

## Supplemental tables

Table S1. *Mixed Modeling Fixed Effect Estimates of Group by Age on disinhibited social engagement disorder (DSED) Signs*

Table S2. *Fit Indices for Growth Mixture Models*

*Note:* The 5-profile model did not converge and is not a viable model. BIC = Bayesian Information Criteria. LMR-LRT = Lo-Mendel-Rubin likelihood ratio test.

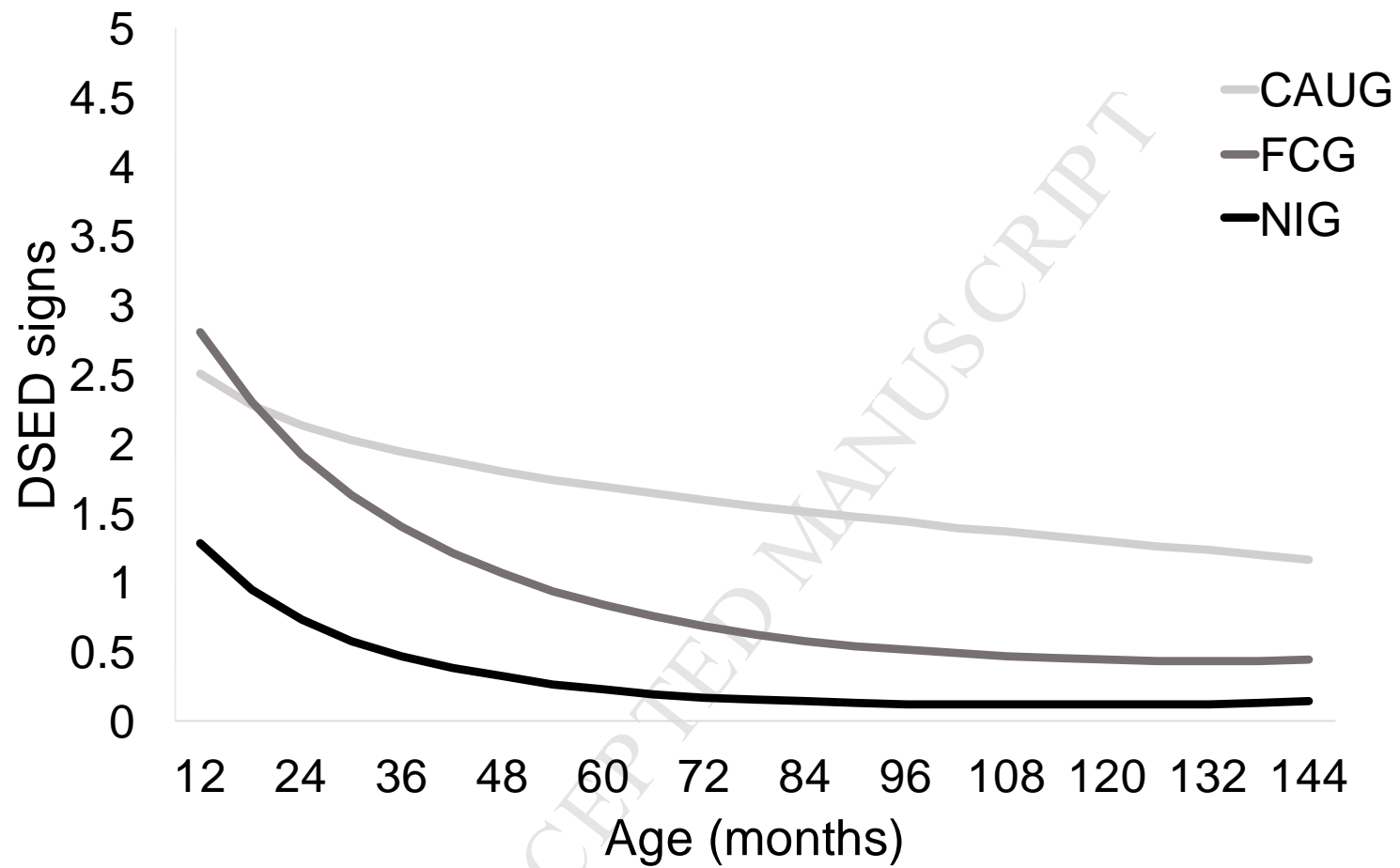
Table S3. *Mean Differences in Age Entered Foster Care (FCG only) and Age First Placed into a Family (FCG and CAUG only).*

*Note:* CAUG = care as usual group. E = Elevated. ED = Early decreasing. FCG = foster care group. M = Minimal. PL = Persistent low.

