

Overview of the ASQ:SE



INTRODUCTION TO THE ASQ:SE

Critical to the well-being of children is their ability to successfully regulate their emotions and manage their social interactions in ways that are acceptable to themselves and others. Children who manage their emotional and social behavior well are deemed competent, while those whose social or emotional behavior is inappropriate and unacceptable to others in their home or community are seen as troubled or “disabled.” A growing body of evidence suggests that habituated and ingrained social and emotional problems are highly resistant to change and indeed are likely to intensify over time (e.g., Feil, Walker, & Severson, 1995; Sprague & Walker, 2000). Consequently, the early identification of social and emotional problems in infants, toddlers, and young children is essential if we are to assist them in building their emotional and social competence and reduce the likelihood of placement in special education programs, residential treatment, or later incarceration.

The need for prevention or early elimination of social or emotional problems in young children is an international concern, addressed in the United States by the Individuals with Disabilities Education Act (IDEA) Amendments of 1997 (PL 105-17). The timely identification of young children who have social or emotional problems or who are on a behavioral trajectory that will lead to problems with self, peers, and parents has proven to be challenging (Guralnick, 1997; Osofsky & Fitzgerald, 2000; Zeanah, 2000). Accurate, affordable strategies for the detection of social or emotional problems in young children have been particularly difficult to develop; consequently, the assessment of social and emotional competence of young children is often left undone until problems reach catastrophic levels requiring huge expenditures of intervention resources.

Table 2. Description of selected social-emotional assessment instruments

Name	Author(s) and copyright year (if available)	Publisher	Age range	Administration time	Number of items	Administrator	Psychometric data	Appropriate for screening
Ages & Stages Questionnaires: Social-Emotional (ASQ:SE)	Jane Squires, Diane Bricker, & Elizabeth Twombly (2002)	Brookes Publishing Co. Post Office Box 10624 Baltimore, MD 21285-0624 800-638-3775	6–60 months	10–15 minutes	Varies	Parent	Limited	Yes
Behavioral Assessment of Baby's Emotional and Social Style (BABES)	Karen M. Finello & Marie K. Poulsen (1996)	California School of Professional Psychology—Los Angeles 1000 South Fremont Avenue Alhambra, CA 91803 818-284-2777	Birth–36 months	10 minutes	29	Parent	Limited; under development	Yes
Behavioral Assessment System for Children (BASC)	Cecil Reynolds & Randy Kamphaus (1992)	American Guidance Service 4201 Woodland Road Circle Pines, MN 55014 800-328-2560	4–18 years	Varies	5 components	Parent or teacher	Yes	No
Carey Temperament Scales (CTS)	William Carey & Sean McDevitt	B-DJ (Behavioral-Developmental Initiatives) 14636 North 55th Street Scottsdale, AZ 85254 800-405-2313	1 month–12 years	25 minutes	5 scales	Parent	Limited	No
Child Behavior Checklist for Ages 1½–5 (CBCL)	Thomas Achenbach & Leslie Rescorla (2000)	Achenbach System of Empirically Based Assessment (ASEBA) Room 6436	1½–5 years	10–15 minutes	100	Parent	Yes	No
Child Behavior Checklist for Ages 4–18 (CBCL)	Thomas Achenbach (1991)	1 South Prospect Street Burlington, VT 05401-3456 800-656-8313	4–18 years	10–15 minutes	113	Parent	Yes	No
Conners' Rating Scale—Revised	C. Keith Conners (1997)	Multi-Health Systems, Inc. 908 Niagara Falls Boulevard North Tonawanda, NY 14120 800-456-3003	3–17 years	10 minutes	Parent Scale (long form): 80 Teacher Scale (long form): 59	Parent Teacher	Limited	Yes
Devereux Early Childhood Assessment Program (DECA)	Devereux Foundation (1998)	Kaplan Companies PO Box 609 Lewisville, NC 27023-0609 800-334-2014	2–5 years	10 minutes	37	Parent	Yes	Yes
Early Coping Inventory (ECI)	Shirley Zeitlin, G. Gordon Williamson, & Margery Szczepanski (1988)	Scholastic Testing Services 480 Meyer Road Bensenville, IL 60106 630-766-7150	4–36 months	Varies; child observed across settings	48	Teacher psychologist, and/or parent	Limited	No
Early Screening Project (ESP)	Hill M. Walker, Herbert H. Severson, & Edward Feil (1995)	Sopris West 4093 Specialty Place Longmont, CO 80504 303-651-2829	3–5 years	Stage 1: 1 hour Stage 2: 1 hour Stage 3: 40 minutes	Varies according to stages	Teacher Counselor Parent	Yes	Yes

