USER PACKET CONTENTS
Version 2.0

The full user guide, including relevant publications, is available from the
author at Cristan.Farmer@NIH.gov
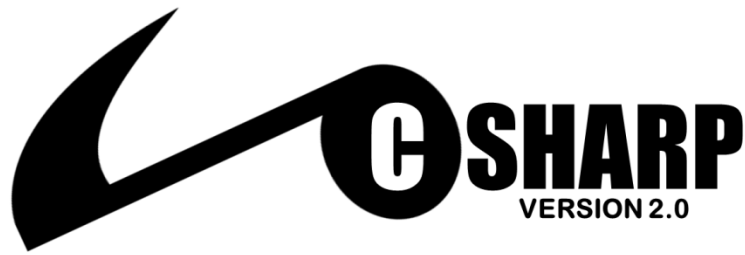
Introduction

The *Children's Scale of Hostility and Aggression: Reactive/Proactive* (C-SHARP) is an instrument for measuring aggressive and hostile behavior in children with developmental disabilities. At the time of development, there were other scales for aggression, but none were appropriate for the type of in-depth measurement of aggression required by many studies in the developmental disabilities. The scale was initially derived through factor analysis, using a sample of 365 children and adolescents with developmental disabilities. The resulting factor structure, which uses only 48 of the 58 items, was confirmed in a separate study of 406 children with ASD and 238 children without ASD. This User's Packet contains all relevant publications, as well as instructions for use and translation. Please pay special attention to the two memos regarding the new version and the publication errors, which are found on pages 5 and 6, respectively.

User Agreement and Instructions

Professionals working in the mental health field are welcome to copy and use the C-SHARP for clinical and research purposes. This includes physicians, psychologists, social workers, counselors, and individuals working under the direct supervision of such professionals. Non-professionals are urged not to make copies of these instruments.

We ask that all individuals who work with the C-SHARP abide by the understandings outlined in this *Agreement* document.

1. Please do not alter the appearance, wording, or scoring system without prior agreement of the developers, Cristan Farmer (Cristan.Farmer@nih.gov) or Michael Aman (aman.1@osu.edu).

2. Please provide appropriate citation of the C-SHARP in any publication resulting from your work with the C-SHARP. Farmer & Aman (2009) should be used as the general reference for the C-SHARP; Farmer et al. (2016) should be used as the reference for the psychometric properties of the C-SHARP.

   Farmer, C. & Aman, M. (2009). Development of the Children's Scale of Hostility and Aggression: Reactive/Proactive (C-SHARP). *Research in Developmental Disabilities*, 30, 1155-1167.

   Farmer, C.A., Kaat, A., Mazurek, M., Lainhart, J., DeWitt, M.B., Cook, Jr., E., Butter, E., & Aman, M.G. (2016). Confirmation of the Factor Structure and Measurement Invariance of the Children's Scale of Hostility and Aggression: Reactive/Proactive (C-SHARP) in Clinic-Referred Children with and without ASD. *Journal of Child and Adolescent Psychopharmacology, 26(1),* 10-18.

Translation Instructions & Agreement

The list of completed C-SHARP translations is available from Cristan Farmer (Cristan.Farmer @nih.gov). If the required translation has not yet been completed, the User may choose to undertake a tranlsation. To the extent possible, please make a note of the following. I routinely ask all people translating the C-SHARP to report what they can regarding the procedures that follow:

1) When translating the scale, please place the following statement at the bottom of the first page of the C-SHARP: "Copyright 2009, translated with permission of authors, Cristan Farmer, Ph.D. and Michael Aman, Ph.D."

2) Please provide a copy of the translated C-SHARP to me with the following information:
   a) Date of translation (month, year)
   b) Company or person conducting the translation (a postal address, email address, and business phone number would be most appreciated)
   c) Method used for the translation: e.g., "translate English version into Thai and back translate this for validation."

3) If possible, please involve Michael Aman and me in the back-translation process. I have noticed that some translations get the intended meaning of scale items wrong. If the intention of the original language is misunderstood, then no translation—no matter how competent the translator—will be accurate.

4) Please send me an electronic copy of the C-SHARP translation once it is completed (Cristan.Farmer@nih.gov).

