



3. PAMUKKALE PSİKIYATRİ SEMPOZYUMU

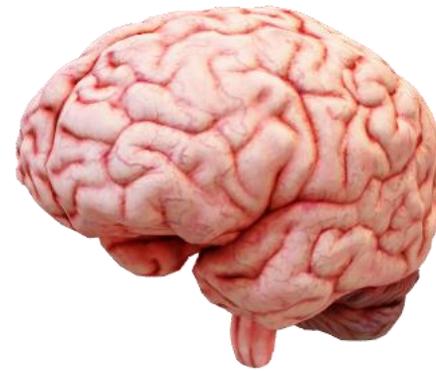
28-30 Kasım 2025, Colossae Termal & Spa Otel, Denizli

Çocukluktan yetişkinliğe
psikiyatride yenilikler >



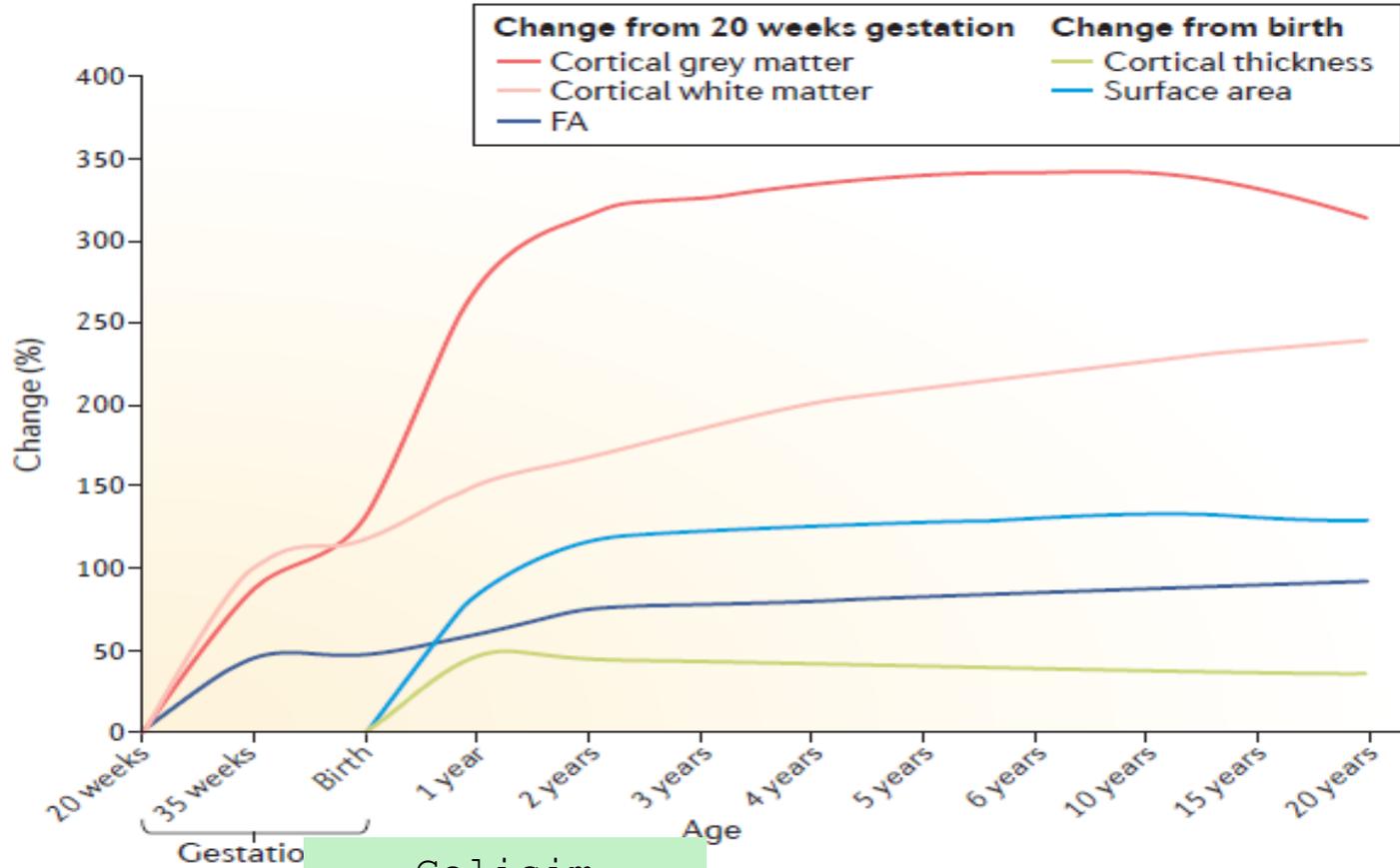
Çocuk Ebeveyn Etkileşimlerinin Çocuk Yönüyle Nörobiyolojik Yansımaları

Doç. Dr. Fatih Hilmi
Çetin



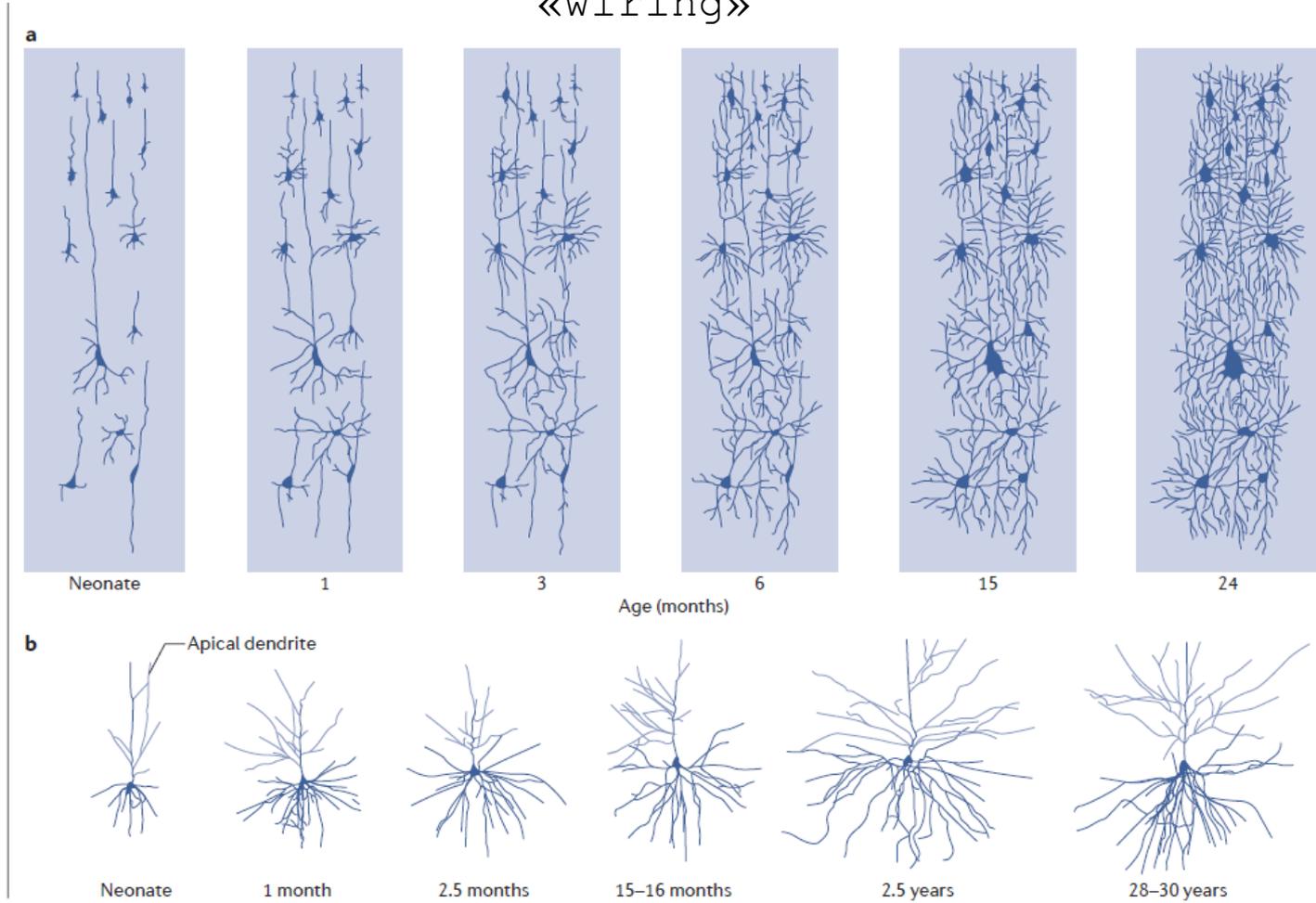
Imaging structural and functional brain development in early childhood

