

Table S1: Early Poverty Predicting Hormones, Hippocampal Volume, Emotion Dysregulation and Depression Controlling for Early Depression

Outcome Variable	Prediction from T1 Income-to-Needs in Step 1 with T1 Depression as a Covariate						Prediction from Interaction between T1 Income-to-Needs and sex in Step 2 with T1 Depression as a Covariate					
	B	Lower 95% CI	Upper 95% CI	<i>t</i>	<i>p</i>	<i>R2</i> Adj Step 1	B	Lower 95% CI	Upper 95% CI	<i>t</i>	<i>p</i>	<i>R2</i> Adj Step 2
Testosterone Slope	.073	.0076	.140	2.18	.031	.843	.052	-.012	.117	1.60	.112	..844
Hippocampal Slope	.236	.08	.393	2.98	.003	.066	.061	-.137	.036	-1.15	.253	.063
T9 Emotion Dysregulation	-.284	-.449	-.119	-3.40	.001	.196	-.114	-.275	.047	-1.41	.163	.203
T9 Child Depression Inventory	-.189	-.369	-.008	-2.07	.041	.076	-.147	-.323	.029	-1.65	.101	.090

Table S2: Early Poverty Predicting Hormones, Hippocampal Volume, Emotion Dysregulation and Depression Controlling for Pubertal Status at T9

Outcome Variable	Prediction from T1 Income-to-Needs in Step 1 with T9 Pubertal Status as a Covariate						Prediction from Interaction between T1 Income-to-Needs and sex in Step 2 with T9 Pubertal Status as a Covariate					
	B	Lower 95% CI	Upper 95% CI	<i>t</i>	<i>p</i>	<i>R</i> ² Adj Step 1	B	Lower 95% CI	Upper 95% CI	<i>t</i>	<i>p</i>	<i>R</i> ² Adj Step 2
Testosterone Slope	.082	.012	.152	2.32	.022	.827	.053	-.016	.122	1.53	.129	.829
Hippocampal Slope	.280	.115	.445	3.35	.001	.061	.019	-.145	.183	0.23	.820	.054
T9 Emotion Dysregulation	-.352	-.514	-.190	-4.29	<.001	.097	-.087	-.247	.074	-1.07	.289	.098
T9 Child Depression Inventory	-.244	-.411	-.077	-2.89	.005	.074	-.141	-.307	.024	-1.69	.093	.087

Table S3: Early Poverty Predicting Amygdala, Caudate, Dorsal Anterior Cingulate, and Dorsolateral Prefrontal Volumes

Outcome Variable	Prediction from T1 Income-to-Needs in Step 1						Prediction from Interaction between T1 Income-to-Needs and Sex in Step 2					
	B	Lower 95% CI	Upper 95% CI	<i>t</i>	<i>p</i>	<i>R</i> ² Adj Step 1	B	Lower 95% CI	Upper 95% CI	<i>t</i>	<i>p</i>	<i>R</i> ² Adj Step 2
Amygdala Slope	.029	-.126	.185	.371	.711	.006	-.108	-.264	.047	-1.38	.171	.001
Caudate Slope	-.058	-.217	.102	-.714	.476	.004	-.065	-.225	.095	-.801	.424	.002
Dorsal Anterior Cingulate Slope	-.036	-.194	.121	0.453	.651	.005	.059	-.100	.217	0.731	.466	.003
Dorsolateral Prefrontal Cortex Slope	-.082	-.240	.076	-1.02	.309	.005	-.079	-.237	.079	-.982	.327	.007

FDR Adjusted *p*s * $<.05$; ** $<.01$, *** $<.005$

Table S4: Testosterone Slopes Predicting Amygdala, Caudate, Dorsal Anterior Cingulate, and Dorsolateral Prefrontal Volumes

Outcome Variable	Prediction from Testosterone Slope in Step 1						Prediction from Interaction between Testosterone Slope and Sex in Step 2					
	B	Lower 95% CI	Upper 95% CI	<i>t</i>	<i>p</i>	<i>R</i> ² Adj Step 1	B	Lower 95% CI	Upper 95% CI	<i>t</i>	<i>p</i>	<i>R</i> ² Adj Step 2
Amygdala Slope	-.085	-.474	.303	-0.43	.665	-.007	1.36	-.166	2.886	1.76	.08	.005
Caudate Slope	.058	-.347	.463	.284	.777	.002	-1.01	-2.61	.591	-1.25	.215	.002
Dorsal Anterior Cingulate Slope	.208	-.187	.603	1.04	.299	.010	-.629	-2.19	.933	-.795	.428	.008
Dorsolateral Prefrontal Cortex Slope	.092	-.290	.475	0.48	.634	.010	-1.23	-2.74	.272	-1.62	.108	.010

