

Outcomes for Students with Autism Spectrum Disorders: What is Important and Likely According to Teachers?

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Abstract: The current study, with its foundation in expectancy theory, investigated the relationships between teacher expectations of future outcomes for students within the autism spectrum. Fifteen teachers, in private and public school settings, completed a survey that assessed their expectations about the importance and the likelihood of specific outcomes for their students. Teachers reported that the most important student outcome is safety. With regards to likelihood, teachers expressed the belief that continuing the students' education would most likely to occur. In contrast they felt that it would be unlikely for the students to take care of the parents in their old age. There were eight areas in which the differences in likelihood and importance were statistically significant. These included: friendships, community services and acceptance, safety, law abiding, caretaker roles, independent living, citizenship, holding a job, happiness, financially secure, and highest education possible. Implications for school psychologists and educators are discussed.

Quality of life is an issue that affects all children. Quality of life should be a right for each child in the world. In the United Nations Convention on the Rights of the Child (1989), several issues dealt specifically with children with disabilities. The convention recognized that children with disabilities should take pleasure in a full and worthy life with conditions promoting honor, independence, and an active partnership in the community (Rights of the Child, 1989). In addition, the convention recognized "the child's right to special care appropriate to the individual's condition" (Rights of the Child, 1989).

Quality of life is a person's perception and confidence while taking part in social roles that are seen by others as respected (Ruble & Dalrymple, 1996). Individuals with disabilities have seen progress in quality of life issues such as community involvement and self-determination in the last few years (McDonnell, Hardman, McDonnell, & Kiefer-O'Donnell, 1995). Researchers have stressed that happiness of individuals with autism should be a critical component of quality of life (Halpern 1993).

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In addition, Rosen, Simon, and McKinsey (1995) have indicated that quality of life should be the framework for building programs, offering services, and assessing environments. Many students are increasingly diagnosed within the autism spectrum (Hardman, Drew, & Egan, 2005; Huebner & Dunn, 2001; Lord & Risi, 2000). Therefore, there are increased educational concerns about future outcomes and quality of life issues. Teachers in all educational settings influence these outcomes. Teacher expectations determine many aspects of a student's education. With no known cure for autism and the increase in diagnosis, educational services and classroom placement are a major concern with regards to educational interventions and future successes (Kelleghrew, 1995; Simpson & Myles, 1998). Understanding the developmental, instructional and future expectations of teachers of students with autism is critical for potential success for these students.

Theoretical Framework

Expectancy theory is a construct that attempts to understand better a person's expectations that will consequently produce precise outcomes and values a person places on those outcomes (Bandura, 1995). Individuals be-

have according to their expectations and performance based on outcome expectancies (Graziano, 2002).

Outcome expectancy and efficacy expectation are different concepts. Outcome expectancy is a person's conviction that specific behaviors will lead to certain outcomes, while efficacy expectations are the convictions that one can act in such a manner as to create the outcomes (Bandura, 1977, 1992). An individual can comprehend the likely consequences of an action but not be able to carry out the action.

The power of expectancy theory is increased when self-efficacy is integrated in the formula (Ajzen & Madden, 1986; DeVries, Dijkstra, & Kuhlman, 1988; Schwarzer, 1992). Persons do not feel that services or treatment choices in areas of low perceived efficacy are worth taking into consideration. This occurs no matter what their values or beliefs are about a treatment philosophy or available service. Self-efficacy beliefs obstruct our expectations. A person's self-efficacy sways our decision-making. In addition, the stronger a person's efficacy to satisfy an educational requirement is, the more they will be interested in options and therefore more likely to investigate services and treatments in education (Betz & Hackett, 1981; Matsui, Ikeda, & Ohnishi, 1989).

