

What Predicts Teachers' Attitudes Toward the Gifted?

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Abstract: The present study explores teachers' attitudes toward the gifted and gifted education. Specifically, the authors examine whether teachers tailor their responses about attitudes toward the gifted to fit the perceived interests of the researcher. In addition, the authors examine several potential predictors of attitudes toward the gifted: training or experience in gifted education, training or experience in special education, and self-perceptions as gifted. A total of 262 teachers participate in the study. The perceived epistemic interests of the researcher do not affect teachers' self-reported attitudes toward the gifted. Teachers who had received training in gifted education hold higher perceptions of themselves as gifted. However, teachers' self-perceptions as gifted are unrelated to their attitudes toward gifted education. Finally, special education teachers hold slightly lower attitudes toward the gifted. The authors discuss the implications of these results for the field of gifted education.

Putting the Research to Use: Those who provide training in gifted education need to reexamine the effectiveness of their training. We found that training in gifted education was not related to teachers' attitudes toward the gifted, although it was positively related to teachers' perceptions of themselves as gifted. It may be that training increases teachers' understanding of giftedness and the needs of gifted students but fails to build support for meeting those needs. Because one of the primary objectives of training is to increase attendees' attitudes toward gifted students, providers of gifted education training should consider assessing attendees before and after receiving training. Based on these assessments, trainers may need to modify their training strategies to improve participants' attitudes toward the gifted. Educators in gifted education should also forge alliances with colleagues in other fields, particularly those in the field of special education. We found that special educators were less supportive of gifted education and acceleration practices than mainstream teachers. Promoting collaboration between gifted education and special education may help to promote positive attitudes toward gifted education among special educators and general educators.

Keywords: *attitudes; teacher training; response effect*

Historically, Americans have held ambivalent attitudes toward gifted students and gifted education (Bégin & Gagné, 1994a). The tension between excellence and equity has a long history in the American educational system (Gallagher, 1994). Although Americans prize achievement and creative productivity, they despise making distinctions between superiority and inferiority in academic, political, or social domains. For this reason, Americans are uncomfortable discussing individual differences in intelligence or academic ability (Gallagher). Fears of elitism cause many educators to view gifted education as involving special privileges for the "already advantaged." The pendulum of public opinion sways between the quest

for excellence and the need for equity. In this era of "No Child Left Behind," concerns about equity of instruction and achievement appear to override concerns about "raising the academic bar." The effects of this zeitgeist on regular education teachers' attitudes toward the gifted are unknown.

Given this ambivalence toward gifted students and gifted education, "most attitude surveys confirm quite eloquently the lack of consensus about the need for, or

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priority of, special education services for gifted and talented children” (Bégin & Gagné, 1994a, p. 161). In the field of gifted education, assessing, predicting, and perhaps changing the attitudes of general education teachers represents an important endeavor. Without the support of regular education teachers and administrators, gifted educators are virtually powerless to institute the curricular and instructional changes necessary to challenge and stimulate the nation’s gifted students.

Review of the Literature

Attitudes Toward the Gifted

For more than half a century, scholars of gifted education have been interested in studying the attitudes of regular education teachers toward gifted students and gifted education (Justman & Wrightstone, 1956; Peachman, 1942). Although many studies have explored the attitudes of teachers toward gifted students and gifted education, we still do not have a clear and definitive picture of teachers’ attitudes toward gifted students and gifted education.

First, the results of these studies have been mixed. Some studies suggested that teachers tend to have positive attitudes toward the gifted (e.g., Gagné, 1983), other studies suggested that teachers tend to harbor more negative attitudes toward gifted education and gifted students (e.g., Cramond & Martin, 1987), and still others reported both positive and negative attitudes toward the gifted (Copenhaver & McIntyre, 1992; Megay-Nespoli, 2001). For example, Morris (1987) surveyed 250 teachers about their attitudes toward the gifted. Although almost 60% of the teachers reported positive attitudes toward the gifted, more than 40% of the teachers reported negative attitudes toward the gifted. In their adaptation of Tannenbaum’s (1962) classic study of students’ attitudes toward the gifted, Cramond and Martin (1987) asked preservice and in-service teachers to complete an attitude questionnaire that assessed participants’ attitudes toward students that were athletic/nonathletic, brilliant/nonbrilliant, and studious/nonstudious. Both preservice and in-service teachers gave the highest ratings to average, nonstudious, athletic students and gave the lowest ratings to brilliant, studious, nonathletic students.