John H. Gilmore¹*, Rebecca C. Knickmeyer¹ and Wei Gao^{2,3}

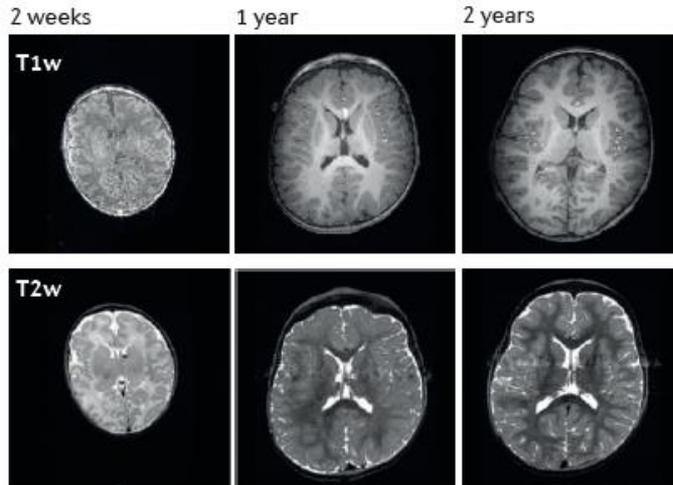


Gelişim penceresi
Düvarlılık

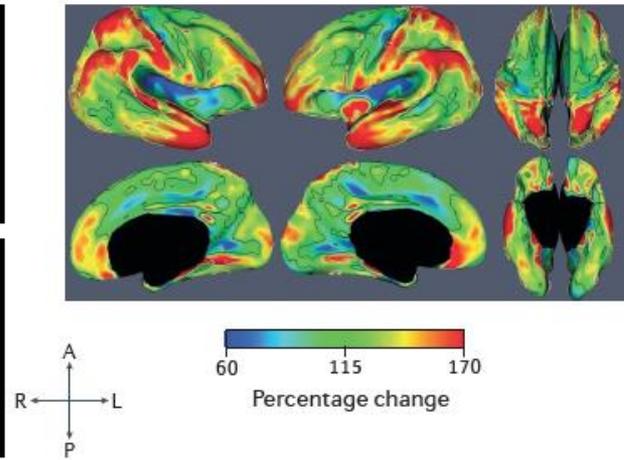
İnce ayar
zamanı
«wiring»



