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# Social and Emotional Screening in Young Children

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Medical Director



# Continuing Medical Education Information

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- Neither the presenter nor planning committee members had any financial relationships to disclose
- All content designers are required to verify that the necessary steps have been taken to ensure patients privacy and confidentiality.
- If you have any questions regarding credit, please contact Cincinnati Children's CME office at [cme@cchmc.org](mailto:cme@cchmc.org) or 513-636-6732.



# Objectives

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- **Review rationale for social-emotional screening in early childhood**
  - **Discuss the utility of the ASQ:SE in social-emotional screening**
  - **Identify resources for referral for evaluation and intervention**
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# Social and Emotional Competence

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## **Social competence**

An Array of behaviors  
that permits one to  
develop and engage in  
positive interactions  
with peers, siblings,  
parents, and other  
adults

(Raver and Zigler 1997)

## **Emotional competence**

The ability to  
effectively regulate  
emotions to  
accomplish one's  
goals

(Campos, Mumme,  
Kermoian, &  
Campos, 1994)



# Contributing Factors

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<b>Variable</b>	<b>Assessment Questions</b>
Setting/time	Where, when, and under what environmental conditions does the behavior occur?
Development	What is the child's developmental level?
Health	What is the child's health status?
Family/culture	What family/cultural factors are potentially associated with the behavior?



# Social-Emotional Problems in Young Children

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- Increased risk for
  - Psychiatric Disorders
  - Poorer academic achievement
- Effective models for early intervention are available
  - Parent training
    - The Incredible Years
    - Parent Child Interaction Therapy
    - Triple P
  - Trauma focused cognitive behavioral therapy
  - Treatment for parental depression and anxiety



# Rationale

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- Habituated and ingrained social and emotional problems are highly resistant to change and likely to intensify
  - Feil, Walker, and Severson 1995
  - Sprague and Walker 2000



# Tools

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- **ASQ:SE**
  - Used by **Ohio Help Me Grow**
- **BITSEA:** Brief Infant and Toddler Social and Emotional Assessment
- **PEDS**
  - Concerns about the child’s “behavior”
  - Concerns about the child’s “getting along with others”



## Social-Emotional Screening Status in Early Childhood Predicts Elementary School Outcomes

*Briggs-Gowan and Carter, Pediatrics, May 2008*

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- **1004 children:** Random Sample Healthy Birth cohort
  - 33.3% minority
  - 29.1% at or near poverty level
- **BITSEA** completed between 12 and 36 months (Mean = 23.8 months SD 7.1 months)
  - 42 item for 1-3 year olds
    - Problem Scale
    - Competence Scale
- **3 item** measure of level of worry re: behavior, emotions, and social development
- **In early elementary school, CBCL and TRF**
  - Mean age 6 years (SD 4 months)
- **Measure of parental depression and anxiety**
- **Sub sample of 389 reported child psychiatric status**



## Social-Emotional Screening Status in Early Childhood Predicts Elementary School Outcomes

*Briggs-Gowan and Carter, Pediatrics, May 2008*

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- **BITSEA and Parent worry associated significantly**
  - School age symptoms
  - Psychiatric disorders
- **BITSEA predicted all school age problems**
- **Worry only predicted CBCL**
- **BITSEA identified:**
  - 49% of children whose teachers reported sub-clinical/clinical symptoms
  - 67.9% of children with a psychiatric disorder.
- **Parents received no feedback**



