Supplementary Data

Supplementary Table S1. Summary of Factor Loading and Cross Loading (Included Cross Loadings Higher Than >0.30)

	Social communication	Restrictive behavior			Challenging behavior
Q: social communication: reciprocity: affect: * <child's name=""> responds to familiar things</child's>	0.800				0.443
C: social communication: reciprocity: affect: * <child's name=""> responds to familiar things</child's>	0.771	0.496	0.325		
C: social communication: reciprocity: affect: * <child's name=""> smiles in response to smile from familiar person</child's>	0.824			0.509	
C: social communication: reciprocity: affect: * <child's name=""> shows appropriate affection toward familiar people</child's>	0.818			0.361	
C: social communication: reciprocity: affect: * <child's name=""> is sensitive to the emotional needs of others</child's>	0.818	0.442			
C: social communication: reciprocity: affect: * <child's name=""> tries to comfort others when they are hurt or sad</child's>	0.805				
C: social communication: reciprocity: affect: * <child's name=""> comments on other people's emotions</child's>				0.509	
C: social communication: reciprocity: joint attention: * <child's name=""> looks when he/she is called or praised</child's>	0.732			0.583	
Q: social communication: reciprocity: joint attention: * <child's name=""> shows attention to what other people are looking at</child's>	0.774				0.367
C: social communication: reciprocity: joint attention: * <child's name=""> shows attention to what other people are looking at</child's>	0.905	0.370			
C: social communication: reciprocity: joint attention: * <child's name=""> looks where another person is looking and pointing</child's>	0.795	0.382			
C: social communication: reciprocity: joint attention: * <child's name=""> gestures and looks back and forth to others to share the experience</child's>	0.905	0.370			
with them C: social communication: reciprocity: joint attention: * <child's name=""> is</child's>	0.905	0.370			
able to imitate simple actions F: social communication: reciprocity: joint attention: * <child's name=""> imitates an action sometime after he/she originally observed it</child's>	0.756			0.411	0.364
C: social communication: reciprocity: joint attention: * <child's name=""> imitates an action sometime after he/she originally observed it</child's>	0.818	0.442			
C: social communication: reciprocity: joint attention: * <child's name=""> imitates or reflects facial expressions</child's>	0.777		0.476		
C: social communication: reciprocity: play and creativity: * <child's name=""> gives things to others for the purpose of sharing</child's>	0.905	0.370			
C: social communication: reciprocity: play and creativity: * <child's name=""> uses objects in place of others</child's>	0.905	0.370			
Q: social communication: reciprocity: play and creativity: * <child's name=""> engages in make believe play with another person</child's>	0.806			0.337	
C: social communication: reciprocity: play and creativity: * <child's name=""> engages in make believe play with another person</child's>	0.818	0.442			
C: social communication: reciprocity: play and creativity: * <child's name=""> can think creatively and take on a different perspective</child's>	0.789	0.382			
C: social communication: reciprocity: play and creativity: * <child's name=""> spends time with friends who are not family members</child's>	0.695	0.571			
C: social communication: reciprocity: play and creativity: * <child's name=""> is able to get along with others of a similar age</child's>	0.830	0.352			
C: social communication: reciprocity: conversation: * <child's name=""> is able to end conversations appropriately</child's>	0.824			0.509	
C: social communication: nonverbal communication: facial expression: * <child's name=""> shows a range of facial expressions</child's>	0.617	0.355			
I: social communication: nonverbal communication: facial expression: * <child's name=""> uses facial expressions that are not appropriate to the situation</child's>	0.713	0.344			

(continued)

