Self-Determination for Students With Disabilities: Views of Parents and Teachers

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ABSTRACT: Parents and general and special education teachers of high school students with high- and low-incidence disabilities were surveyed about their views on self-determination. Factor analyses of parent data yielded three factors: student participation in individualized education program (IEP) meetings, teaching self-determination, and students' opportunity to make choices and express interests. Analysis of teacher data yielded two factors: familiarity with self-determination and students' opportunity to learn and practice self-determination. Parents strongly supported participation in IEP meetings and the teaching of self-determination. Teachers slightly agreed that they were familiar with self-determination and that students had the opportunity to learn and apply these skills. Students' instructional program mediated parents' beliefs. Interactions between teacher type, incidence of disability, instructional program, and teaching experience mediated teacher beliefs.

A critical marker of the success of special education services is the degree to which students with disabilities become a guiding force in their own lives (Agran, Blanchard, & Wehmeyer, 2000; Wehmeyer, 1992). Halpern (1994, p. 118) argued "if the transition process is to be successful, it must begin with helping students to gain a sense of empowerment with respect to their own transition planning." As the process of creating and implementing transition plans for students with disabilities evolved, it became increasingly evident that students with disabilities needed instruction in gaining this sense of empowerment as well as in how to evaluate options and advocate for themselves (Abery, 1994; Mithaug, Wehmeyer, Agran, Martin, & Palmer, 1998; Wehmeyer, 1996). Instructional activities that address these skill areas are collectively referred to as self-determination.

In 1988, the Secondary Education and Transitional Service for Youth with Disabilities Program within the Office of Special Education and Rehabilitative Services (OSERS) implemented a self-determination initiative to provide people with disabilities with more input in the decisions that affect their lives (Ward, 1991). OSERS supported 26 model demonstration projects designed to identify and teach skills neces-
sary for self-determination. Many of the products, curricula, and assessment instruments that are used today to support the development of self-determination in schools for students with disabilities, along with the limited amount of research that currently exists, were a result of this initiative (i.e., Aber, Rudrud, Arndt, Schauben, & Eggebeen, 1995; Algozzine, Browder, Karvonen, Test, & Wood, 2001; Browder, Wood, Test, Algozzine, & Karvonen, 2001; Martin & Marshall, 1998; Sands & Doll, 1996; Schloss, Alper, & Jayne, 1993; Wehmeyer, 1994, 1996).

In addition to this federal funding, the Final Regulations of the Individuals with Disabilities Education Act (IDEA) Amendments of 1997, P.L. 105-17, provided further support for self-determination by including provisions that strengthened the involvement of students by stating that (Assistance to States, 1999): “students with disabilities be invited to any IEP [individualized education program] meetings for which a purpose is the consideration…of transition services” (p. 12440), and that the “transition services provided to each student be…based on the individual student’s needs, taking into account the student’s preferences and interests” (p. 12475). This was an important mandate because student involvement as specified in the IDEA Amendments of 1997 places its intent and spirit in line with efforts to promote self-determination and consumer choice.

To gauge the impact that this language has had on practices implemented in schools it is necessary to examine both a parent and teacher perspective as each provides a vital role in the development of self-determination for students with disabilities. The following will briefly review our current knowledge about these two groups and describe how their perspectives were sought in the current study.

Parental support and family involvement are recognized by all stakeholders as critical factors in the development of self-determination for students with disabilities (Abery, 1994; Field & Hoffman, 1994; Martin & Marshall, 1998; Mithaug et al. 1998; Wehmeyer, 1996). Although there is a growing literature on the skills and competencies underlying the development of self-determination in the home (Sands & Doll, 1996; Ward, 1991), as well as personal reflections on self-determination by people with disabilities or their family members (Ferguson, 1998; Kennedy, 1998; Ward, 1988), there is little research that documents parents’ knowledge or perceptions of self-determination. As teachers increasingly infuse self-determination into school curricula, however, it is important to examine more fully parents’ beliefs about self-determination, including how these beliefs are related to different types of disabilities. Undoubtedly the success of self-determination depends on parents’ views of its appropriateness and desirability.

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In the current study, parents of high school students (16 years or older) with high- and low-incidence disabilities were surveyed to determine their beliefs about self-determination. This included examining parents’ beliefs about teaching self-determination as part of the school curricula, participation of students with disabilities in IEP meetings, and their child’s opportunity to make choices and express interests in school. Thus, we not only examined parents’ beliefs about the teaching of self-determination, but also their perceptions about their child’s opportunity to demonstrate and practice important self-determination skills at school. As Sands, Bassett, Lehmman, and Spencer (1998) noted, students not only need to develop skills for self-determination, but they also require repeated opportunities to apply and generalize skills such as decision making and planning. Furthermore, we assessed parents’ beliefs about student participation in the IEP meetings, as this venue provides a real-life opportunity for the application of self-determination skills (Martin & Marshall, 1998; Wehmeyer, Agran, & Hughes, 1998). The availability of this opportunity, however, may be enhanced or limited depending on parents’ beliefs.