## Social-Emotional Screening Status in Early Childhood Predicts Elementary School Outcomes

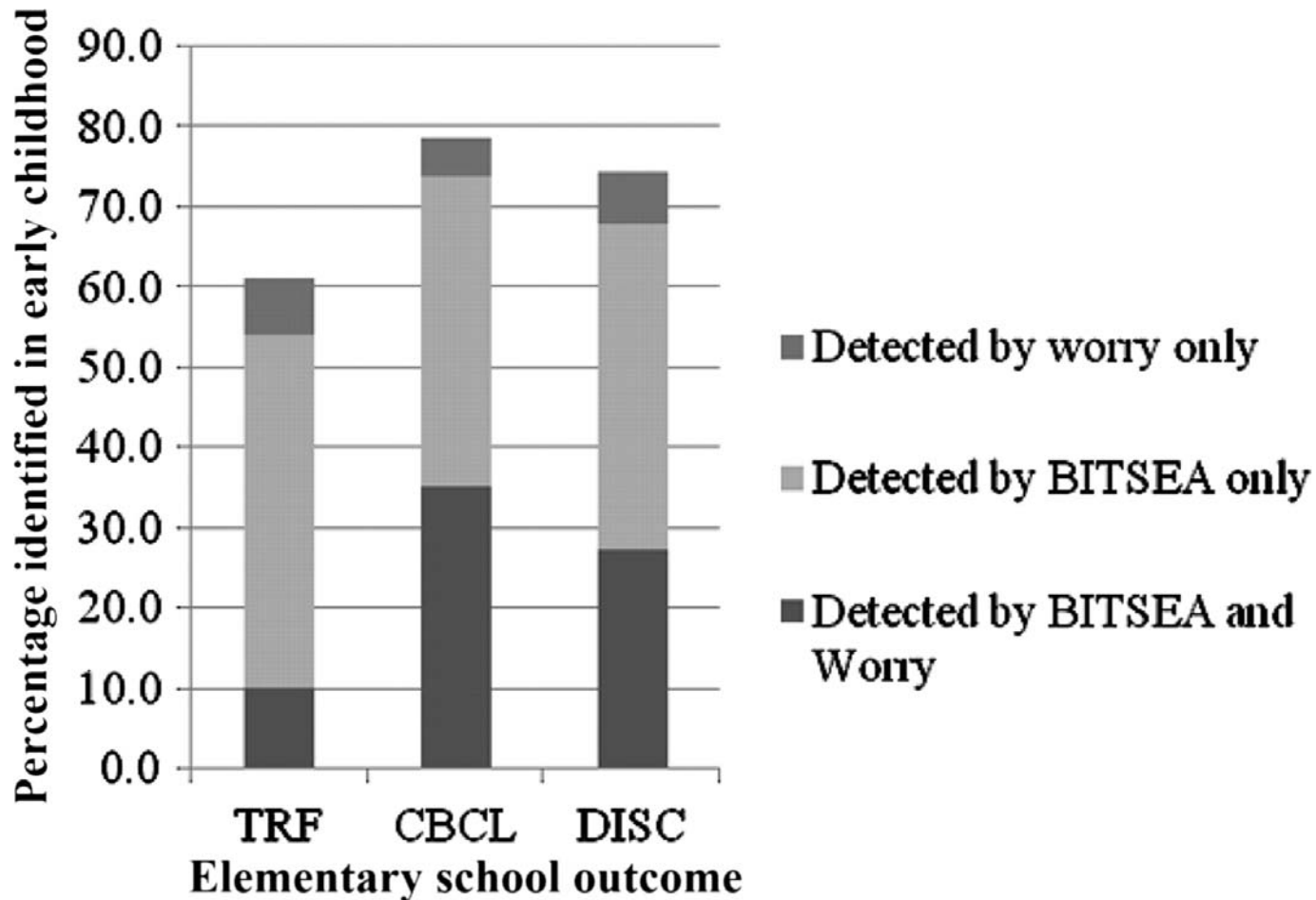
*Briggs-Gowan and Carter, Pediatrics, May 2008*

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- 10.4% with BITSEA scores indicating concern and high parental worry
- 22.9% with BITSEA scores indicating concern, but no parental worry
- 6.4% with only parental worry
- *Only 31.4% with BITSEA scores indicating concern had high parental worry*
- 1.7% of parents reported receiving services for social-emotional/behavior problems in Year 1
- 31% of BITSEA concerns had persistent problems on CBCL
  - 4.5 times greater than those without concerns
- 40% of BITSEA concerns met criteria for psychiatric disorder in the sub sample