FDR Adjusted *p*s *<.05; ** < .01, ***<.005

Supplemental Figure Captions

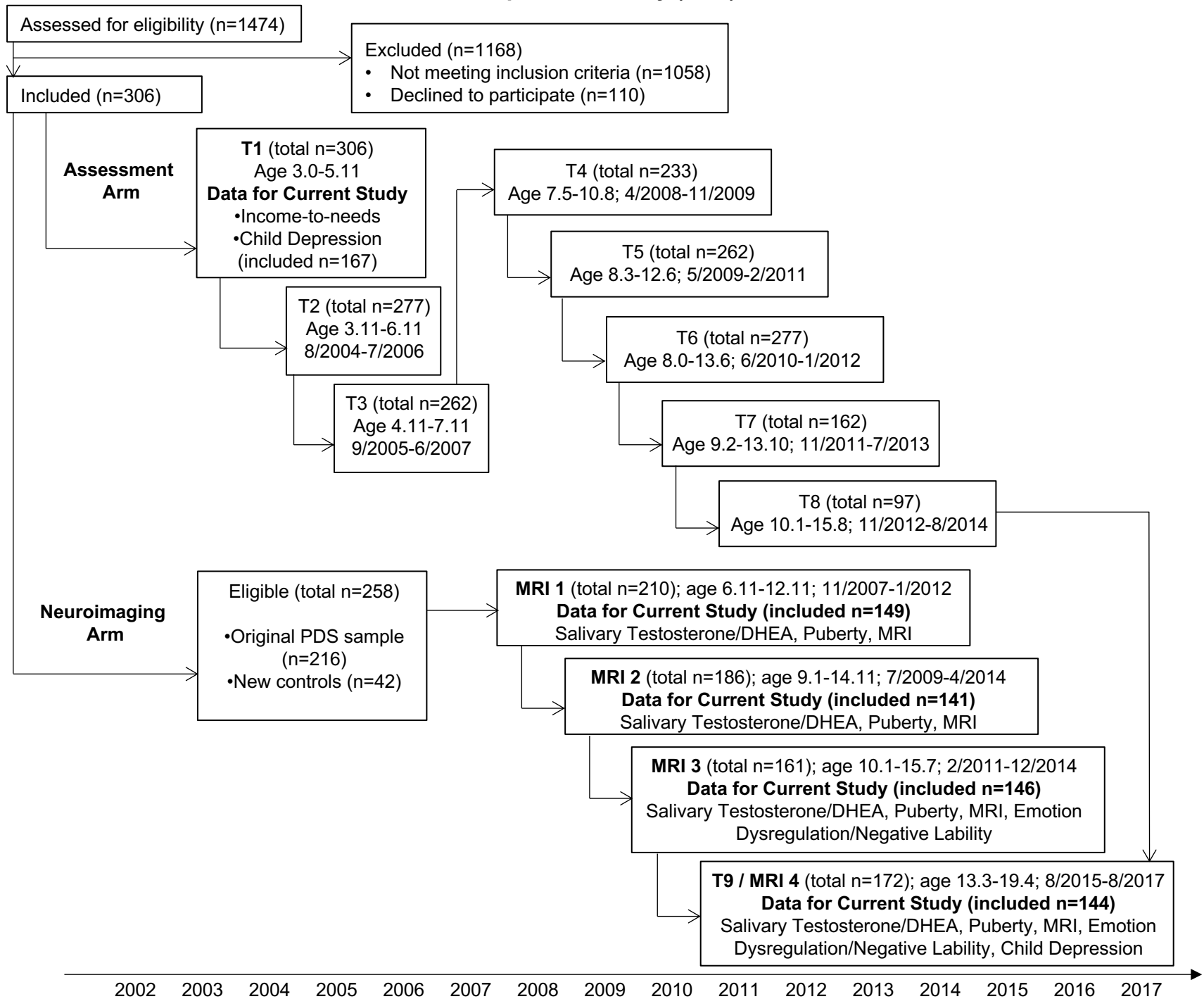
Figure S1. Study Flow: MRI 2 was approx. 18 months after MRI 1, MRI 3 was 15 months after MRI 2, MRI 4 was 41 months after MRI 3 (due to time between grant cycles)