In addition, even though many studies have examined teachers’ attitudes toward gifted students and gifted education (e.g., Copenhaver & McIntyre, 1992; Cramond & Martin, 1987; Jacobs, 1975; Rubenzer & Twaite, 1979), most studies failed to use either a random

or a representative sample of teachers. Therefore, the results of these studies may not be generalizable to the general population of teachers. Overall, the results of previous research do not provide a clear picture about teachers’ attitudes toward gifted students.

Predictors of Attitudes Toward the Gifted

Many published studies have examined predictors of attitudes toward the gifted. In their review of the research on predictors of attitudes toward the gifted, Bégin and Gagné (1994a) identified more than 50 different variables that had been studied as potential predictors of attitudes toward the gifted. The results of their review were somewhat ambiguous. Many of the predictors of attitudes toward the gifted had only been included in one research study. Furthermore, most of the statistically significant predictors that had been included in more than one research study were nonstatistically significant predictors of attitudes toward the gifted in one or more studies. However, a few predictors did appear to be related to attitudes toward the gifted. First, a person’s self-perception as gifted significantly predicted attitudes toward gifted education in one of the reviewed studies (Michener, 1980), suggesting that those who perceive themselves as academically gifted or who have gifted friends and family tend to harbor more positive attitudes toward the gifted. In addition, contact with gifted children, past participation in a gifted program, the presence of a gifted program in the participant’s school, and perceived knowledge of giftedness were statistically significant predictors of attitudes toward the gifted in the majority of studies that included these variables (Bégin & Gagné, 1994a, 1994b).

Bégin and Gagné (1994a) identified several methodological weaknesses of previous studies. First, the measurement of attitudes toward the gifted was inconsistent and often inappropriate. Most researchers failed to use empirically validated scales to measure attitudes toward the gifted, and many of the studies failed to provide adequate evidence of reliability or validity for their homegrown instruments. Second, the choices and measurement of the predictors of attitudes toward gifted education were often inadequate. Few studies assessed more than a few predictors, and many of the studies failed to use appropriate scales to measure the predictors. Oftentimes, the predictors were measured using single items. Furthermore, many of the studies used crude or inappropriate analyses. Finally and most important, most of the studies used nonrepresentative and nonrandom samples. Therefore, the results of the

studies are not generalizable to the general population (Bégin & Gagné, 1994a).

Bégin and Gagné (1994b) then conducted their own study of attitudes toward the gifted using an instrument developed by Gagné and Nadeau (1985). They isolated two statistically significant predictors of attitudes toward gifted education: socioeconomic status and contact with giftedness. In their study, these two demographic variables explained about 22% of the variance in teachers' and parents' attitudes toward the gifted. The higher the respondents' socioeconomic status and the more contact respondents had with giftedness, the more positive they were about the gifted.

Strength and Stability of Attitudes

Variations in the context in which an attitude question is asked can alter participants' responses to the question in systematic or predictable ways. This phenomenon is commonly referred to as a "response effect" (Krosnick & Schuman, 1988). A large body of literature suggests that "responses to attitude questions are inconsistent over time and sensitive to question order and context" (Tourangeau, Rips, & Rasinski, 2000, p. 169). Recently, this has led some researchers to speculate that people's attitudes may represent temporary states, rather than stable traits. According to this point of view, temporarily salient information influences attitudes (Lavine, Huff, Wagner, & Sweeny, 1998). If this theory is correct, then contextual effects surrounding the administration of an attitude survey should influence participants' self-reported attitudes.

Strong attitudes possess internal consistency, certainty, and intensity, and they influence thoughts and behaviors (Lavine et al., 1998). Strong attitudes are particularly stable over time and resistant to influence attempts (Lavine et al., 1998). Therefore, several researchers have hypothesized that strong attitudes may be more resistant to contextual effects than weak attitudes (Krosnick & Schuman, 1988; Lavine et al., 1998). Because strong attitudes are more likely to be affected by stable feelings and beliefs whereas weak attitudes are more likely to be based on temporally and situationally based cues, context effects are likely to be moderated by attitude strength. The results of previous research in the area of attitude strength are somewhat ambiguous. In the Krosnick and Schuman (1988) study, measures of attitude intensity, importance, and certainty did not differentiate individuals who showed response effects from those who did not. In the Lavine et al. (1998) study, contextual effects were found using multi-item, multidimensional measures of attitude

strength but not when using single-item indicators of attitude strength.

