

Redução da violência e idade penal

***"SE É NA MENTE DOS
HOMENS QUE SURGEM AS
GUERRAS, É NA MENTE
DOS HOMENS QUE DEVEM
SER ERGUIDAS AS
DEFESAS DA PAZ"***

Lema da UNESCO



Brasil, (SIM, 2012)

56.337 homicídios

46.051 mortes no trânsito

10.600 suicídios



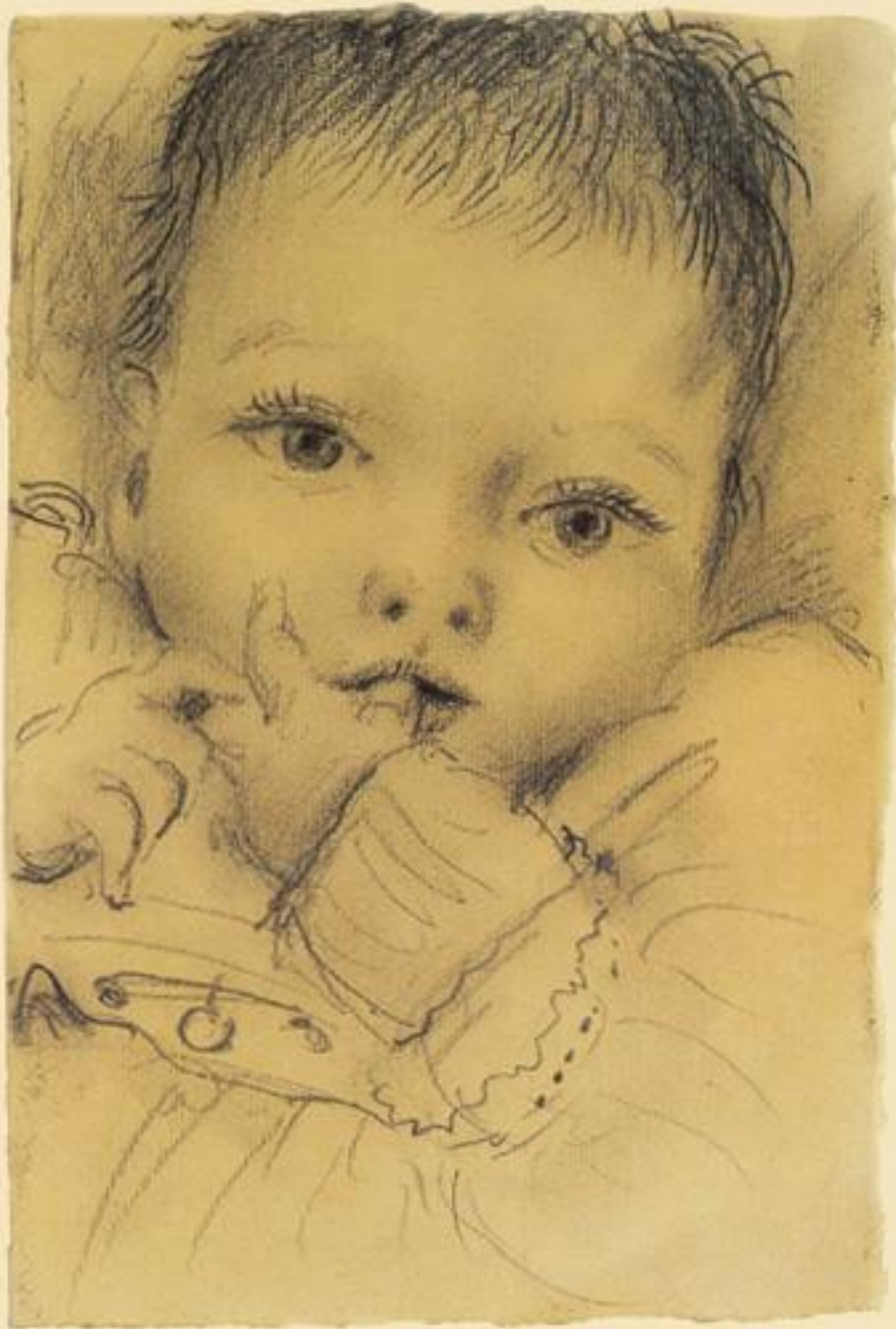
CHINA 13.000 (1/100.000)

INDIA 48.000 (4,8/100.000)

