SUPPLEMENTARY
For

The Effects of Mild but Chronic Stress at School on Brain Development: A Comparative Morphometric Study Between Traditionally and Montessori-schooled children

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Table S1

Liner Regression Factors Predicting Hippocampus Volume in 3-12 Years Old Schooled Children

Predictor	Estimate	*SE*	95% Confidence Interval		*T*	*P*
			Lower	Upper		
Intercept [a]	.51143	.03686	.43809	.58477	13.875	< .001
Age	.00982	.00447	9.34e-4	.01871	2.199	.031
Gender:						
M – F	.04273	.05282	-.06236	.14782	.809	.421
Pedagogy:						
T – M	.15186	.04755	.05725	.24647	3.194	.002
Age ✻ Gender:						
age ✻ (M – F)	-.00785	.00600	-.01979	.00410	-1.307	.195
Age ✻ Pedagogy:						
age ✻ (T – M)	-.01884	.00566	-.03010	-.00758	-3.330	< .001
Gender ✻ Pedagogy:						
(M – F) ✻ (T – M)	-.20444	.07164	-.34698	-.06190	-2.854	.005
Age ✻ Gender ✻ Pedagogy:						
age ✻ (M – F) ✻ (T – M)	.02448	.00811	.00833	.04062	3.017	.003

Note. [a] Represents reference level ✻ represents an interaction. In the predictor column, M below gender represents male, while F represents female; in the same column, T below Pedagogy represents traditionally schooled children, while M represents Montessori schooled children.

Table S2

Liner Regression Factors Predicting Amygdala Volume in 3-12 Years Old Schooled Children

Predictor	Estimate	*SE*	95% Confidence Interval		*T*	*P*
			Lower	Upper		
Intercept [a]	0.20088	0.02161	0.15788	0.24388	9.296	< .001
Age	0.00417	0.00262	-0.00104	0.00938	1.591	0.115
Gender:						
M – F	0.02045	0.03097	-0.04116	0.08206	0.661	0.511
Pedagogy :						
T – M	0.05778	0.02788	0.00232	0.11325	2.073	0.041
Pedagogy ✻ age :						
(T – M) ✻ age	-0.00741	0.00332	-0.01401	-8.06e−4	-2.233	0.028
Pedagogy ✻ Gender :						
(T – M) ✻ (M – F)	-0.06747	0.04200	-0.15103	0.01610	-1.606	0.112
Age ✻ Gender :						
Age ✻ (M – F)	-0.00303	0.00352	-0.01003	0.00398	-0.860	0.392
Pedagogy✻ age ✻ Gender:						
(T – M) ✻ age ✻ (M– F)	0.00908	0.00476	-3.83e−4	0.01854	1.909	0.060

Note. [a] Represents reference level ✻ represents an interaction. In the predictor column, M below gender represents male, while F represents female; in the same column, T below Pedagogy represents traditionally schooled children, while M represents Montessori schooled children.

Table S3

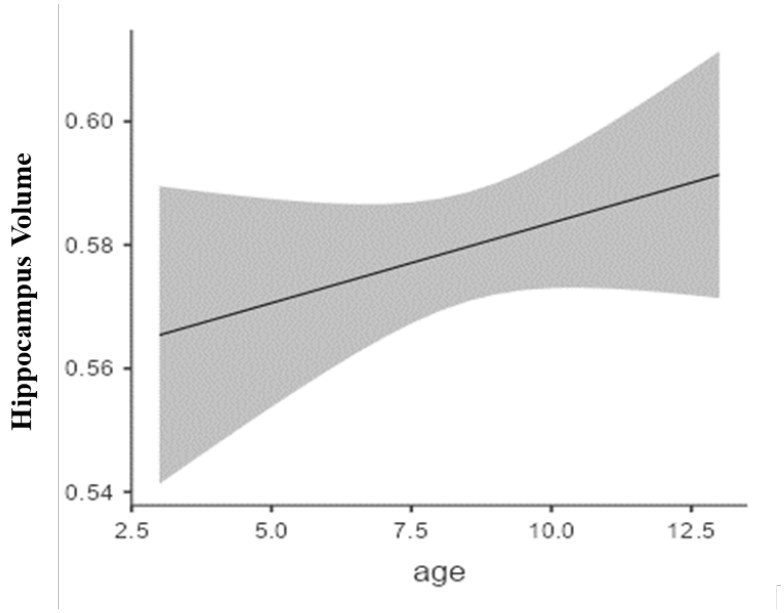
Liner Regression Factors Predicting Medial Prefrontal Cortex (mPFC) Volume in 3-12 Years Old Schooled Children