Additionally, we examined if four variables were related to parents’ beliefs about self-determination. It was expected that incidence of disability (high incidence vs. low incidence) would mediate parents’ responses, as previous re-
searchers found a relationship between a child’s incidence of disability and parents’ expectations and preferences for instruction (Epps & Myers, 1989; Lehmann & Baker, 1995; Masino & Hodapp, 1996; Whitney-Thomas & Hanley-Maxwell, 1996). It was further expected that parents’ responses would interact with their child’s instructional program (i.e., college preparation, career/technology, and community-based/life skills), as different types of programs are likely to influence the extent to which students and their families are exposed to the concept of self-determination. Furthermore, we anticipated that parents’ beliefs would be related to the amount of time their child spent in general education. For example, students in general education classes are expected to participate in core curricular subjects such as English, history, and mathematics, subjects that do not place a great deal of emphasis on the development or application of self-determination skills. Although no prediction was made concerning the relationship between beliefs and parents’ relationship to their child (i.e., mother vs. other caregivers), we also examined the correlation between these two variables.

Like research about parents’ beliefs, there are limited data concerning teachers’ beliefs about self-determination. Two exceptions are studies by Agran, Snow, and Swander (1999) and Wehmeyer, Agran, and Hughes (2000). Agran, Snow, and Swander examined teachers’ perceptions of the benefits of self-determination, how frequently teachers used strategies to support self-determination, and the extent to which teachers incorporated self-determination into students’ IEP goals and objectives. Although the teachers in this study rated self-determination as an important curricular area, more than half of them indicated that self-determination skills were included on none or only some of their students’ IEPs. Wehmeyer et al. (2000) also reported similar findings in a study involving teachers serving students with disabilities who were 14 to 21 years of age. They found that 60% of the respondents were familiar with the construct of self-determination, with teachers rating various self-determination skills as moderately or very important. Nevertheless, one third of the respondents indicated that none of their students had self-determination goals on their IEPs.

Additional research is needed to examine teachers’ familiarity with self-determination and the opportunities for students to learn and apply these skills. Teachers who are familiar with this construct are more likely to support the development of self-determination skills. Likewise, students are more likely to develop these skills if they are given opportunities to learn and apply them. In the current study, therefore, teachers of high school students (16 years or older) with high- or low-incidence disabilities were surveyed to determine their familiarity with self-determination and their perceptions about students’ opportunities to learn and apply these skills in their schools.

Because the effects of instruction on self-determination may be enhanced or limited by contextual factors, we also examined the relationship between four variables and teacher perceptions about self-determination. One, it was expected that the incidence of disability (i.e., high incidence vs. low incidence) of the students with whom teachers worked would mediate teachers’ responses. Teachers of students with mild disabilities in the Wehmeyer et al. (2000) study rated instructional efforts in promoting self-determination as more important than did teachers of students with severe disabilities.

Two, it was anticipated that teachers’ instructional programs (i.e., college preparation, career/technology, and community-based/life skills) would interact with their beliefs about self-determination. Wehmeyer et al. (2000) reported that teachers working in less restrictive environments were more likely to believe that instruction in self-determination was needed. These findings, however, were primarily limited to special education teachers, who comprised 95% of the teachers surveyed. Consequently, these findings need to be replicated with a broader sample of educators.

Three, it was predicted that teaching experience (i.e., number of years teaching in their school system) would be related to teacher responses, as teachers who were more recently hired were more likely to be familiar with and trained to implement self-determination. Finally, it was expected that special education teachers would be more familiar with self-determination and support its application than general education teachers, as the concept of self-determination has been widely promoted in the field of special education.
METHODS

INSTRUMENTS

Two survey instruments were developed, one for parents/caregivers and one for teachers. Both surveys were designed to assess specific beliefs about self-determination and were based on a review of self-determination literature as well as feedback from parents, teachers, and experts in the field of secondary special education. With the exception of questions soliciting demographic information, parents/caregivers and teachers responded to each item on the surveys by circling a number on a 6-point Likert-type scale (ranging from 1 = strongly agree to 6 = strongly disagree) that best represented their level of agreement or disagreement with that item.

Parent Survey. The first section of the parent survey asked for demographic information. This included information on their child's incidence of disability, chronological age, gender, ethnicity, course of study (college preparation, career and technology education, or community-based/life skills), and type of graduation document their child would receive (diploma or certificate). The second part of the survey included nine statements designed to measure parent/caregiver beliefs about self-determination. These statements addressed beliefs about their child's participation in IEP meetings and opportunities to make choices and decisions at school; the need for instruction involving the IEP, participation in the IEP process, decision making, self-advocacy, and goal setting; the extent to which their child had learned to express his or her interest and abilities at school; and the emphasis that schools should place on developing their child's self-esteem.

Teacher Survey. The first section of this survey collected demographic information about the teachers, including gender, ethnicity, type of teacher (general or special), number of years spent teaching in the school system, type of instructional program (college preparation, career and technology education, or community-based/life skills), hours spent working with students with disabilities, and the incidence of disability of the students that they taught.

The second part of the survey included 10 statements designed to measure teachers' beliefs about self-determination. These statements addressed teachers' familiarity with the concept of self-determination; with their level of prior training in how to teach self-determination; with importance of student participation in IEP meetings; with student understanding of the IEP process; with student opportunities to make choices; with teachers' use of materials and curricula to teach self-determination; and with whether students at their school are taught to problem-solve and identify strengths and needs.

PROCEDURES

Introductory letters were mailed to the randomly selected 984 parents/caregivers and 698 general and special education teachers. This letter provided background information about the study. One week later, surveys were mailed to each of these parents and teachers, along with a cover letter and a postage-paid reply envelope. Subsequent mailings included a postcard reminder and an additional copy of the survey that was sent to nonrespondents (Salant & Dillman, 1994). To encourage responses, parents and teachers were told they would be entered into a random drawing for three prizes.