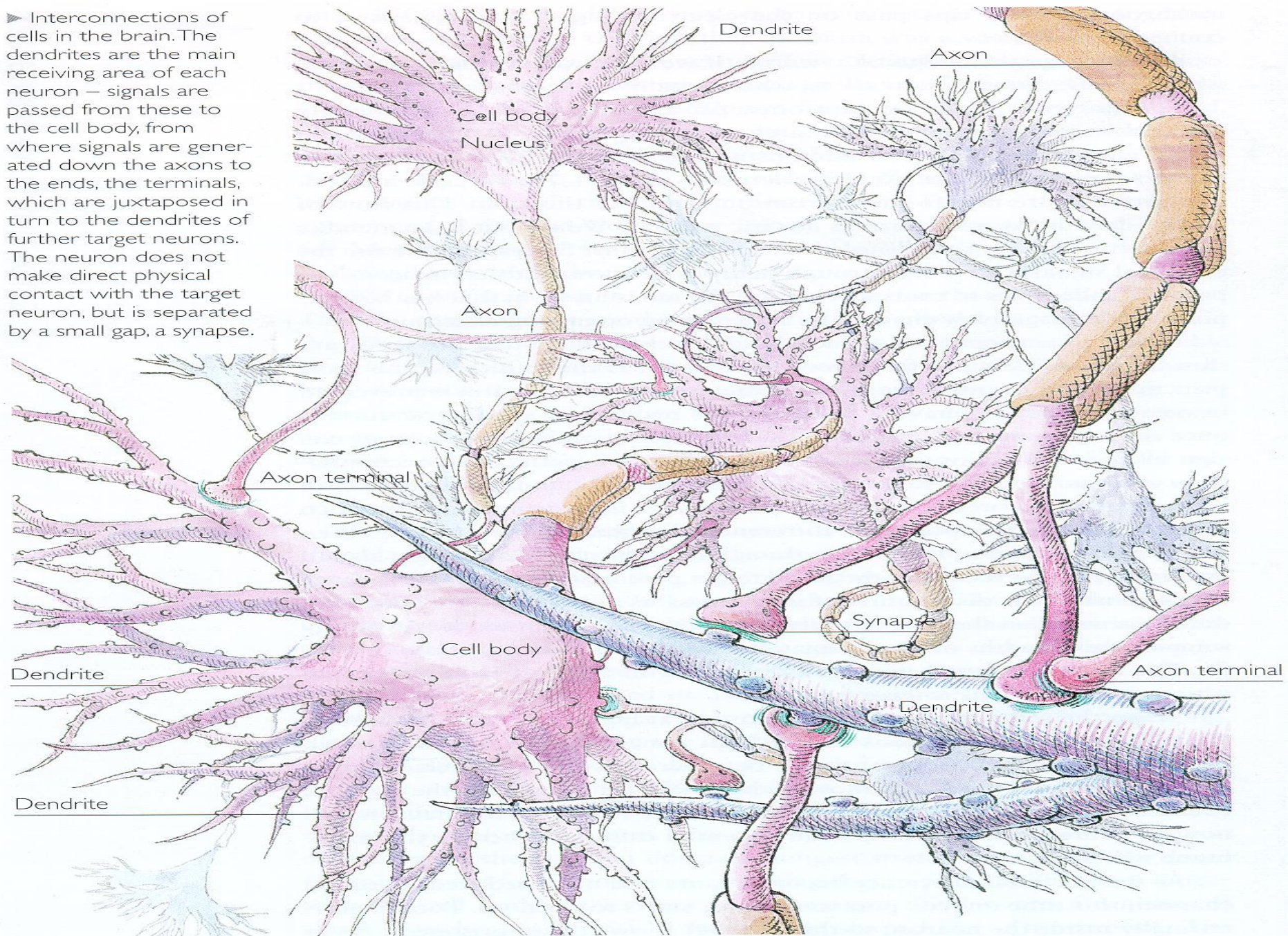
EUA 15.000 (3/100.000)

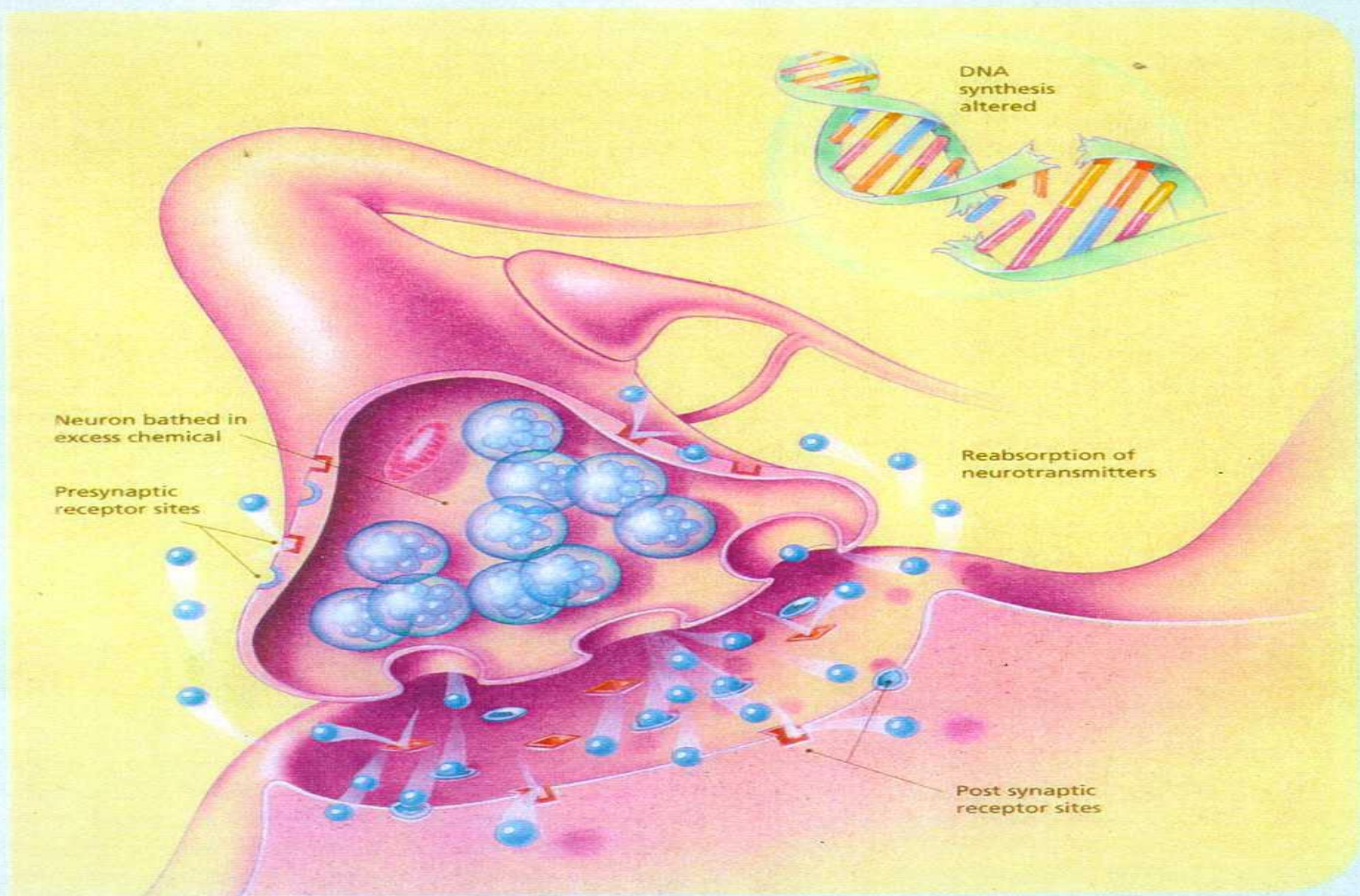
INDONÉSIA 1.400 (0,56/100.000)

