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## **ABSTRACT**

In a study of academic attribution patterns, teachers were asked to suggest causes for the successes and failures of students whose backgrounds had been manipulated to provide various combinations of social class (middle, lower), race (White, Asian American), and gender. It was found that teachers cited causes internal to the student more often for success than failure, and teacher-related causes more frequently for failure than success. It was also found that the more similar the student's background to the teacher's, the more likely the teacher was to "count" the student's successes and "discount" the failures. Middle class White successes were more likely to be attributed to internal stable causes than were Asian and lower class successes. White female successes were more likely than failures to be attributed to stable effort causes, while White male and Asian student data did not reveal this difference. Also, teachers took more responsibility for Asian females' failures than successes and for Asian females' failures than Asian males' failures. Overall, student background results provided ambiguous evidence concerning whether prior expectations or outgroup prejudice, or both, influence attributions. Lower class students, a low expectation outgroup, showed the least favorable attribution pattern. Asians, a high expectation outgroup, showed more favorab. attributions than lower class students but less favorable patterns, relative to middle class Whites, than prior expectations might have predicted. (CMG)



## Academic Attributions for Success and Failure Among Asian Americans

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This paper reports a study addressing questions raised since Weiner and his colleagues (Weiner, Frieze, Kukla, Reed, Rest and Rosenbaum, 1971) demonstrated the relevance of teacher causal attributions for student performance to the instructional process. Among these questions are (a) do teachers take more personal responsibility for their students' success than failures, and (b) do teacher attributions differ for students from different racial and social class backgrounds? Referring to what Weiner (1977) called the "low expectancy cycle", the question specifically is: do teachers form or maintain low expectations for disadvantaged or minority students by attributing these students' successes to causes external to the student and failures to causes internal to the student?

Zuckerman (1979) has determined that the self-serving pattern of attributions had not been reliably produced, that is individuals do not necessarily take more responsibility for success than failure in interpersonal influence situations. Arkin, Cooper, & Kolditz (1980) found some studies reported large effects in the self-serving direction while others found large effects in a counterdefensive direction, that is, teachers took more responsibility for failure than success.

Burger, Cooper, and Good (1982) had professional teachers make attributions for students in their own classes. This procedure produced no clear evidence for either attributional pattern. Teachers cited the causes "directions and instruction" more often for students' failures, suggesting a counterdefensive pattern, but also cited "student attention and effort" more often for failures, suggesting a self-serving pattern.

In contrast, the present study asked professional teachers to suggest causes for fictitious students' performance. This would allow us to determine whether the patterns found in the earlier study were particular to the teachers and students sampled or if the patterns represented more abstract schema that teachers apply to students in general.

Regarding student background, there is little doubt that teachers hold



generally lower expectations for the performance of black than white students and for students of lower than middle class backgrounds. B. on, Tom, and Cooper, (in press), on performing a statistical analysis of the literature, found that teachers expected the average white student to ouperform 58% of black students. Further, the average middle class student was expected to outperform 57% of lower class students. However, little is known about teacher expectations for nonwhite racial groups other than blacks. Three studies comparing whites with Mexican-Americans consistently found higher expectations for whites. Only two studies have compared teacher expectations for whites and Asian-Americans. Wong (1980) found that professional teachers held higher expectations for the Asian than white students in their classes. In the only experimental study, Tom, Cooper, & McGraw (1984) found that teachers tended to assign higher grades to fictitious Asian students than white students.

Research on attributions for students of differing backgrounds has been confined exclusively to white/black comparisons. Cooper, Baron, and Lowe (1975) found that white middle class students were held more personally responsible for failure than middle or lower class blacks or lower class whites, thus indicating that attributions did not serve to maintain low expectancies for blacks, (see also Wiley and Eskilson, 1978).

The present study thus sought to explore the relations between student background and teacher attributions, by replicating past social class effects; in addition, it allows a first exploration of attribution differences for whites and Asians. This latter comparison is especially interesting because past expectation research indicates that whites should be the group with the less advantageous attribution. Thus the low expectancy effect would contradict predictions based on outgroup prejudice, that is, whiteteachers should view outgroup students less favorably than white students. Finally, the inclusion of the gender variable would help in determining whether results are generalizable across the sexes.



Twenty-three female and two male teachers were recruited from a large midwestern city for the experiment, and paid \$20 each for their time of participation. The teachers averaged six years of teaching experience.