SELECTION OF PARTICIPANTS

The names and addresses of 984 parents or primary caregivers and 698 general and special education teachers were randomly selected by two school systems in a mid-Atlantic state. All general and special education teachers provided some type of instruction to high school students (16 to 21 years of age) with a high-incidence disability (e.g., specific learning disability, mild/moderate mental retardation, emotional disability, speech language disability) or a low-incidence disability (e.g., autism, multiple severe disabilities, severe orthopedic disability, significant mental retardation, visual or hearing impairment, traumatic brain injury). Likewise each parent or primary caregiver had a child between the ages of 16 and 21 years of age with a high- or low-incidence disability.
Both school systems were located in urban areas. One of the school systems served a total of 106,465 students and employed 1,892 secondary teachers. Twelve percent of the students received special education services, and there were 1,620 special needs students between the ages of 16 and 21. The other school system served a total of 131,059 students and employed 2,006 secondary teachers. Ten percent of these children received special education services, with 2,196 of them between the ages of 16 and 21.

A total of 496 parents/caregivers and teachers responded to the survey. Fourteen (3%) of the returned surveys were not usable because respondents did not provide informed consent or did not complete the survey. The remaining 482 surveys constituted the sample for this study, with 234 of the 984 parents/caregivers (24%) and 248 of the 698 teachers (36%) responding.

Of the 234 parents and caregivers who completed the survey, the respondents were overwhelmingly mothers (83.5%). The other parents/caregivers were fathers (10%), other family caregivers such as a grandparent (6%), or the student’s legal guardian (2%). One hundred and sixty-two (69%) of the parents/caregivers reported that their child had a high-incidence disability, whereas 72 parents/caregivers (31%) reported that their child had a low-incidence disability. The students were primarily male (70%) and represented a diverse cross section of the population of the United States. Forty-two percent were Caucasian, 50% were African American, and 5% were Hispanic, Asian, or multiracial. Three percent of respondents did not complete the question about race. Twenty-seven percent of the students were in a high school program that focused on college preparation, 22% were in a program that emphasized career and technology development, and 33% were in a community-based/life skills program. Six percent of the respondents were served in other types of programs (e.g., self-contained classrooms, alternative schools). Thirteen percent of the respondents did not complete this question. Parents reported that slightly more than two-thirds of the students (68%) would receive a diploma upon graduating from high school, while 21% would receive a high school certificate. The other parents were unsure of the type of culminating document their child would receive upon finishing high school.

The teachers who completed the survey were predominantly female (71%). Slightly more than half (N = 131) were general educators, while 36% (N = 90) were special education teachers. The remaining 11% (N = 27) either indicated that they were a vocational educator or they selected “other” when asked to describe their teaching role. The majority of the teachers (61%) provided instruction in a college preparation program. Another 10% primarily focused on career and technology education, and 13% primarily taught in a community-based/life skills program. Fifteen percent of the teachers provided instruction in other types of programs (e.g., art, music, athletics). Most of these teachers (88%) worked with one or more students with a high-incidence disability. The other 12% worked with one or more students with low-incidence disabilities. Thirty-eight percent of the teachers worked with students with disabilities for 5 to 6 hours a day, 23% for 3 to 4 hours a day, 29% for 1 to 2 hours a day, and 9% for 1 hour or less a day. Seventy-one percent of the teachers were Caucasian, 26% were African American, and 2% were multiracial. Half of the teachers had taught for 10 or more years in their current school system, 16% had taught 5 to 10 years, 29% had taught 2 to 5 years, and 6% had taught for 1 year or less.

**RESULTS**

**Factor Analysis**

Using the data from this survey, we conducted a series of factor analyses to establish the factor structure of the two self-determination instruments developed for this investigation. For both questionnaires, an unconstrained factor analysis was first used to generate the factor matrix with squared multiple correlations as initial communality estimates. Following examination of a scree plot, the data were again subject to factor analysis using a varimax rotation. In order to maximize the simple structure and theoretical clarity of each instrument, factor structure loadings for each item that defined a factor had to exceed .40 (Jöreskog & Sörbom, 1983).
Parent Survey. An unconstrained principal factor analysis of parent/caregiver responses yielded two factors with eigenvalues greater than 1.0 and one factor with an eigenvalue of .99. Examination of a scree plot showed that a three-factor solution best defined the data. Thus, we ran a forced three-factor solution with an oblique rotation. The oblique rotation was used instead of varimax because any resulting factors were likely to be related. The forced three-factor solution accounted for 66% of the variance. Eight items loaded at .40 or greater on one of the three factors, with none of the items cross loading at .40 or greater on more than one factor. When the one item with a factor pattern loading less than .40 on any factor was eliminated, and the factor analysis was rerun, the three factors accounted for 57% of the variance (see Table 1).

The first factor, Student Participation in IEP Meeting, contained three items and accounted for 36% of the variance in participants’ responses (see Table 1). The alpha coefficient for this factor was .79. Items for this factor measured parental beliefs about their child’s involvement in IEP meetings as well as teaching students about the IEP and how to participate in the meeting. The second factor, Student Expression of Choice and Interest, contained two items and accounted for 13% of the variance. The alpha coefficient for this factor was .64. Items for this factor measured parental beliefs about their child’s opportunity to learn how to express their interests and abilities as well as make choices and decisions in school. The third factor, Teaching Self-Determination Skills, included three items and accounted for 8% of the variance. The alpha coefficient for this factor was .73. Items for this factor assessed beliefs about the value of emphasizing self-esteem in their child’s classes as well as teaching goal setting and decision-making processes.