BRASIL 56.000 (28/100.000)



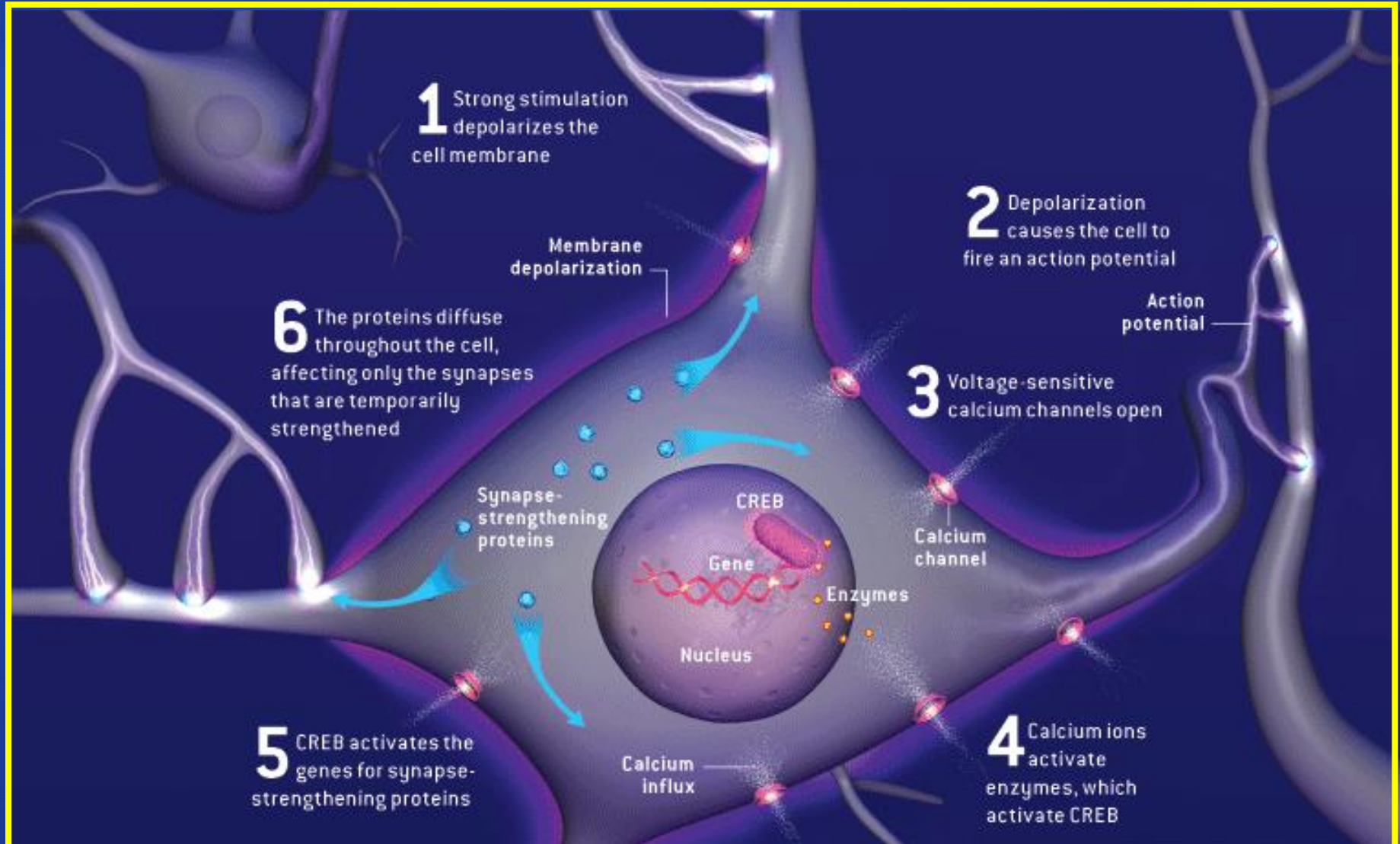
► Interconnections of cells in the brain. The dendrites are the main receiving area of each neuron – signals are passed from these to the cell body, from where signals are generated down the axons to the ends, the terminals, which are juxtaposed in turn to the dendrites of further target neurons. The neuron does not make direct physical contact with the target neuron, but is separated by a small gap, a synapse.