The teachers were given six record cards containing information about six separate stimulus students. Students' backgrounds were manipulated so that the following combinations of social class, race, and gender were represented:

(a) middle class white male; (b) middle class white female; (c) lower class white male; (d) lower class white female; (e) middle class Asian male; (f) middle class Asian female. Baron, Tom, and Cooper (in press) discovered that visual manipulations or a student's race produce the strongest effects while the most impactful manipulations of social class involved written descriptions of the student's economic background. Learning from this, the present study used color photographs to manipulate race and gender of the stimulus students. Father's and mother's occupation were used to manipulate social class, varying this information on cumulative record cards that were utilized to obtain a more realistic effect.

These cumulative record cards are actually used by school districts; any identifying marks were removed. Occupational rating of Hodge, Siegel, and Rossi (1966) were used to define middle and lower class occupations.

Teachers were exposed to each record card one at a time. The order of presentation of students was randomly determined.

After completing several other measures concering their impression of the student (see Tom, Cooper, & McGraw, 1984), teachers were asked the following question about each student: "When this child succeeds at an academic task, what is the cause for this success"? Teachers were asked to provide as many causes as applied. Then, teachers were instructed to provide causal explanations for each student's failures.

Using procedures described by Cooper and Burger (1980), answers were then coded into thirteen attribution categories: academic ability, previous experience,



acquired characteristics, typical effort, interest in the subject matter, immediate effort, attention, directions or instruction, task, family, other students, mood, and other miscellaneous external causes. Two independent coders demonstrated intercoder reliability as measured by Cohen's kappa of .74 for success attributions, and .66 for failure attributions.

The thirteen attribution categories were then reduced to five, broader categories: (a) internal stable (ability, previous experience, and acquired characteristics); (b) stable effort (stable effort and interest in the subject matter); (c) immediate effort (immediate effort and attention); (d) teacher-related external (directions or instruction, task), and; (e) other external (family support and other students; the mood and miscellaneous categories were used infrequently and not included in the analyses). This reclassification was done for two purposes: (a) the broader categories reflect the attributional dimensions underlying the more specific causes, and; (b) the broader categories have a greater frequency of use, thus stabilizing the data for purposes of analysis. This also increased the reliability of the codings to .76 for success and .69 for failure.

For each of the six stimulus students, each teacher was given ten scores, corresponding to the success and failure attributes of each of the five categories. If a teacher utilized a particular category, this teacher was given a score of "1" for that category. If a category was not used by the teacher a score of "0" was assigned.

Frequency of category use was then analyzed using Cochran's Q-test for related samples (Cochran, 1950), which provides a method of determining whether or not sets of frequencies differ among themselves when the frequencies in different categories are dependent (i.e. are repeated measures). The Q-test yields a Chi-square statistic referable to standard Chi-square tables.

The five attribution categories served as dependent variables in five sepa-



rate analyses. Thus, an initial set of five analyses were conducted, with the six stimulus students crossed by the two performance outcomes serving as twelve cells of the independent variable. If the overall analyses proved significant, each possible pairwise comparison between stimulus students was performed for that attribution, again using the O-test.

The overall analyses revealed the following results: internal stable Q(11) = 29.96, p < .01; stable effort Q(11) = 24.75, p < .01; immediate effort Q(11) = 14.39, n.s.; teacher-related Q(11) = 59.85, p < .001, and; other external Q(11) = 116.05, p < .001. Table 1 presents the frequencies underlying these results.

For internal stable attributions, pairwise comparisons revealed that teachers more often cited internal stable causes for the success than failure of middle class white students (for females Q(1) = 4.5, p < .05; for males Q(1) = 4.45, p < .05). Equivalent success vs. failure comparisons for middle class Asian students, however, was nonsignificant (for females Q(1) = 0.50; for males Q(1) = 0.00).

For stable effort attributions, significant success vs. failure comparisons were found for middle class white females (Q(1) = 6.40, p < .02) and for lower class white females (Q(1) = 5.00, p < .05), thus indicating that successes were more often attributed to stable effort causes than were failures for both lower and middle class white females. No other result reached significance.

Teacher-related causes were more often cited for the failure of middle class Asian females than for their successes (Q(1) = 5.33, p<.05). Teacher-related causes were often cited for the failures of middle class Asian females than middle class Asian males (Q(1) = 4.45, p<.05), and less often for the success of middle class Asian females than middle class white females (Q(1) = 6.00, p<.02).