In society today, quality of life issues are often synonymous with future expectations for students with exceptionalities. Some quality of life indicators to consider when judging outcomes for individuals with autism can include: (1) participation in activities with family and friends, (2) contact with family members as frequently as desired to include events and passages (birthday parties, weddings, funerals), (3) being active and comfortable in a familiar community (transportation, shopping), (4) working at a valued job to earn money, (5) learning about the world through successful experiences with supportive people (opportunity to try new activities and challenges), (6) taking responsibility for personal and home chores and contributing to the family, (7) making choices about purchases, and (8) having his/her own possessions to keep as desired (Ruble & Dalrymple, 1996).

Educators are often unaware of the impact of their expectations on students (Obiakor, 1999). In addition, longitudinal studies show

that teachers' expectations of a child's ability are predictive of later achievement of that child (Alexander, Entwisle & Dauber, 1993; Alvarez & Weinstein, 1999). Teachers frequently must work with many students simultaneously, which makes it very difficult to build knowledgeable relationships. Teachers do not always support educational changes (Minke, Bear, Deemer, & Griffin, 1996; Vaughn, Schurnrn, Jallard, Slusher, & Saumell, 1996). If teachers believe that students are not progressing both academically and socially, they may not be supportive of an existing program (Fullan & Miles, 1992). Although teachers are well trained and have experience developing educational programs for individual students, they are not always involved in the evaluation of these programs. Therefore, there is no perceived need to change curriculum for specific outcomes (Knott & Asselin, 1999).

Autism is a low incidence disability in that it occurs in approximately 5 per 10,000 (Hardman et al., 2005). Teachers strongly believe that students with disabilities make significant progress with academic and social skills (Koegel, Koegel, Frea, & Smith, 1995; Waldron, McLeskey, & Pacchiano, 1999). Therefore, it is important to address teacher challenges and educational systems in terms of outcome and success for students with autism.

Outcomes for individuals with autism are extremely variable. Innate linguistic and cognitive skills are two major factors that can affect outcomes. Cognitive abilities and language skills are considered the best predictors of outcome (Howlin, 1997; Shriver, Allen, & Mathews, 1999). While it is important for educators to be aware of excess demands for students with autism, underestimating their capability can do harm. Flexibility and personalized teaching arrangements are also needed to capitalize on future success (Wood, Davis, Swindle, & Quirk, 1996). For students with autism, education is a lifelong process. Cohen (1949) presented several specific follow-up studies that evaluated outcomes for students with autism. In each project, approximately ten percent of the students who are now adults had "good" outcomes in terms of employment, no blatant behavior problems, and near-normal social life. While these students achieved very close to normal functioning, most could not explain their deep emotions

or show an interest in intimate relationships. Approximately 61-74 % of the individuals had “poor” or “very poor outcomes” with regard to school, work and social activities. An outcome study conducted by Schopler and Mesibov (1983), for instance, supports the belief that individuals with autism who are involved in programs that focus on daily living skills and knowledge, will achieve better outcomes and be less likely to be institutionalized. In addition, Howlin and Goode (1998) found that today only about 8% of persons with autism are institutionalized versus nearly 55% in the 1980’s. According to Larkin and Gurry (1998), students with autism improved their attention capacity and behavioral outcomes over a two-year period with behavioral methods of treatment.

Ruble and Dalrymple (1996) studied forty-six individuals with autism. Outcomes were addressed in a new framework that consists of a person’s strengths and challenges, other’s perceptions of competence and self-perceptions of quality of life, and environmental stressors and supports. Exploration of new ways to define and broaden views of outcomes, specifically with autism, was targeted. Although general knowledge about the course of the lives of persons with autism is sketchy, variables like education and employment are important in outcome studies (Lord & Venter, 1992).

Much research is directed towards expectations and outcomes. Researchers have discovered that expectations are often positively linked to future outcomes for students (Field & Hoffman, 1999; Mutua, 2001). In this study, expectancy theory was used as a foundation for the investigation of teacher expectations regarding outcomes for students within the autism spectrum. The purpose of this study was to investigate the extent to which differences exist on teacher ratings of the importance and likelihood of achieving specified outcomes of students with autism spectrum disorders.