Predictor	Estimate	*SE*	95% Confidence Interval		*T*	*P*
			Lower	Upper		
Intercept [a]	1.54193	.1597	1.2242	1.85969	9.655	< .001
Age	.00245	.0194	-.0361	.04095	.126	.900
Gender:						
M – F	.18106	.2288	-.2743	.63638	.791	.431
Pedagogy:						
T – M	.34580	.2060	-.0641	.75571	1.679	.097
Pedagogy ✻ Gender:						
(T – M) ✻ (M – F)	-.90805	.3104	-1.5256	-.29048	-2.926	.004
Pedagogy ✻ age:						
(T – M) ✻ age	-.04043	.0245	-.0892	.00835	-1.649	.103
Gender ✻ age:						
(M – F) ✻ age	-.02322	.0260	-.0750	.02854	-.893	.375
Pedagogy ✻ Gender ✻ age:						
(T – M) ✻ (M – F) ✻ age	.09654	.0352	.0266	.16648	2.746	.007

Note. [a] Represents reference level ✻ represents an interaction. In the predictor column, M below Gender represents male, while F represents female; in the same column, T below Pedagogy represents traditionally schooled children, while M represents Montessori schooled children.

Figure S1

Estimated Marginal Means in Linear Regression Factors Predicting Hippocampus Volume With Age in 3-12 Years Old Schooled Children



Note. Age significantly predicted a global increase in the hippocampus volume for Montessori and traditionally schooled children (*M*=0.580, *SE*=0.004).

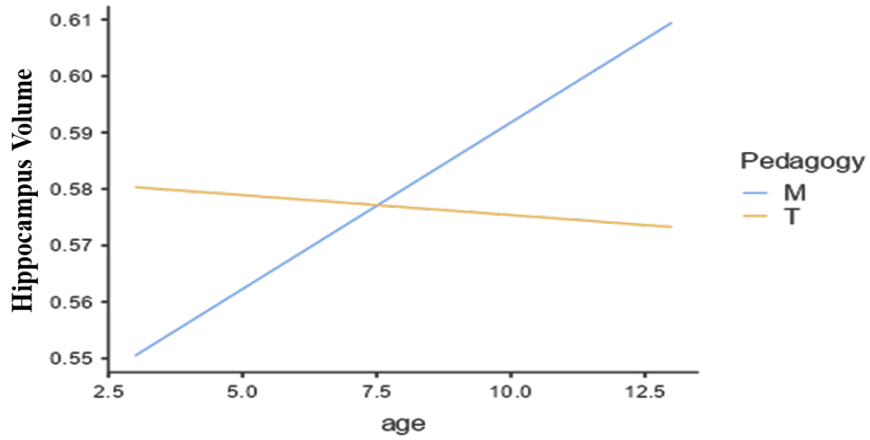
Figure S2

Estimated Marginal Means in Linear Regression Factors Predicting Hippocampus Volume With Pedagogy in 3-12 Years old schooled children

Note. Pedagogy significantly predicted a higher increase in hippocampus volume for Montessori schooled children (*M*=0.583, *SE*=0.006) compared to traditionally schooled children (*M*=0.576, *SE*=0.006).

Figure S3

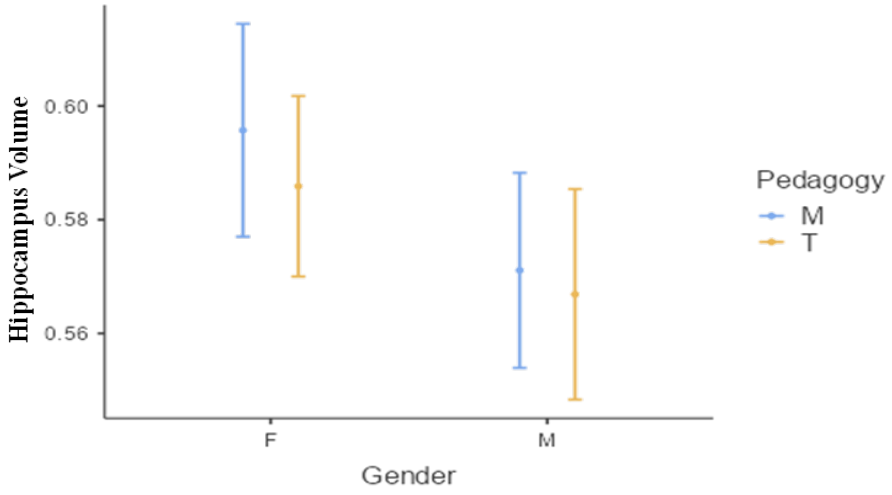
Estimated Marginal Means in Linear Regression Factors Predicting Hippocampus Volume in 3-12 Years Old Schooled Children; Age and Pedagogy Interaction