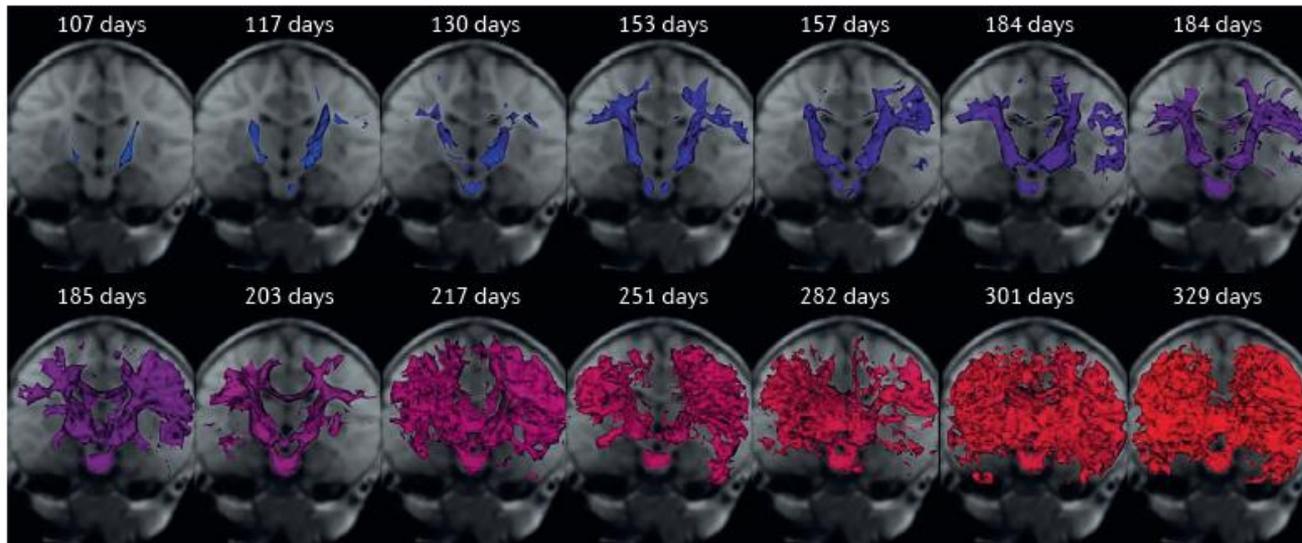
a Grey matter and white matter



b Cortical surface expansion



c Myelin maturation





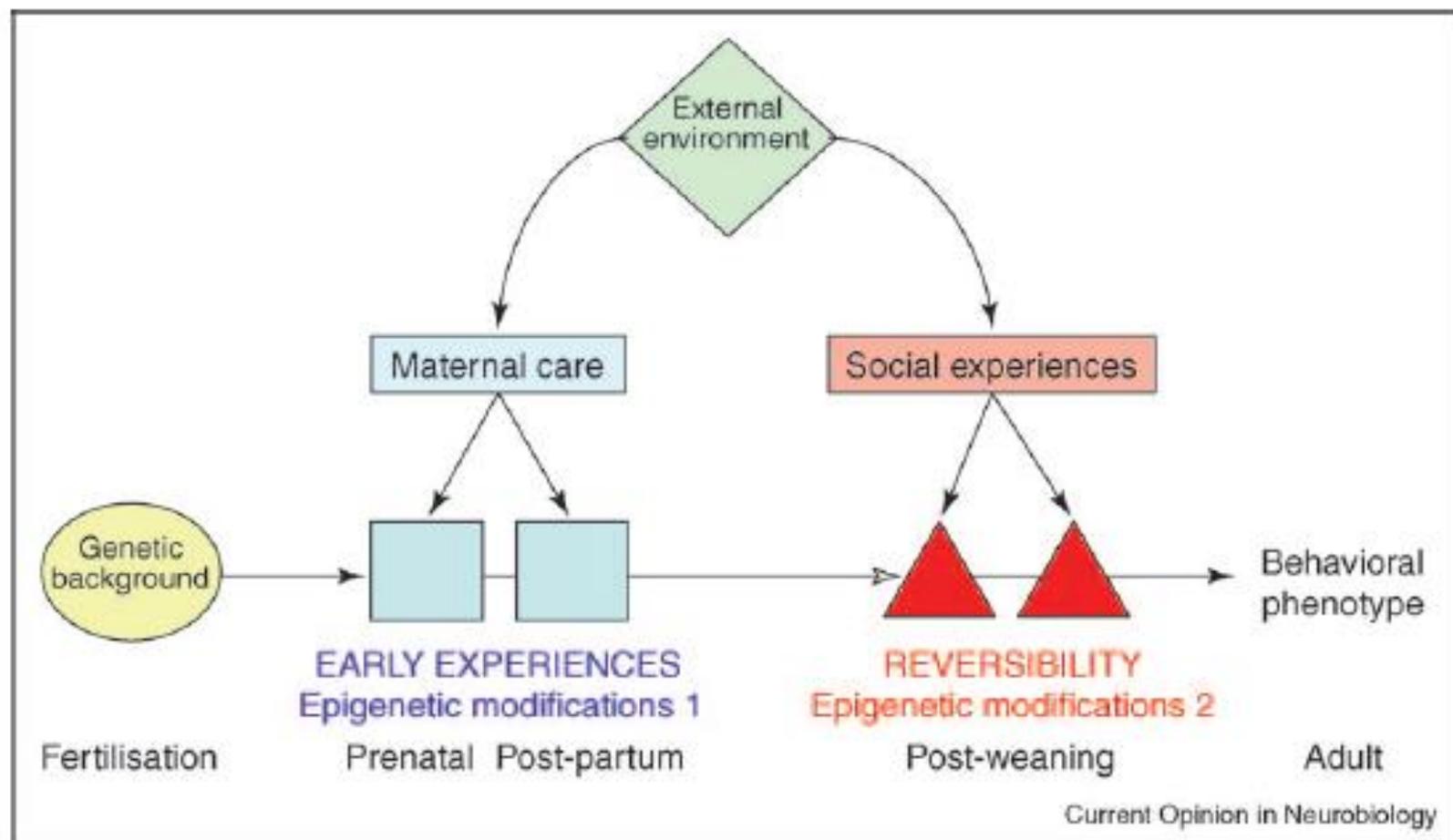
ELSEVIER

Current Opinion in Neurobiology 2005, 15:704-709

Fu

How social experiences influence the brain

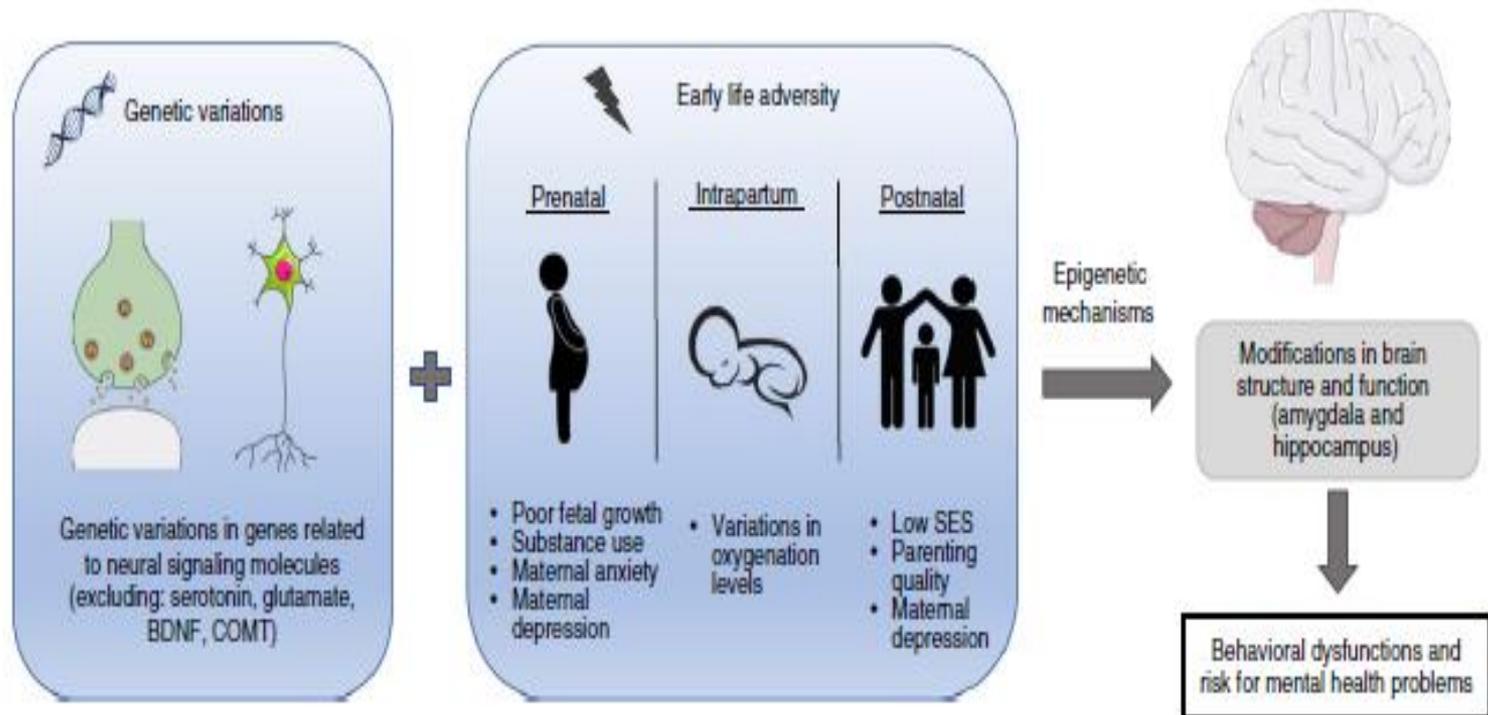
Frances A Champagne and James P Curley



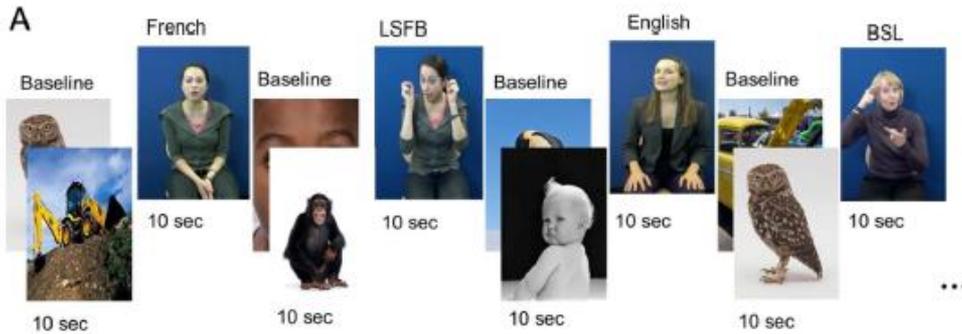
Early environmental influences on the development of children's brain structure and function

PATRÍCIA M MIGUEL^{1,2} | LENIR O PEREIRA^{1,2} | PATRÍCIA P SILVEIRA^{3,4,5}  | MICHAEL J MEANEY^{3,4,5,6,7} 

Developmental Medicine & Child Neurology 2019



Bakımverilen Çevre & Bakımverme
Kalitesi



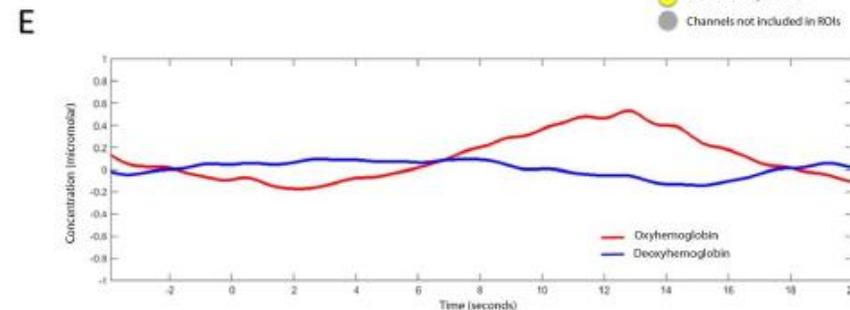
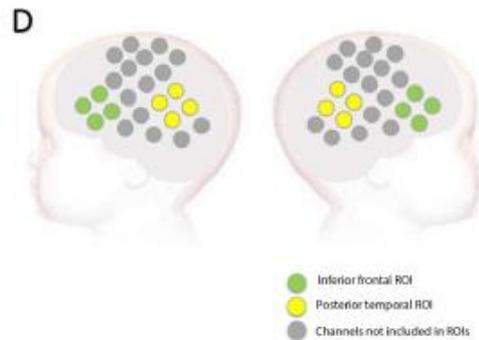
Neurobiology
of Language

B

	Familiar languages	Unfamiliar languages
Spoken languages	English	French
Signed languages	BSL (to bimodal bilinguals)	LSFB

Language Experience Impacts Brain Activation for Spoken and Signed Language in Infancy: Insights From Unimodal and Bimodal Bilinguals

Evelyne Mercure^{1,2,3} , Samuel Evans^{2,4} , Laura Pirazzoli^{3,5}, Laura Goldberg², Harriet Bowden-Howl^{2,6}, Kimberley Coulson-Thaker^{2,7}, Indie Beedie², Sarah Lloyd-Fox^{3,8} , Mark H. Johnson^{3,8} , and Mairéad MacSweeney²



60 işiten bebek (4 ila 8 aylık) :

