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ABSTRACT

The Responsibility for Student Achievement Questionnaire (RSA) was designed to measure elementary or secondary school teachers' beliefs regarding their responsibility for their students' academic successes and failures. The 30 items were constructed in the alternative-weighting format: for each item describing student success or failure, the respondent assigns one number indicating the degree to which that event is caused by the teacher, and a second number indicating the degree to which the event is caused by factors outside the teacher's control. (Both numbers must total 100). The RSA was administered to 215 elementary and secondary school teachers who also indicated the grade level taught, number of years of teaching experience, and sex. Results showed that females assumed greater responsibility for the positive achievements of their students than males did. Differences related to years of experience or grade level taught were not significant. Test reliability was moderately high, and subscale scores assessing responsibility for success and for failure were distinct. (The similarity between teachers' RSA scores and students' Intellectual Achievement Responsibility Questionnaire scores is discussed, and the RSA questionnaire is included). (Author/GDC)

TEACHERS' BELIEFS IN THEIR OWN CONTROL OF FACTORS INFLUENCING THE ACADEMIC ACHIEVEMENT OF STUDENTS

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ABSTRACT

This study describes a scale for assessing teachers' beliefs regarding responsibility for the academic successes and failures of their students. Test-retest and split-half reliabilities were moderately high. Subscale scores assessing responsibility for successes and for failures were generally independent of each other. Normative data on 215 elementary and secondary school teachers indicate that female teachers tend to assume greater self-responsibility for the positive learning outcomes of their students than do male teachers. Differences in responsibility scores were not found to be related to teacher experience or to the grade level taught.

TEACHERS' BELIEFS IN THEIR OWN CONTROL OF FACTORS INFLUENCING THE ACADEMIC ACHIEVEMENT OF STUDENTS

Over the past fifteen years a number of researchers have been interested in the degree to which children believe that they are usually able to influence the outcome of situations, particularly in school. Studies in this area have been based on the premise that these personal beliefs of children could be important determiners of the reinforcing effects of many classroom experiences. Generally, this research has centered around investigations of the relationship between measures of locus of control and the achievement-related behavior of students. Some of the earliest studies in this area were conducted by Vaughn Crandall and his colleagues at the Fel's Research Institute (Crandall, Katkovsky & Preston, 1962). This pioneering research led to the development and refinement of the Intellectual Achievement Responsibility Questionnaire (IAR), a 34 item scale which sought to measure children's beliefs in their own control of factors influencing success and failure in academic situations. While other locus of control instruments had been developed previously, the IAR greatly enhanced research on students in that it was the first to tap beliefs in reinforcement responsibility exclusively in the intellectual-academic achievement realm. Responsibility scores as measured by the IAR were found to be moderately related to intelligence, ordinal position among siblings, and size of family (Crandall, Katkovsky, & Crandall, 1965). In other contexts, scores on the IAR have been used in assessing the effects of various instructional programs and teaching practices, such as those associated with Project Follow Through (Stallings, 1975).

While the number of studies of students' beliefs in their own control of reinforcements in academic and school related situations has grown

(see Reppucci, 1973; Kukla, 1972; McGhee & Crandall, 1968; Seligman, 1973; Weiner & Sierad, 1975), scant attention has been paid to assessing similar attributional dimensions in classroom teachers. Janzen, Becken, & Hritzut (1973) did look at the relation between a general locus of control measure (Rotter, 1966), and a number of other attitudinal variables among a group of 80 Canadian teachers. They found that locus of control measures were related only to teachers' beliefs in student autonomy. Those teachers found to be more "internal," who believed that reinforcements were contingent upon their own behavior, tended to desire more control of their environment (the classroom) than did more "external" teachers, who believed that reinforcements were a mere result of fate, luck, or powerful outside forces. Janzen et al. argued that this desire was manifest in a relative rejection of student autonomy by internal teachers and the assumption of responsibility for class control.

As was the case in studies with students, however, precise research on teachers and teacher effectiveness would also appear to require a responsibility scale more specifically oriented toward intellectual-academic achievement in the classroom. Some researchers have alluded to the responsibility teachers perceive for the learning of their students as an important variable, but have not had the means of assessing it directly. Brookover & Lezotte (1979), for example, found through interviews with school personnel that those in less effective schools tended to feel less responsible for the learning of their students than did those in more effective schools. Teachers from the less effective schools attributed children's reading problems to non-school factors and were pessimists about their ability to have an impact,

thus creating an environment where children were expected to fail.