Memo Regarding C-SHARP Version 2.0

The original factor structure of the C-SHARP utilized only 48 of the 58 items (Farmer & Aman, 2009). The 10 non-algorithm items were retained in case of a change in structure of the C-SHARP. In a subsequent study, we confirmed the factor structure and its invariance across ASD and non-ASD clinical samples (Farmer et al., 2016). Given this evidence, we have removed the 10 non-algorithm items to produce the C-SHARP Version 2.0. The content of the scale and the scoring is identical to Version 1.0, but the item numbers have been changed. Users should take care to ensure that they are using the correct version of the C-SHARP. The correct reference for Version 2.0 remains the original publication (Farmer & Aman, 2009), although the User should indicate in the text of the publication that Version 2.0 was used.

Memo Regarding Publication Errors

Farmer & Aman (2010) and Farmer & Aman (2011) contain two errors that may impact Users. In both publications, the Bullying subscale mistakenly lists item 37 (*Pulls others' hair*), which **should not** appear on this subscale, rather than item 39 (*Spits*), which **should** appear on this subcsale. As a result, the 2011 publication incorrectly lists item 39 (*Spits*) as a non-algorithm item, and incorrectly omits item 56 (*Doesn't seem truly sorry*) from the non-algorithm item list.

Users of the original C-SHARP should ensure that they are using the appropriate scoring structure, which can be found in the original publication (Farmer & Aman, 2009), and is also available from the authors. These errors have been corrected in publications after 2011 and do not appear in the C-SHARP Version 2.0.

Additional questions should be directed to Cristan Farmer (Cristan.Farmer@nih.gov).

C-SHARP Normative Data

Full-scale normative data are not yet available on the C-SHARP. However, the available published data may be instructive in determining whether scores are higher or lower than expected, given sample characteristics. The published data come from two samples, that reported on in Farmer & Aman (2009, 2010, and 2011) and that reported on in Farmer et al. (2015) and Farmer et al. (2016). The Farmer & Aman sample was composed of children who received special education services from the State of Iowa, and all phenotypic information was gathered via parent report. The Farmer et al. sample was drawn from clinics for children and adolescents with developmental disabilities, and is primarily composed of children suspected of having an ASD. The children in this sample underwent an extensive evaluation and more complete phenotypic data are available. After careful consideration of the respective publications describing each of the samples in more detail, Users may select whichever sample best reflects the population under study. For convenience, the mean subscale scores are reproduced here.

Publication	Sample Size	Verbal	Bullying	Covert	Hostility	Physical
Farmer & Aman, 2009, 2011						
All Participants	344	2.22 (4.98)	4.77 (6.02)	4.50 (5.66)	5.81 (6.03)	1.77 (2.61)
Females Only	139	2.13 (5.42)	3.86 (6.06)	4.38 (5.95)	5.05 (5.56)	1.42 (2.65)
Males Only	204	2.30 (4.69)	5.40 (5.93)	4.58 (5.49)	6.35 (6.29)	2.02 (2.56)
12 years and younger	177	2.29 (4.96)	4.26 (5.74)	4.38 (5.53)	5.61 (6.02)	1.31 (2.12)
Older than 12 years	167	2.15 (5.03)	5.31 (6.26)	4.62 (5.81)	6.03 (6.05)	2.26 (2.97)
ASD Only	121	2.30 (4.30)	6.60 (5.10)	4.10 (4.40)	7.20 (5.30)	2.60 (2.60)
Non-ASD Only	244	2.30 (4.60)	4.10 (5.60)	4.50 (5.10)	5.30 (5.50)	1.50 (2.30)
Farmer et al., 2015						
ASD Only	414	3.75 (6.14)	6.29 (6.42)	6.04 (6.08)	8.71 (6.98)	1.84 (2.70)
Non-ASD Only	243	5.40 (7.05)	9.33 (8.42)	8.60 (7.05)	10.51 (7.50)	2.98 (4.02)

Farmer, C. & Aman, M. (2009). Development of the Children's Scale for Hostility and Aggression: Reactive/Proactive. *Research in Developmental Disabilities, 30,* 1155-1167.

Farmer, C. & Aman, M. (2011). Aggressive behavior in a sample of children with autism spectrum disorders. *Research in Autism Spectrum Disorders, 5(1),* 317-323.

Farmer, C., Butter, E., Mazurek, M., Cowan, C., Lainhart, J., Cook., E., DeWitt, M., & Aman, M. (2015). Aggression in children with autism spectrum disorders and a clinic-referred comparison group. *Autism: International Journal of Research and Practice, 19(3),* 281-291.