Method

Participants

The sample of 15 teachers was selected from two public schools and one private school in

the rural and urban mid-west. The small sample was due to the limited number of classes for students with autism. Teachers in this study work with students with developmental disabilities of all levels. The private school, located in the mid-west, is a residential full-time school that houses students with developmental disabilities, the majority of whom are diagnosed with autism. There are approximately 30 students, ages 5 through 21, living on the campus. Students have a seven-hour school day, Monday through Friday. One public school has five self-contained classrooms of students with autism or pervasive developmental disorders only. The additional campus consists of students with severe and low incidence disabilities including autism spectrum disorders.

Teacher Demographics

Of the fifteen teacher participants, fourteen were female. Fourteen of the teachers were Caucasian and one was African American. Eight taught in public schools while seven taught in private schools. Almost half of the teachers (47%) have taught five years or less. Fifty-three percent have taught six or more years. Ten of the 15 teach in urban settings, three teach in suburban settings, and two teach in rural areas. Involvement by parents in their classroom was varied. Five reported parent/teacher contact on a daily basis, three on a weekly basis, and five on a monthly basis. Contact every three months was reported by one teacher and contact every six months was reported by one teacher. No teachers reported yearly parent/teacher contact nor did any report no contact.

Child Demographics

The teachers were asked to select any student and consider only that student when completing the survey. Of the 15 students targeted, ages ranged from 4 through 21 years, with the majority of teachers focusing on students from age 6 to 10. Students’ ethnicity, reported by teachers, included one student with an African American background and 14 with Caucasian backgrounds.

Instrument

The 20-statement instrument that was used in this study was adapted from Mutua (1999) with the goal of collecting data about teachers' expectations on future outcomes for students within the autism spectrum. The original survey (Mutua, 1999) contained portions that addressed issues other than expectations that parents have about their children's future outcomes. The portion that was used in this research was treated as a separate block of statements in the original research. Reliability and validity for the data were established independently.

This instrument was appropriate for this particular study since it was used in the recent past to investigate expectations for children with disabilities, including that of autism. In addition, it addressed outcomes that are relevant and pertain to children with autism. The similar areas of adult responsibilities, community, and education were appropriate for this study and therefore used in this research. The survey was adaptable, in that the first 20 statements that were selected that were related to expectations for children with autism. The additional sections of the original survey were eliminated since they did not apply to the current study.

Procedure

Teachers were asked to rate how important it is for them that their students achieve the future outcome specified by each item derived from theory on autism. The responses were scored on a 5-point scale from highly unimportant (1) to very important (5). Likewise, with regard to likelihood of expectations, responses were scored on the same scale, a 5-point Likert-type scale ranging from highly unlikely (1) to very likely (5).

Evidence of Reliability

Since the instrument used a Likert-type scale, Cronbach's Alpha was used to evaluate internal consistency. Data were determined to have a reliability coefficient of .90 for the Importance of Expectations and .93 for Likelihood of Expectations. The reliability coefficient for the data as a whole was .91. These high alpha

values indicate that the instrument and its parts measure the same characteristics. This is consistent with the reliabilities for importance and likelihood (.90 and .93, respectively) indicated by Mutua (1999).

Evidence of Validity

Validity of the data must be evaluated within the purpose of the study. With respect to construct validity this instrument was considered to be valid for this particular project since it was used in the recent past to study expectations for students with exceptionalities including that of autism. Items incorporated in this instrument were derived from constructs that were shown through research to correlate to future outcomes for students with disabilities (Mutua, 1999). In addition, Mutua used exploratory factor analysis to study the characteristics of the theoretical factors on expectations of importance and likelihood. According to her, the instrument included factors with a high correlation and content equivalency across their ratings on importance and likelihood. These four factors were adult roles, importance of community and civil access, importance of educational attainment, and importance of personal fulfillment. These constructs fit the theory for which the instrument was intended.