The present study describes a scale for assessing teacher beliefs regarding responsibility for the academic successes and failures of their students. The Responsibility for Student Achievement Questionnaire (RSA) shares the aim of other locus of control scales in that it attempts to measure beliefs in internal versus external responsibility. However, similar to the IAR Questionnaire for children, the RSA is aimed at assessing teachers' beliefs in responsibility exclusively in academic achievement and school related situations.

The RSA is also similar to the IAR in that the scale was constructed to sample an equal number of positive and negative situations. This was done because it was felt that the dynamics operative in accepting credit when good things happen in the classroom may be very different from those operative in accepting blame for unpleasant occurrences or failures. Thus, the RSA was constructed so that in addition to a total internal or self-responsibility score (R), separate subscores are obtained for beliefs in internal responsibility for classroom successes (R+ score) and for classroom failures (R- score).

METHOD

The Responsibility for Student Achievement Questionnaire

The RSA scale for teachers is composed of 30 alternative-weighting items. Each item stem describes either a positive or negative student achievement experience which routinely occurs in classroom life. This stem is followed by one alternative stating that the event was caused by the teacher and another stating that the event occurred because of factors outside of the teacher's immediate control. Pilot testin revealed that

most teachers view classroom events as being complex and stemming from more than a single cause. Hence, the either-or, forced choice format, similar to that used in the IAR was found to be inappropriate. Consequently, teachers are asked to divide 100 points between the two alternatives, depending upon their beliefs. Thus the weight assigned a particular alternative may vary from 0 to 100, but combined alternative weights for an item always total 100 points or 100 percent. This alternative weighting scheme was derived from a similar strategy employed in the research of Duby (1979).

The items from the RSA are presented in Table 1. Internal alternatives are designated by an R. Positive-event items are indicated by a plus sign and negative items by a minus sign following the R. Scores on the RSA are obtained by averaging the weights assigned to the internal responsibility alternatives across items. The R+ score is obtained by averaging across all positive items, the R- score by averaging across all negative items, and the total R score by averaging the R+ and R- subscores.

The Sample

The RSA was administered to a sample of 215 elementary and secondary school teachers from a large metropolitan school system. All of these teachers had volunteered to participate in an inservice education program for which they would receive both graduate education credit and salary lane-placement credit. On the questionnaire, teachers were assured of the confidentiality of their responses. They were then asked to record their school, subject area, grade level, and the number of years they had been teaching.

TABLE 1

The Responsibility for Student Achievement Questionnaire

DIRECTIONS:

For each of the following questions, please give a weight or percent to each of the two choices according to your preferences. For example:

If most students complete a home assignment you make, is it usually
_____a. because of their personal motivation, or
_____b. because you were very clear in making the assignment?

You may feel that students complete assignments more because of personal motivation than because of your clarity in making the assignment. In that case, you might answer:

85% a.

15% b.

Or you may feel quite the opposite. The percentage will vary according to how strongly you feel about each alternative. You may see choice (b) almost totally responsible for students completing assignments and might give it 99%. Choice (a) would then get 1%. The two must always add to 100%.

1. If a student does well in your class, would it probably be
_____a. because that student had the natural ability to do well, or
R+_____b. because of the encouragement you offered?

2. When your class is having trouble understanding something you have taught, is it usually
R-_____a. because you did not explain it very clearly, or
_____b. because your students are just slow in understanding difficult concepts?

3. When most of your students do well on a test, is it more likely to be
_____a. because the test was very easy, or
R+_____b. because you let them know what you expected?

4. When a student in your class can't remember something you said just moments before, is it usually
R-_____a. because you didn't stress the point strongly enough, or
_____b. because some students just don't pay attention?

5. Suppose your chairman or principal says you are doing a fine job. Is that likely to happen
R+_____a. because you've been successful with most of your students, or
_____b. because chairmen and principals say that sort of thing to motivate teachers?

6. Suppose you are particularly successful with one class. Would it probably happen
R+_____a. because you helped them overcome their learning difficulties, or
_____b. because these students usually do well in school?

TABLE 1 - continued

7. If your students learn an idea quickly, is it
   R+_____a. because you were successful in encouraging their learning efforts, or
   _____b. because your students are basically intelligent?

8. If your chairman or principal suggests you change some of your class procedures, is it more likely
   _____a. because of his/her personal ideas about teaching methodology, or
   R-_____b. because your students haven't been doing well?