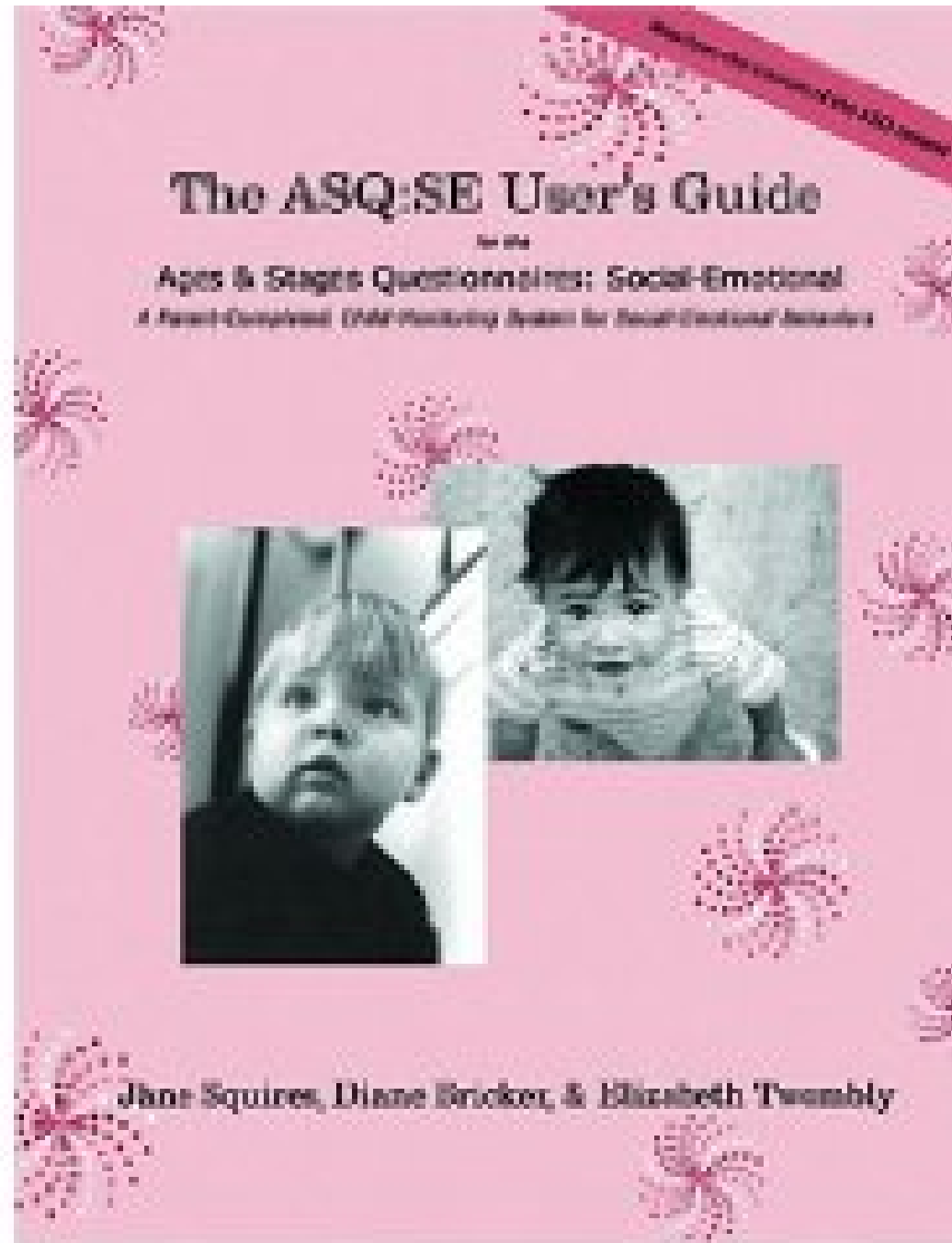
## Early identification of school-age problems and worry in early childhood, according to BITSEA



Briggs-Gowan, M. J. et al. Pediatrics 2008;121:957-962

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## ASQ:SE

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- Identifies infants and young children whose social and emotional development requires further evaluation to determine if referral for intervention services is necessary.
  - Not a diagnostic tool!
  - Available in English and Spanish
  - Brookes Publishing
-



## Areas Assessed by ASQ:SE

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- Self-regulation
  - Compliance
  - Communication
  - Adaptive behaviors
  - Autonomy
  - Affect
  - Interactions with people
- 



# Need

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- Useful from infancy through early childhood
  - Low cost for large scale screening
  - Quick and easy to complete
  - Psychometrically sound
  - Simple to score
  - Simple to interpret
  - Parent has meaningful role
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# ASQ:SE at a Glance