Eyberg Child Behavior Inventory (ECBI)	Sheila Eyberg	Psychological Assessment Resources, Inc. Post Office Box 998 Odessa, FL 33556 800-331-8378	2–16 years	10 minutes	36	Parent	Limited	Yes
Functional Emotional Assessment Scale (FEAS)	Georgia DeGangi & Stanley Greenspan (2000)	Appendix B in DeGangi, G. (2000). <i>Pediatric Disorders of Regulation in Affect and Behavior</i> . San Diego: Academic Press; for more information, call 301-320-6360.	7 months–4 years	15–20 minutes	6 versions; 27–61 items	Professional	Yes	Yes
Infant–Toddler and Family Instrument (ITFI)	Sally Provence & Nancy H. Apfel (2001)	Brookes Publishing Co. Post Office Box 10624 Baltimore, MD 21285-0624 800-638-3775	6 months–3 years	Varies	35 in interview; 38 in concerns checklist	Professional with parent	No	Useful in gathering preliminary information or as clinical tool
Infant–Toddler Social and Emotional Assessment (ITSEA)	Margaret J. Briggs-Gowan & Alice S. Carter	Not published commercially; contact the authors at 203-764-9093 for more information.	12–36 months	40 minutes	200	Parent	Yes	No
Infant/Toddler Symptom Checklist	Georgia DeGangi, Susan Poisson, Ruth Sichel, & Andrea Santman Wiener (1999)	Therapy Skill Builders 3830 East Bellevue Tucson, AZ 85716 800-872-1726	7–30 months	10 minutes	57	Parent	Limited	Yes
Parenting Stress Index (PSI), Third Edition	Richard R. Abidin	American Guidance Service 4201 Woodland Road Circle Pines, MN 55014 800-328-2560	Birth–12 years	20–30 minutes	120	Parent	Yes	No
Preschool and Kindergarten Behavior Scale (PKBS)	Kenneth Merrell (1994)	PRO-ED 8700 Shoal Creek Boulevard Austin, TX 78757	3–6 years	8–12 minutes	76	Parent and teacher	Yes	Yes
Social Skills Rating System (SSRS)	Frank M. Gresham & Stephen N. Elliott	American Guidance Service 4201 Woodland Road Circle Pines, MN 55014 800-328-2560	3–18 years	15–25 minutes	89	Parent and teacher	Yes	Yes
Temperament and Atypical Behavior Scale (TABS)	Stephen J. Bagnato, John T. Neisworth, John Salvia, & Frances M. Hunt (1999)	Brookes Publishing Co. Post Office Box 10624 Baltimore, MD 21285-0624 800-638-3775	11–71 months	5 minutes 15 minutes	Screeners: 15 Assessment Tool: 55	Parent Professional	Preliminary	Yes
Vineland Social-Emotional Early Childhood Scale (SEEC)	Sara Sparrow, David Balla, & Dominic Cicchetti (1998)	American Guidance Service 4201 Woodland Road Circle Pines, MN 55014 800-328-2560	Birth–5 years, 11 months	15–20 minutes	Varies	Professional	Yes, but based on 1984 data	No



NEED FOR THE ASQ:SE

There is a significant need for a psychometrically sound, low-cost screening instrument that can accurately reflect the emotional and social competence of infants, toddlers, and preschool-age children. Table 2 presents a list of instruments frequently used to examine social and emotional competence in infants and young children. This table provides each instrument's name, author(s), publisher, year of copyright, age range, administration time, number of items, administrator, psychometric data, and its appropriateness as a screening tool. The data presented in Table 2 were taken from the instruments' test manuals or articles published by the instruments' authors.

A review of the information contained in Table 2 finds few instruments that cover the age range of 6 months through 6 years. Many of the tools listed in Table 2 were not designed for large-scale screening and, therefore, do not meet the criteria for low-cost screening. That is, the instruments listed take considerable time to complete, scoring is complex, and the interpretation of results must be done by highly trained professionals. In addition, many of the tools have limited data available on their reliability, validity, and utility. Finally, some of the instruments do not include the parent in a meaningful capacity.