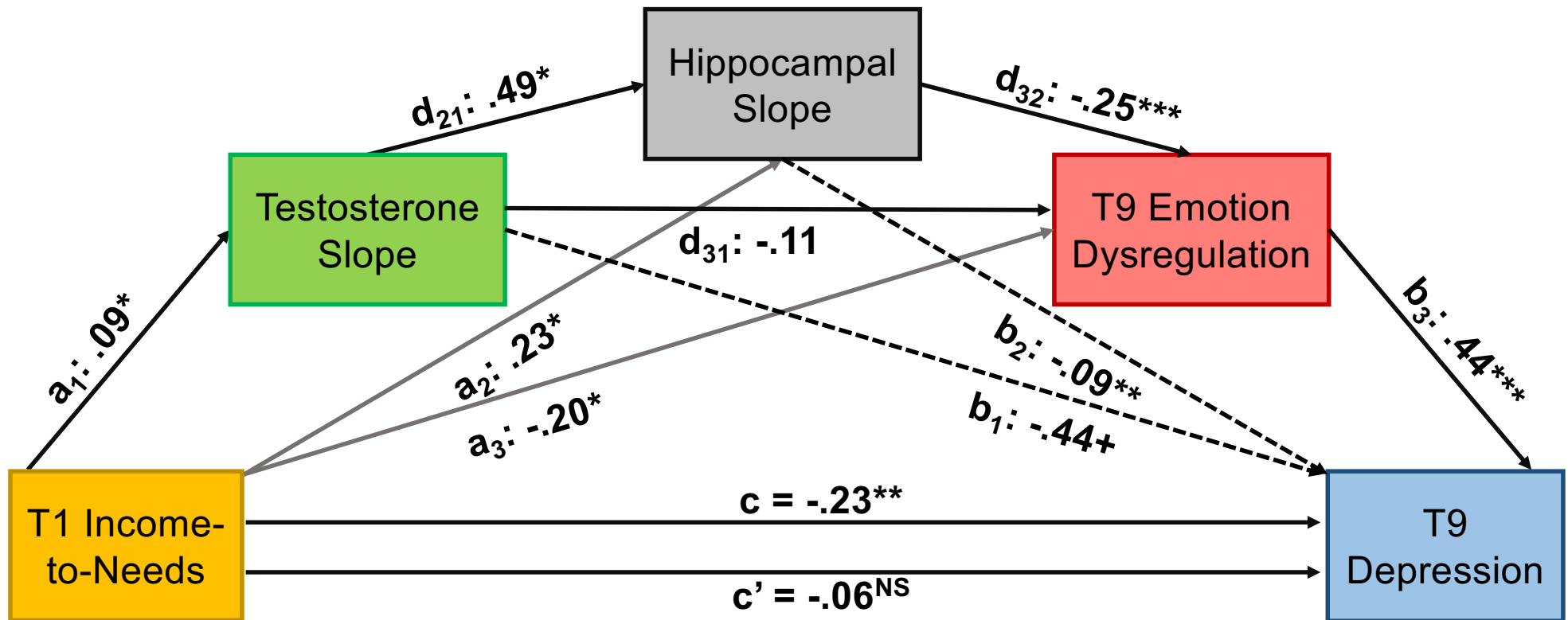
Figure S2: Results of Serial Mediation Model Between Early Poverty and Adolescent Depression Controlling for Early Depression. The top of the figure illustrates the components of the serial mediation model using the Hayes notation. The chart at the bottom illustrates all of the individually significant indirect effects.

Figure S3: Results of Serial Mediation Model Between Early Poverty and Adolescent Depression Controlling for T9 Pubertal Status. The top of the figure illustrates the components of the serial mediation model using the Hayes notation. The chart at the bottom illustrates all of the individually significant indirect effects.

Figure S4. Results of Serial Mediation Model Between Early Poverty and Adolescent Depression Using MRI3 Emotion Dysregulation. The top of the figure illustrates the components of the serial mediation model using the Hayes notation. The chart at the bottom illustrates all of the individually significant indirect effects