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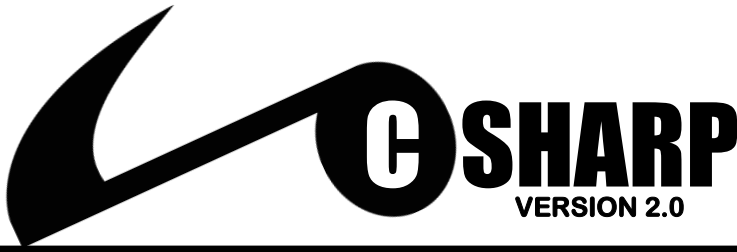
Child Name: _____

Child Gender: ☐ Female ☐ Male

Child Birthdate ___/___/___

Your Name: _____

Your Relationship to Child: _____

Today's Date: ___/___/___

Instructions

Problem Scale

Circle the number that describes your child's behavior.

0 = Does not happen
1 = Mild or infrequent problem
2 = Moderately serious and/or frequent problem
3 = Severe and/or very frequent problem

If this answer is "0," do not select a "Who starts it?" rating, and move on.

If this answer is a "1," "2," or "3," circle one "Who starts it?" rating for the item.

Who starts it? Scale

Rate this only if you rated the item with 1, 2, or 3 on the Problem Scale.

Provocation refers to any action leading to the aggression, no matter how mild or severe, which seems to anger or upset your child and trigger the behavior.

-2 = *Only* when provoked and/or unplanned
-1 = *Usually* provoked and/or unplanned
0 = Equally likely to be provoked or to start it
1 = *Usually* "starts it," without provocation
2 = *Always* "starts it," without provocation

In the past month, how well does each item describe your child?

Remember to choose a "Who Starts It?" rating if you select a "Problem Scale" rating of 1, 2, or 3.

	Problem Scale (Doesn't Happen → Severe/Frequent)				Who Starts It? (Provoked → Not Provoked)				
1. Sneers, "makes faces" at others	0	1	2	3	-2	-1	0	1	2
2. Is "sneaky;" does things "on the sly"	0	1	2	3	-2	-1	0	1	2
3. Pinches others	0	1	2	3	-2	-1	0	1	2
4. Is resentful over seemingly minor issues	0	1	2	3	-2	-1	0	1	2
5. Breaks others' things	0	1	2	3	-2	-1	0	1	2
6. Is quick to anger ("hot-headed")	0	1	2	3	-2	-1	0	1	2
7. Takes others' things by force	0	1	2	3	-2	-1	0	1	2
8. Broods, pouts, or is sullen	0	1	2	3	-2	-1	0	1	2
9. Calls others insulting names in their absence	0	1	2	3	-2	-1	0	1	2
10. Shoves or pushes others	0	1	2	3	-2	-1	0	1	2
11. Crowds others (invades their personal space)	0	1	2	3	-2	-1	0	1	2
12. Says, "I hate you" or makes other hurtful statements	0	1	2	3	-2	-1	0	1	2
13. Bites others	0	1	2	3	-2	-1	0	1	2
14. Insults others to their faces	0	1	2	3	-2	-1	0	1	2
15. Throws objects at others	0	1	2	3	-2	-1	0	1	2
16. Reacts suddenly or impulsively to minor provocations	0	1	2	3	-2	-1	0	1	2
17. Shouts at others in anger	0	1	2	3	-2	-1	0	1	2
18. Gets mad when caught behaving badly	0	1	2	3	-2	-1	0	1	2
19. Is overly argumentative	0	1	2	3	-2	-1	0	1	2
20. Uses profanity to shock or offend others	0	1	2	3	-2	-1	0	1	2

OVER ➡

	Problem Scale				Who Starts It?	

In the past month, how well does each item describe your child?

Remember to choose a "Who Starts It?" rating if you select a "Problem Scale" rating of 1, 2, or 3.

