rural Upward Bound (RUB) program, which chooses poverty-level migrant students who show promise of being able to benefit from college preparation educational opportunities (which their school districts are unable to provide). The “unsuccessful” group contained students enrolled in the State Migrant Program (SMP), which chooses migrant students who have been grade retained once or twice and have not passed the TEAMS test. Students in both groups work during the program and attend classes that are appropriate to their achievement level.

The total sample of 151 migrant high school students consisted of 34 males and 50 females in the RUB program and 35 males and 32 females in the SMP program. The RUB students ranged in age from 14 to 20 years with a mean of 16.81, while the SMP students ranged from 15 to 19 years with a mean of 16.80. For the RUB students, 5% were scheduled to enter the first year of high school, 41% the second, 35% the third, and 16% the final year of high school in the fall following testing. For the SMP students, 25% were scheduled to enter the first year of high school, 33% the second, and 39% the third.
Instruments

The questionnaire, administered to students during the final group meetings of the summer programs, included a demographic section, educational expectation and occupational aspiration and expectation questions, the Modernism-Traditionalism Scale, the Risk-Taking Scale, and a section for writing three early recollections.

Prestige of the subjects' expected occupations and their parents' actual occupations was judged according to the International Scale on Occupations (Manaster & Havighurst, 1972), in which both urban and rural occupations are categorized in six status levels ranging from 1 (high prestige) to 6 (low prestige).

The Modernism-Traditionalism Scale is a 14-item abridged version (Havighurst & Gouveia, 1969) of Kahl's (1968) instrument designed for international or cross-cultural studies. Subjects can respond agree or disagree to each item. The number of agree items is summed so that the higher the score, the higher the traditionalism. Since Havighurst and Gouveia (1969) performed a factor analysis on a sample of Brazilian students for this scale and identified three factors, we also checked the dimensionality of this scale on the present sample with principle-components analysis. Both scree-test and eigenvalue-greater-than-one rules suggested only one dominant factor. Therefore, modernism-traditionalism was analyzed as a unidimensional concept. Internal consistency (alpha) of this scale is .68.

The Risk-Taking Scale, developed by Williams (1962), consists of 8 forced-choice paired job description items. Higher scores indicate higher risk-taking tendency. Since Havighurst and Gouveia (1969) found that this scale is not unidimensional, we also performed a factor analysis on the present sample. Three significant factors similar to Havighurst and Gouveia's findings were identified (content and structure are presented in the Results section).

Finally, the early recollection data were scored according to the Manifest Content Scoring Manual (Manaster & Perryman, 1974). Subjects were asked to write three early recollections. Some subjects did not complete three recollections and many of the responses were general memories, what are called "reports" rather than recollections, and thus did not meet the criteria for early recollection scoring. Therefore only a single (the first scoreable) recollection for each subject from whom there was a scoreable recollection (N = 121) was used in this analysis. There were scoreable recollections for 85% (72 of the 84 subjects) of the RUB sample and 73% (49 of the 67 subjects) of the SMP sample, which reflects the difference between the two samples in academic ability. The recollections were written in English or Spanish at the subject's preference.
Using the Manaster-Perryman Manifest Content Scoring Manual the groups were compared on each of the 42 variables which compose the seven scoring categories (characters, themes, concern with detail, setting, active-passive, control, and affect). It would be almost impossible for two groups to differ on all or even many variables because the variables are not mutually exclusive within some categories; a significant difference on one variable within a category would leave too few remaining responses for more than one other variable to produce a significant comparison. Therefore, the five variables noted below on which there are differences should be considered of greater import than might be inferred from their percentage of the total variables.

RESULTS

Demographic Variables

Demographic data for the two groups were subjected to chi-square analyses. A greater percentage of the SMP (unsuccessful) students' parents (82.5%) were born in Mexico than were parents of RUB (successful) students (56.1%) ($\chi^2 = 10.19, p < .01$). Similarly, 44.6% of the SMP students were born in Mexico whereas only 17.9% of the RUB students were born there ($\chi^2 = 12.68, p < .01$).

Numerical categories for school size (under 500, 500–1,000, over 1,000) and size of town in which schools were located (under 5,000, 5,000–10,000, over 10,000) were arbitrarily, but intuitively, determined. Approximately 75% of the SMP students attended high schools in towns with populations below 5,000, while 90% of RUB students' high schools were in towns of over 5,000 ($\chi^2 = 63.31, p < .001$). Correspondingly, 75% of the SMP sample attended high schools with fewer than 500 students, and 84% of the RUB sample attended high schools with more than 500 students ($\chi^2 = 54.14, p < .001$).

Inasmuch as the students were chosen for these programs on the basis of migrant status, one would expect little or no difference in status of parents' occupations between the groups. However, on father's occupation, 82% of the SMP fathers had the two lowest status level jobs or no jobs at all as compared to 71% of the RUB fathers ($\chi^2 = 20.01, p < .01$). Mothers' occupational status also differed between the groups, with 50% of the RUB students' mothers being housewives or unemployed as compared to 77% of the SMP students' mothers ($\chi^2 = 16.85, p < .05$).