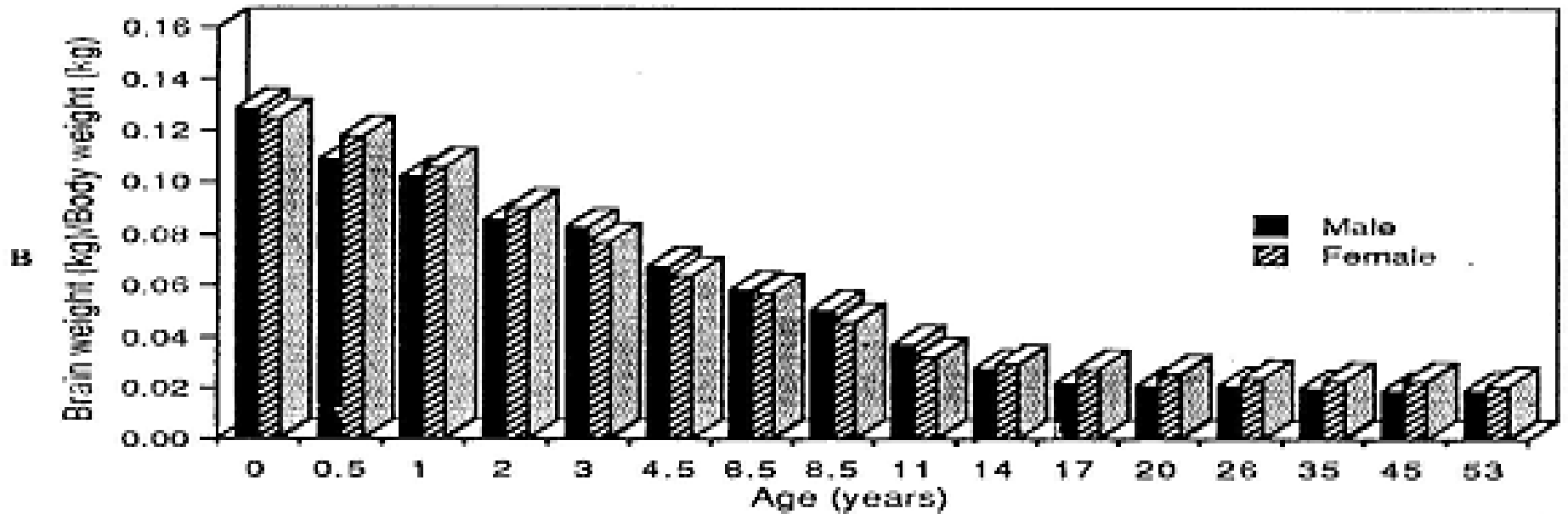
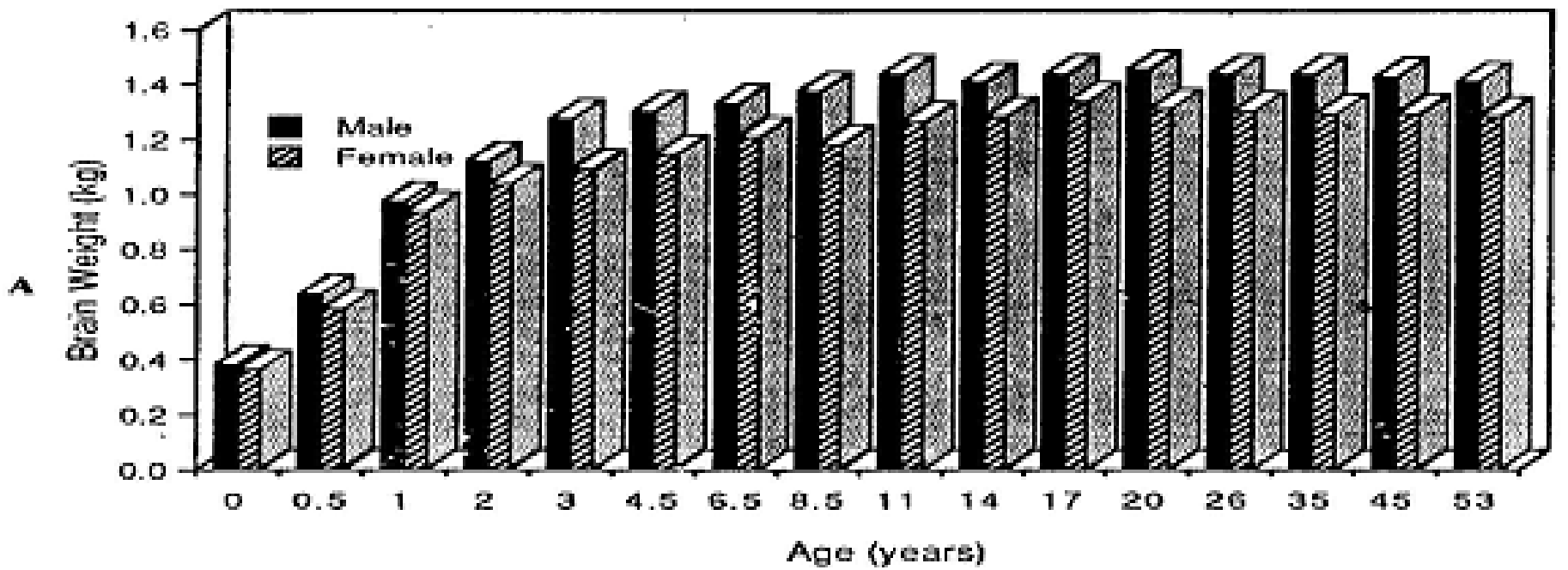