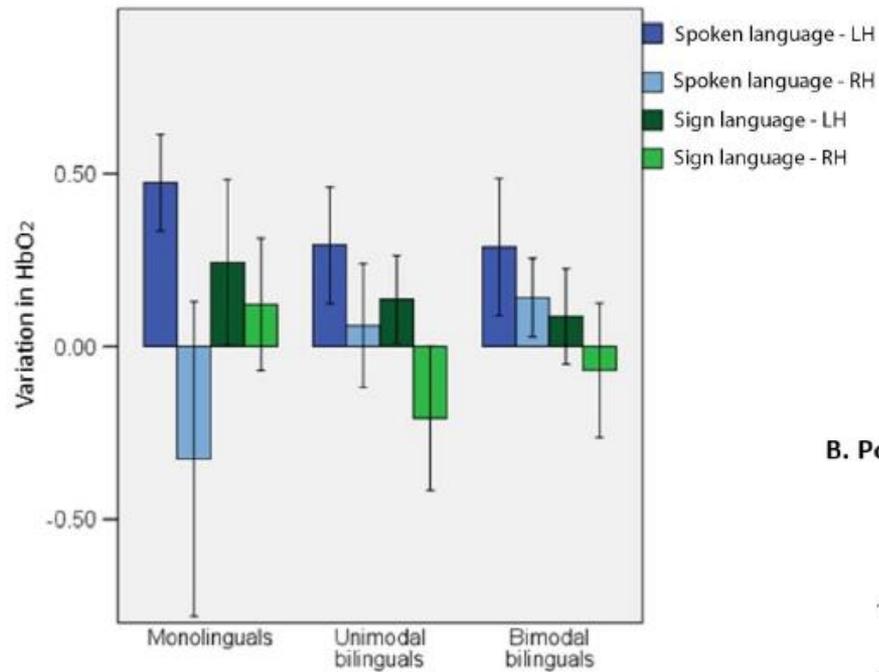
19 İngilizce

20 İngilizce ve

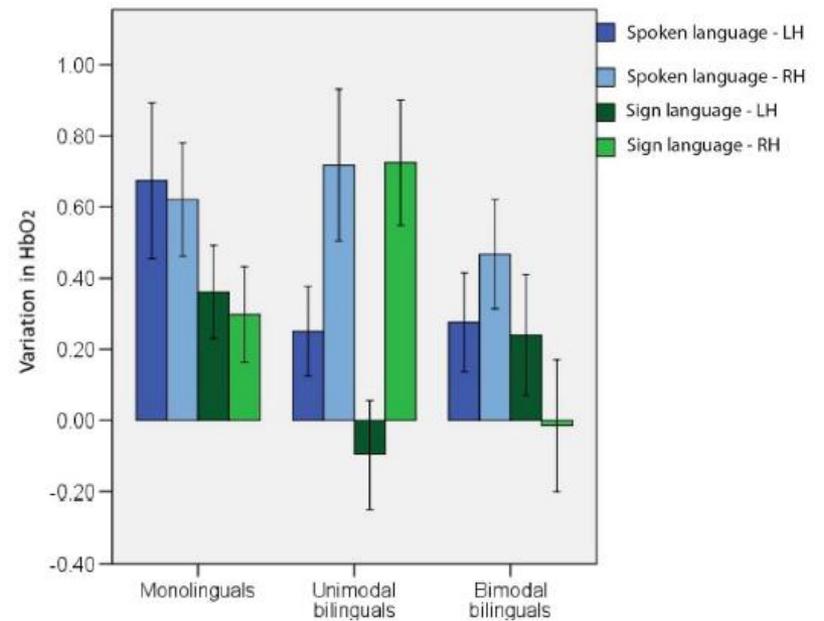
Fransızca

21 İngilizce ve BSL

A. Inferior frontal region



B. Posterior temporal region



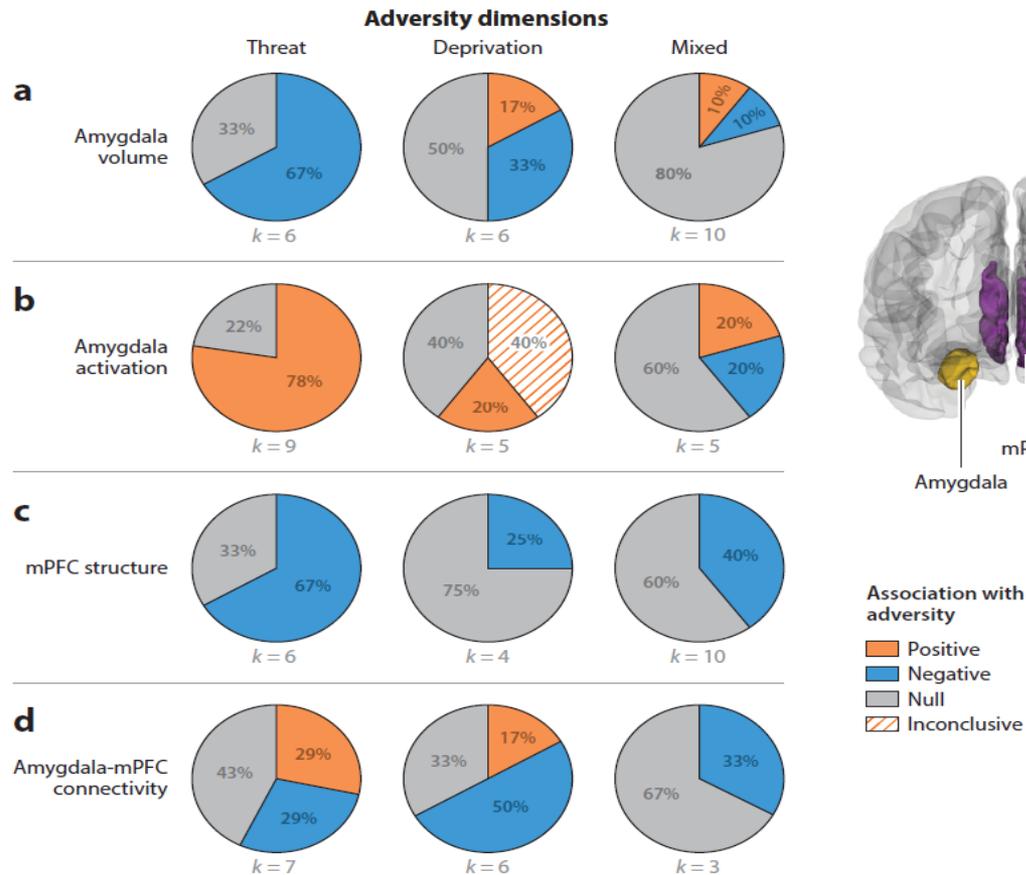
Childhood Adversity and Neural Development: A Systematic Review

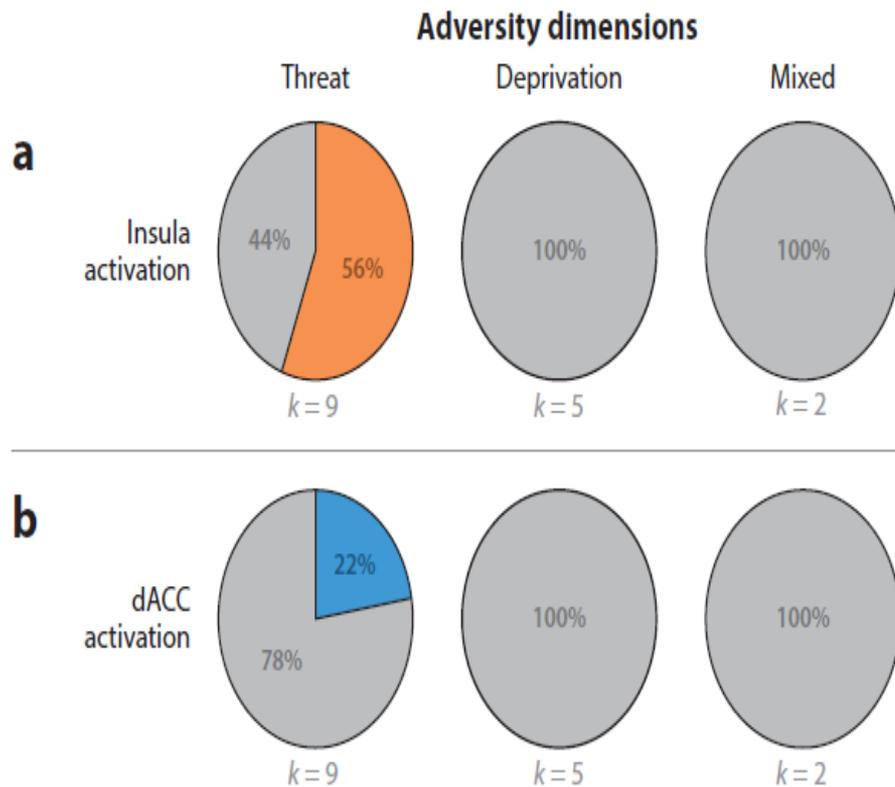
Annu. Rev. Dev. Psychol. 2019. 1:277–312