In comparisons using t tests, RUB students' parents had more education than SMP students' parents, 5.94 years versus 4.31 years for fathers ($t = 2.41, p < .05$) and 6.39 years versus 4.34 years for mothers ($t = 3.23, p < .01$). The families of RUB students were smaller, averag-
ing 5.15 children, than SMP students’ families, which averaged 5.98 children \( t = -1.97, p < .05 \).

**Psychological Variables**

**Early Recollections.** Differences were found between the groups on five variables within two early recollections categories. The RUB sample (20.8%) was higher, approaching significance \( \chi^2 = 3.54, p < .06 \), than the SMP sample (8.2%) in themes about and acknowledged as misdeeds. The SMP sample was higher (42.9%) than the RUB sample (20.8%) on themes of new or unfamiliar situations causing excitement \( \chi^2 = 6.77, p < .01 \). The SMP sample averaged 1.86 themes in the recollections while the RUB sample averaged 1.50 themes \( t = -2.51, p < .05 \).

The RUB sample (31.9%) tended to have a higher percentage \( \chi^2 = 3.73, p = .053 \) of recollections occurring in the home setting than did the SMP sample (16.3%), while the SMP sample (34.7%) had a much higher percentage \( \chi^2 = 19.69, p < .0001 \) of unclear settings than did the RUB sample (4.2%).

**Modernism-Traditionalism.** The factor analysis of the Modernism-Traditionalism Scale identified a single common factor according to the scree test, so the total score was used in the following analyses. The total score means of the two groups on the Modernism-Traditionalism Scale differed significantly \( t = -2.44, p < .05 \), with the RUB mean (3.02) lower (more modern) than the SMP mean (3.98). Both high school size \( F = 6.20, p < .01 \) and high school location \( F = 4.28, p < .05 \) were significantly related to modernism-traditionalism. The means on the Modernism-Traditionalism Scale for students attending high schools of under 500 students, 500 to 1,000 students, and over 1,000 students, were 4.24, 2.90, and 3.04, respectively. The mean for students attending high schools in towns of under 5,000 population was 3.85, while it was 3.26 for students attending high schools in towns with populations over 5,000.

**Risk Taking.** The Risk-Taking Scale was explored by principal-axis factor analysis first. Using varimax orthogonal rotation and the eigenvalue-greater-than-one rule, a three-factor solution for the eight-item instrument was obtained (see Table 1).

Separate total scores were obtained for each factor because of the multidimensionality of the Risk-Taking Scale. The SMP students' mean (0.69) was higher \( t = -2.62, p < .05 \) than the RUB students' mean (0.41) on Factor 2, Change and Excitement. The groups did not significantly differ on Factor 1, Responsibility Is Mine (although the RUB group was higher, \( p < .097 \), on this factor), or on Factor 3, Challenge to My Abilities.
Table 1
Factor Loadings and Item Contents for the Risk-Taking Scale
("A job..." and the high-risk choice)

<table>
<thead>
<tr>
<th>Factor 1 - Responsibility Is Mine.</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>item 5</td>
<td>.6763</td>
<td>where I am the final authority on my work.</td>
</tr>
<tr>
<td>item 2</td>
<td>.4368</td>
<td>where I have to make many decisions for myself.</td>
</tr>
<tr>
<td>item 1</td>
<td>.4214</td>
<td>where I am almost always on my own.</td>
</tr>
</tbody>
</table>

Factor 2 - Change and Excitement.

| item 6                            | .6262             | where I would be either highly successful or fail. |
| item 7                            | .2808             | that is constantly changing. |
| item 8                            | .2068             | an exciting job which might be done away with. |

Factor 3 - Challenge to My Abilities.

| item 4                            | .4951             | where I am pressed to the limits of my abilities. |
| item 3                            | .2918             | where my instructions are general. |

Aspirations and Expectations. In response to the question, What do you plan to do after you graduate from high school?, 90% of the RUB students and 68% of the SMP students ($\chi^2 = 14.65, p < .05$) said "go to college," with the remaining responses distributed fairly similarly by the two groups between "vocational education, work, military, marry"; 4.5% of the SMP students responded "don't know."
The two groups differed significantly on occupational aspirations and expectations (see Table 2). Referring to the first three occupational
Table 2
Response Frequencies: Occupational Status Levels by Student Groups

<table>
<thead>
<tr>
<th>Aspiration</th>
<th>Occupational levels</th>
<th></th>
<th></th>
<th></th>
<th>6</th>
<th>DK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>RUB</td>
<td>20</td>
<td>14</td>
<td>32</td>
<td>10</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>SMP</td>
<td>3</td>
<td>14</td>
<td>17</td>
<td>19</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>$x^2 = 21.76$, $p &lt; .01$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expectation</th>
<th>Occupational levels</th>
<th></th>
<th></th>
<th></th>
<th>6</th>
<th>DK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>RUB</td>
<td>16</td>
<td>11</td>
<td>30</td>
<td>19</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>SMP</td>
<td>2</td>
<td>8</td>
<td>13</td>
<td>18</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>$x^2 = 29.11$, $p &lt; .0001$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: DK = Don’t Know.

levels as “high-status,” that is, middle- and upper-status jobs, 78.6% of the RUB students versus 50.8% of the SMP indicated that they would like to have high-status occupations. When they indicated their expectations, the “job you think you will probably have,” 67.8% of the RUB sample and 34.3% of the SMP sample gave high-status job descriptions.