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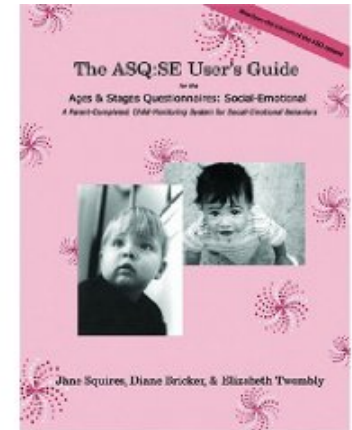
**Age range covered: 6–60 months**

**General areas screened: Personal-social (self-regulation, compliance, communication, adaptive functioning, autonomy, affect, and interaction with people)**

**Components: 8 color-coded questionnaires for use at 6, 12, 18, 24, 30, 36, 48, and 60 months, eight corresponding scoring sheets, User's Guide**

**Who completes it: Parents/caregivers complete questionnaires; professionals score them**

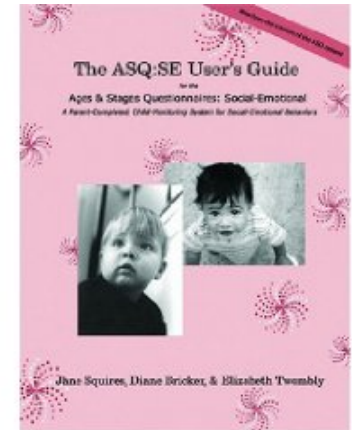
**Approximate time: Each questionnaire takes 10–15 minutes to complete and just 1-3 minutes to score**





# ASQ:SE at a Glance

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**Validity and reliability:** Investigated with over 3,000 children across the age intervals and their families. Reliability is 94%; validity is between 75% and 89%

**User's Guide includes:** Instructions on setting up and running ASQ:SE, validity data, tips on cultural sensitivity, case studies, and activities

**Languages:** Questionnaires in English and Spanish

**Other features:** Cost-effective, may be photocopied, can be used alone or in conjunction with ASQ:3



# ASQ:SE 12 months

Ages & Stages Questionnaires®: Social-Emotional  
A Parent-Completed, Child-Monitoring System for Social-Emotional Behaviors  
By Jane Squires, Diane Bricker, & Elizabeth Twombly  
with assistance from Suzanne Yockelson, Maura Schoen Davis, & Younghee Kim  
Copyright © 2002 by Paul H. Brookes Publishing Co.

## 12 Month/1 Year ASQ:SE Questionnaire

(For children ages 9 through 14 months)

.....

Please provide the following information.

Child's name: \_\_\_\_\_

Child's date of birth: \_\_\_\_\_

Today's date: \_\_\_\_\_

Person filling out this questionnaire: \_\_\_\_\_

What is your relationship to the child? \_\_\_\_\_

Your telephone: \_\_\_\_\_

Your mailing address: \_\_\_\_\_  
\_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ ZIP code: \_\_\_\_\_

List people assisting in questionnaire completion: \_\_\_\_\_  
\_\_\_\_\_

Administering program or provider: \_\_\_\_\_

ASQ:SE™



Please read each question carefully and

1. Check the box  that best describes your child's behavior *and*
2. Check the circle  if this behavior is a concern

MOST  
OF THE  
TIME

SOMETIMES

RARELY  
OR  
NEVER

CHECK IF  
THIS IS A  
CONCERN

1. Does your baby laugh or smile at you and other family members?



z

v

x

2. Does your baby look for you when a stranger approaches?

z

v

x

3. Does your baby like to play near and be with family members and friends?

z

v

x

4. Does your baby like to be picked up and held?

z

v

x

5. When upset, can your baby calm down within a half hour?

z

v

x

6. Does your baby stiffen and arch her back when picked up?

x

v

z





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24. Is there anything that worries you about your baby? If so, please explain:

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25. What things do you enjoy most about your baby?

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<http://www.brookespublishing.com>

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## 12 Month/1 Year ASQ:SE Information Summary

Child's name: \_\_\_\_\_ Child's date of birth: \_\_\_\_\_  
Person filling out the ASQ:SE: \_\_\_\_\_ Relationship to child: \_\_\_\_\_  
Mailing address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_  
Telephone: \_\_\_\_\_ Assisting in ASQ:SE completion: \_\_\_\_\_  
Today's date: \_\_\_\_\_ Administering program/provider: \_\_\_\_\_



### SCORING GUIDELINES

1. Make sure the parent has answered all questions and has checked the concern column as necessary. If all questions have been answered, go to Step 2. If not all questions have been answered, you should first try to contact the parent to obtain answers or, if necessary, calculate an average score (see pages 39 and 41 of *The ASQ:SE User's Guide*).
2. Review any parent comments. If there are no comments, go to Step 3. If a parent has written in a response, see the section titled "Parent Comments" on pages 39, 41, and 42 of *The ASQ:SE User's Guide* to determine if the response indicates a behavior that may be of concern.