Data Analysis

A paired *t*-test was used to determine if the differences between the two constructs significantly differ from zero. The 95% confidence interval was calculated for each comparison. This allowed for the examination of the degree of variability in the corresponding population from which the sample was drawn. Data was examined for likelihood and importance differences as whole constructs and on an item-by-item level.

Results

Fifteen teachers were surveyed in this study. Means and standard deviations for all responses to statements regarding importance and likelihood are given in Table 1. Means for the category of importance ranged from 1.73 for the statement "... have his/her own chil-

TABLE 1

Means and Standard Deviations of Teachers' Expectations for Future Outcomes

<i>Statement</i>	<i>Importance</i>				<i>Likelihood</i>			
	<i>M</i>	<i>SD</i>	<i>MIN</i>	<i>MAX</i>	<i>M</i>	<i>SD</i>	<i>MIN</i>	<i>MAX</i>
<i>My student with autism will be . . .</i>								
1. . .happy and satisfied	4.60	.63	3.0	5.0	4.13	.92	2.0	5.0
2. . .attend school.	4.93	.26	4.0	5.0	4.93	.26	4.0	5.0
3. . .get married.	2.67	1.22	1.0	5.0	1.93	1.33	1.0	4.0
4. . .own a house.	2.07	1.28	1.0	4.0	1.80	1.26	1.0	4.0
5. . .support network of friends.	4.47	.92	2.0	5.0	3.73	1.22	1.0	5.0
6. . .religion of choice.	3.40	1.45	1.0	5.0	3.33	1.23	1.0	5.0
7. . .accepted in the community.	4.87	.35	4.0	5.0	4.07	.96	2.0	5.0
8. . .secure financial future.	4.33	.82	2.0	5.0	3.60	.99	1.0	5.0
9. . .safe from physical harm.	5.00	.00	5.0	5.0	4.20	.41	4.0	5.0
10. . .highest education possible.	4.80	.77	2.0	5.0	4.20	1.26	1.0	5.0
11. . .help with household chores.	4.87	.35	4.0	5.0	4.47	.64	3.0	5.0
12. . .socially responsible/law abiding.	4.73	.59	3.0	5.0	3.87	1.13	1.0	5.0
13. . .take care of parent in old age.	2.13	1.19	1.0	5.0	1.53	1.25	1.0	5.0
14. . .participate in citizenship activities.	3.80	.77	2.0	5.0	2.73	.96	1.0	5.0
15. . .live independently..	3.93	.92	2.0	5.0	2.40	1.30	1.0	5.0
16. . .time to play/watch games.	4.60	.63	3.0	5.0	4.27	.88	2.0	5.0
17. . .hold a job/vocation.	4.67	.72	3.0	5.0	3.40	1.30	1.0	5.0
18. . .have own children.	1.73	.96	1.0	5.0	1.80	1.15	1.0	4.0
19. . .use community services.	4.60	.83	2.0	5.0	4.00	.76	3.0	5.0
20. . .be successful in school.	4.47	1.13	1.0	5.0	4.07	1.10	1.0	5.0
Total	80.42	8.05			68.46	11.07		

dren” to 5.0 for the statement “. . .safe from physical harm”. Deviations for this category ranged from .00 for the statement “. . . safe from physical harm” to 1.45 for the statement “. . .religion of choice”. For the statement “. . .safe from physical harm”, all teachers responded with a rating of 5, which is the highest possible rating.

For the category of likelihood, the means ranged from 1.53 for the statement “. . .take care of parent in old age” to 4.93 for the statement “. . .attend school”. Standard deviations for this category ranged from .26 for the statement “. . .attend school” to 1.33 for the statement “. . .get married”. The statement “. . .attend school” with the highest mean (4.93) had the smallest standard deviation (.26).

A paired *t*-test was used to determine if the case-wise differences between the two constructs significantly differ from zero. The 95% confidence interval was calculated for each comparison. The results of the *t*-test are shown in Table 2.