Effects of Researcher's Epistemic Interests

The affiliation of the researcher or the research organization may influence respondents' self-reports of their attitudes (Norenzayan & Schwartz, 1999). This is sometimes referred to as "the letterhead effect" (Schwartz, 1999). To date, very little research has systematically examined the effect of the researcher's affiliation on the attitudes of the respondents (Norenzayan & Schwartz, 1999; Schwartz, 1999). In one of the only published studies of the letterhead effect, Norenzayan and Schwartz (1999) found that undergraduates' responses were influenced by the avowed affiliation of the researcher.

If the affiliation listed on the letterhead effect does affect participants' responses to attitude surveys, it has major implications for the large-scale survey studies of gifted education conducted by the National Research Center on the Gifted and Talented (NRC/GT) and other gifted organizations (e.g., the National Association for Gifted Children, the Association for the Gifted, etc.). It seems possible that people report more positive attitudes toward the gifted when queried on a survey mailed on an NRC/GT letterhead than they would be if they received the same survey from an organization that they did not perceive to be associated with gifted education.

Purpose

The present study attempted to broaden our knowledge of teachers' attitudes toward the gifted by exploring several unanswered questions. How do regular education teachers currently feel about providing specialized services for gifted students? Do teachers tailor their responses about attitudes toward the gifted to fit what they perceive to be the research interests of the researcher? Are teachers who have training or experience in gifted education more supportive of gifted students and gifted education? Are teachers who have training or experience in gifted education more likely to perceive themselves as gifted? Are there differences between special education teachers and non-special-education teachers in terms of their attitudes toward the gifted?

Specifically, we hypothesized that teachers who received a survey with an NRC/GT (progifted) letterhead would report statistically significantly higher attitudes toward the gifted and teachers who received a

survey with a Center for Equity and Equality (antigifted) letterhead would report statistically significantly lower attitudes toward the gifted than teachers who receive a survey with a University of Connecticut (neutral) letterhead.

In addition, we hypothesized that teachers who have training in gifted education or experience as gifted education teachers would have more positive attitudes toward gifted education and gifted students. Finally we hypothesized that self-perceptions as gifted would be positively related to teachers' attitudes toward the gifted.

Method

Sample

We mailed the survey packet to a national random sample of 1,500 teachers. To obtain the national sample, we purchased a mailing list of 1,500 randomly selected teachers from a national educational marketing company that routinely supplies mailing lists for researchers and advertisers. Then, we directly manipulated the letterhead effect. We randomly selected 500 of the teachers to receive the survey on University of Connecticut letterhead, 500 of the teachers received a cover letter from the "Center for Equity and Equality in Education," and 500 of the teachers received the survey from the NRC/GT. We sent two additional follow-up mailings to nonrespondents. A total of 262 teachers (17.5% response rate) responded to the survey. Eighty-nine teachers responded to the survey with the University of Connecticut letterhead, 98 responded to the survey with the NRC letterhead, and 75 responded to the survey with the "Center for Equity and Equality in Education" letterhead. There were no statistically significant differences in the response rate between the three letterhead conditions, $\chi^2(2) = 3.08, p = .215$. Of the 262 respondents, 46 (17.6%) were male and 216 (82.4%) were female. Approximately 86.6% of the sample were White, 4.2% were African American, and 4.6% were Latino/Latina. The respondents showed a mean of 16.12 years of teaching experience, with a standard deviation of 9.98 years. Approximately 74% of the teachers reported that their schools offered gifted programs; 26% reported that their schools did not provide gifted programming. The respondents indicated a high level of exposure to gifted training and coursework. Almost 37% of the sample reported taking courses in gifted education, almost 30% of the sample reported attending at least one conference on gifted

education, and approximately 20% of the sample reported having held a position as a teacher of the gifted at some point during their careers. However, only 6.9% of the teachers reported having a degree or certification in gifted education. In total, just more than half of the respondents reported having some training or experience in gifted education, as indicated by their endorsement of at least one of the previous four items.