Teacher Survey. An unconstrained principal factor analysis of teachers’ responses yielded three factors with eigenvalues greater than 1.0. Examination of a scree plot showed that a three-factor solution best defined the data. Consequently, we ran a forced three-factor solution using an oblique rotation. The oblique rotation was used because any resulting factors were likely to be related. With this solution, five items loaded at .40 or greater on one factor, three items at .40 or greater on a second factor, and only one item at .40 or greater on the third factor. The finding that only one item loaded on a factor is commonly indicated as a general indicator of over factoring (Comrey, 1978). Thus, we reran the analysis using a forced two-factor varimax solution. The forced two-factor solution accounted for 53% of the variance. Eight items loaded at .40 or greater on one of the two factors, with none of the items cross loading at .40 or greater on more than one factor. When the two items with factor pattern loadings less than .40 on any factor were eliminated and the factor analysis was rerun, the two factors accounted for 65% of the variance (see Table 2).

The first factor, Student Opportunity to Learn and Practice Self-Determination Skills, contained five items and accounted for 46% of the variance in teachers’ responses (see Table 2). The alpha coefficient for this factor was .85. Items for this factor measured teachers’ beliefs about students’ opportunities to make choices and decisions for themselves in school, students’ understanding of their IEP, and the teaching of problem-solving skills. The second factor, Teacher Familiarity with Self-Determination, included three items and accounted for 18% of the variance. The alpha coefficient for this factor was .73. Items for this factor assessed beliefs about teachers’ familiarity and training in teaching self-determination as well as their use of materials to promote self-determination in their classroom. Table 2 provides the final scale items and factors from the Teacher Knowledge and Beliefs Regarding Self-Determination Scale.

Parent/Caregiver Beliefs About Self-Determination

Scores for each factor on the parent/caregiver survey were obtained by averaging a respondent’s item scores for that factor. For the construct, student participation in IEP meetings, the average score for participants was 1.67 (SD = .77), indicating that parents/caregivers agreed that students with disabilities should be informed and skilled.
TABLE 1
Means, Standard Deviations, Alpha Coefficients, and Factor Pattern Scores on the Parent Self-Determination Scale

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Statement</th>
<th>M</th>
<th>SD</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Young adults with disabilities should participate in their IEP meetings.</td>
<td>1.73</td>
<td>1.03</td>
<td>(.661)</td>
<td>.088</td>
<td>-.002</td>
</tr>
<tr>
<td>2</td>
<td>Young adults with disabilities should be taught what an IEP is.</td>
<td>1.54</td>
<td>.78</td>
<td>(.529)</td>
<td>-.112</td>
<td>-.278</td>
</tr>
<tr>
<td>3</td>
<td>Young adults with disabilities should be taught how to participate in their IEP meeting.</td>
<td>1.74</td>
<td>.92</td>
<td>(.985)</td>
<td>-.013</td>
<td>.050</td>
</tr>
<tr>
<td>4</td>
<td>I think that the development of self esteem should be emphasized in the classes my child attends.</td>
<td>1.46</td>
<td>.74</td>
<td>.099</td>
<td>-.133</td>
<td>(-.425)</td>
</tr>
<tr>
<td>5</td>
<td>Schools should teach young adults with disabilities to make decisions about their lives.</td>
<td>1.60</td>
<td>.83</td>
<td>.178</td>
<td>.026</td>
<td>(-.619)</td>
</tr>
<tr>
<td>6</td>
<td>I want my child to learn how to set goals in school.</td>
<td>1.49</td>
<td>.82</td>
<td>-.130</td>
<td>.139</td>
<td>(-.990)</td>
</tr>
<tr>
<td>7</td>
<td>My child is given many opportunities to make choices and decisions in school.</td>
<td>2.61</td>
<td>1.36</td>
<td>.019</td>
<td>(.767)</td>
<td>-.076</td>
</tr>
<tr>
<td>8</td>
<td>My child has learned to express his or her interests and abilities in school.</td>
<td>2.50</td>
<td>1.33</td>
<td>.025</td>
<td>(.606)</td>
<td>-.030</td>
</tr>
</tbody>
</table>

Eigenvalue for unrotated factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>3.22</th>
<th>.969</th>
<th>1.53</th>
</tr>
</thead>
</table>

Percent total variance

|          | 35.8 | 13.1 | 7.9  |

participants in IEP meetings. Virtually all of the respondents indicated some level of agreement with the construct measured by this factor, as the factor score of 96% of the parents/caregivers was 3 or lower (i.e., slightly agree to strongly agree). Respondents also agreed that students with disabilities should be taught self-determination skills in school. The mean response of parents/caregivers on this factor was 1.51 (SD = .64), with 98% of the respondents indicating some level of agreement, as their factor score was 3 or less. Finally, respondents’ average score on the construct, student expression of choice and interest, was 2.55 (SD = 1.15), indicating that parents/caregivers slightly agreed that their child had the opportunity to apply self-determination skills at school. The majority of the respondents indicated some level of agreement with the construct measured by this factor, as 78% had a factor score of 3 or less.