Data were examined for likelihood and importance differences as whole constructs and on an item-by-item level. The difference between the means of the total importance and total likelihood responses was significant at .01 level. This significant difference indicates that the teachers differed significantly in their importance and likelihood expectations of outcomes for their students.

There were eight differences between importance and likelihood that were statistically significant at the .01 level. For the statements “. . .support network of friends”, “. . .accepted in community”, “. . .safe from physical harm”, “. . .socially responsible/law-abiding”, and “. . .take care of parent in old age”, the statement “. . .participate in citizenship activities”, the statement “. . .live independently”, and the statement “. . .hold job/vocation” the means for importance were higher than the mean for likelihood. However, standard deviations for all of these statements were higher for likelihood than they were for importance.

Differences in the responses for importance

TABLE 2

Results of Paired-Sample *t* Test for Importance and Likelihood Responses of Teachers

<i>Pairs</i>	<i>Mean Difference</i>	<i>Std. Error Mean Difference</i>	<i>95% Confidence Interval of the Difference</i>		<i>t</i>	<i>Df</i>	<i>Sig. (2-tailed)</i>
			<i>Lower</i>	<i>Upper</i>			
I1 & L1	.47	.19	.06	.88	2.43	14	.029*
I2 & L2	a						
I3 & L3	.33	.25	-.21	.87	1.32	14	.207
I4 & L4	.27	.27	-.31	.84	1.00	14	.334
I5 & L5	.73	.21	.29	1.18	3.56	14	.003**
I6 & L6	.07	.33	-.64	.78	.20	14	.843
I7 & L7	.80	.22	.32	1.28	3.60	14	.003**
I8 & L8	.73	.25	.20	1.27	3.00	14	.010*
I9 & L9	.80	.11	.57	1.03	7.48	14	.000**
I10 & L10	.60	.24	.10	1.10	2.55	14	.023*
I11 & L11	.40	.21	-.06	.86	1.87	14	.082
I12 & L12	.87	.19	.46	1.28	4.51	14	.000**
I13 & L13	.60	.19	.19	1.00	3.15	14	.007**
I14 & L14	1.07	.27	.49	1.64	4.00	14	.001**
I15 & L15	1.42	.29	.80	2.06	4.91	13	.000**
I16 & L16	.33	.18	-.07	.73	1.78	14	.096
I17 & L17	1.27	.21	.82	1.71	6.14	14	.000**
I18 & L18	-.07	.23	-.56	.42	-.29	14	.774
I19 & L19	.60	.21	.14	1.06	2.81	14	.014*
I20 & L20	.40	.24	-.10	.90	1.70	14	.111
ITOTAL & LTOTAL	11.93	2.18	7.22	16.64	5.47	13	.000**

Note. I denotes statements concerned with importance and L denotes statements concerned with likelihood.

* $p < .05$. ** $p < .01$ a. The *t*-statistic cannot be computed because the standard error of the difference is zero.

and likelihood for statements 1 “. . .happy and satisfied”, “. . .secure financial future”, and 10 “. . .highest education possible”, and “. . .use community services” were significantly at the .05 level. For all four of these statements the mean for the importance responses was higher than the mean for the likelihood responses. However, except for the statement “. . .use community services,” standard deviations for likelihood were greater than standard deviations for importance for these statements.

For the statement “. . .attend school”, all teachers gave importance the highest rating, of 5. This statement, involving the attendance at school, is the most stable statement on the survey. It was consistently given a high level of importance with no variability among those surveyed.