Other external factors (e.g. family support, or other students) were more often seen as causing the success of middle class white students than their failures (for females,  $\Omega(1) = 10.28$ , p < .01; for males  $\Omega(1) = 9.0$ , p < .01) and the success of middle class Asian students than their failures (for females  $\Omega(1) = 9.0$ , p < .01; for males  $\Omega(1) = 5.33$ , p < .05). Other external causes were also more frequently cited for the success of middle class white students than the success of lower class white students (for females  $\Omega(1) = 7.36$ , p < .01; for males  $\Omega(1) = 8.00$ , p < .01).

Separate analyses of the "other external" category revealed that the significant effects for other external attributions were due entirely to differences in teachers' use of the "family" as a cause for student performance. This "support of family" was cited more often for the success than failure of middle class white students (for females  $\Omega(1) = 14.22$ , p<.001; for males  $\Omega(1) = 10.00$ , p<.01). Similarly, family support was cited more often for Asian students' success than failure (for females  $\Omega(1) = 14.00$ , p<.001; for males  $\Omega(1) = 8.06$ , p<.01). And finally, the success of middle class white students was also seen as more frequently caused by family support than the success of lower class white students (for females  $\Omega(1) = 2.32$ , ns; for males  $\Omega(1) = 7.00$ , p<.01).

The results of this study revealed no self-serving pattern, but rather a counterdefensive one. That is, teachers cited causes internal to the student more often for succes than failure, and teacher-related causes more frequently for failure than success. Until further evidence can be gathered, the question of whether self-serving or counterdefensive patterns of attributions occur due to motivational factors or to the particular qualities of the information available to teachers (see Nisbett and Ross, 1980) cannot be adequately answered. There is growing amounts of evidence, of which this study is a part, that professional teachers' schema concerning student performance are not influenced by motivational or informational biases resulting in attribution patterns that serve the teacher's personal interests.



Regarding student background, the more similar the student's background was to the teacher's the more likely the teacher was to "count" the student's successes and "discount' the failures. Middle class white students' successes were more likely than their failures to be attributed to internal stable causes while Asian and lower class students revealed this pattern to a lesser, nonsignificant degree. White female successes were more likely than their failures to be attributed to stable effort causes while white male and Asian students did not reveal this difference. Also, teachers took more personal responsibility for Asian females' failures than successes and for Asian females' failures than Asian males' failures.

These results indicate that attribution patterns for Asian females showed some tendency to sustain positive expectations, especially in the teachers' willingness to take more blame for their failures than credit for their successes. (In fact, teachers took less credit for Asian female successes than middle class white female successes).

Only results involving the "other external" cause category ran counter to the conclusion that student backgrounds more similar to the teacher's receive more favorable attribution patterns. Other external causes were cited more often for middle class successes than failures, regardless of student race. These causes were also cited more often for middle class successes than lower class successes, thus indicating a kind of "discounting" of middle class successes. Closer examination of this "other external" category, however, reveals that perhaps it may be misleading to have aggregated "family" and "other students" into the broader "other external" category. Middle class <u>families</u> were seen as being more facilitative of success than lower families, and as playing more of a role in success than failure Because of the stable aspect of families on a student's environment, it would be erroneous to conclude that teachers would use this causal explanation to discount middle class students' success. However these results do suggest that future



researchers avoid treating "family" and "other student" causes as instances of the same attribution category.

Finally, results regarding student background provide ambiguous evidence concerning whether prior expectations or outgroup prejudice, or both, influence attributions. Lower class students, a low expectation outgroup, showed the least favorable attribution pattern. Asians, a high expectation outgroup, showed more favorable attributions than lower class students, but perhaps less favorable than prior expectations might have predicted, relative to middle class whites.

Future research should attempt to further separate the effect of lowe expectations and outgroup prejudice on teacher attributions for students of varying backgrounds.



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Table 1 Teacher Performance Attributes for Six Students

Attribution Category	MWF <sub>C</sub>	MWM a	LWF	LWM <sub>a</sub>	MAF <sub>c</sub>	MAM <sub>a</sub>
Internal Stable:						
Success	14	15	15	14	13	14
Failure	8	8	9	9	11	14
Stable Effort:						
Success	20	15	18	17	15	15
Failure	12	16	13	15	11	10
Immediate Effort:			,			
Success	1	1 3	0	0	2 2	0 1
Failure	4	3	4	2	2	1
Teacher-Related:						
Success	15	15	13	16	9	12
Failure	17	13	13	12	17	10
Other External:						
Success	21	19	12	11	19	18
Failure	9	10	14	13	7	10



Notes: a. Entries are frequencies of category use.
b. M = middle class, L = lower class, W = white, A = Asian,
F = female, M = male.