Instrumentation

Teachers' attitudes toward the gifted and gifted education were measured using Gagné and Nadeau's (1991) Opinions About the Gifted and Their Education instrument. This 35-item instrument is designed to measure six factors related to attitudes toward the gifted. All items on the scales were measured using a 7-point Likert-type scale, where 1 = *strongly disagree* and 7 = *strongly agree*. The first subscale, Needs and Support, assesses the respondent's belief in the needs of gifted children and his or her support for special services for the gifted. High scores on this subscale indicate positive attitudes toward the gifted. The second subscale, Resistance to Objections, measures the respondents' objections based on ideology and other priorities. High scores indicate more negative attitudes toward the gifted. The Social Value subscale measures the respondent's perceptions of the social usefulness of gifted persons in society. High scores indicate positive attitudes toward the gifted. The Rejection subscale measures respondents' perceptions of the isolation of gifted students by others in the immediate environment. High scores indicate more negative attitudes toward the gifted. The Ability Grouping subscale measures respondents' attitudes toward special homogeneous groups, classes, and schools. High scores indicate positive attitudes toward the gifted. School Acceleration measures respondents' attitudes toward acceleration for academically gifted students. High scores on this subscale indicate positive attitudes toward the gifted (Gagné, 1983, 1991; Gagné & Nadeau, 1985).

To confirm the factor structure that Gagné and Nadeau (1985) posited, we conducted a confirmatory factor analysis using EQS 6.1. However, Gagné and Nadeau's model failed to converge and resulted in an inadmissible solution after 500 iterations. Therefore, we elected to conduct another exploratory factor analysis to investigate the factor structure of the instrument with our sample of teachers. Based on the results of an exploratory factor analysis and reliability analyses, we created three subscales for further analyses. The first

Table 1
Subscales Used for This Study

Subscale 1. Support (from Gagne & Nadeau, 1991, 5 questions, alpha = .76)

1. Our schools should offer special education services for the gifted.
15. The gifted need special attention to fully develop their talents.
26. Tax payers should not have to pay for special education for the minority of children who are gifted. (Reverse scored)
30. Since we invest supplementary funds for funds for children with difficulties, we should do the same for the gifted.
35. All special programs for the gifted should be abolished. (Reverse scored)

Subscale 2. Elitism (from Gagne & Nadeau, 1991, 6 questions, alpha = .80)

4. Special programs for gifted children have the drawback of creating elitism.
5. Special educational services for the gifted children are a mark of privilege.
6. When the gifted are put in special classes, the other children feel devalued.
21. By separating students into gifted and other groups, we increase the labeling of children as strong-weak, good-less good, etc.
23. The gifted are already favored in our schools.
28. Gifted children might become vain or egotistical if they are given special attention.

Subscale 3. Acceleration (from Gagne & Nadeau, 1991, 4 questions, alpha = .71)

7. Most gifted children who skip a grade have difficulties in their social adjustment to a group of older students.
10. Children who skip a grade are usually pressured to do so by their parents.
29. When skipping a grade, gifted students miss important ideas. (They have holes in their knowledge.)
34. A greater number of gifted children should be allowed to skip a grade. (Reverse scored)

Subscale 4. Self-perceptions (researcher created, 5 questions, alpha = .94)

1. I was or could have been in a gifted program in school.
2. Most of my family and friends consider me gifted.
3. I am gifted.
4. Most of my family and friends are gifted.
5. People consider me gifted.

Table 2
Correlations Between the Subscales

	Acceleration	Support	Elitism	Gifted Self-Perceptions
Acceleration (negative)	1.000			
Support (positive)	-0.185**	1.000		
Elitism (negative)	0.349**	-0.524**	1.000	
Gifted self-perceptions	0.046	-0.013	0.039	1.000

** $p < .01$ (two-tailed).

subscale, Support, assesses the respondent's belief in the needs of gifted children and his or her support for special services for the gifted. High scores on this factor indicate positive attitudes toward the gifted. This subscale contains five items and has a Cronbach's alpha reliability of .76 in the present sample. The second subscale, Elitism, measures the respondents' objections based on concerns about elitism and the favored status that the gifted have in schools and society at large. High scores on the second subscale indicate more negative attitudes toward the gifted. This subscale contains six items and has a Cronbach's alpha of .80 in this sample. The third subscale, School Acceleration, measures

respondents' attitudes toward acceleration for academically gifted students. High scores on this subscale indicate negative attitudes toward the gifted. This subscale contains five items and has a Cronbach's alpha of .71 for the present sample. Table 1 contains the items for each of these subscales.