Discussion

The mean of the total responses for importance was 80.42 compared to 68.46 for likelihood. Although teachers value a specific outcome, they reported their students will have some difficulty achieving that outcome. The total standard deviation for importance was 8.05 compared to 11.07 for likelihood. Hence, the range for responses was larger in the likelihood category reflecting that beliefs about outcomes for students with autism are varied. This may be a result of the broad spectrum of skill levels for students in this study. Additionally, the varied student diagnoses could affect the likelihood responses of the teachers. The highest mean (5.00) for the importance category of teachers was the statement “. . .safe from physical harm”. Teachers indicated that

the most important expectation for their students is that they are safe in society and will experience no bodily harm. According to a study by (Ivey, 2004), parents have similar concerns with regards to their children's safety. The second highest mean for the importance category and the highest mean for the likelihood category was for the statement 2 "...attend school", 4.93 and 4.93 respectively. This is an expected response due to the fact that all of the participants are employed as teachers in the field.

For the importance category, the mean was the lowest (1.73) for the statement "...have own children." Teachers do not feel that having children is an important aspect in life for a student with autism. Teachers most likely feel that basic academics, daily living skills and communication skills are more critical than raising children. Furthermore, the statement "...taking care of parent in old age" had a low mean of 2.13 as well as the lowest (1.53) in the likelihood category. This indicates that teachers do not think that a student with autism should concentrate on taking care of other adults such as parents and probably would not have the appropriate skills to take care of adults. The mean was the highest (4.84) for the likelihood category for the statement "...attend school." All of the students in this study are currently enrolled in a school setting and therefore the teachers anticipated that they would remain in school. There was a statistically significant difference between for the total importance and total likelihood responses for teachers. Teachers felt more positive about importance of the outcomes than they did about the likelihood of those outcomes. There are eight statements for which the differences between importance responses and likelihood responses were statistically significant at the .01 level. The statements are "...support network of friends", "...accepted in the community", "...safe from physical harm", "...socially responsible/law abiding", "...take care of parent in old age", "...participate in citizenship activities", "...live independently", and "...hold a job/vocation". The four that were statistically significant at the .05 level were the statements "...happy and satisfied", "...secure financial future", "...highest education possible", and "...use community services".

The only education related significant difference for teachers was the statement about the students attaining the highest education possible. There was no significant difference between likelihood and importance of the students being successful and attending school. This indicates that teachers are positive about their students' success in the classroom and feel as if they will attend school. This could be due to the fact that the teachers are knowledgeable about interventions and for the most part believe that these techniques and methods will work for the students.

Many of the statistically significant differences of the responses by teachers address adult responsibilities and community support. Teachers believe that it is important that their students be accepted in the community, have a secure financial future, socially responsible, participate in citizenship activities, live independently, hold jobs, and use services available in the community. However, they are not convinced that their students will attain these goals (Arick et al., 2003). It is possible that teachers are aware of the scarcity of some support services such as quality group homes, employment services, and collaborative organizations and agencies. In addition, teachers may acknowledge that there is a lack of appropriate leisure activities available for adults with autism (Field & Hoffman, 2002).

Other possibilities for the discrepancies are the gaps in the knowledge about and involvement in transitions into adulthood and adult services. In a study by Knott and Asselin (1999), it was determined that even secondary special education teachers have little experiences dealing with the employment issues and transition planning. This is particularly disturbing since these same teachers rated vocational preparation and job training as an important area of education. Since the teachers in the current study teach students across many age levels, including elementary age, they may have a limited exposure to these issues. Therefore, they may not be aware of all the possibilities in the community. In addition, teachers that teach young students are not required by the law to Teachers also may believe that the environment in their classrooms the most nurturing for the students. The concern for such a nurturing environment is also evident in the statistically signifi-

cant responses for the statement concerning safety of the student. For these students, the classroom is often perceived as a haven from outside dangers and threats. Teachers may often consider themselves protectors of children with exceptionalities.

According to these teachers, children with autism have trouble developing friendships and maintaining those relationships. It is likely that they see the lack of communication skills in their classroom daily and observe first hand the challenges of social skills for some their students. This area also relates to the issues of being happy and satisfied. Contentment is also based on these quality of life issues such as friends and independence, and safety (Huebner & Dunn, 2001.)