A four-way analysis of variance was run separately for each factor of the parent/caregiver self-determination survey to determine if participants’ mean scores were related to the child’s incidence of disability (high-incidence vs. low-incidence disability), respondents’ relationship to the child (mother vs. other family member/legal guardian), type of instructional program (college preparation, career/technology, or community-based/life skills), or time spent in general education (5 hours or more per day vs. less than 5 hours per day). For two of the factors, teaching self-determination skills and student expression of choice and interest, none of the main effects or interactions was statistically significant at the .05 level. Thus, factor scores for these two constructs [P]arents/caregivers agreed that students with disabilities should be informed and skilled participants in IEP meetings.
### TABLE 2
Means, Standard Deviations, Alpha Coefficients, and Factor Pattern Scores on Teacher Knowledge of Self-Determination Scale

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Statement</th>
<th>M</th>
<th>SD</th>
<th>I</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Young adults in secondary special education in my school are taught to be aware of their strengths and needs.</td>
<td>2.35</td>
<td>1.11</td>
<td>(.779)</td>
<td>.107</td>
</tr>
<tr>
<td>2.</td>
<td>Young adults in secondary special education are given many opportunities to make choices for themselves in my school.</td>
<td>2.48</td>
<td>1.12</td>
<td>(.763)</td>
<td>.063</td>
</tr>
<tr>
<td>3.</td>
<td>Young adults in secondary special education are being taught how to problem solve in my school.</td>
<td>2.35</td>
<td>1.05</td>
<td>(.762)</td>
<td>.062</td>
</tr>
<tr>
<td>4.</td>
<td>Young adults in secondary special education in my school understand what their IEP is.</td>
<td>2.57</td>
<td>1.10</td>
<td>(.589)</td>
<td>-.079</td>
</tr>
<tr>
<td>5.</td>
<td>Young adults in secondary special education are given the opportunity to make decisions and experience the consequences in my school.</td>
<td>2.43</td>
<td>1.17</td>
<td>(.721)</td>
<td>-.038</td>
</tr>
<tr>
<td>6.</td>
<td>I am familiar with the concept of self-determination as it applies to young adults with disabilities.</td>
<td>2.26</td>
<td>1.17</td>
<td>-.072</td>
<td>(.655)</td>
</tr>
<tr>
<td>7.</td>
<td>I have used materials or curricula to promote self-determination in my classroom.</td>
<td>2.49</td>
<td>1.32</td>
<td>-.044</td>
<td>(.864)</td>
</tr>
<tr>
<td>8.</td>
<td>I have received training or in-service on how to use self-determination materials or curricula with my students.</td>
<td>3.90</td>
<td>1.63</td>
<td>.069</td>
<td>(.586)</td>
</tr>
<tr>
<td></td>
<td><strong>Eigenvalue for unrotated factors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percent total variance</td>
<td>45.9</td>
<td>18.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

were not mediated by any of the independent variables.

In contrast, the main effect for type of instructional program, $F (2, 137) = 3.512$, $MSE = .453$, $p < .05$, was statistically significant for the construct, student participation in IEP meetings, as was the interaction between incidence of disability and time spent in general education, $F (1, 137) = 8.127$, $MSE = .453$, $p < .05$. None of the other main effect or interactions for this factor was statistically significant.

Post-hoc analysis using Tukey HSD revealed that the mean response of parent/caregivers whose child participated in community-based/life skills programs $(M = 1.88; SD = .85)$ was significantly higher $(p < .05)$ than that of parents/caregivers whose child was in a college preparatory program $(M = 1.51; SD = .67)$ or a career/technology program $(M = 1.43; SD = .53)$. Thus, parents and caregivers were more likely to believe that students with a disability should be informed and skilled participants in IEP meetings when their own child was in either a college preparatory or a career/technology program vs. a program that emphasized community-based/life skills instruction. For the statistically significant interaction between disability type and time spent in general education, there were no statistically significant differences (all $p > .05$) among means for the follow-up, post-hoc analysis. For students with high-incidence disabilities who spent less than 5 hours in general education, the mean and standard deviation was 1.57 and .68; for those students who spent more than 5 hours in general education the
mean and standard deviation was 1.55 and .66 respectively. For students with low-incidence disabilities who spent less than 5 hours in general education, the mean and standard deviation was 1.67 and .61, and for those students who spent more than 5 hours in general education the mean and standard deviation was 1.97 and 1.08 respectively.

**Teacher Beliefs About Self-Determination**

Scores for each factor on the teacher survey were obtained by averaging a respondent’s item scores for that factor. For the construct, teacher familiarity with self-determination, the average score for participants was 2.88 (SD = 1.11), indicating that teachers slightly agreed that they were familiar with the concept of self-determination and how to teach it. The majority of respondents indicated some level of agreement with the construct measured by this factor, as the factor score for 63% of the teachers was 3 or lower (i.e., slightly agree to strongly agree). Similarly, respondents slightly agreed that students with disabilities had the opportunity to acquire and learn and practice self-determination skills at their school. Teachers’ mean response for this factor was 2.44 (SD = .88). Again, the majority of teachers indicated some level of agreement with the construct measured by this factor, as 84% of the scores for this factor were 3 or less.

A four-way analysis of variance was run separately for each factor of the teacher self-determination survey to determine if participants’ mean scores were related to student’s incidence of disability (high-incidence vs. low-incidence disability), type of teacher (general vs. special education), type of instructional program (college preparation/career technology programs vs. community-based/life skills programs), or teaching experience (10 years or more teaching in the school system vs. less than 10 years). In contrast to the analysis with the parent survey, career technology was combined with college preparation when analyzing the effects for type of instructional program because so few teachers were involved in a career technology program.