The ASQ:SE was designed specifically as a low-cost screening instrument. Using the ASQ:SE is economical because it relies on parents to complete simple, easy-to-read questionnaires on their child at designated age intervals from 6 through 60 months. This approach automatically ensures meaningful participation by parents. Parents report that the questionnaires take little time to complete (i.e., 10–15 minutes). Scoring the questionnaires is simple and can be done by paraprofessionals. Interpreting the results is straightforward, as children's scores can be compared with empirically derived cutoffs that indicate if a child should receive further evaluation. The normative group closely approximates the 2000

Table 3. Number of scored ASQ:SE items by age interval

	ASQ:SE age interval							
	6	12	18	24	30	36	48	60
Number of items	19	22	26	26	29	31	33	33

Table 4. The ASQ:SE's seven behavioral areas and associated definitions

Behavioral area	Associated definition
Self-regulation	Items address the child's ability or willingness to calm or settle down or adjust to physiological or environmental conditions or stimulation.
Compliance	Items address the child's ability or willingness to conform to the direction of others and follow rules.
Communication	Items address the child's ability or willingness to respond to or initiate verbal or nonverbal signals to indicate feelings, affective, or internal states.
Adaptive functioning	Items address the child's success or ability to cope with physiological needs (e.g., sleeping, eating, elimination, safety).
Autonomy	Items address the child's ability or willingness to self-initiate or respond without guidance (i.e., moving to independence).
Affect	Items address the child's ability or willingness to demonstrate his or her own feelings and empathy for others.
Interaction with people	Items address the child's ability or willingness to respond to or initiate social responses to parents, other adults, and peers.

United States census data (Bureau of the Census, 2001) for income, level of education, and ethnicity and includes a minimum of 175 cases at each age interval. In addition, the reliability (e.g., interrater, test-retest, and internal consistency) and validity (e.g., concurrent) of the ASQ:SE have been studied with large groups of children. The underreferral (i.e., children who should be identified are missed) and overreferral (i.e., children are identified who should not be) rates for the ASQ:SE are acceptable, indicating that in most cases the instrument will accurately identify children in need of further evaluation (i.e., sensitivity) and those who do not (i.e., specificity). For more details on the psychometric properties of the ASQ:SE, see Appendix A in this *User's Guide*.

The most effective use of any screening instrument is within a larger, coordinated child-find system and not as an isolated activity; therefore, in addition to describing the ASQ:SE, procedures for developing a comprehensive community-based screening program are included later in this *User's Guide*.

DESCRIPTION OF THE ASQ:SE

The ASQ:SE is a series of eight questionnaires designed to be completed by parents to address the emotional and social competence of young children. The ASQ:SE has separate questionnaires for 6, 12, 18, 24, 30, 36, 48, and 60 month age intervals. Each questionnaire can be used within 3 months (for the 6 through 30 month intervals) or 6 months (for the 36 through 60 month intervals) of the chronological age targeted by the questionnaire. For example, the 6 month ASQ:SE can be used with infants from 3 through 8 months, the 12 month ASQ:SE with infants from 9 through 14 months, the 48 month questionnaire with children from 42 through 53 months, and the 60 month questionnaire with children from 54 through 65 months. Questionnaires vary in length, depending upon

Table 5. Behavioral areas, associated content, and specific items by ASQ:SE age interval