Katie A. McLaughlin,¹ David Weissman,¹ and Debbie Bitrán²

R. Spitz:

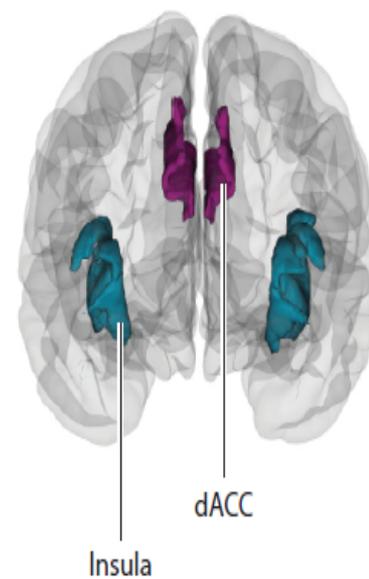
Yuva hastalığı
Anaklitik
depresyon



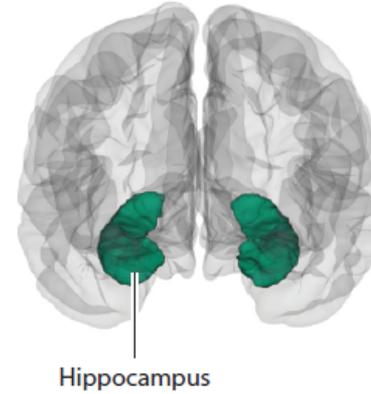
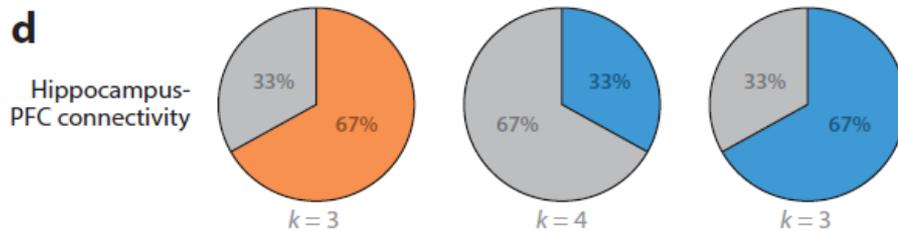
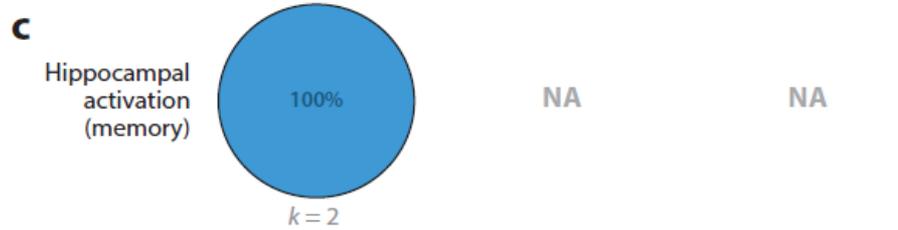
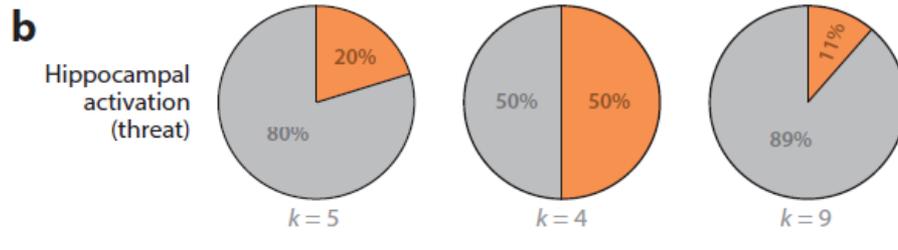
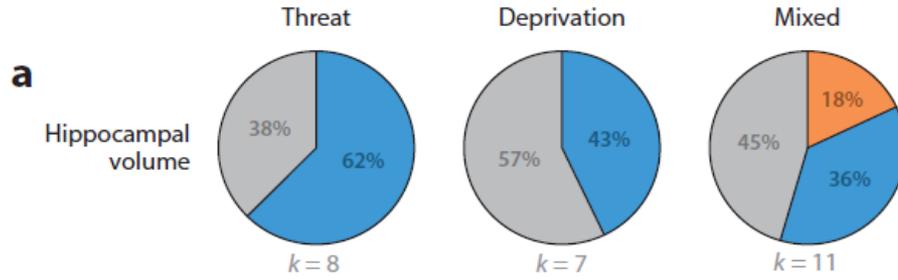


Association with adversity

- Positive
- Negative
- Null



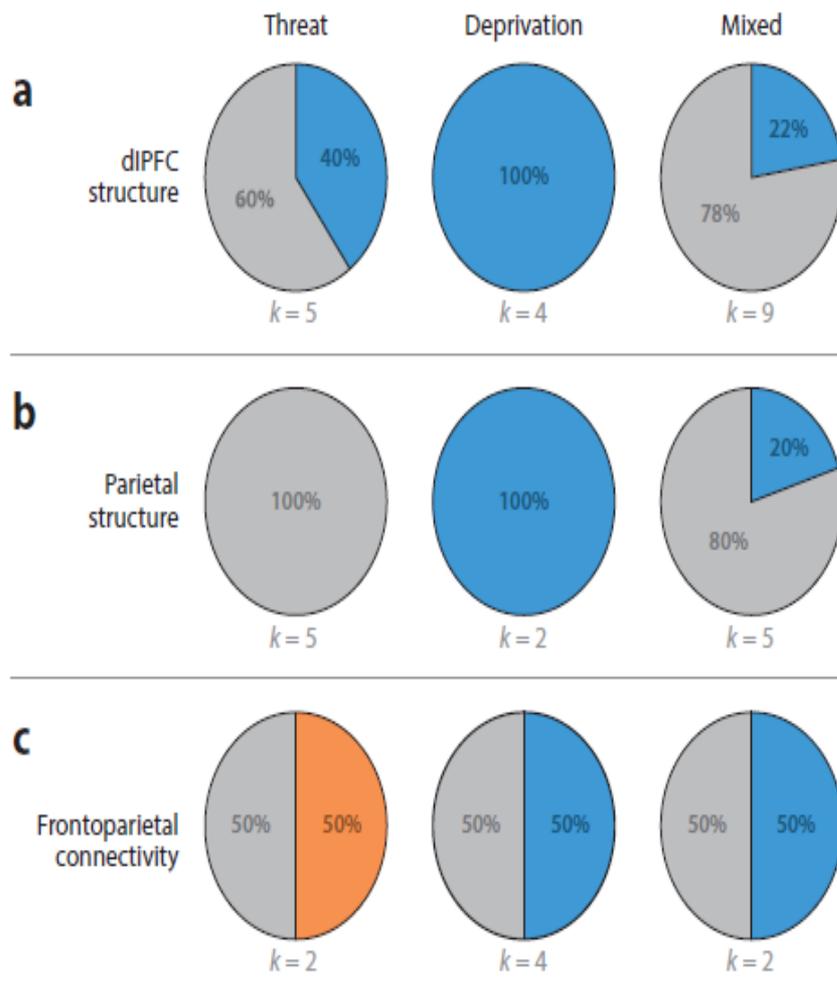
Adversity dimensions



Association with adversity

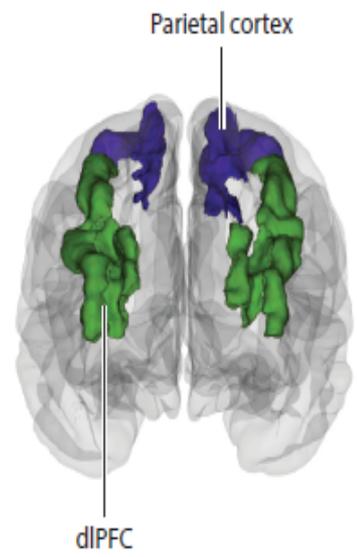
- Positive
- Negative
- Null

Adversity dimensions



Association with adversity

- Positive
- Negative
- Null



The Protective Effects of Supportive Parenting on the Relationship Between Adolescent Poverty and Resting-State Functional Brain Connectivity During Adulthood

Gene H. Brody¹ , Tianyi Yu¹, Robin Nusslock², Allen W. Barton¹ 
Gregory E. Miller^{2,3}, Edith Chen^{2,3}, Christopher Holmes¹,
Michael McCormick⁴, and Lawrence H. Sweet⁵