	Doesn't Happen			Severe/Frequent	Provoked				Not Provoked
21. Tickles or physically teases others, even after being asked to stop....	0	1	2	3	-2	-1	0	1	2
22. Steals from others when they aren't looking...	0	1	2	3	-2	-1	0	1	2
23. Reacts to insults or teasing by lashing out physically..........................	0	1	2	3	-2	-1	0	1	2
24. Calls others insulting names to their faces..	0	1	2	3	-2	-1	0	1	2
25. Trips others..	0	1	2	3	-2	-1	0	1	2
26. Head-butts others..	0	1	2	3	-2	-1	0	1	2
27. Makes insulting comments about others behind their backs................	0	1	2	3	-2	-1	0	1	2
28. Breaks own belongings..	0	1	2	3	-2	-1	0	1	2
29. Charges at others...	0	1	2	3	-2	-1	0	1	2
30. Verbally teases others, even after being asked to stop.........................	0	1	2	3	-2	-1	0	1	2
31. If caught, denies having behaved badly...	0	1	2	3	-2	-1	0	1	2
32. Pulls others' hair...	0	1	2	3	-2	-1	0	1	2
33. When angry, is slow to cool off...	0	1	2	3	-2	-1	0	1	2
34. Spits at others...	0	1	2	3	-2	-1	0	1	2
35. Says "I hate [someone]" or other hurtful things when the person isn't there.....	0	1	2	3	-2	-1	0	1	2
36. Lashes out at people who are in his/her space....................................	0	1	2	3	-2	-1	0	1	2
37. Starts trouble by baiting others..	0	1	2	3	-2	-1	0	1	2
38. If caught, makes excuses for bad behavior..	0	1	2	3	-2	-1	0	1	2
39. Scratches others with fingernails...	0	1	2	3	-2	-1	0	1	2
40. Glares at others...	0	1	2	3	-2	-1	0	1	2
41. Encourages others to gang up on someone (physically OR verbally)...	0	1	2	3	-2	-1	0	1	2
42. Hits others with objects..	0	1	2	3	-2	-1	0	1	2
43. Is often grouchy...	0	1	2	3	-2	-1	0	1	2
44. Verbally threatens others with physical harm......................................	0	1	2	3	-2	-1	0	1	2
45. Hits or shoves others forcefully	0	1	2	3	-2	-1	0	1	2
46. Makes unwanted sexual comments to others..	0	1	2	3	-2	-1	0	1	2
47. Gets revenge after time has passed and the other person is not on guard....	0	1	2	3	-2	-1	0	1	2
48. Tries not to get caught while doing harmful things to others...........	0	1	2	3	-2	-1	0	1	2

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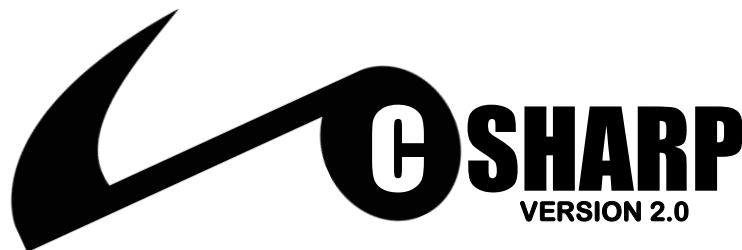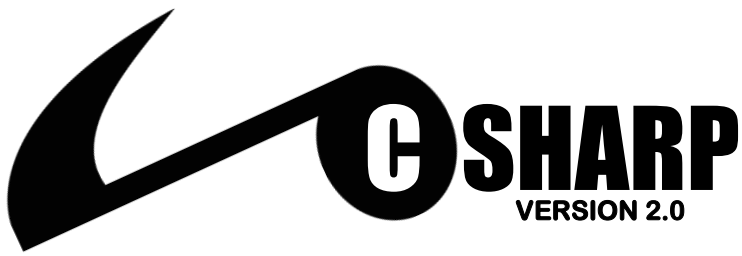
| Child Name: _____ |
| Child Age: _____ |
| Rater : _____ |
| Date: ___/___/___ |

	Item	Problem Scale	Provocation Scale
Verbal Aggression	9		
	12		
	14		
	20		
	23		
	24		
	27		
	30		
	35		
	41		
	44		
	46		
Total			
Bullying	5		
	7		
	10		
	11		
	15		
	22		
	28		
	29		
	34		
	37		
	42		
	45		
Total			
Covert Aggression	1		
	2		
	8		
	12		
	19		
	21		
	22		
	31		
	38		
	40		
Total			

	Item	Problem Scale	Provocation Scale
Hostility	4		
	6		
	8		
	16		
	17		
	18		
	33		
	36		
	43		
Total			
Physical Aggression	3		
	13		
	25		
	26		
	32		
	39		
	47		
	48		
Total			