Supplemental figure

*Figure S1.* Consolidated Standards of Reporting Trials (CONSORT) figure.

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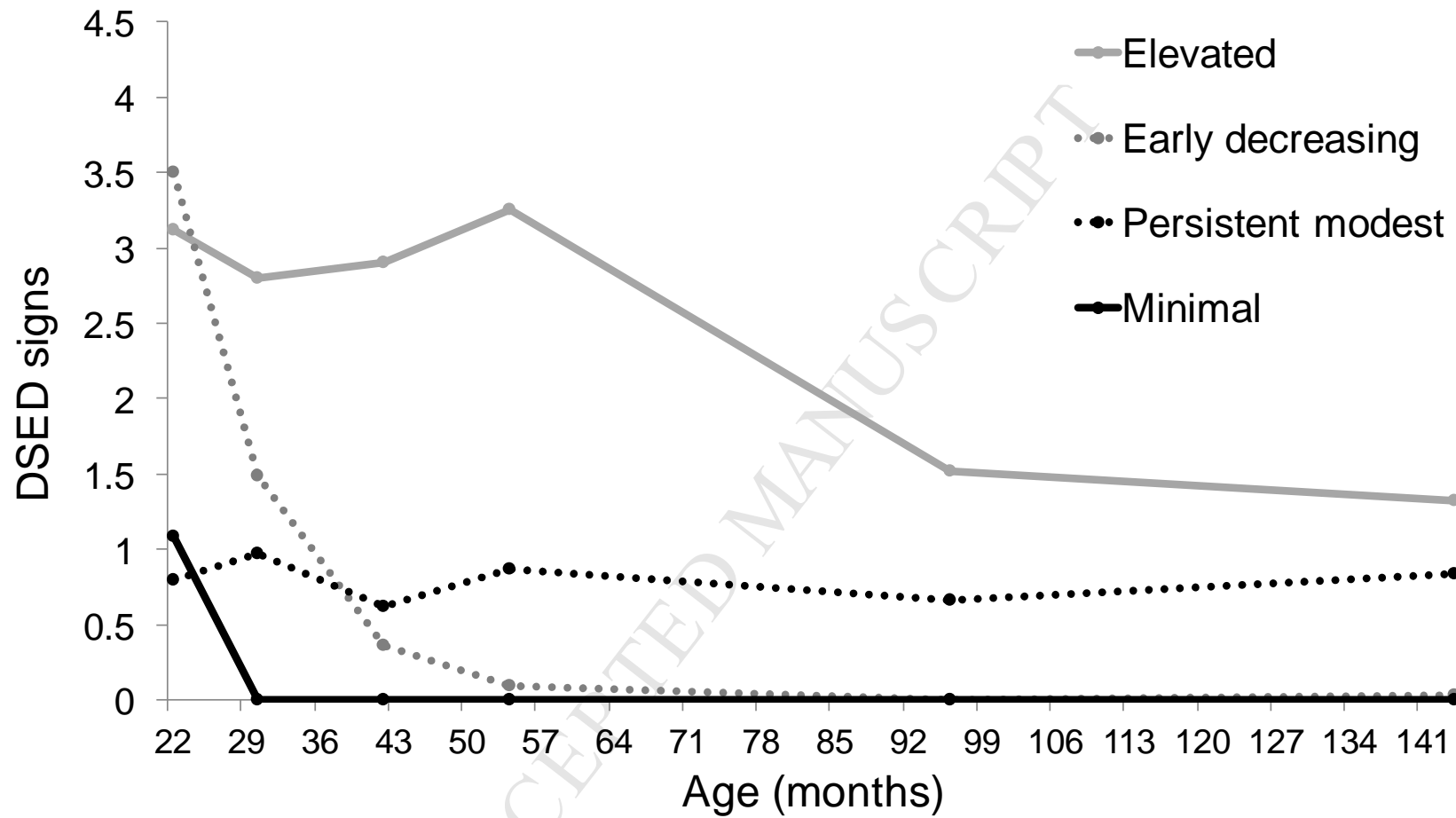