For the teacher familiarity with self-determination scale, the main effects for type of instructional program, $F(1,214) = 8.262$, $MSE = 1.12$, $p < .05$, and teaching experience, $F(1,214) = 4.99$, $MSE = 1.12$, $p < .05$, were statistically significant. Means and standard deviations for college preparation/career and technology programs, community-based/life skills programs, 10 years or less of teaching experience in the school system, and more than 10 years of teaching experience in the school system were 3.03 (SD = 1.13), 2.58 (1.07), 2.87 (SD = 1.11), and 2.95 (SD = 1.15), respectively. Four of the six possible two-way interactions were statistically significant: incidence of disability by type of teacher, $F(1,214) = 11.001$, $MSE = 1.12$, $p < .001$; incidence of disability by type of instructional program, $F(1,214) = 8.83$, $MSE = 1.12$, $p < .05$; type of teacher by type of instructional program, $F(1,214) = 5.503$, $MSE = 1.12$, $p < .05$; and incidence of disability by teaching experience, $F(1,214) = 7.069$, $MSE = 1.12$, $p < .05$. None of the other main effects or interactions for this factor was statistically significant.

Follow-up analysis for the interaction between incidence of disability and type of teacher indicated that special educators who served students with high-incidence disabilities ($M = 2.50$; $SD = 1.00$) were more likely to believe that they were familiar with self-determination and how to teach it than were general educators who served students with high-incidence disabilities ($M = 3.23$; $SD = 1.14$), $p < .05$. For teachers who served students with low-incidence disabilities, there were no statistically significant differences between general educators ($M = 2.93$; $SD = 1.01$) and special educators ($M = 3.08$; $SD = 1.33$).

For the statistically significant interaction between incidence of disability and type of instructional program, follow-up analysis revealed that educators who served students with high-incidence disabilities in community-based/life skills programs ($M = 2.58$; $SD = 1.10$) were more likely to believe that they were familiar with self-determination and how to teach it than were educators serving students with high-incidence disabilities in college preparation/career technology programs ($M = 3.01$; $SD = 1.13$), $p < .05$. For teachers who served students with low-incidence disabilities, there was no statistically significant difference between those who served students in college preparation or career and technology programs ($M = 3.40$; $SD = 1.10$) and those who
served students in community-based/life skills programs ($M = 2.58; SD = 1.10$).

Furthermore, for the follow-up analysis involving the interaction between type of teacher and type of instructional program, it was found that special educators who taught in a college preparation/career technology program ($M = 2.65; SD = 1.00$) were more likely to believe that they were familiar with self-determination and how to teach it than were general educators who taught in a college preparation/career technology program ($M = 3.21; SD = 1.15$), $p < .05$. For teachers who taught students in community-based/life skills programs, there was no statistically significant difference between general educators ($M = 3.06; SD = .921$) and special educators ($M = 2.44; SD = 1.08$).

Last, for the statistically significant interaction between incidence of disability and teaching experience in the school system, follow-up analysis showed that teachers who had taught students with high-incidence disabilities for more than 10 years ($M = 2.88; SD = 1.16$) were more likely to believe that they were familiar with self-determination and how to teach it than were teachers who had served students with low-incidence disabilities for more than 10 years ($M = 3.67; SD = .82$), $p < .05$. Moreover, educators who had taught students with low-incidence disabilities for less than 10 years in the school system ($M = 2.42; SD = 1.01$) were more likely to believe that they were familiar with self-determination and how to teach it than were teachers who taught those same students for more than 10 years ($M = 3.67; SD = .82$), $p > .05$.

For the teacher opportunity to learn and practice self-determination scale, the interaction between the variables type of teacher and teaching experience in the school system was statistically significant, $F (1,214) = 3.921, MSE = .747, p < .05$. None of the other main effects or interactions for this factor was statistically significant.

Follow-up analysis for this interaction found that general educators with 10 years or more teaching experience in the school system ($M = 2.40; SD = .72$) were more likely to believe that students with disabilities had the opportunity to learn and practice self-determination skills than were general education teachers with less than 10 years of teaching experience ($M = 2.75; SD = 1.05$), $p < .05$. In addition, special education teachers with less than 10 years of teaching experience in the school system ($M = 2.12; SD = .76$) were more likely to believe that students with disabilities had the opportunity to learn and practice self-determination skills than were general educators who had taught for 10 years or less ($M = 2.75; SD = 1.05$), $p < .001$.

**Discussion**

**Parental Views on Self-Determination**

It is widely agreed that parents can play a critical role in the development of self-determination for students with disabilities (Abery, 1994; Field & Hoffman, 1994; Mithaug et al., 1998; Wehmeyer, 1996). If parents believe that self-determination is an important part of the school curriculum, for example, then schools are more likely to foster its development. Conversely, parents who do not support school efforts to promote self-determination may undermine the success of such strategies.

In the current study, parents of high school students with disabilities supported the teaching of self-determination skills at school. Almost all of the parents or caregivers surveyed agreed that students with disabilities should be taught skills and competencies underlying self-determination. Furthermore, almost all of them believed that these students should attend IEP meetings and be taught how to participate in them. These are particularly important findings, as no other study to our knowledge has established that parents of students with disabilities support the teaching and practice of self-determination in the schools.

The majority of parents also agreed that their child’s school supported the development of important self-determination skills by teaching goal setting, providing opportunities to make decisions, and fostering the expression of interests and personal abilities. There did appear to be some incongruence, however, between the importance that parents placed on teaching self-determination skills and their perceptions of what was happening with their own child. Virtually all of the respondents (98%) indicated some level of
Parents of high school students with disabilities supported the teaching of self-determination skills at school.

agreement with statements concerning the responsibility of schools to teach self-determination skills such as decision making, but only 78% of parents expressed some level of agreement that such skills were actually taught to their own child with a disability.