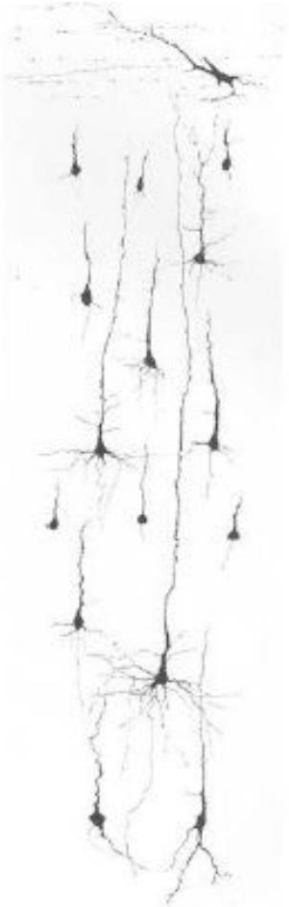
HOW NICOTINE AND OTHER DRUGS MAY AFFECT SYNAPSES: When a synapse is activated, neurons release more neurotransmitters than they need and then reabsorb the excess at special receptor sites. Scientists hypothesize that drugs such as nicotine and cocaine interfere with this reabsorption by blocking receptor sites. As a result, the neurons' "connection sites" are bathed in leftover chemicals and may become overstimulated.