Table S1

*Mixed Modeling Fixed Effect Estimates of Group by Age on DSED Signs*

Variable	<i>F</i>	<i>df</i>	<i>p</i> -value
Group	14.98	3, 860.86	<.001
Age (months)	0.01	1, 832.37	.92
Quadratic Age	1.78	1, 821.28	.18
Cubic Age	2.43	1, 813.05	.12
Group by Age	2.76	2, 834.37	.06
Group by Quadratic Age	3.13	2, 822.06	.04
Group by Cubic Age	2.98	2, 813.28	.05

Table S2

*Fit Indices for Growth Mixture Models*

	BIC	LMR-LRT		BLRT	
		Loglikelihood value	<i>p</i> -value	Loglikelihood value	<i>p</i> -value
2-profile	2662.095	-1332.561	0.024	-1332.561	< .001
3-profile	2664.462	-1312.629	0.003	-1312.629	0.013
4-profile	2669.571	-1305.918	0.175	-1305.918	0.040
5-profile	-	-	-	-	-

*Note.* The 5-profile model did not converge and is not a viable model. BIC = Bayesian Information Criteria. LMR-LRT = Lo-Mendel-Rubin likelihood ratio test.

Table S3

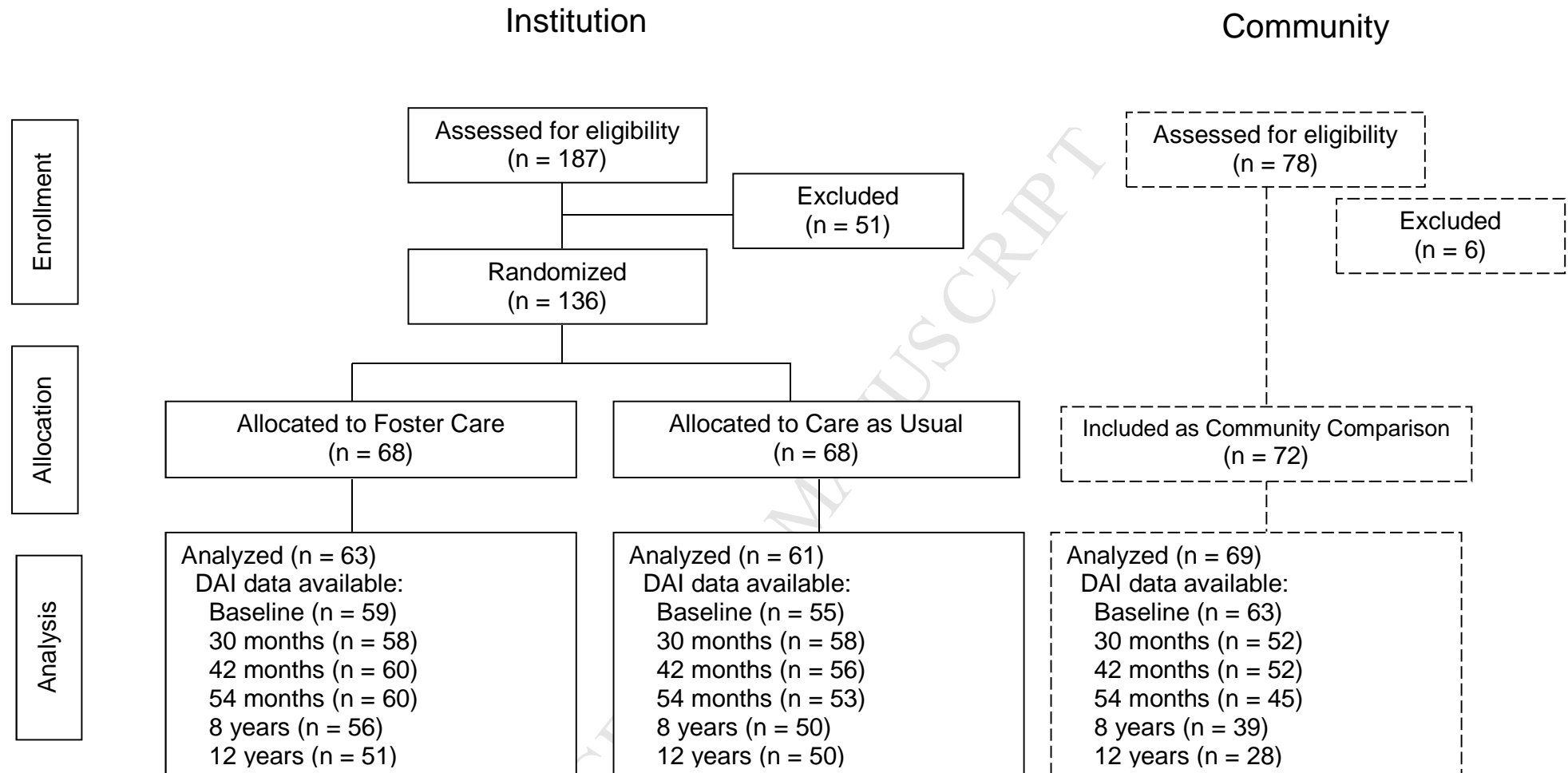
*Mean Differences in Age Entered Foster Care (FCG only) and Age First Placed into a Family (FCG and CAUG only)*