Note. Across development, the pedagogy significantly predicted increased hippocampus volume for Montessori schooled children (*M*=0.583, *SE*=0.006). In contrast, a decrease in the hippocampus volume was observed for the traditionally schooled children (*M*=0.576, *SE*=0.006). M represents Montessori schooled children, and T represents traditionally schooled children within Pedagogy.

Figure S4

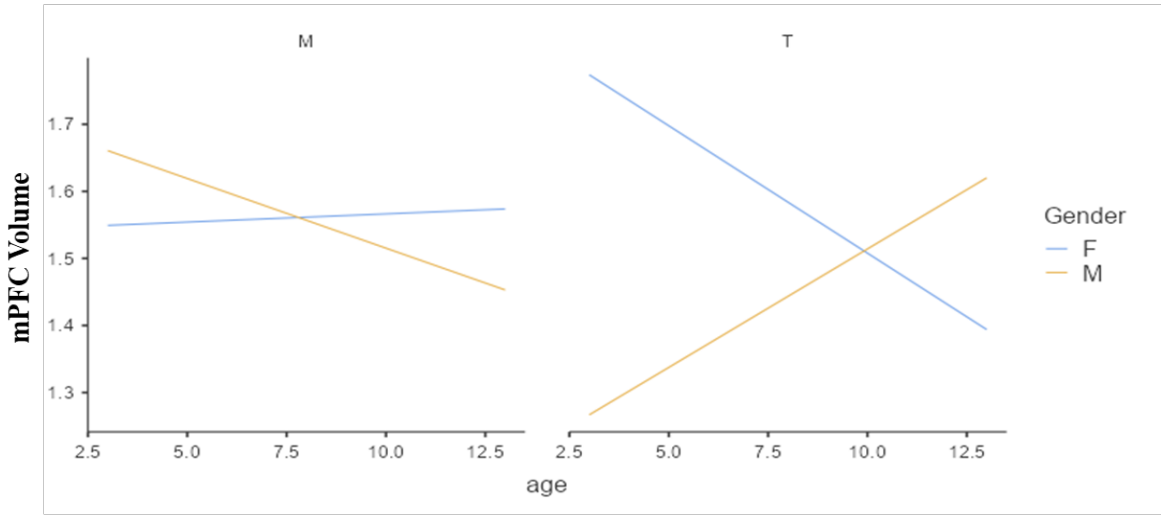
Estimated Marginal Means in Linear Regression Factors Predicting Hippocampus Volume in 3-12 Years Old Schooled Children; Gender and Pedagogy Interaction



Note. Males, in general, for both pedagogies, showed a smaller volume in the hippocampus than females. However, male Montessori schooled children showed a bigger hippocampus volume (*M*=0.571, *SE*=0.009) than male traditionally schooled children (*M*=0.567, *SE*=0.009). Female Montessori schooled children showed a bigger hippocampus volume (*M*=0.596, *SE*=0.009) than female traditionally schooled children (*M*=0.586, *SE*=0.009). M represents Montessori schooled children, T represents traditionally schooled children within Pedagogy, F represents females, and M represents males within Gender.

Figure S5

Estimated Marginal Means in Linear Regression Factors Predicting Medial Prefrontal Cortex (mPFC) Volume in 3-12 Years Old Schooled Children; Pedagogy, Age and Gender Triple Interaction



Note. Across development, the pedagogy significantly predicted differences of gender in the volume of the mPFC for Montessori schooled children; females had a slight increase in the volume of the mPFC while males had a decrease. Conversely, female traditionally schooled children had a decrease across development in the volume of the mPFC while male traditionally schooled had an increase. M represents Montessori schooled children, T represents traditionally schooled children while F represents females, and M represents males within Gender.