Behavioral area	Associated content	ASQ:SE age interval							
		6	12	18	24	30	36	48	60
Self-regulation	Can calm down	8	10						
	Body relaxed	10	8	5	4				
	Has trouble falling asleep	16	15	13	16				
	Calms down within time period	1	5	7	8	15	5	4	5
	Cries for long periods of time; screams, has tantrums	9	9	9	11	10	19	8	9
	Hurts others		21	25	25	28	29	31	30
	Has perseverative behaviors			11	21	11	21	22	22
	Is more active than peers					8	12	16	16
	Can settle down after excitement					9	7	7	7
	Stays with activities					12	13	18	13
	Moves from one activity to next					23	8	20	20
	Destroys and damages things					25	24	25	25
Total number of self-regulation items per interval		5	6	6	6	9	9	9	9
Compliance	Follows simple directions/ routine; follows rules			19	18	21	18	24	24
	Does what you ask					13	11	13	15
Total number of compliance items per interval		0	0	1	1	2	2	2	2
Communication	Listens; turns to look, smiles; looks	5	20	1	1	1	1	1	1
	Babbles		16						
	Lets you know/uses words when hungry, sick, tired	6	19	18	19	20	17	17	18
	Uses words for feelings						25	19	19
	Follows when you point			16	15	18			
Total number of communication items per interval		2	3	3	3	3	3	3	3
Adaptive functioning	Has trouble sucking	11							
	Stays awake for hour or longer during day	15							
	Takes longer than 30 minutes to feed	12	12						
	Is constipated or has diarrhea	18	18	17	17				
	Has eating problems	14	14	12	13	16	15	11	12
	Sleeps x hours in 24-hour period	17	17	15	14	19	16	15	17
	Hurts self on purpose			23	23	26	22	23	23
	Stays away from danger					24	23	26	26
	Has interest in sex						30	32	32
	Stays dry during day; is toilet trained							10	11
Total number of adaptive functioning items per interval		6	4	4	4	4	5	6	6
Autonomy	Checks when exploring; explores new places			21	20	22	20	21	21
	Clings to you more than you expect					3	4	2	2
Total number of autonomy items per interval		0	0	1	1	2	2	2	2

Note: Numbers in unshaded boxes indicate item number on the specific ASQ:SE questionnaire.

Behavioral area	Associated content	ASQ:SE age interval								
		6	12	18	24	30	36	48	60	
Affect	Likes to be picked up and held; likes to be hugged and cuddled	3	4	6	7	2	2	5	3	
	Stiffens and arches back	4	6	8	9					
	Is interested in things around her		11	10	10	14	10	9	10	
	Seems happy					5	9	14	8	
	Shows concern for others' feelings							28	27	
Total number of affect items per interval		2	3	3	3	3	3	4	4	
Interaction with people	<i>Parents and other adults</i>	Smiles; smiles and laughs	2	1	3	3				
		Watches, listens; plays peek-a-boo; likes stories	7	7	22	22	6			
		When you leave, cries more than an hour			2	5				
		Enjoys mealtimes together	13	13	14	12	17	14	12	14
		Plays near; greets; talks to adults		3	20	6	4	3	3	4
	<i>Peers</i>	Looks for you; is too friendly with strangers		2	4	2	7	6	6	6
		Likes to be around other children; plays alongside			24	24	27			
		Names a friend; takes turns and shares						26	27	31
		Other children like to play with your child						27	29	28
		Your child likes to play with other children						28	30	29
Total number of interaction with people items per interval		3	5	7	7	5	6	6	6	
General concerns and comments	Anyone has expressed concerns about child	19	22	26	26	29	31	33	33	
	Has concerns about child's eating and sleeping	20	23	27	27	30	32	34	34	
	Has any worries about child	21	24	28	28	31	33	35	35	
	Things you enjoy about child	22	25	29	29	32	34	36	36	
Total number of general concerns and comments items per interval		4	4	4	4	4	4	4	4	
Total number of all items per interval		22	25	29	29	32	34	36	36	

the age of the child. The number of questions per age interval is shown in Table 3.

To the extent possible, the ASQ:SE items were written with an eye toward the setting/time, developmental, health, and family/cultural variables listed previously in Table 1 in Chapter 1. Although not specifically identified on the questionnaires, the item content of the questionnaires addresses seven behavioral areas: self-regulation, compliance, communication, adaptive functioning, autonomy, affect, and interaction with people. A list of these seven behavioral areas and their associated definitions are contained in Table 4. The separation into seven areas as well as the area names (e.g., self-regulation) is somewhat arbitrary but may help providers understand the organization of the ASQ:SE and the intent of individual questions.

Table 5 presents the seven behavioral areas, their associated general content indicators, and the specific items by ASQ:SE age interval. A review of Table 5 indicates that items are not evenly distributed across areas. In addition, the number of items and the content of items change over age intervals to accommodate changes in development.