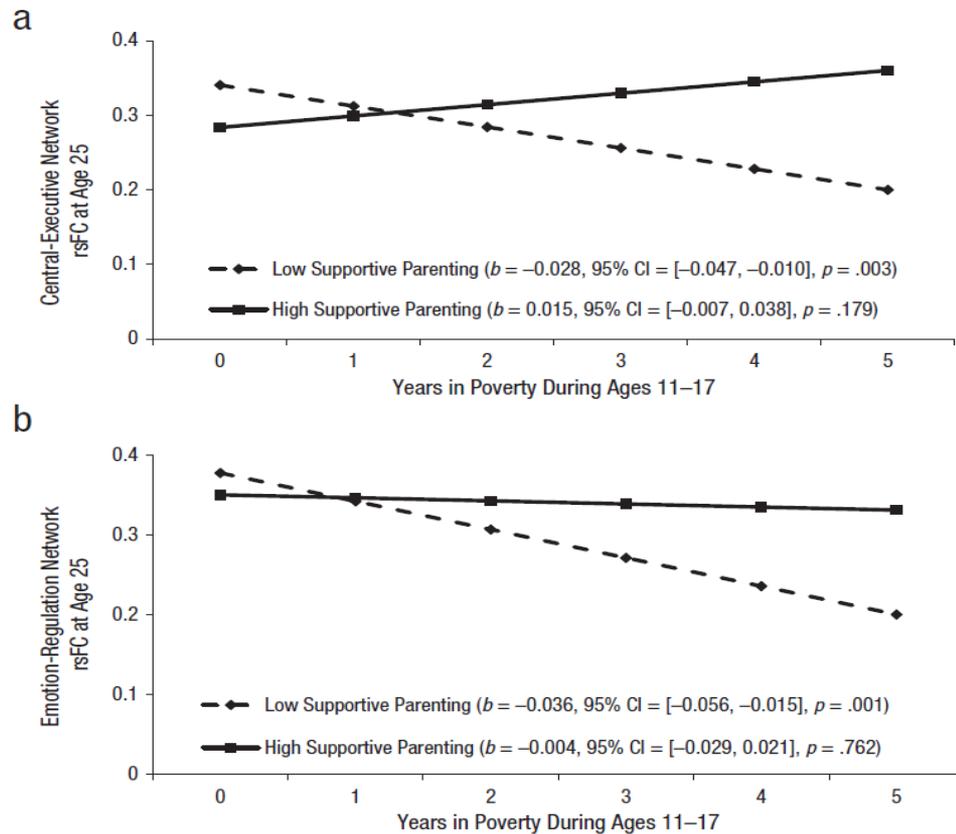


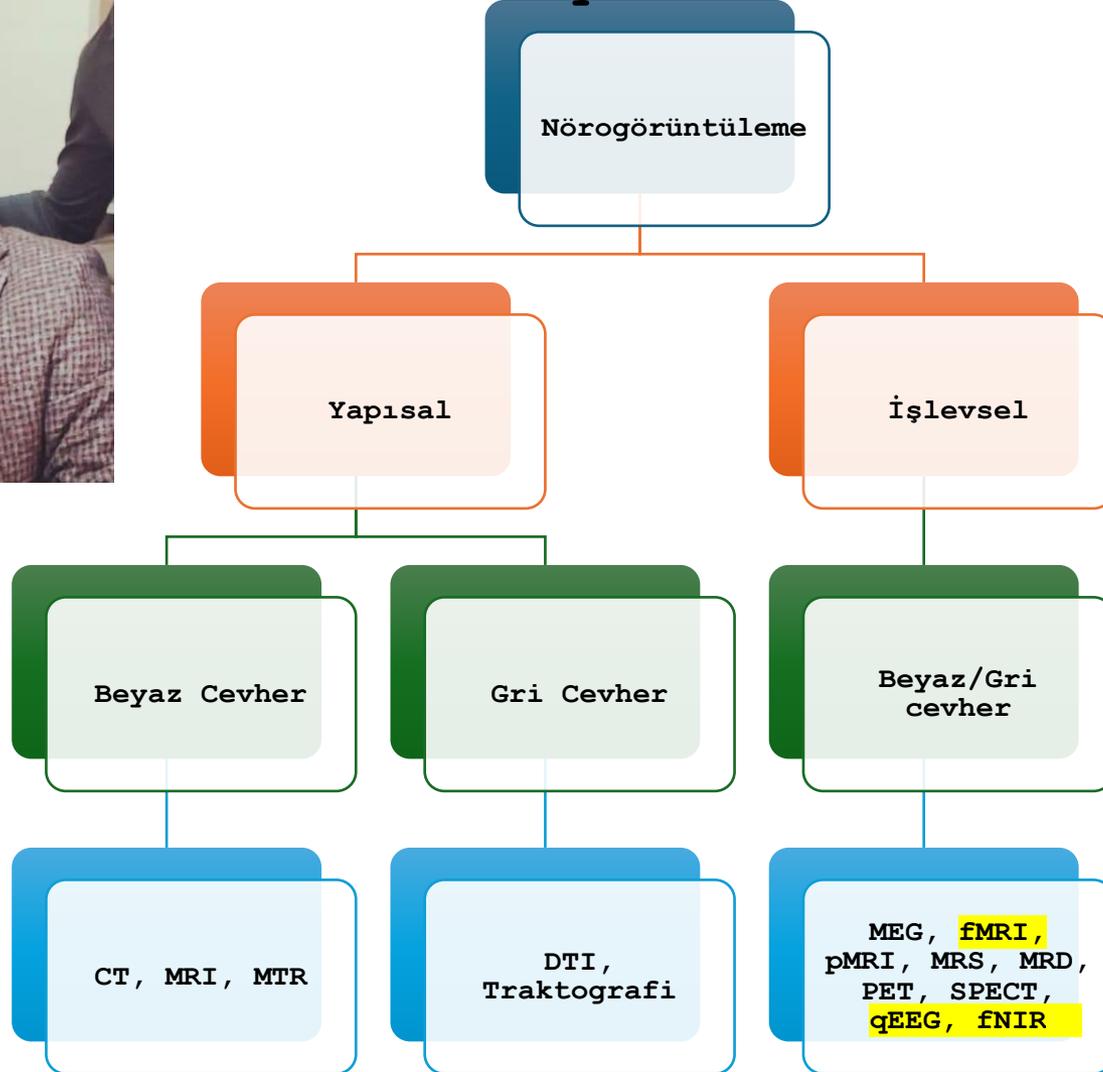
Fig. 2. Youths' (a) central-executive network resting-state functional connectivity (rsFC) and (b) emotion-regulation network rsFC as a function of number of years during adolescence spent in poverty and level of supportive parenting. Regression lines are shown for low (1 *SD* below the mean) and high (1 *SD* above the mean) levels of supportive parenting. Statistics in parentheses refer to simple-slopes analyses. CI = confidence interval.