Contrary to our expectations, parents’ beliefs about the importance of teaching self-determination and their perceptions about how well their child’s school taught such skills were not mediated by any of the following four variables: respondent’s relationship with the child (mother vs. other caregivers), amount of time their child spent in general education, their child’s instructional program, and their child’s classification as having either a high-incidence or a low-incidence disability. Similarly, only one of the variables, child’s instructional program, mediated parents’ beliefs about student’s participation in IEP meetings. Parents of students who attended college preparation or career technology classes were more likely than parents of students who attended community-based/life skills classes to believe that young adults with disabilities should participate in IEP meetings. This could be related to an assumption of ability or previous experiences. Possibly, parents of students who attended college preparation or career technology classes felt that their children, who presumably may have had less severe cognitive deficits, would be better able to participate in their transition planning during an IEP meeting. It is also possible that parents of students with low-incidence disabilities had not had the opportunity to have their son or daughter participate in IEP meetings and transition planning, as students with significant disabilities have often been left out of their IEP meetings (DeFur, Gerzel, & Kregel, 1994; Grigal, Test, Beattie, & Wood, 1997).

Participation in the IEP meeting, however, may mean different things to different people, and for some, it may simply connote attending the IEP meeting. This is important, as being pre-
sent for the meeting does not mean that the student is involved in any meaningful way. Field and Hoffman (1994) illustrated this point by reporting that although 71% of students in their sample attended their last IEPs or transition planning meetings, 56% indicated they had not been told the purpose of the meeting, 76% had not been prepared for the meetings, and 59% had not helped in any way to identify goals. It also supports the need for student involvement in transition-related activities, as Sands et al. (1998) found that students from families who held a positive value for student involvement were more likely to be active participants in transition-related activities. Future research is needed to ascertain what influences parental support of student participation in IEP meetings and transition planning, and what educators can do to increase that support.

Teachers’ Views on Self-Determination

Although self-determination has been identified as a key component in the curricula and instruction for students with disabilities (Agran et al., 1999; Sands et al., 1998) and as a strategy that will likely lead to better postschool outcomes for individuals with disabilities (e.g., Benz, Doren, & Yovanoff, 1997; Kohler, 1998; National Council on Disability, 2000), the teachers participating in the present study only slightly agreed that they were familiar with the concept of self-determination and how to teach it. More than one third of the teachers indicated that they were not familiar with this concept. This finding is consistent with Wehmeyer et al. (2000), who found that only about 60% of the teachers they surveyed were familiar with the construct of self-determination. Furthermore, the teachers in the current study only slightly agreed that students with disabilities had the opportunity to learn and practice self-determination skills at their school. This result mirrored and supported the viewpoint of the parents we surveyed, who also slightly agreed that their child had the opportunity to learn and practice self-determination skills in school. This lack of opportunity may have a strong impact as Field, Martin, Miller, Ward, and Wehmeyer (1998) noted: “self-determination is a function of the interaction between an individual’s skills and the opportunities provided by their
environments" (p. 119). Clearly, preservice programs for both special and general education need to prepare prospective teachers to include strategies and materials on self-determination in their classes (Browder et al., 2001).

Unlike our examination of parents’ responses, where only one factor, type of instructional program, mediated beliefs about self-determination, we identified four contextual variables that accounted for a statistically significant proportion of the variance in some aspect of teachers’ responses. This included teachers’ position (special vs. general education), their instructional program (college preparation/career technology vs. community-based/life skills), teaching experience, and incidence level of their students with disabilities (high vs. low). Teachers’ beliefs about their familiarity with self-determination proved to be especially complex, as the participants’ responses were mediated by the interaction of these four variables. First, special education teachers indicated that they were more familiar with the concept of self-determination than were general education teachers when both types of teachers taught students with high-incidence disabilities and when both taught in college preparation or career technology programs. Second, teachers working with students with high-incidence disabilities were more likely to indicate that they were familiar with self-determination when they worked in a community-based/life skills program vs. a college preparation or career technology program. Third, teachers with a long employment record (i.e., 10 or more years in their current school system) were more likely to believe they were familiar with self-determination when they worked with students with high-incidence vs. low-incidence disabilities. Fourth, teachers who worked with students with low-incidence disabilities were more likely to believe that they were familiar with self-determination when they had taught for less than 10 years in the school system that presently employed them versus teachers with 10 years or more in the school system.

‘Teachers’ perceptions about students’ opportunities to learn and practice self-determination skills at their school were also mediated by teacher position (special vs. general education) and teaching experience. General education teachers who had taught for less than 10 years in their present school system were less likely to indicate that their school provided such opportunities when compared with special educators with the same amount of experience or general educators with more experience.

Some of the differences in teachers’ responses are likely related to participants’ preservice training. For instance, self-determination is more likely to be emphasized in teacher preparation programs in special education than in general education, as the concept of self-determination is primarily a special education initiative. Surprisingly, however, the term self-determination is not used in the Council for Exceptional Children’s (CEC) Professional Standards for Beginning Teachers, Individualized Independence Curriculum Referenced Standards (for teachers of students with low-incidence disabilities), Individualized General Curriculum Reference Standards (for teachers of students with high-incidence disabilities), or for Transition Specialists (Council for Exceptional Children, 2002). These standards do address various components of self-determination such as self-awareness, self-advocacy, and self-reliance. Therefore, skills related to self-determination are implied rather than explicitly stated in these teacher training standards. The term self-determination is also absent from the standards used to train some (e.g., math and science) general educators (National Board for Professional Teaching Standards, 2002).