	Elevated (E)		Persistent low (PL)		Minimal (M)		Early decreasing (ED)		<i>F</i> ( <i>df</i> )	Partial $\eta^2$	Pairwise comparisons
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Age entered foster care	25.99	6.00	22.06	6.13	18.61	7.27	23.98	7.16	3.41(3, 56)*	0.155	E > M ED > M
Age first placed in a family	35.59	15.76	35.83	17.93	18.18	6.97	25.35	13.11	7.24(3, 114)***	0.160	E > ED, M PL > ED, M
Placement disruptions through 54 months	2.75	1.27	3.07	0.98	2.50	0.94	2.67	0.86	1.05(2, 111)	0.028	-
Placement disruptions through 12 years <sup>a</sup>	3.49	1.65	4.45	1.77	2.42	0.90	3.16	1.21	4.29(3,99)**	0.115	E > M PL > E, ED, M
Percent time in institution through 54 months	62.63	23.05	61.48	27.62	29.60	12.65	39.18	19.22	11.91(3,115)***	0.243	E > ED, M PL > ED, M
Percent time in institution through 12 years <sup>a</sup>	37.69	27.82	34.02	26.88	10.53	4.47	15.82	10.60	0.41(3, 99)	0.012	-

*Note.* FCG = foster care group. CAUG = care as usual group. E = Elevated. PL = Persistent low. M = Minimal. ED = Early decreasing.

<sup>a</sup>Controlling for percent time through 54 months.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .





## Supplement 1: Additional information on research participants

Research participants in the present study were drawn from a randomized control trial called the Bucharest Early Intervention Project<sup>1</sup> investing foster care as an alternative intervention for children in institutional care in Romania. Originally, 187 children from six institutions in Bucharest, Romania were screened for inclusion in the study. Fifty-one children were excluded for medical reasons including genetic syndromes and microcephaly. The remaining 136 children were assessed and randomized to the care as usual in the institution group (CAUG;  $n=68$ ) or the foster care group (FCG;  $n=68$ ). The CAUG comprised 33 boys and 35 girls and the FCG comprised 34 boys and 34 girls. The groups did not differ based on age, sex, ethnicity, birth weight, developmental quotient, observed caregiving environment, or caregiver rated behavioral problems.<sup>2</sup> At baseline, the children were on average 22 months of age (range=6-31 months of age) and had lived in an institution for at least half of their life.

Seventy-two community comparison children matched on age and sex were recruited from the same hospitals in which the FCG and CAUG children were born and comprised the never institutionalized group (NIG). The NIG comprised 31 boys and 41 girls and did not differ from the ever-institutionalized children in mean age or sex.

## References

1. Zeanah CH, Nelson CA, Fox NA, et al. Designing research to study the effects of institutionalization on brain and behavioral development: The Bucharest Early Intervention Project. *Dev Psychopathol.* 2003;15(4):885-907. doi:10.1017/S0954579403000452.
2. Smyke AT, Koga SF, Johnson DE, et al. The caregiving context in institution-reared and family-reared infants and toddlers in Romania. *J Child Psychol Psychiatry Allied Discip.* 2007;48(2):210-218. doi:10.1111/j.1469-7610.2006.01694.x.