9. When a large percent of the students in your class are doing poorly, does it usually happen
   _____a. because they have done poorly before and don't really try, or
   R-_____b. because you haven't had the time to give them all the help they need?

10. When your students seem to learn something easily, is it usually
    _____a. because they were already interested in it, or
    R+_____b. because you have helped them organize the concepts?

11. When students in your class forget something that you explained before, is it usually
    _____a. because most students forget new concepts quickly, or
    R-_____b. because you didn't get them actively involved in the learning?

12. When you find it hard to get a lesson across to particular students, is it
    R-_____a. because you haven't insisted on their learning earlier lessons, or
    _____b. because they are just slow in understanding and learning?

13. Suppose you present a new idea to your students and most of them remember it. Is it likely to be
    R+_____a. because you reviewed and re-explained the difficult parts, or
    _____b. because they were interested in it even before you explained it?

14. When your students do poorly on a test, is it
    _____a. because they didn't really expect to do well, or
    R-_____b. because you didn't insist they prepare adequately?

15. When parents commend you on your work as a teacher, is it usually
    R+_____a. because you have made a special effort with their child, or
    _____b. because their child is generally a good student?

16. If a child doesn't do well in your class, would it probably be
    _____a. because he did not work very hard, or
    R-_____b. because you didn't provide the proper motivation for him?

17. Suppose you don't have as much success as usual with a particular class. Would this probably happen
    R-_____a. because you didn't plan as carefully as usual, or
    _____b. because these students just had less ability than others?

18. If one of your students says, "Ya know, you're a pretty good teacher," is it probably
    R+_____a. because you make learning interesting for that student, or
    _____b. because students generally try to get on a teacher's good side?

19. Suppose you find that many students are eager to be in your class. Do you think this would happen
    _____a. because most students feel you have a nice personality, or
R+_____b. because you encourage most of your students to learn well?

20. Suppose you are trying to help a student solve a particular problem but she is having great difficulty with it. Would that happen
R-_____a. because you may not be explaining it at her level, or
    _____b. because she is not used to being helped by adults?

21. When you find it easy to get a lesson across to a class, is it
R+_____a. because you could get most students to participate in the lesson, or
    _____b. because the lesson was an easy one to teach?

22. When a student in your class remembers something you talked about weeks before, is it usually
    _____a. because some students have that potential to remember things well, or
R+_____b. because you made the point interesting for that student?

23. If you are working with a student who can't understand a concept and he suddenly gets it, is that likely to happen
R+_____a. because you gave him regular feedback on each learning step, or
    _____b. because he usually works on something until he gets it?

24. When you are having a hard time getting your students interested in a lesson, is it usually
R-_____a. because you didn't have time to plan the presentation well, or
    _____b. because your students are generally hard to motivate?

25. If one of your students says, "You're a rotten teacher!" is it probably
    _____a. because many of your students have learning problems, or
R-_____b. because you haven't been able to give that student enough individual attention?

26. When your students seem interested in your lesson right from the beginning, is it
    _____a. because the topic is one which students generally find interesting, or
R+_____b. because you were able to get most of the students involved?

27. If you were to discover most of the students in your class doing very well, would it probably be
    _____a. because their parents were supporting the school's efforts, or
R+_____b. because you had been able to motivate them to work hard?

28. When your students seem to have difficulty learning something, is it usually
    _____a. because they are not willing to really work at it, or
R-_____b. because you weren't able to make it interesting for them?

29. If a parent is critical of you as a teacher, is it likely to be
R-_____a. because you have difficulty getting that parent's child to do the work you require, or
    _____b. because that parent's child is developmentally not ready to do well in your class?

30. On those days when you are depressed about teaching, is it
    _____a. because learning is a difficult activity for many of your students, or
R-_____b. because you just weren't able to motivate students to work as hard as they should?

The schools from which these teachers were drawn ranged from small elementary schools with fewer than 200 students to large high schools with more than 2000 students. Forty-four of the teachers were male; 171 were female. Subsample sizes at various grade level groups were: grades 1-3, N=69; grades 4-8, N=82; grades 9-12, N=64. When divided into groups in terms of years of teaching experience, the subsample sizes were: 1-5 years, N=41; 6-10 years, N=89; 11 or more years, N=81.