3. Using the following point system:

Z (for zero) next to the checked box	= 0 points
V (for Roman numeral V) next to the checked box	= 5 points
X (for Roman numeral X) next to the checked box	= 10 points
Checked concern	= 5 points

Add together:

Total points on page 3	= _____
Total points on page 4	= _____
Total points on page 5	= _____
Child's total score	= _____



## SCORE INTERPRETATION

1. *Review questionnaires*

Review the parent's answers to questions. Give special consideration to any individual questions that score 10 or 15 points and any written or verbal comments that the parent shares. Offer guidance, support, and information to families, and refer if necessary, as indicated by score and referral considerations.

2. *Transfer child's total score*

In the table below, enter the child's total score (transfer total score from above).

Questionnaire interval	Cutoff score	Child's ASQ:SE score
12 months/1 year	48	

3. *Referral criteria*

Compare the child's total score with the cutoff in the table above. If the child's score falls above the cutoff and the factors in Step 4 have been considered, refer the child for a mental health evaluation.

4. *Referral considerations*

It is always important to look at assessment information in the context of other factors influencing a child's life. Consider the following variables prior to making referrals for a mental health evaluation. Refer to pages 44–46 in *The ASQ:SE User's Guide* for additional guidance related to these factors and for suggestions for follow-up.

- Setting/time factors  
(e.g., Is the child's behavior the same at home as at school?)
- Development factors  
(e.g., Is the child's behavior related to a developmental stage or a developmental delay?, Have there been any stressful events in the child's life recently?)
- Health factors  
(e.g., Is the child's behavior related to health or biological factors?)
- Family/cultural factors  
(e.g., Is the child's behavior acceptable given cultural or family context?)



## Parent Evaluation of ASQ:SE


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- Time to complete
  - 60% less than 10 minutes
  - 32% 10-20 minutes
- Easy to understand: 96%
- Fun to do: 38%
- Interesting 57%
- Helped me think about my child 71%
- Do it again? 91%



# Challenges

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- Acceptable behavior is influenced by age, cultural and family values, and environmental factors.
  - Lines from immature to temporary to a repeated behavior that can become serious may be blurred.
  - Early identification leads to most effective intervention.
- 



# Psychometrics

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- 3000 questionnaires
- Reflect 2000 U.S. Census population
- 8 intervals: 3-66 months
  - At least 175 cases at each age level
- Most of the time, sometimes, rarely or never
- Opportunity to check if concern
- Cutoff score



# Psychometrics

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- **Gold Standard**
  - **Child Behavior Checklist (CBCL)**
    - Parent completed
  - **Vineland Social-Emotional Early Childhood Scale (SEEC)**
    - Interview with parent
- **1041 children**
- **Completed within 2-3 weeks of ASQ:SE**



# Definitions and Formulas

		Follow-up Assessment Results	
ASQ: SE results		Needs intervention	Okay
	At risk; needs further assessment	True Positives A	False Positives (Over referral) B
	Okay	False Negatives (Under referral) C	True Negatives D

Sensitivity: Percent correctly identified as needing further assessment  $A / A + C$

Specificity: Percent correctly identified as okay:  $D / B + D$

Likelihood Ratio +:  $\text{Sensitivity} / 1 - \text{Specificity}$

**Odds Ratio:** Increase in likelihood a condition is present with positive test compared to if only pre-test odds are known

Likelihood Ratio -:  $1 - \text{Sensitivity} / \text{Specificity}$



# Definitions and Formulas

		Follow-up Assessment Results	
ASQ: SE results		Needs intervention	Okay
	At risk; needs further assessment	True Positives A	False Positives (Over referral) B
	Okay	False Negatives ( Under referral) C	True Negatives D

Over Referral: Percent incorrectly identified as needing further assessment  $B / A + B + C + D$