DISCUSSION

In summary, a comparison of the two groups on the demographic variables showed that the SMP students were more likely to have
parents born in Mexico and to have been born in Mexico themselves, to live in more rural areas, and to attend smaller high schools in smaller towns. Their fathers’ and mothers’ jobs tended to be of lower status than those of the successful students’ parents. More unsuccessful students’ fathers were unemployed and their mothers nonworking housewives or unemployed, and both their fathers and mothers had less education than the parents of successful students. Overall, as a group, the unsuccessful Mexican-American migrant students can be characterized as coming from families that are larger, poorer, more rural, and more “foreign” (i.e., more parents and children born in Mexico) than the successful students’ families. On the other hand, as would be expected of a sample of Texas migrant children, the entire sample can be said to come from relatively large, poor, uneducated, rural Mexican-American families.

Regarding the psychological indicators of acculturation, the successful group scored higher on modernism. Since they were more likely to be from larger towns and larger high schools, the successful group showed modern values which were more typical of students from these locations. Their early recollections seem to show that the successful group had a clearer sense of their place in the world, while the unsuccessful group was less sure. The successful group exhibited a greater sense of stability, familiarity with the world, and consistency in themes of interest than did the unsuccessful group, which, as in the risk-taking factor analysis, showed less sense of stability and a greater sense of potential for upset and excitement. Last, the early recollections data indicated that the successful group tended to be more concerned with misdeeds and the effect of misdeeds, which may be seen as their being more concerned with rules and having internalized, to a greater degree than the unsuccessful group, the norms and strictures of the society.

Contrary to our prediction, factor analysis showed that the Risk-Taking Scale does not measure a unidimensional concept. As measured by this scale, taking work-related risks may imply wanting to have (a) greater responsibility, (b) a changing and exciting job, or (c) a challenging job. The two groups of students were equally willing to take responsibility and face challenges in their jobs, but the high-risk group scored significantly higher on the change/excitement factor than did the successful group.

The two groups also differed on their plans and goals. The successful group had higher occupational aspirations and expectations than did the high-risk group, which illustrates a degree of realism in their sense of the future.

If we had a matched sample of migrant students who had not just completed an enriching and presumably encouraging educational and occupational experience to compare with our samples, we would expect
to find the aspirations and expectations of our students to be higher. Although within our samples a healthy realism emerges in the comparison of the plans and goals of the successful versus the heretofore unsuccessful students, it may be that one effect of the enrichment program was a degree of optimism about their occupational future that is not historically realistic, but that in the long run, it is hoped, will prove to be accurate.

In sum, this study has provided a fairly clear picture of acculturation and achievement. The more academically successful migrant students began their lives in a more acculturated position toward the Anglo culture as indicated by their demographics. Their belief system was more modern than that of the high-risk unsuccessful students. They aspired to and expected their occupational future to be more positive, and tended to want it to be based on stability instead of change and excitement. According to their psychological sense of themselves in the world, as determined through early recollection analysis, the successful migrant students seemed to be more stably acculturated than were the high-risk migrant students. Successful migrant students may, therefore, for demographic and related psychological reasons, have a clearer sense of themselves and the world, feel more able to integrate divergent components from their different cultures, and achieve and expect to continue to achieve more in the future than do unsuccessful migrant students.

These findings seem to imply that two persistent and seemingly divergent notions about the effects of acculturation operate within this population. On one hand, for the more acculturated, with time in the host culture and with effort and a modicum of achievement, more success comes with the generations. On the other hand, for those who do not integrate the values and beliefs of the host culture and who are not socially and occupationally mobile, potential for future success and mobility is limited. For this migrant population, these findings seem to point to two paths in which acculturation affects the future of individuals and families: a more acculturated “success breeds success” path, and a less acculturated “culture of poverty” path. The question seems to be how to encourage the former and change the latter. One obvious possibility might be enrichment programs such as those in which our sample had participated. However, in this study, the differences found between the two groups on the psychological variables existed at the end of the programs; thus, longitudinal investigations are needed to determine their long-term effectiveness.

We cannot know, through this sample and these sampling methods, whether these findings apply to other, more and less successful Mexican-American migrant students. Moreover, we cannot generalize the
effects of these enrichment programs on acculturation and motivation for success to other programs. However, the findings are encouraging.

REFERENCES