How Genes “Know” When to Strengthen a Synapse

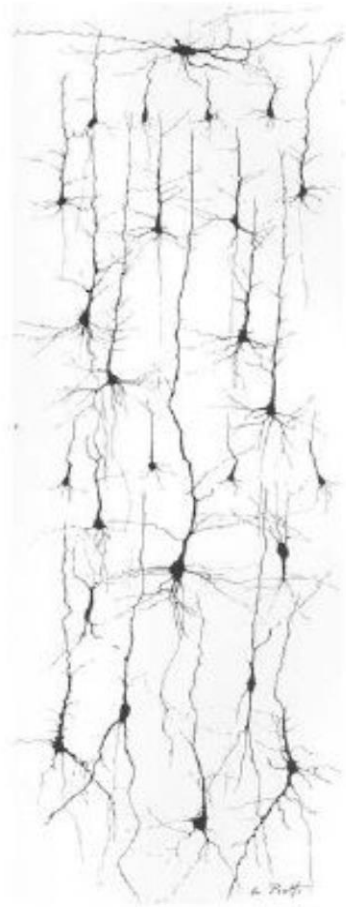




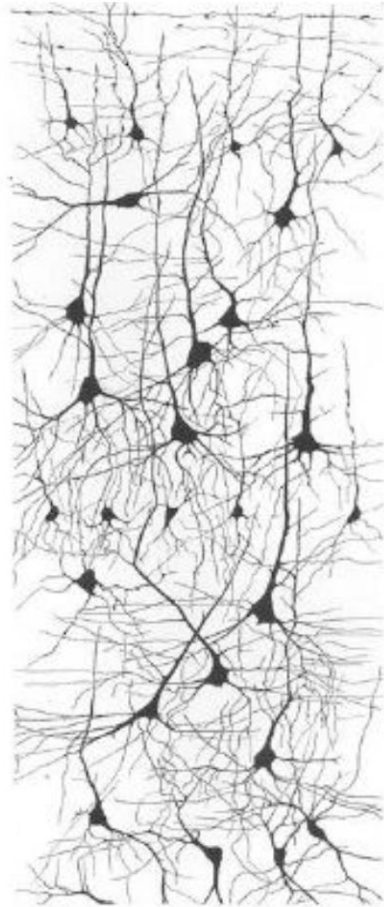




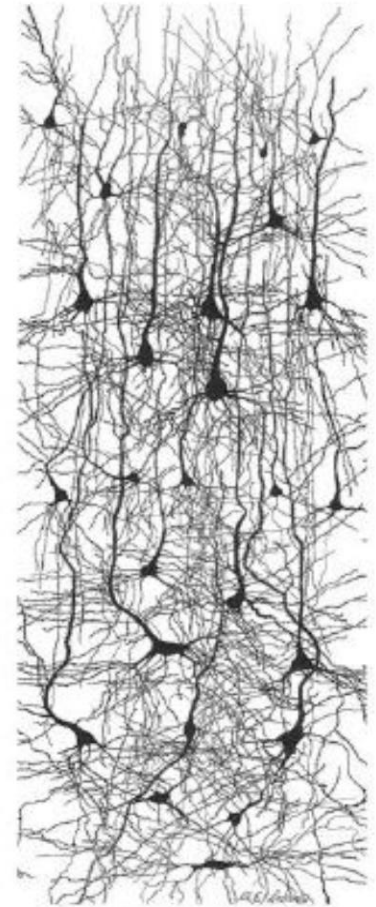