Preschool Depression Study (PDS) Flowchart



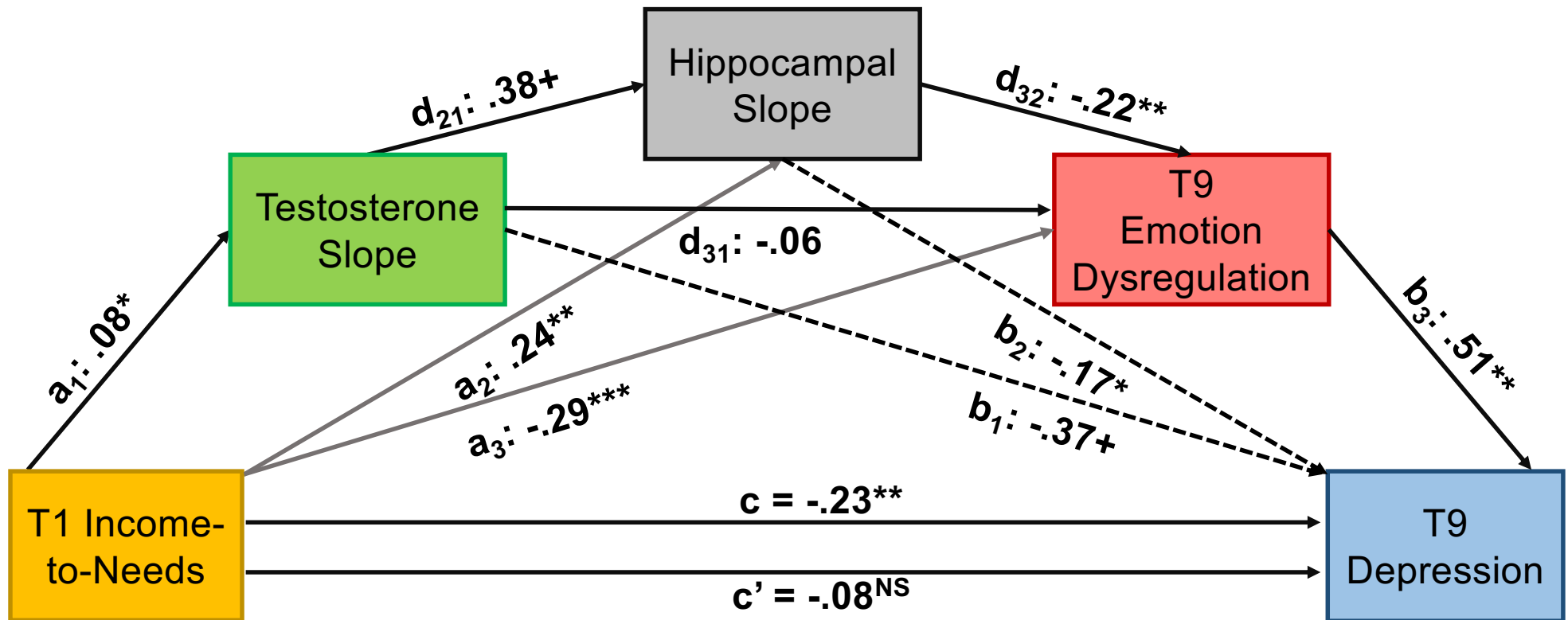


+ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .005$;

Covariates = Depression at T1 & Age at T9 & Gender

Significant Indirect Effects

T1 Income-to-Needs	→	Testosterone	→	Hippocampal Slope	→	Emotion Dysregulation	→	Depression	Effect = $-.0047$ +/-95% BOOT CI = $-.0173 \leftrightarrow -.0004$
T1 Income-to-Needs	→	Testosterone	→	Hippocampal Slope			→	Depression	Effect = $.0106$ +/-95% BOOT CI = $.0009 \leftrightarrow .0352$
T1 Income-to-Needs			→	Hippocampal Slope			→	Depression	Effect = $.0577$ +/-95% BOOT CI = $.013 \leftrightarrow .1271$
T1 Income-to-Needs			→	Hippocampal Slope	→	Emotion Dysregulation	→	Depression	Effect = $-.0254$ +/-95% BOOT CI = $-.0701 \leftrightarrow -.0063$
T1 Income-to-Needs					→	Emotion Dysregulation	→	Depression	Effect = $-.0898$ +/-95% BOOT CI = $-.2005 \leftrightarrow -.0204$