In addition, we administered a five-item Self-Perceptions as Gifted scale that was created for this study. High scores on this subscale indicate that the respondent perceives himself or herself as gifted. The Cronbach's alpha reliability of this subscale was .94. The correlations between the four subscales are contained in Table 2.

Analysis

We conducted a multivariate analysis of variance (MANOVA) to determine whether the type of letterhead influenced teachers' centroid of mean scores on the three attitudes toward the Gifted subscale. The MANOVA revealed no statistically significant differences between the three letterhead types on the centroid of mean scores (Wilks' Lambda = .981, $p = .56$, partial eta squared = .009). In addition, there were no differences between the letterhead groups on the self-perceptions as Gifted subscale, $F(2, 258) = 2.11$, $p = .123$. These results suggest that the type of letterhead had no effect on teachers' responses to the questionnaire. Therefore, we collapsed the three letterhead groups to examine whether training and experience in gifted education resulted in higher attitudes toward the gifted.

Teachers in the sample were generally supportive of gifted education. The mean on the support factor was 5.45, which indicated slight to moderate support of gifted education. This was the highest of all the subscale means. Less than 7% of the sample had means less than the midpoint on the Support scale. In contrast, 28% of the sample had means of 6.0 or greater on this subscale, indicating that they were supportive or strongly supportive of gifted education. Teachers' attitudes about acceleration were more mixed. The mean on this scale was 4.46, and higher scores on this scale reflect more negative attitudes toward acceleration. Therefore, teachers in the sample tended to have neutral or perhaps very slightly negative views about acceleration. Less than 10% of the sample had means of 3.0 or lower on this scale, indicating a positive attitude toward acceleration. Almost 24% had means of 5.0 or greater, indicating they held negative views of school acceleration. The majority of teachers (almost 67%) had mean scores between 3.0 and 5.0, indicating ambivalent views about acceleration. The mean on the Elitism scale was 3.88, very close to the midpoint of the scale (4.0). This indicates that in general teachers neither agree nor disagree with the notion that gifted education is elitist. Approximately half of the sample fell below the midpoint (indicating disagreement with the notion that gifted education is elitist), and approximately half of the sample fell above the midpoint on this scale (indicating disagreement with the notion that gifted education is elitist). Finally, teachers' means on the Gifted Self-Perceptions subscale were near the midpoint of the scale, and their scores were extremely variable. Table 3 contains the means and standard deviations for each of the subscales.

Table 3
Means and Standard Deviations
for the Full Sample

Subscale	<i>M</i>	<i>SD</i>
Elitism (negative)	3.88	1.21
Support (positive)	5.45	0.98
Acceleration (negative)	4.46	0.96
Gifted self-perceptions	4.12	1.60

It is interesting that the correlations between the Self-Perceptions as Gifted subscale and the three attitudinal subscales were near zero and nonsignificant. Therefore, the Self-Perception as Gifted subscale was completely unrelated to the three attitudinal subscales. In other words, teachers who saw themselves as gifted were no more likely to display positive attitudes toward gifted education than teachers who did not.

To examine the impact of training and experience, we created a dichotomous variable: gifted education training. Teachers who reported (a) taking a gifted education class, (b) attending a gifted education class, (c) working as a teacher of the gifted, and/or (d) being certified in gifted education composed the group that had some training in gifted education. Teachers who reported that they had never engaged in any of those activities were placed in the "no training" group. There were 133 teachers in the "some training" group and 126 teachers in the "no training" group. We conducted a multivariate t test to determine whether there were significant differences in the two groups' attitudes toward the gifted and a univariate t test to determine whether the two groups differed in terms of their self-perceptions as gifted. The results of the multivariate t test revealed that the two groups were similar in terms of their attitudes toward the gifted (Wilks' Lambda = .899, $p = .442$, partial eta squared = .01). The effect sizes of the differences between the two groups on each of the three attitudinal subscales were between .10 and .17 standard deviation units, indicating trivial differences between the two groups. However, the results of the univariate t test indicated that there were statistically significant differences between the two groups in terms of their self-perceptions as gifted, $t(257) = 4.176$, $p < .001$. Teachers who received training in gifted education had significantly higher perceptions of self as gifted ($M = 4.5$, $SD = 1.52$) than teachers who had never received training in gifted education ($M = 3.7$, $SD = 1.58$). The effect size for this difference was .52 standard deviation units, which represents a