Newborn



1 month



6 months



2 years



4 years

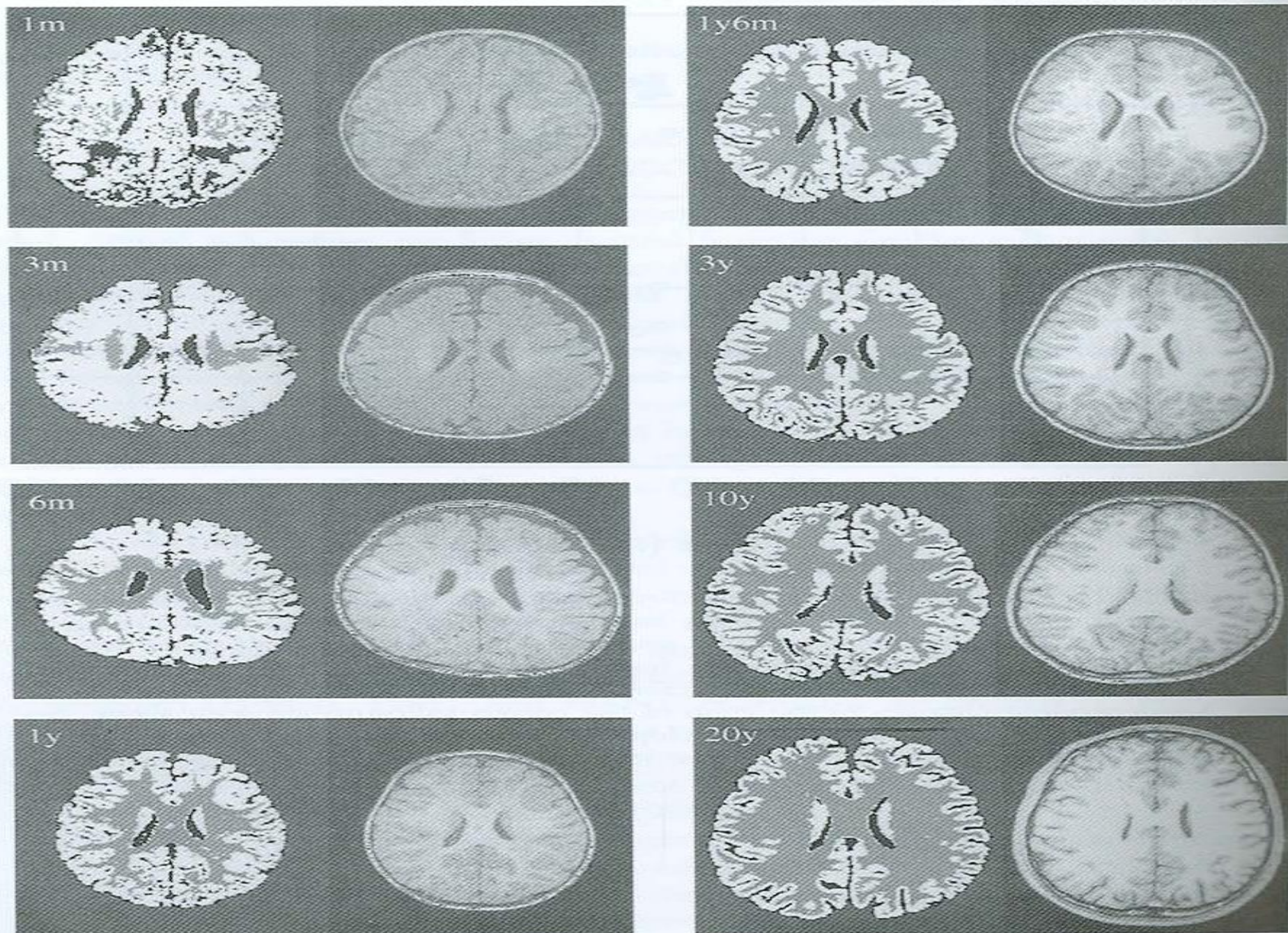
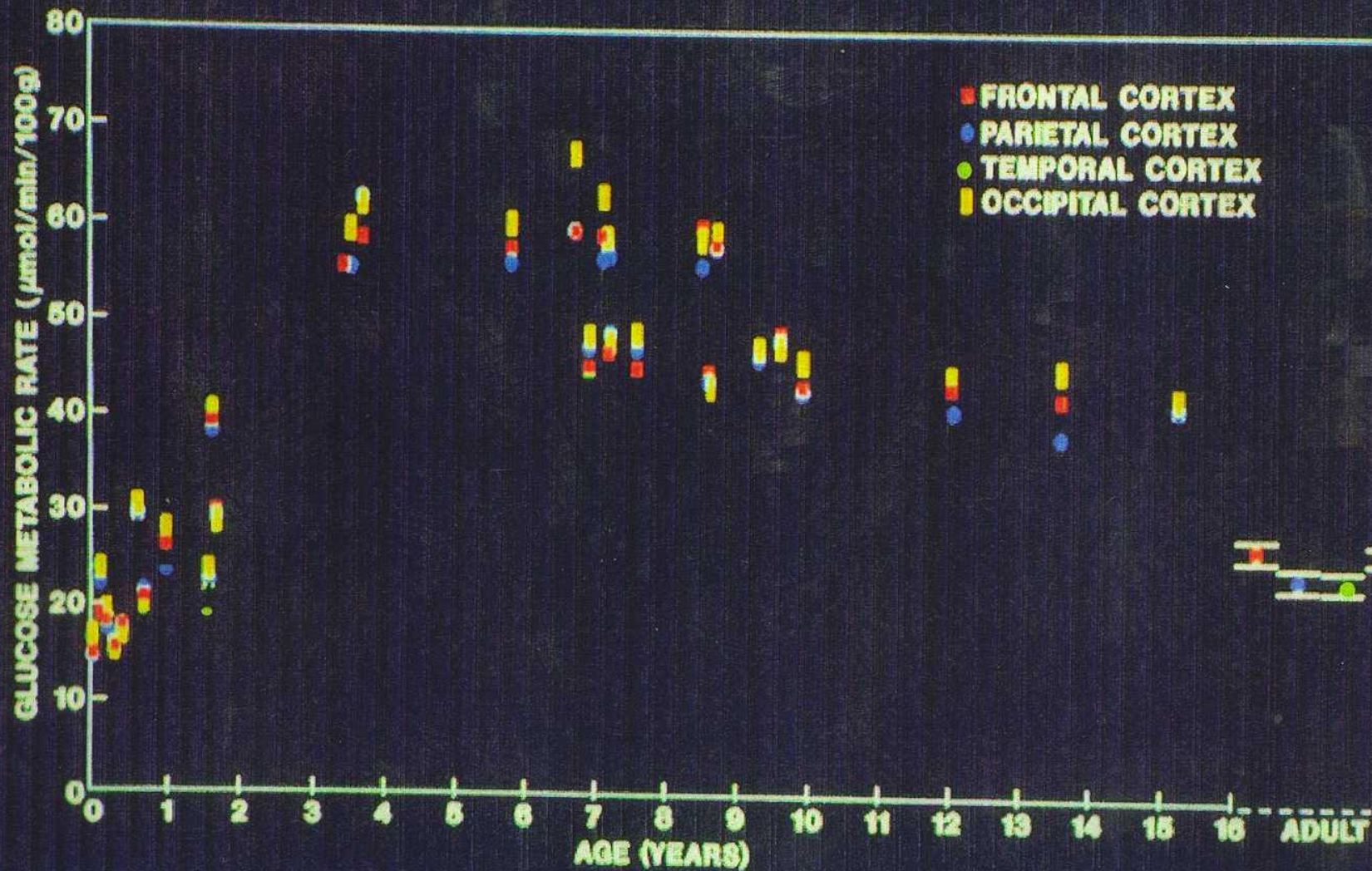
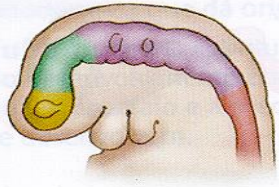