The questionnaires have a standard format. There is a title page for each interval, followed by a sheet for recording name, date, address, and other identifying information. There is also a summary page at the end of each interval for programs to compile results and referral decisions. Each questionnaire item is followed by a series of three columns that parents can use to indicate whether their child does the behavior *most of the time*, *sometimes*, or *never or rarely*. A fourth column permits parents to indicate with a check if the behavior is of concern to them. Items on each questionnaire are coded Z, V, or X to permit quick and error-free scoring. Parents' responses are transferred to point values of 0, 5, or 10, respectively. Scores for each item are then combined into a total score. A high total score is indicative of problems, while a low score suggests that the child's social and emotional behavior is considered competent by his or her parent. Children whose total score exceeds the established cutoff points should be referred for a diagnostic evaluation. *This scoring pattern is the opposite of that of the ASQ, on which low scores, or the absence of developmental skills, indicates referral for further assessment.*

The ASQ:SE contains items related to competence and to problem behaviors. Examples of competence-related items include "Is your baby able to calm himself down (for example, by sucking on his hand or pacifier?"; "Does your child like to be picked up and held?"; and "Does your baby let you know when she is hungry, hurt, or wet?" Examples of items related to problem behaviors include "Does your child have eating problems such as stuffing foods, vomiting, or eating nonfood items?" and "Does your child hurt himself on purpose?" Throughout the questionnaires, male and female pronouns are alternated by item. The questionnaires are also available in Spanish and Korean.

Each questionnaire can be completed by parents in 10–15 minutes, depending on the length of the questionnaire and the time it takes for individual parents to read and mark the appropriate answers. Reading level is approximately fifth- to sixth-grade level. As with any parent-completed assessment tool, not all parents will be able to read, understand, and accurately complete the ASQ:SE. For parents who do not read English or Spanish at a fifth- to sixth-grade level, the questionnaires can be used as an interview tool. For parents with cognitive and emotional disabilities, a professionally administered tool may be more appropriate. Cultural and ethnic variability will also need to be considered when using the ASQ:SE. If an item on the questionnaire is not appropriate for a family, it should be omitted. If an item is omitted, scoring procedures will need to be adjusted, as specified in Chapter 4 of this *User's Guide*.

OVERVIEW OF PSYCHOMETRIC DATA ON THE ASQ:SE

Validity, reliability, and utility studies were conducted on the ASQ:SE between 1996 and 2001 in order to determine the psychometric properties of the screening instrument. Normative studies included 3,014 preschool-age children and their families, distributed across the eight age intervals from 6 months through 60 months. Internal consistency, measured by Cronbach's coefficient alpha, ranged from .67 to .91, indicating strong relationships between questionnaire total scores and individual items. Test-retest reliability, measured as the agreement between two ASQ:SE questionnaires completed by parents at 1- to 3-week intervals, was 94%. These results suggest that ASQ:SE scores were stable across time intervals.

Concurrent validity, as reported in percentage agreement between ASQ:SE and concurrent measures, ranged from 81% to 95%, with an overall agreement of 93%. Sensitivity, or the ability of the screening tool to identify those children with social-emotional disabilities, ranged from 71% to 85%, with 78% overall sensitivity. Specificity, or the ability of the screening tool to correctly identify those children without social-emotional delays, ranged from 90% to 98%, with 95% overall specificity. These results support the overall usefulness of the ASQ:SE to discriminate between children with social-emotional delays and those who appear to be developing typically in social-emotional areas.

To measure the utility of the ASQ:SE, parents ($N = 731$) completed utility questionnaires. More than 97% rated ASQ:SE items easy to understand and appropriate. Parents indicated that the ASQ:SE took little time to complete and helped them to think about social and emotional development in their young children.

RELATIONSHIP BETWEEN THE ASQ AND ASQ:SE

The Ages & Stages Questionnaires: Social-Emotional (ASQ:SE): A Parent-Completed, Child-Monitoring System for Social-Emotional Behaviors was developed to complement the ASQ by providing information specifically addressing the social and emotional behavior of children ranging in age from 3 to 66 months. Like the ASQ, the ASQ:SE is composed of a series of simple-to-complete questionnaires designed for use by a child's parents or other primary caregivers. The ASQ:SE is a screening tool that identifies infants and young children whose social or emotional development requires further evaluation to determine if referral for intervention services is necessary. The ASQ:SE focuses on a child's social and emotional behavior and therefore should be used in conjunction with the ASQ or another screening measure that provides information on a child's communicative, motor, problem-solving, and adaptive behaviors.