Table 4
Mean Differences Between Teachers With GT Training and Teachers Without GT Training

		<i>M</i>	<i>SD</i>	Cohen's <i>d</i>
Acceleration	No training	4.55	0.95	.17
	Training	4.38	0.98	
Elitism	No training	3.99	1.15	.16
	Training	3.80	1.27	
Support	No training	5.39	0.89	.10
	Training	5.49	1.07	
Gifted self-perceptions	No training	3.70	1.58	.52
	Training	4.51	1.52	

Note: GT = gifted teaching.

medium effect size. Table 4 contains the means, standard deviations, and Cohen's *d* effect size measures for the three attitude subscales and the Gifted Self-Perceptions subscale for the two groups of teachers: teachers with some training in gifted education and teachers with no training in gifted education.

Finally, we compared the attitudes of special education and nonspecial education teachers toward gifted education. We anticipated that special education teachers might have different attitudes than nonspecial education teachers, although we were unsure of the direction. On one hand, special education teachers seemed more likely to have more positive attitudes toward gifted education as they also work with students who have special needs and receive special accommodations. On the other hand, it is possible that special education teachers could perceive gifted programming as "competing" with special education for funding and support. Therefore, special education teachers could have more negative attitudes toward gifted education. In our sample, there were 62 teachers who reported having held a position as a special education teacher and 200 teachers who reported never having held a position as a special education teacher. We conducted a multivariate *t* test to determine whether there were significant differences in the two groups' attitudes toward the gifted and a univariate *t* test to determine whether the two groups differed in terms of their self-perceptions as gifted. The results of the multivariate *t* test revealed that there were statistically significant differences between the special education teachers and the nonspecial education teachers in terms of their attitudes toward the gifted (Wilks' Lambda = .959, $p = .014$, partial eta squared = .041). The univariate follow-up ANOVAs indicated that special education teachers had a statistically

Table 5
Comparison of Special Education Teachers and Nonspecial Education Teachers on the Four Subscales

		<i>M</i>	<i>SD</i>	Cohen's <i>d</i>
Acceleration	No special education	4.39	0.938	.34
	Special education	4.71	1.02	
Elitism	No special education	3.86	1.21	.12
	Special education	3.99	1.21	
Support	No special education	5.53	0.904	.35
	Special education	5.19	1.15	
Gifted self-perceptions	No special education	4.08	1.62	.12
	Special education	4.26	1.51	

significant lower mean on the Support subscale, $F(1, 259) = 5.63$, $p = .018$, and a higher mean on the Acceleration subscale, $F(1, 259) = 5.36$, $p = .021$. However, there were no statistically significant differences between the two groups on the Elitism subscale, $F(1, 259) = .56$, $p = .45$. The results of the univariate *t* test indicated that there were no statistically significant differences between the two groups in terms of their self-perceptions as gifted, $t(260) = .81$, $p = .42$. Table 5 contains the means, standard deviations, and Cohen's *d* effect size measures for the three attitude subscales and the Gifted Self-Perceptions subscale for the special education and nonspecial education teachers.

Discussion

The major purpose of the present study was to determine whether the perceived research interests of the researcher influence teachers' responses. If respondents tailor their responses to the perceived interests of the researcher, this would have serious implications for researchers in the field of gifted education. Thankfully, the perceived affiliation of the researcher had no effect on teachers' self-reported attitudes toward the gifted or their reported self-perceptions as gifted. These results suggest that teachers are not

unduly influenced by the researcher's affiliation when responding to attitudinal surveys. Overall, teachers appear to have fairly neutral attitudes toward gifted education. However, there is a great deal of variability among teachers. Whereas some teachers harbor very positive attitudes, other teachers harbor extraordinarily negative attitudes. Therefore, practitioners in the field of gifted education need to assess teachers' attitudes on an individual basis rather than assuming that "all teachers" harbor positive or negative attitudes toward gifted education. Also, in the present study, teachers' self-perceptions as gifted were completely unrelated to their attitudes toward gifted education. This contradicts some prior research (Bégin & Gagné, 1994b; Michener, 1980) as well as conventional wisdom. Our results suggest that teachers who perceive themselves as gifted are not any more sympathetic to gifted education than those who do not. In addition, training or experience in gifted education is not indicative of more positive attitudes toward the gifted. Therefore, it may be difficult for gifted educators to identify potential allies within a school at first glance.