Under Referral: Percent incorrectly identified as okay:  $C / A + B + C + D$



# Definitions and Formulas

		Follow-up Assessment Results	
ASQ: SE results		Needs intervention	Okay
	At risk; needs further assessment	True Positives A	False Positives (Over referral) B
	Okay	False Negatives ( Under referral) C	True Negatives D

Percent identified as needing further assessment

$$A + B / A + B + C + D$$

Positive Predictive Value: Percent identified at risk who require intervention:

$$A / A + B$$



# Psychometrics

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Age	Cut off	Sensitivity	Specificity	False +	False -	% Agree- ment	Under- referral	Over- referral
12 month	48	71.4	97.2	16.7	5.5	93.0	4.7	2.4
36 month	59	77.8	93.0	26.3	5.7	89.9	4.5	5.7
Overall		78.0	94.5	26.8	4.3	91.8	3.6	4.6

False + and Over-referral rates are high

- ASQ:SE is over screening??
- Criterion measures may be missing children??



# Psychometrics

Age	Cut off	Sensitivity	Specificity	Percent identified at risk	Percent identified at risk who need intervention (Positive Predictive Value)
12 month	48	71.4	97.2	14.1	83.3
36 month	59	77.8	93.0	21.2	73.4
Overall		78.0	94.5	17.2	73.1

Age	Cut off	Sensitivity	Specificity	Likelihood Ratio + LR+	Likelihood Ratio - LR-
12 month	48	0.714	0.972	25.5	0.29
36 month	59	0.778	0.930	11.11	0.234
Overall		0.780	0.945	14.18	0.232



# Scoring Questionnaires with Unanswered Items

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1. Try to get parent to complete.
2. Use an average score.  
Total score/number of items answered
3. 12 month: only if 1-2 items not done
4. 36 month: only if 1-3 items not done
5. Add multiple of average score to completed total score.
6. Compare to cutoff.



# ASQ:SE at a Glance

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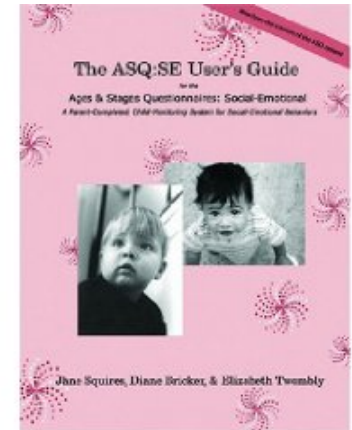
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# Referral Criteria

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- **Above the cutoff**
  - Refer for diagnostic evaluation **OR**
  - Provide information and support and monitor
- **Near the cutoff**
  - May have a problem
  - Refer for diagnostic evaluation **OR**
  - Provide information and support and monitor



# Referral Criteria

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- Use your clinical judgment
  - Don't ignore your concerns
    - Gather information from others who know the child well
    - Pursue further assessment
  - Consider possible inflated scores
    - Lots of “sometimes”
    - Look at information in context
    - Avoid unnecessary referrals



## Don't forget Appendix C, p. 111 Developmental List and Activities

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- Be sure to put in cultural context
- These are for prevention, not intervention
- Not comprehensive
- May need to be modified
- May need additional information on:
  - Feeding, sleep, toileting, discipline, safety



# Resources

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[www.ohiohelpmegrow.org](http://www.ohiohelpmegrow.org)  
1-800-755-4769 (GROW)



# Early Childhood Mental Health Consultation: ODMH

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- Identify and address early childhood behavioral health needs in subsidized child care and Head Start settings in high risk, low income communities
- County based
- ADAMH Boards



# Ohio Assn. of County Behavioral Health Authorities

[www.oacbha.org](http://www.oacbha.org)

The screenshot shows the website's header with the logo and CEO name, a navigation menu, and the main content area. The main content area features a title, a descriptive sentence, a map of Ohio with counties color-coded by board, and a list of board names.

**HEALTH AUTHORITIES**  
Cheri L. Walter, CEO

Navigation: About Us, Committees, Programs, Publications, Resources, Foundation, Legislative, Members Only, County Board Directory, Affiliate Members, Related Links, Calendar

## County Board Directory

Contiguous counties of the same color comprise a multi-county Board.

Click on a County to find out more information about your board.