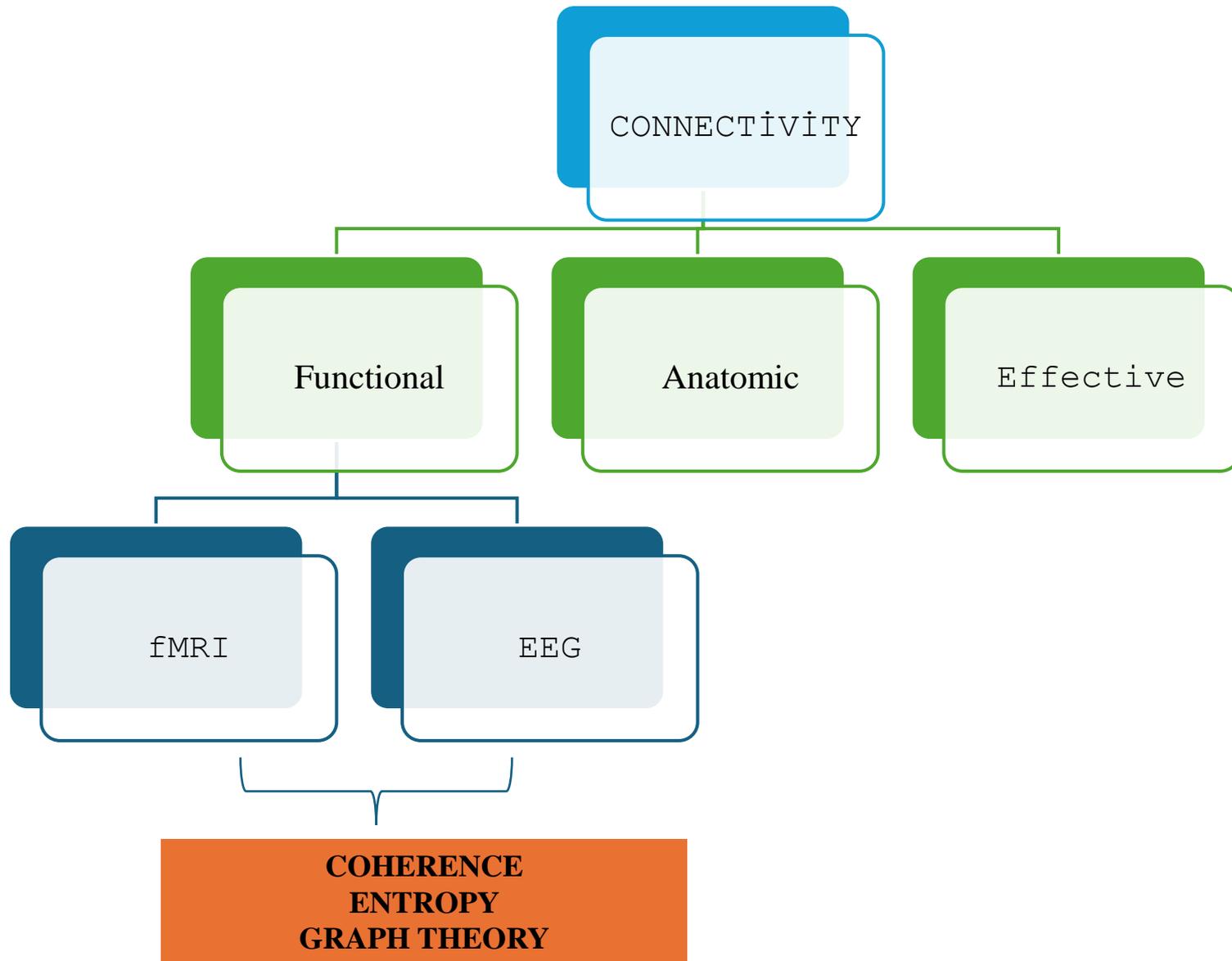
- N=119
- 11–13 ve 16–18 'de sed ve ebeveynlik düzeyi
- 25'te fMRI



- Nörotipik gelişim için nörotipik çevre gerekli!
(NŞA' da 😊)

infant-friendly neuroimaging techniques???







Contents lists available at ScienceDirect

Neuroscience and Biobehavioral Reviews

journal homepage: www.elsevier.com/locate/neubiorev

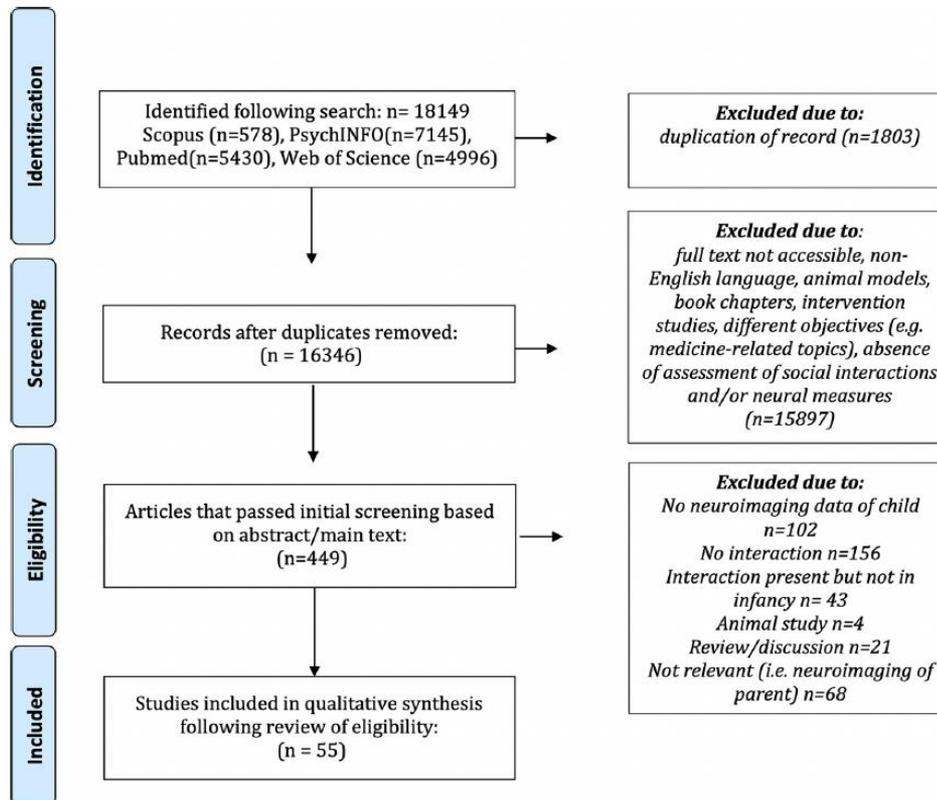


Review Article

Infant social interactions and brain development: A systematic review

Dianna Ilyka ^{*}, Mark H. Johnson, Sarah Lloyd-Fox

Department of Psychology, University of Cambridge, United Kingdom



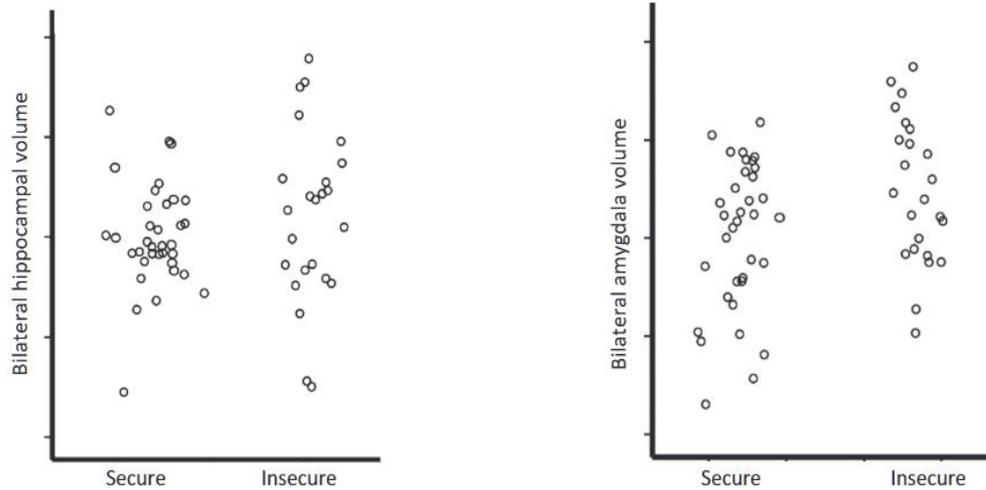
A summary of the characteristics of the neuroimaging and behavioural sessions included in this review.

Characteristics	N	%	Characteristics	N	%
Child's age during the brain session			Child's age during the interaction		
0–5 mths	18	33%	0–5 mths	16	29%
6–12mths	24	40%	6–12 mths	28	51%
13–24mths	5	8%	13–24 mths	16	29%
>2yrs	13	22%			
Neuroimaging technique			Interaction setting		
fMRI	20	36%	Home - free interaction	5	9%
fNIRS	1	2%	Lab - free interaction	35	64%
EEG	32	58 %	Lab - structured interaction	18	33%
MEG	1	2%			
Ultrasound imaging	1	2%	Interaction partner		
Brain measure			mother	42	76 %
Structural studies	13	24 %	father	1	2%
Resting-state	25		experimenter	2	4%
EEG asymmetry	13	24 %	caregiver and experimenter	11	20%
EEG frontal power	5	9%			
Functional network	8	15%	Coded behaviours of:		
Other	2	4%	mother	38	69 %
Task-related activations	15		father	1	2%
faces	3	5%	infant	30	55 %
facial expressions	4	7%	dyad	6	11%
eye-gaze	1	2%			
prosody	2	4%			
emotion processing	5	9%			