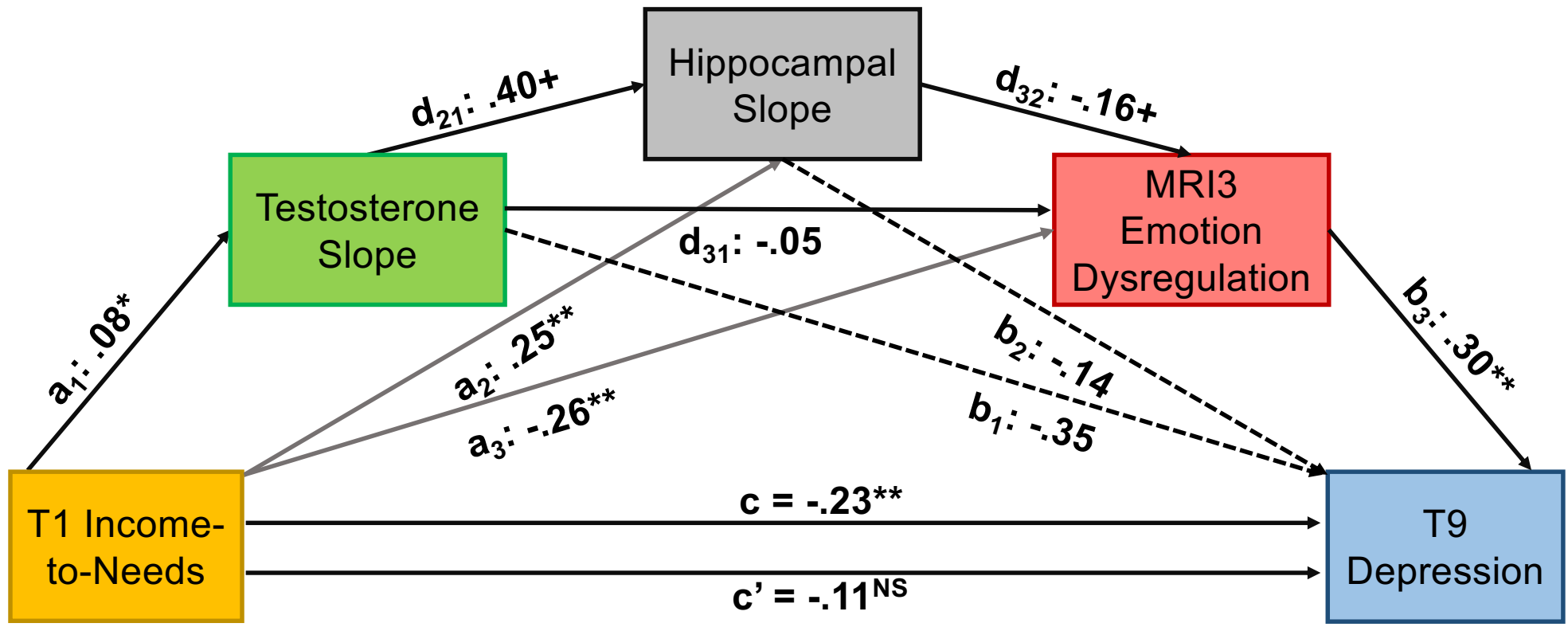


+ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .005$;

Covariates = Age at T9, Gender & Pubertal Status at T9

Significant Indirect Effects

T1 Income-to-Needs	→	Testosterone	→	Hippocampal Slope	→	Emotion Dysregulation	→	Depression	Effect = $-.0033$ +/-95% BOOT CI = $-.0125 \leftrightarrow -.0004$
T1 Income-to-Needs	→	Testosterone	→	Hippocampal Slope			→	Depression	Effect = $.0052$ +/-95% BOOT CI = $.0005 \leftrightarrow -.0199$
T1 Income-to-Needs			→	Hippocampal Slope			→	Depression	Effect = $.0406$ +/-95% BOOT CI = $.0076 \leftrightarrow .1060$
T1 Income-to-Needs			→	Hippocampal Slope	→	Emotion Dysregulation	→	Depression	Effect = $-.0256$ +/-95% BOOT CI = $-.0659 \leftrightarrow -.0079$
T1 Income-to-Needs					→	Emotion Dysregulation	→	Depression	Effect = $-.1457$ +/-95% BOOT CI = $-.2753 \leftrightarrow -.0583$



+ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .005$;
 Covariates = Age at T9 & Gender

Significant Indirect Effects

T1 Income-to-Needs	→	Testosterone	→	Hippocampal Slope	→	Emotion Dysregulation	→	Depression	Effect = -.0016 +/-95% BOOT CI = -.0092 ↔ -.0001
T1 Income-to-Needs	→	Testosterone	→	Hippocampal Slope			→	Depression	Effect = .0046 +/-95% BOOT CI = .0001 ↔ -.0225
T1 Income-to-Needs			→	Hippocampal Slope			→	Depression	Effect = .0341 +/-95% BOOT CI = .0007 ↔ .0983
T1 Income-to-Needs			→	Hippocampal Slope	→	Emotion Dysregulation	→	Depression	Effect = -.012 +/-95% BOOT CI = -.0432 ↔ -.0016
T1 Income-to-Needs					→	Emotion Dysregulation	→	Depression	Effect = -.0787 +/-95% BOOT CI = -.1805 ↔ -.0220