	Social communication	Restrictive behavior			Challenging behavior
F: social communication: nonverbal communication: eye contact: * <child's name=""> uses eye contact and gazes appropriately</child's>	0.763	0.371			
C: social communication: nonverbal communication: eye contact: * <child's name=""> uses eye contact and gazes appropriately</child's>	0.741	0.414			
F: social communication: nonverbal communication: eye contact: * <child's name=""> looks at others in anticipation of their actions</child's>	0.795	0.353			
F: social communication: nonverbal communication: eye contact: * <child's name=""> makes eye contact when communicating or being spoken to</child's>	0.759	0.370			
C: social communication: nonverbal communication: eye contact: * <child's name=""> makes eye contact when communicating or being spoken to</child's>	0.739	0.432			
C: social communication: nonverbal communication: gestures: * <child's name=""> waves "Hello" and "Goodbye"</child's>	0.905	0.370			
C: social communication: nonverbal communication: gestures: * <child's name=""> uses conventional gestures</child's>	0.905	0.370			
C: social communication: nonverbal communication: gestures: * <child's name=""> requests items by pointing</child's>	0.905	0.370			
C: social communication: nonverbal communication: gestures: * <child's name=""> requests items with an open-handed reach</child's>	0.754			0.473	
C: social communication: nonverbal communication: gestures: * <child's name=""> combines gestures with vocalizations to enhance communication</child's>	0.789	0.382			
C: social communication: verbal communication: * <child's name=""> has an unusual tone of voice when speaking</child's>	0.780	0.450			
C: social communication: verbal communication: * <child's name=""> offers information about his/her own thoughts or feelings</child's>	0.905	0.370			
I: social communication: verbal communication: * <child's name=""> misses the point of jokes</child's>	0.820			0.458	
C: restrictive repetitive behavior: resistance to change: * <child's name=""> is able to adapt to change and find new ways to solve problems</child's>		0.771	0.453		
I: restrictive repetitive behavior: stereotypical behavior: * <child's name=""> makes repetitive movements</child's>		0.797			0.525
F: restrictive repetitive behavior: hypersensitivity: * <child's name=""> touches or strokes objects</child's>		0.860	0.321		
C: mental health: mood: * <child's name=""> has sudden changes in mood</child's>	0.756		0.819		
F: mental health: mood: * <child's name=""> appears sad, unhappy, or depressed</child's>	0.456		0.712		
C: mental health: mood: * <child's name=""> is cheerful and has fun</child's>	0.657		0.819		
C: mental health: mood: * <child's name=""> seems lonely</child's>	0.543		0.704		
F: mental health: mood: * <child's name=""> complains of loneliness</child's>	0.469		0.752		
C: mental health: mood: * <child's name=""> complains of loneliness F: mental health: irritability: *<child's name=""> demands must be met</child's></child's>	0.426 0.478		0.572 0.682		
<pre>immediately C: mental health: irritability: *<child's name=""> demands must be met immediately</child's></pre>		0.353	0.697		
F: mental health: irritability: * <child's name=""> cries over minor annoyances and hurts</child's>	0.754		0.767		
F: mental health: irritability: * <child's name=""> is irritable and whiny</child's>	0.685		0.700		
F: mental health: anxiety: * <child's name=""> worries about his/her physical health</child's>	0.698		0.867		
I: mental health: anxiety: * <child's name=""> worries about his/her physical health</child's>	0.645		0.887		
F: mental health: anxiety: * <child's name=""> clings to adults or is too dependent on them</child's>	0.758		0.843		
I: self-regulation: impulsivity: * <child's name=""> acts without thinking</child's>	0.568			0.778	
I: self-regulation: impulsivity: * <child's name=""> speaks without thinking</child's>				0.686	
I: self-regulation: impulsivity: * <child's name=""> acts recklessly</child's>	0.458			0.730	
C: self-regulation: motivation: * <child's name=""> is withdrawn</child's>	0.568			0.795	
C: self-regulation: motivation: * <child's name=""> prefers to play alone</child's>		0.352		0.830	
C: self-regulation: motivation: * <child's name=""> prefers to be alone</child's>	0.554	0.333		0.750	

SUPPLEMENTARY TABLE S1. (CONTINUED)

	Social communication	Restrictive behavior		Challenging behavior
C: self-regulation: motivation: * <child's name=""> leaves tasks unfinished</child's>	0.568		0.791	
C: self-regulation: motivation: * <child's name=""> fails to complete tasks</child's>	0.689	0.370	0.905	
C: self-regulation: motivation: * <child's name=""> has difficulties paying attention to fun activities</child's>	0.569		0.791	
C: self-regulation: motivation: * <child's name=""> will respond to requests to do things that he/she knows how to do</child's>	0.598	0.370	0.905	
F: challenging behavior: aggression: * <child's name=""> is cruel or mean to others</child's>	0.685			0.800
I: challenging behavior: elopement: * <child's name=""> runs away</child's>	0.685			0.786

Anchor combinations: frequency (F), intensity (I), quality (Q), context (C). \ast Child's name is inserted in the text presented to parents.