The statement “. . .attend school” was given a rating of 5 for all teachers. This statement is the most stable statement on the survey. The means for the responses for this statement were among the highest and the variability was among the lowest. This is a basic issue of a free and public education for all children according to federal law. None of the teachers viewed this any differently than the law.

There were several expectations that showed no statistically significant differences between importance and likelihood for teachers. The statements “. . .get married, “. . .have own children“, and “. . .help with household chores“ were rated similarly. Additionally, the statements “. . .time to play and watch games“ and “. . .religion of choice“ were not significantly different when comparing importance and likelihood.

Implications

School Psychologists

Due to strong teacher feelings regarding future outcomes, as reported by teachers, school psychologists and clinicians need to be aware of such issues and address them when communicating goals and objectives for students in psychoeducational meetings. In addition, these outcomes are important for classroom consultation services provided by professionals.

One should acknowledge that it is not always the school psychologist or clinician that should develop the agendas in working with

students with autism spectrum disorders. It must be a collaborative effort among all persons involved with the student (Ivey, 2004). As a school psychologist, one must be ready and able to assist educators in developing positive interventions geared towards future success. This may be in terms of community awareness and safety, social skills, and independent living. This study emphasizes that professionals must be prepared to support educators when communicating with parents and community service agencies that will directly influence and facilitate the expected outcomes. As professionals, it is critical that school psychologist know what future skills are likely to assist each student and what agencies and services are available to educators and parents.

Educators

If teachers do not have confidence in the student, the student may feel like he or she cannot be successful on given tasks. This relates to the expectancy theory emphasizing what children believe about themselves will impact their self-concept. Further, teachers' expectations for students dictate the amount and quality of effort expended toward the students' needs.

It would logically follow that teachers may not follow through with goals and objectives in the IEPs. The fact that the law requires it is not always an indication that this mandate will be carried out. In addition to a robust curriculum, there is a need to examine social skills instruction. There is research that indicates that children with autism can attain social skills that were deemed impossible in the past (Harchik, Harchik, Luce, & Sherman, 1990; Harris, Handleman, & Alessandri, 1990; Krantz & McClannahan, 1993; Stahmer, 1995)

In addition, the results of this study have implications for referral of services. If teachers feel that adult responsibilities and community supports are not likely to make a difference in the life of the student, they may not make efforts to obtain information from agencies or communicate available options to parents. The critical component is that the teachers are typically the primary source of these referrals (Hardman et al., 2005).

Future Research

Since research about teachers and their expectations for children with autism is in its infancy, there are many avenues to explore. Researchers could compare responses between teachers at different grade levels with regard to outcomes for students. This would allow one to see if expectations differ between elementary, middle school, and high school teachers and if so, how much and in what areas. Investigating the number of years each teacher has taught in the classroom may also allow one to see if experience dictates one's expectations for these students. In addition, a researcher could conduct an analysis to explore any differences in expectations for students with mild, moderate, and severe autism. This would allow one to see what discrepancies may exist, if any for the different diagnoses.

Additionally, one could interview teachers to determine why they responded in the way they did on the instrument. Such qualitative information may be helpful in clarifying various factors for expectations. This may assist with clarifying any possible bias that might occur when teachers responded differently to issues of importance and likelihood. Since autism spectrum disorders are low incidence disabilities, the sample size in this study was considered appropriate. However, more information could be obtained with a larger sample. Increasing sample size may result in finding additional statistically significant differences between importance and likelihood outcomes.

Summary

Research shows that when the significant people in a child's life do not believe that he or she has capability to achieve an outcome, it is unlikely that the outcome will be realized. For example, if a teacher feels that a student has social obstacles, then their perceptions may increase the undesirable behavior and the student may see him or herself in that light (Donohue, Weinstein, Cowan, & Cowan, 2000).

One cannot disregard quality of life issues when addressing needs of children within the autism spectrum. They are children who often have communication, interaction, and behav-

ior difficulties. With these challenges, the students may not be able to voice their own views and thoughts to others. It is crucial that teachers have the highest expectations possible for all children.

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