RESULTS

Factor Analysis of the RSA

The underlying factor structure of items in the Responsibility for Student Achievement Questionnaire was assessed through factor analysis procedures. As is illustrated in Table 2, a two-common factor model accounts for 60.9 percent of the variance in RSA item responses. Close inspection of the factor loadings shows a rather clear distinction between items from the R+ and R- subscales. Fourteen of the 15 items from the R- scale load most heavily on the first factor, while 9 of the 15 items from R+ scale load most heavily on the second factor. It thus appears that items from the RSA are assessing two different factors, and that these factors correspond very closely to distinctions between responsibility for student successes and ressponsibility for student failures.

TABLE 2

Unrotated Factor Loadings for Items From the Responsibility for Student Achievement Questionnaire

Items	Scale[1]	Factors		Communalities
		F_1	F_2	
1	+	.170	.530	.484
2	-	.513	-.295	.495
3	+	.279	.170	.200
4	-	.617	-.164	.559
5	+	.112	.408	.314
6	+	.309	.543	.496
7	+	.299	.463	.471
8	-	.307	-.059	.246
9	-	.598	-.049	.475
10	+	.414	.317	.380
11	-	.585	-.244	.542
12	-	.722	-.309	.629
13	+	.380	.320	.389
14	-	.541	-.123	.419
15	+	.208	.448	.373
16	-	.594	-.258	.521
17	-	.630	-.253	.528
18	+	.305	.424	.475
19	+	.211	.533	.459
20	-	.501	-.264	.459
21	+	.299	.316	.365
22	+	.470	.182	.435

Continued

TABLE 2--Continued

Items	Scale[1]	Factors F_1	Factors F_2	Communalities
23	+	.413	.390	.477
24	-	.604	-.323	.554
25	-	.428	.103	.430
26	+	.385	.130	.421
27	+	.309	.332	.336
28	-	.700	-.323	.647
29	-	.183	.054	.208
30	-	.295	-.088	.264
Eigenvalues		5.941	2.986	
Percent of Variance Explained		40.5	20.4	
Cumulative Percent of Variance Explained		40.5	60.9	

[1] '+' indicates an item associated with the R+ subscale; '-' indicates association with the R- subscale.

Reliability

Test-retest reliability. The consistency of teachers' RSA responses over time was found to be moderately high. One hundred two of the teachers were given the questionnaire a second time after a 4-month interval. For these teachers, test-retest correlations were .739 for total R scores, .718 for R+, and .784 for R-. These correlations were all statistically significant ($p < .001$). There were no statistically significant sex differences in any of these correlations.

Internal consistency. Because the RSA contains two kinds of items, those which sample beliefs in self-responsibility for positive events in the classroom and those sampling self-responsibility for negative classroom events, reliability indices were computed separately for each of the two subscales. For the R+ subscale, the unequal-length Spearman Brown formula estimated the reliability to be .760. The Guttman split-half estimate was .754 while the alpha coefficient was calculated to be .791. The unequal-length Spearman Brown formula estimated the reliability of the R- subscale at .899. For this subscale the Guttman split-half estimate was .885, and the alpha coefficient was .881. Thus the R- subscale appears to be somewhat more reliable than the R+ subscale. However, considering the brevity of both subscales, these reliability indices indicate that the items within each scale display a relatively high degree of consistency.

Intercorrelations Between Measures

Table 3 presents the Pearson product-moment intercorrelations between RSA total scores and subscale scores, teachers' sex (1=male, 2=female), their years of teaching experience, and the grade level of their students. In these computations, years of experience and grade level are treated as continuous rather than categorical variables.

Because the total R score represents the averaged sum of scores from the two subscales, the intercorrelation between total R, and R+ and R- scores would be expected to be high (.724 and .814, respectively). The intercorrelation between R+ and R- subscale scores, however, is only .203. This intercorrelation is quite low, especially considering the conceptual similarity of these two measures. Although statistically significant, it provides further evidence that the R+ and R- subscales measure different orientations and appear to be independent. Apparently, assuming responsibility for the academic successes of students is indeed different from assuming responsibility for their academic failures. The low correlation between these two subscales also raises doubt about the use of the total R score alone. Since this score combines self-responsibility for classroom successes and failures it may disguise important differences between these two factors in the individual teacher.

With one exception, the correlations between RSA scores, teachers' sex, years experience, and grade level are all very low and not statistically significant. The one exception is the correlation between R+ scores and teachers' sex ($r = .200$), indicating that there may be some interrelation between the sex of teachers and the responsibility they assume for the academic successes of their students. This possibility is discussed in greater detail in the next section of this paper. The other very low correlations indicate that while differences in self-responsibility may be related to years teaching experience or grade level, it appears that relationship is not linear in nature.