### Alphabetical Board List

- [ADAMHS Board of Adams, Lawrence, Scioto Counties](#)
- [MHRS Board of Allen, Auglaize, Hardin Counties](#)
- [MH & Recovery Board of Ashland County](#)
- [Ashtabula County MH & Recovery Board](#)

System tray: Internet, 100%



# Ohio Assn. for Infant Mental Health

## www.oaimh.org


OAIMH - Microsoft Internet Explorer provided by Akron Children's Hospital

http://www.oaimh.org/

File Edit View Favorites Tools Help

★ + Social-Emotional Scree... OAIMH x

Home RSS Print Page Tools

  
**about**  
■ **OAIMH**

■ **newsletters**


■ **find a provider**

■ **professions in IMH**

■ **information resources**

■ **collaborative peer groups**

The Ohio Association for Infant Mental Health (OAIMH) is an active affiliate of the World Association for Infant Mental Health. OAIMH promotes and supports healthy development and nurturing relationships for all infants and young children in Ohio. OAIMH provides a forum for interdisciplinary collaboration by advocating for the application of infant mental health principles in services for infants, young children and caregivers. OAIMH offers training and consultation and publishes an educational newsletter as well as other materials. Membership is open to those interested in improving the mental health of infants, young children and families. This Web site offers an abundance of information on our organization and how to become a part of it. We thank you for your visit and hope you will return soon.



[About this site](#)

[Learn about our upcoming events](#)

Done Internet 100%



# Network of Care Ohio

<http://ohio.networkofcare.org>

Network of Care for Behavioral Health

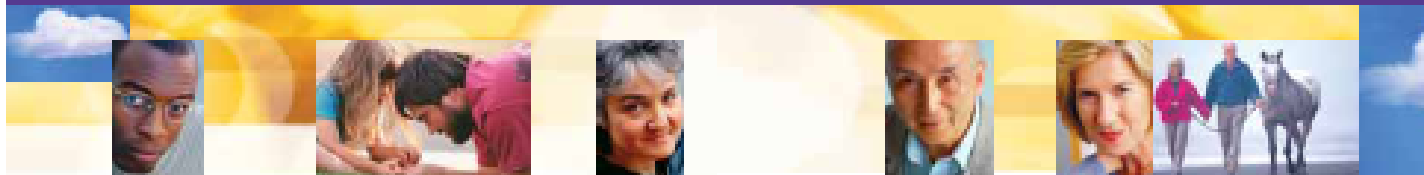
[www.networkofcare.org](http://www.networkofcare.org)

network of care for  
**behavioral health**

**find** services  
**gain** knowledge  
**remain** independent  
**be** heard

Network of Care for Behavioral Health is an online information place for individuals, families and agencies concerned with mental and emotional wellness, substance abuse and developmental disabilities. This online community provides critical information, communication and advocacy tools with a single point of entry. It ensures there is "No Wrong Door" for those navigating the system of behavioral health services, those working to avoid the need for formal services, and those ready to transition out of the behavioral health system.

Regardless of where you begin your search for assistance with behavioral health issues, Network of Care ensures you will find what you need. This Web site can greatly assist in our efforts to protect our greatest human asset – our beautiful minds.





# Resources

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- After third birthday
- Local Schools
- Other Health Impaired
- Emotional Disturbance





# IDEA: Emotional Disturbance

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## ***Emotional Disturbance***

A condition showing one or more of the following characteristics over a long period of time and to a degree that it affects a child's educational performance, resulting in:

- An inability to learn that cannot be explained by intellectual, sensory, or health factors;
- An inability to build or maintain satisfactory relationships with peers and teachers;
- Inappropriate types of behavior or feelings under normal circumstances;

A general pervasive mood of unhappiness or depression; or

- A tendency to develop physical symptoms or fears associated with personal or school problems.

The term includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have a serious emotional disturbance.



# IDEA: Other Health Impairment

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## ***Other Health Impairment***

Having limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment, that is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever or sickle cell anemia, and Tourette syndrome; and adversely affects a child's educational performance.



# Conclusions

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- **Relying on parental worry misses many children**
  - Parents have trouble distinguishing problem from normative behavior in young children
- **There are inexpensive, easy to use tools available for screening**
- **Parents find screening helpful**
- **Early identification makes a difference**
- **Linking parents with treatment for their anxiety and depression makes a difference**
- **There are resources available**