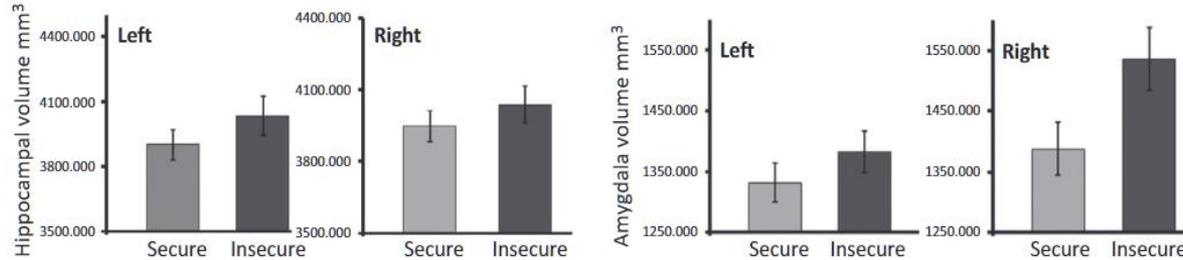
Insecure attachment during infancy predicts greater amygdala volumes in early adulthood

Christina Moutsiana,¹ Tom Johnstone,² Lynne Murray,^{2,3} Pasco Fearon,¹
Peter J. Cooper,^{2,3} Christos Pliatsikas,⁴ Ian Goodyer,⁵ and Sarah L. Halligan⁶

Panel A



Panel B



22 yıllık izlem,

Bağlanma değerlendirme
i 18 ay,
MRI: 22 y,

Anne depresyonu kontrol edildiğinde bağlanma paterni yine de etkiliyor

Research Article

Mother–Infant Interaction and Child Brain Morphology: A Multidimensional Approach to Maternal Sensitivity

Annie Bernier ✉, Fanny Dégeilh, Élizabel Leblanc, Véronique Daneault, Heidi N. Bailey, Miriam H. Beauchamp

First published: 14 October 2018 | <https://doi.org/10.1111/infa.12270> | Citations: 44

•33 anne–bebek ikilisinde, **1 yaşında** annelik duyarlılığının üç boyutu (Uyum/Kooperasyon, Pozitiflik, Erişilebilirlik/Ulaşılabilirlik) Çocuklar **10 yaşında** yapısal MRI

Bulgular:

•Daha yüksek **anne Erişilebilirliği/Ulaşılabilirliği**, çocuklarda **daha küçük sağ amigdala hacmi** ile ilişkili bulunmuştur.

•Daha yüksek **anne Pozitifliği**, **daha küçük bilateral hipokampus hacimleri** ile ilişkili bulunmuştur.

Infant frontal asymmetry predicts child emotional availability

Maria Licata, Markus Paulus, Nina Kühn-Popp,
Jorg Meinhardt and Beate Sodian

International Journal of
Behavioral Development
1-5

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DOI: 10.1177/0165025415576816

ijbd.sagepub.com



Table 1. Descriptive statistics of the study variables.

<i>n</i> = 28	M	SD	Range
Maternal Sensitivity (7 mo.)	4.66	1.32	2.00–7.00
Child Responsiveness (7 mo.)	4.93	1.31	2.50–7.00
Child Involvement (7 mo.)	4.38	0.98	3.00–6.00
Child EEG Frontal Asymmetry (14 mo.)	–0.01	0.48	–1.40–0.97
Maternal Sensitivity (50 mo.)	4.29	1.22	2.50–7.00
Child Responsiveness (50 mo.)	4.45	1.17	2.50–7.00
Child Involvement (50 mo.)	4.48	1.21	3.00–7.00

Note: high scores in sensitivity, responsiveness and involvement indicate high emotional availability; high EEG frontal asymmetry scores indicate greater left than right frontal EEG power.

7, 14 ve 50 aylık 28 çocuk
7 aylık **emotional availability** ölçümü
14 aylık rs frontal asimetri
50 aylık anne-çocuk etkileşim kalitesi

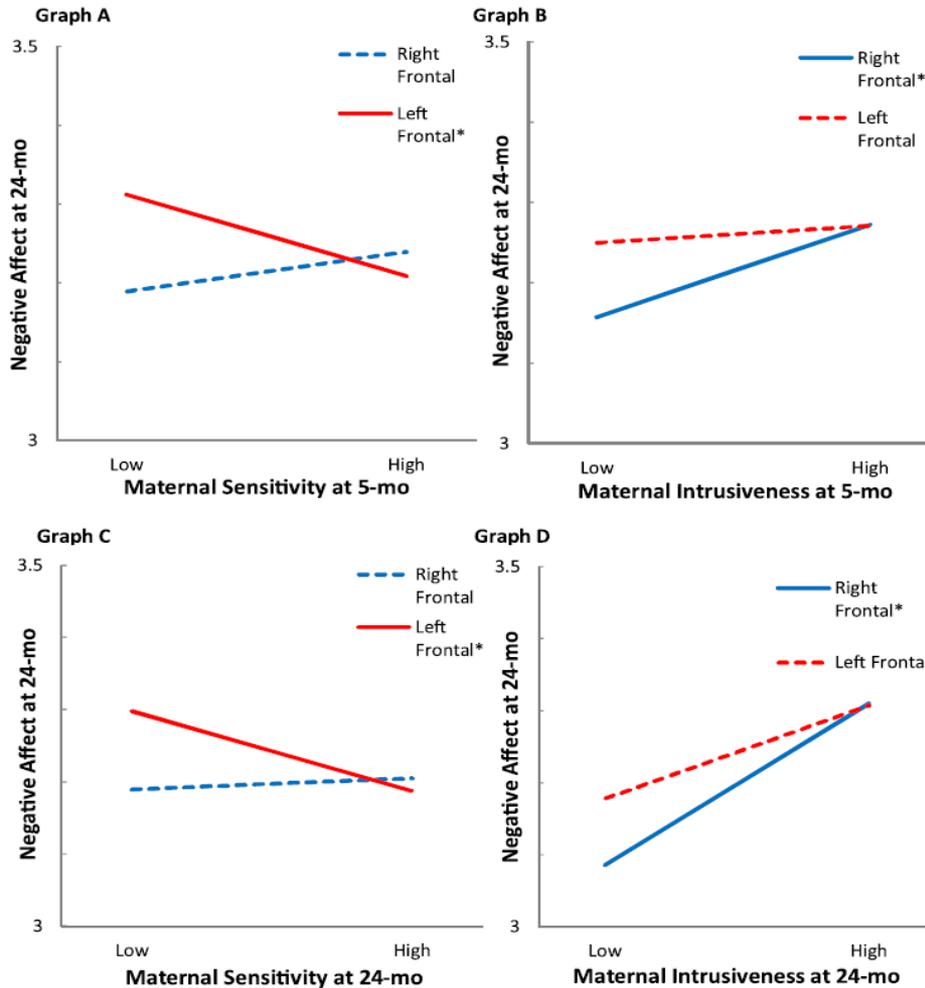
14 aylıkken sol frontal kortikal aktivasyonun sağa göre görece daha yüksek olması, 50 aylıkken daha yüksek çocuk katılımı ile ilişkili



Full length article

Infant frontal EEG asymmetry moderates the association between maternal behavior and toddler negative affectivity

Anjolie Diaz^{a,*}, Margaret M. Swinger^b, Lin Tan^c, Cynthia L. Smith^c, Susan D. Calkins^d, Martha Ann Bell^c



410 bebek
5-24 ay

THE ROLE OF DYADIC COMMUNICATION IN SOCIAL COGNITIVE DEVELOPMENT

Maria Legerstee

DEPARTMENT OF PSYCHOLOGY, YORK UNIVERSITY, TORONTO,
ON M3J 1P3, CANADA

RESEARCH ARTICLE

Observed Measures of Negative Parenting Predict Brain Development during Adolescence

Sarah Whittle^{1,2*}, Nandita Vijayakumar¹, Meg Dennison^{1,3}, Orli Schwartz¹, Julian G. Simmons^{1,2}, Lisa Sheeber⁴, Nicholas B. Allen^{1,5,6}

(a) Natural condition with mother



(b) Still-Face Condition (mother)



(c) Masked Condition (mother)



Sonuç :

Ebeveyn-çocuk etkileşiminin yaşam boyu sonuçları var..
Nörotipik gelişim için nörotipik çevre?

Ebeveyn-çocuk etkileşimi bir epigenetik parametre..
Aracı değişkenler?

Değişen dünyada değişen etkileşimler:
Teknoferans? Phubbing? Geç modern özne olarak bebek?

Çocuk dostu teknikler (qEEG, fMRI, fNIR) ve yeni nesil analizler (entropy, connectivity, graph teori)



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