TABLE 3

Intercorrelations Between RSA Scores and Selected Teacher Variables

Variable	R	R+	R-	Sex	Years Experience	Grade Level
R	1.00	.724**	.814**	.134	.006	-.023
R+		1.00	.203*	.200*	.122	-.115
R-			1.00	.026	-.002	.062
Sex				1.00	.043	-.127
Years Experience					1.00	.073
Grade Level						1.00

* p < .05
** p < .01

Descriptive Statistics

The means and standard deviations of RSA total scores and subscale scores for male and female teachers are presented in Table 4. Since each of the 30 items presents both an internal and an external alternative, chance distributions would result in a mean score of 50 for total R, R+ and R- scores. In all cases, however, the obtained means exceed those which would be expected by chance. It may be that the wording of the RSA items promote a tendency for more internal responses. However, it may also be that the higher means which were obtained indicate that self-responsibility is a general characteristic among teachers, or at least among those who volunteer to participate in an inservice education program.

The differences between the scores of male and female teachers illustrated in Table 4 indicate that female teachers tend to assume greater responsibility for student achievement in the classroom than do male teachers. T-test comparisons revealed that female teachers assumed significantly greater self-responsibility for the academic successes of students ($t = 2.14$, $p < .05$), while differences in responsibility for academic failures were not significant. Both male and female teachers had approximately the same number of years teaching experience, however, male teachers in the sample tended to teach at higher grade levels than female teachers, a difference which was statistically significant ($t=1.98$, $p < .05$).

TABLE 4

Means, Standard Deviations, and Ranges of RSA Scores By Sex

Scale	Males (N=44)			Females (N=171)		
	$\bar{X}$	S.D.	Range	$\bar{X}$	S.D.	Range
Total R	56.56	8.05	46.2-79.2	59.73	9.83	31.4-91.9
R+	59.12	8.47	46.7-81.2	64.28	10.61	29.4-93.0
R-	53.91	11.45	37.9-83.8	54.83	14.88	27.3-95.3
Years Experience	10.59	6.08	2.0-30.0	11.39	7.69	2.0-41.0
Grade Level	6.19	2.74	1.0-11.0	5.19	3.25	1.0-12.0

Table 5 shows the means and standard deviations of RSA total and subscale scores for three groups of teachers divided in terms of their years of teaching experience. These results indicate that beginning teachers (1-5 years experience) and the most experienced teachers (11 or more years of experience) tend to feel more self-responsibility for positive achievement events than do the middle group of teachers with 6-10 years experience. Analysis of variance procedures indicated, however, that the differences between these groups were not statistically significant. Regression analyses were also performed to test the significance of a curvilinear relationship between years of teaching experience (treated as a continuous variable) and RSA total and subscale scores, but again, the relationship was not found to be statistically significant. Furthermore, there were no significant differences between these groups in the mean grade level at which the teachers taught.

In Table 6 are listed the means and standard deviations of RSA total scores and subscale scores for three groups of teachers divided on the basis of the grade level of students taught. While there again appeared a tendency for middle grade level teachers to assume less self-responsibility than either early elementary grade teachers or secondary level teachers, analysis of variance procedures showed that the differences between these groups were not statistically significant. Regression analyses investigating the possibility of a curvilinear relationship between grade level (treated as a continuous variable) and RSA scores also yielded no statistically significant results. There were no differences between the groups in terms of number of years of teaching experience.

TABLE 5

Means, Standard Deviations, and Ranges of RSA Scores By Years of Teaching Experience

Scale	1-5 Years (N=43)			6-10 Years (N=90)			11+ Years (N=82)		
	$\bar{X}$	S.D.	Range	$\bar{X}$	S.D.	Range	$\bar{X}$	S.D.	Range
Total R	58.71	6.13	47.8-83.8	57.76	9.86	31.4-87.5	59.73	9.60	40.8-91.9
R+	63.14	9.03	44.3-88.1	60.86	10.40	29.4-87.7	64.51	10.64	44.7-93.0
R-	54.23	11.22	22.3-79.5	54.58	12.82	32.7-87.3	54.49	16.14	37.4-89.7
Grade Level	5.61	2.88	1.0-10.0	4.90	2.94	1.0-11.0	5.73	3.37	1.0-12.0