Similarly, the term self-determination is not mentioned specifically in language related to transition services in the IDEA of 1990 or the IDEA Amendments of 1997. Rather self-determination skills are implied in the section of the mandate that states that students should be invited to their IEP meetings when the need for transition services are being discussed and that the statement of needed transition services must be based on students’ needs, preferences, and interests. If the professional standards that guide the instruction of new teachers and the mandate that supports transition practices are not using the term self-determination, it is possible that teacher familiarity with self-determination is a matter of semantics. Teachers may be exposed in their training to concepts related to self-determination, such as student decision making and self-advocacy, but
are not relating those concepts to the term self-determination.

Differences in the content of teacher preparation programs do not fully capture the diversity in teachers’ responses, however, nor do they exhaust all of the possible explanations. For example, an alternative explanation for why perceived knowledge of self-determination was mediated by type of instructional program for teachers working with students with high-incidence disabilities involves the nature and focus of these programs. Community-based/life skills programs are often individualized and emphasize decision making and problem-solving in social situations (Browder & Snell, 1993). These situations provide ample opportunities to promote self-determination skills. In contrast, college preparation and career technology programs are typically bound by academic curricula and state standards covering specific content topics, which may reduce the likelihood that self-determination skills will be addressed by teachers in these programs. As with the findings of parents’ beliefs, the findings on teachers’ beliefs need to be replicated and additional research is needed to pinpoint more precisely the factors that contribute to the variability of teacher responses.

LIMITATIONS

A number of methods were used to increase the rate of response to the surveys, including university sponsorship, pre-notification letter, stamped return envelope, postcard follow up, and a monetary incentive (raffle). However, the overall rate of return was only 29%. This is not surprising as the response rates for mail questionnaires tend to be between 10% and 50% (Weisberg, Krosnick, & Bowen, 1989). Increasing the number of respondents would have substantially increased the power of statistical analyses, which was relatively low in many cases.

The results of this study were based on a relatively large sample that was randomly selected from two racially diverse, large, urban school systems in one mid-Atlantic state. Fifty percent of the parent respondents were African American, and 26% of the teacher respondents were African American. Therefore, generalization of the findings to parents and teachers in areas outside of these two school systems, especially in rural or less culturally diverse areas, should be done with caution.

Another limitation involves the high rate of non responses to certain variables. For example, 13% of the parents/caregivers did not report the type of program in which their child was served. Caution should be used when making interpretations based on some of the findings with low response rates.

It should further be noted that one of the factors, Teaching Self-Determination Skills, on the parent scale had an eigenvalue of only .969. Thus, researchers who use the parent scale in the future need to do additional development to strengthen this factor (e.g., add additional items that tap this construct). This may help to account for additional unexplained variance in parents’ responses to the items on this instrument.

The final limitation involves the nature of self-reported data. Parents and teachers were asked to indicate their beliefs and knowledge related to self-determination. It is possible that the responses of the participants did not accurately reflect their true beliefs and attitudes.

IMPLICATIONS FOR PRACTICE

It was encouraging that parents of high school students with disabilities supported the teaching of self-determination in the schools. This support was relatively broad, as parents and caregivers of students with both high- and low-incidence disabilities supported the teaching of self-determination skills as well as informed and skilled participation in IEP meetings. Despite their overwhelming support for the teaching of self-determination skills, the responses of parents suggest that schools could do more to support the development of self-determination for students with disabilities, as parents only slightly agreed that such skills were taught to their children. As a result, it is important that parents and caregivers advocate for the teaching of self-determination in their child’s IEP and for such skills to be supported through practice during the school day in all instructional environments. As schools are not required by mandate to promote the instruction
and practice of self-determination skills, parental advocacy may be one of the only forces that can be used to improve what schools currently do in this area. To augment what is being done in schools to foster self-determination with students with disabilities, parents may also want to consider increasing their emphasis on the development of such skills in the home. The professional community can facilitate such efforts by investigating how parents can foster these skills and by developing materials and programs to support parental efforts.

The responses of the participating teachers also suggested that self-determination instruction in the schools is not optimal. Teachers only slightly agreed that they were familiar with the concept of self-determination and how to teach it or that students in their school had the opportunity to learn and apply important self-determination skills. If the educational system is to play a critical role in the development of self-determination for students with disabilities, schools must place greater emphasis on its development by making self-determination an integral part of their school improvement efforts (Algozine et al., 2001; Browder et al., 2001). This includes setting goals for improving students’ self-determination skills, providing inservice training to school personnel, providing access to curricula and materials that support self-determination, integrating such instruction throughout all types of instructional programs, and evaluating the effects of these efforts. In addition, teacher education programs have an important role to play in efforts designed to promote self-determination in the schools. Institutions of higher education need to provide prospective teachers with the theoretical and practical knowledge needed to promote self-determination. This applies to both special and general education teacher preparation programs.

Supporting the development of self-determination for students with disabilities may be a challenge for parents and teachers, but it is a challenge worth facing. Continued efforts to provide students with disabilities with opportunities to develop and practice these skills in their homes, schools, and communities will ultimately provide students with the power to influence and direct their own postschool outcomes.

As schools are not required by mandate to promote the instruction and practice of self-determination skills, parental advocacy may be one of the only forces that can be used to improve what schools currently do in this area.

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