We were surprised that gifted education training had no impact on teachers' attitudes toward the gifted. We had anticipated that teachers who had received some form of training in gifted education would have more positive attitudes toward the gifted. However, prior research on the effects of training in giftedness has been mixed. For example, Bégin and Gagné's (1994a) review of the research identified eight studies that examined the relationship between training in giftedness and attitudes toward the gifted. Five of the eight studies found a statistically significant relationship; three of the eight did not.

Although training in gifted education was not related to teachers' attitudes toward the gifted, it was positively related to teachers' perceptions of themselves as gifted. There are at least two possible explanations for the finding that teachers with gifted education training had higher perceptions of themselves as gifted. First, it is possible that teachers with higher perceptions of their own giftedness are more likely to seek training in gifted education. For instance, it is possible that teachers who pursue training in gifted education are more likely to be gifted themselves and are therefore drawn to the field of gifted education. Alternatively, it is possible that training in gifted education increases teachers' perceptions of themselves as gifted. The present study is nonexperimental; therefore, it is impossible to attribute causality

to this finding. However, it is somewhat disturbing that teachers who receive training in gifted education have higher perceptions of themselves as gifted but do not have higher attitudes toward gifted education and gifted students. As suggested by one of the reviewers, it is possible that professional development opportunities in gifted education enable teachers to acquire broader, more inclusive, multidimensional notions of giftedness. This would explain why teachers with gifted education training are more likely to see themselves as gifted. However, these professional development activities fail to increase teachers' attitudes toward the gifted. Is it possible that by broadening the notion of giftedness, we are less able to make a compelling argument for the necessity of specialized service for gifted students? Future research should explore the curious relationship between training in gifted education and teachers' self-perceptions of their own giftedness as well as the lack of relationship between teachers' attitudes toward the gifted and their training and/or self-perceptions as gifted. It may be that training increases teachers' understanding of the needs of gifted students but does not affect educators' support for meeting those needs. In addition, providers of gifted education training should consider assessing attendees before and after receiving training to determine whether teachers' perceptions of self as gifted change as a result of training in gifted education. If training in gifted education serves to increase teachers' perceptions of themselves as gifted without increasing teachers' attitudes toward the gifted and gifted education, we may need to reexamine the effectiveness of our teacher training in the field of gifted education.

Special education teachers tend to have lower attitudes toward the gifted. In particular, they have lower support for gifted education and lower attitudes toward acceleration; however, the magnitude of these differences is fairly small. Future research should explore the reasons for these differences. There are many similarities between gifted education and special education. As gifted educators, we need to forge alliances with our colleagues in special education to promote optimal learning opportunities for students with exceptionalities of any sort. Although our field may perceive itself as being strongly aligned with special education, special educators may not always see the communalities between the two fields. Promoting communication and collaboration between gifted education and special education may help to promote positive attitudes toward gifted education among special educators.

Limitations

The present study suffers from several limitations, which may affect the generalizability of these results. First, although the mailing list of teachers represented a random sample of teachers nationwide, the response rate for the study was quite low. Therefore, the teachers who responded to the survey may differ systematically from nonrespondents, limiting the generalizability of the findings. For example, it is possible that teachers with training or experience in gifted education were more likely to respond to the survey, as it dealt with attitudes toward gifted education. In addition, the training in gifted education variable was broadly defined, and the quality of gifted education training is impossible to assess. Therefore, it could be that different types of training activities have varying effects on teachers' attitudes toward the gifted and their self-perceptions as gifted. Finally, the instrumentation used in this study captured only a limited number of factors related to attitudes toward the gifted, and only three of the subscales demonstrated high enough reliabilities to use in the analyses. Therefore, the measurement of attitudes toward the gifted encompassed a distinct subsample of attitudinal factors. It is possible that using different attitudinal measures could produce different results.

Conclusion

Researchers can take comfort in the fact that their affiliation appeared to have no effect on teachers' responses to an Attitudes Toward the Gifted scale. However, the relationship between training in gifted education and attitudes toward the gifted is troubling. Although training in gifted education was related to differences in self-perceptions as gifted, it was not related to differences in attitudes toward gifted education. Future research should investigate the impact of gifted education training on attitudes toward the gifted and self-perceptions as gifted.

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