TABLE 6

Means, Standard Deviations, and Ranges of RSA Scores By Grade Level

Scale	Elementary Grades 1-3 (N=69)			Middle Grades 4-8 (N=82)			Secondary Grades 9-12 (N=64)		
	$\bar{X}$	S.D.	Range	$\bar{X}$	S.D.	Range	$\bar{X}$	S.D.	Range
Total R	58.60	9.85	40.8-84.8	57.38	8.74	37.0-91.0	58.89	8.65	46.7-87.5
R+	63.81	10.50	42.7-88.1	61.41	9.98	35.0-93.0	62.08	9.71	46.7-87.7
R-	53.16	15.43	18.3-87.0	52.87	14.10	23.5-95.0	55.55	11.99	27.0-87.3
Years Experience	11.02	5.47	4.0-25.0	10.38	5.96	2.0-27.0	12.28	10.15	3.0-41.0

Finally, three-way analysis of variance procedures were performed in order to determine if there were any interactive effects between the sex of teachers, years of teaching experience, and grade level taught. Separate analyses were performed on R+ subscale scores and R- subscale scores. The results of these procedures, which are illustrated in Table 7 and Table 8 respectively, show that no two-way or three-way interactions were statistically significant for either R+ or R- scores. Only the main effect of sex upon R+ scores was found to be significant.

DISCUSSION

One surprising element found in these analyses of the Responsibility for Student Achievement Questionnaire was the striking similarity in associations between RSA measures among teachers and IAR measures among students. The subscale scores on the RSA measuring responsibility for successes (R+ score) and responsibility for failures (R- score) were found to be fairly independent and appeared to be assessing different orientations on the part of teachers. Crandall, Katkovsky, and Crandall (1965) found the same to be true of subscale scores from the IAR for students, where the median interscale correlation across grade levels was only .20. It thus seems that these two orientations may be quite different, regardless of the age of an individual. It also adds support to the suggestion of Crandall and his associates that self-responsibility for successes and failures may be learned separately and therefore applied differentially.

Another similarity between RSA measures among teachers and IAR measures among students is the difference between female and male responses. Female teachers were found to consistently assume greater responsibility for the learning outcomes of their students than were male teachers, particularly in terms of positive learning outcomes. Similarly, Crandall et al. (1965) found that female students scored consistently higher than male

TABLE 7

Analysis of Variance for R+ Subscale Scores

Source	df	F	Probability
Sex	1	6.40	0.01
Years Experience	2	0.43	n.s.
Grade Level	2	0.13	n.s.
Sex x Years Experience	2	0.52	n.s.
Sex x Grade Level	2	0.40	n.s.
Years Experience x Grade Level	4	1.58.	n.s.
Sex x Years Experience x Grade Level	4	0.83	n.s.
Error	198		

TABLE 8

Analysis of Variance for R- Subscale Scores

Source	df	F	Probability
Sex	1	0.03	n.s.
Years Experience	2	1.24	n.s.
Grade Level	2	0.74	n.s.
Sex x Years Experience	2	C.31	n.s.
Sex x Grade Level	2	0.40	n.s.
Years Experience x Grade Level	4	0.89	n.s.
Sex x Years Experience x Grade Level	4	0.75	n.s.
Error	198		

students in measures of responsibility for positive achievement events, regardless of the grade level at which these responses were made. Reasons for these consistent sexual differences, however, are unexplained.

As is the case with students, it also seems probable that belief in self-responsibility may constitute a motivational influence upon the classroom performance of teachers. Just as the student who feels responsible for personal successes and failures shows greater initiative in seeking rewards and greater persistence in the face of difficulty, the teacher who feels responsible for classroom successes and failures might also show greater initiative in working with students and greater persistence in struggling with classroom problems. Furthermore, it seems probable that a teacher's belief in self-responsibility for students' academic successes and failures might be closely associated with the expectations that teacher holds for student learning. Brookover and Lezotte (1979) suggest that beliefs in self-responsibility and expectations for learning are closely related, and may have a powerful impact upon student learning outcomes. Certainly these issues need to be studied more thoroughly.

In conclusion, the associations investigated here between demographic variables and teachers' beliefs in their own control of factors influencing the academic achievement of students provide evidence for the utility of measuring this construct with the present instrument. It is believed that self-responsibility for student achievement may be a very significant variable in research on teachers and the teaching-learning process. Further research seems warranted relating RSA scores to the classroom behaviors of teachers, the expectations they hold for their students, and to the learning outcomes of students.

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