FIGURE A-2A Three-dimensional magnetic resonance imaging (MRI) of healthy chil-

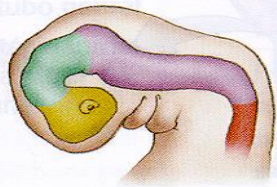
Synaptic Activity



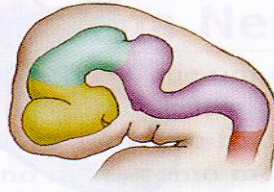
25 dias



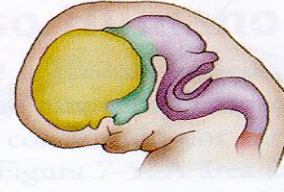
35 dias



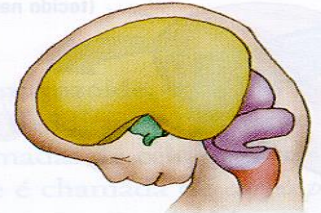
40 dias



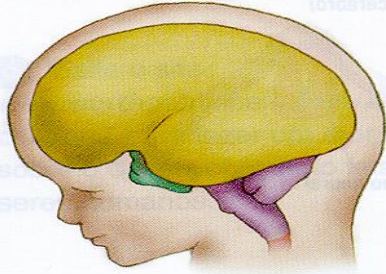
50 dias



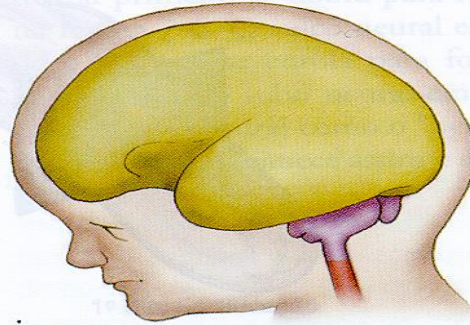
100 dias



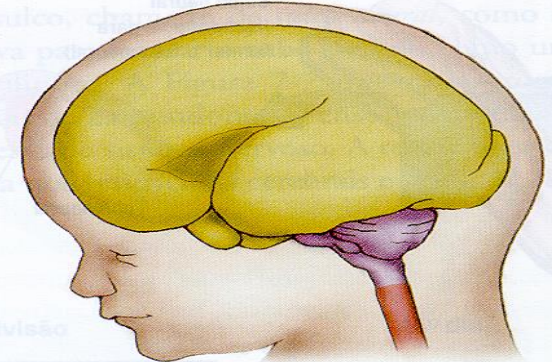
5 meses



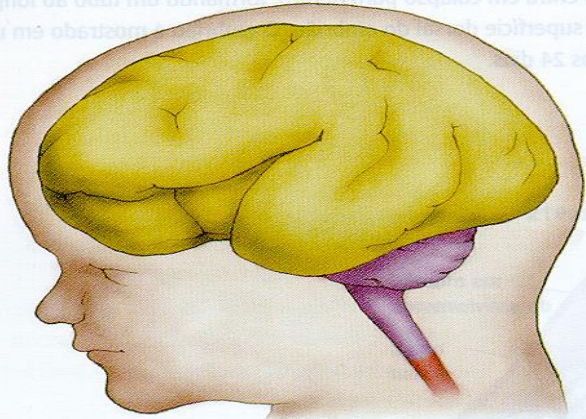
6 meses



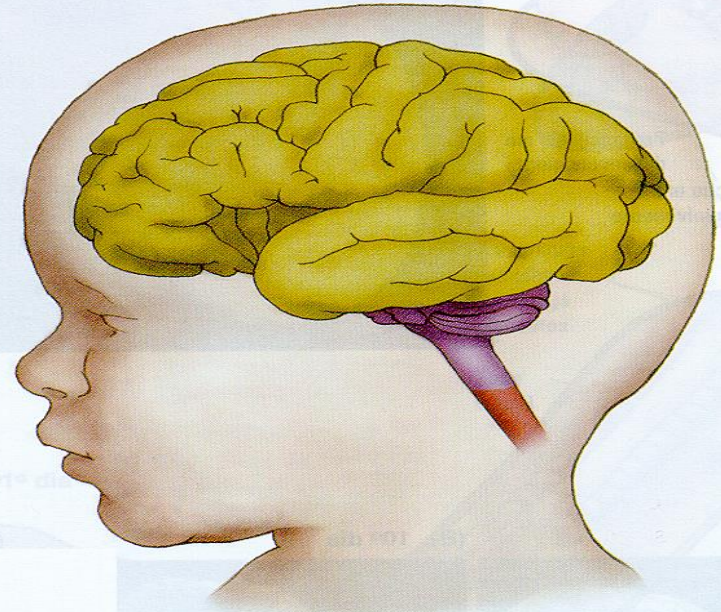
7 meses



8 meses



9 meses



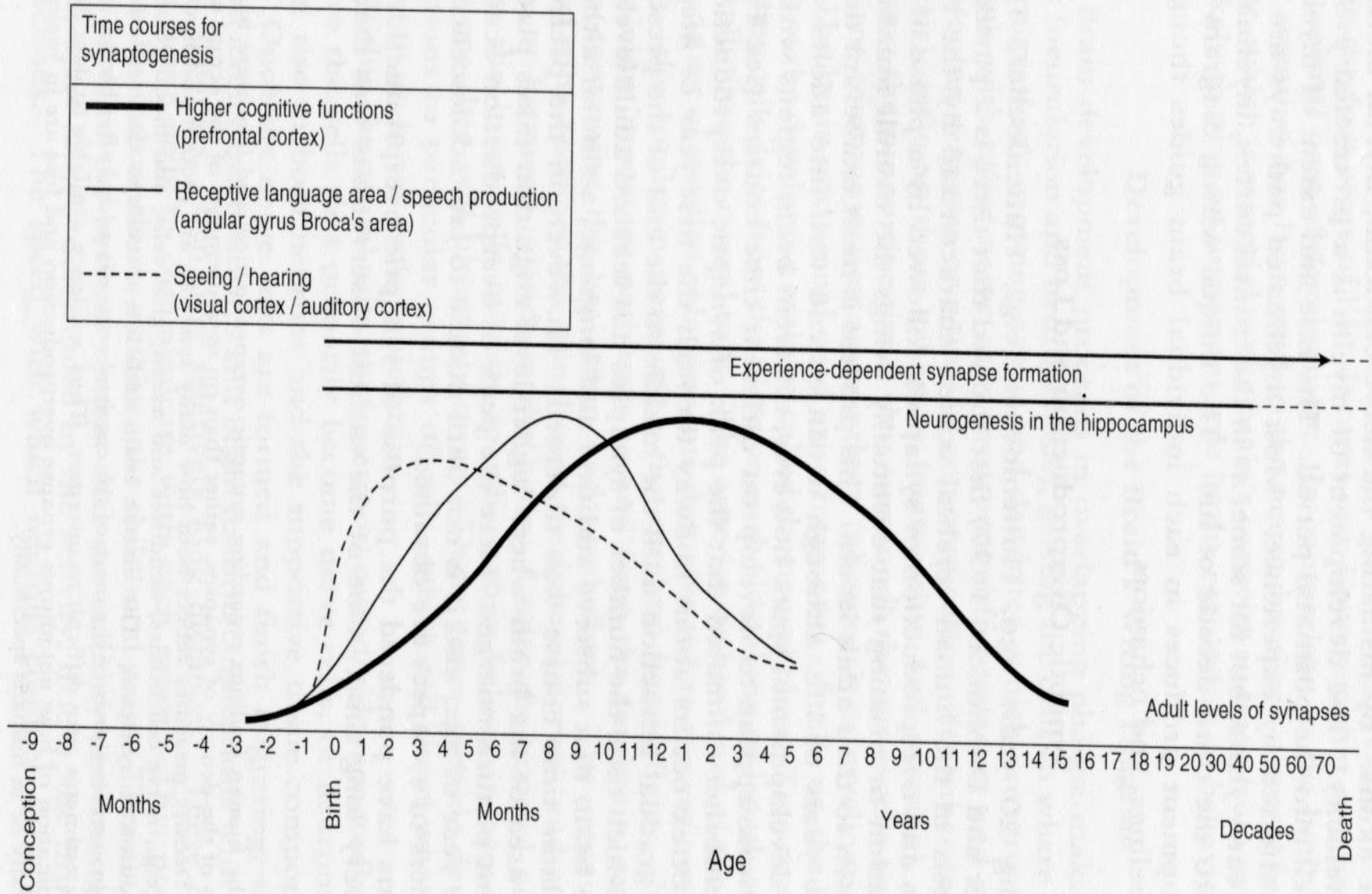
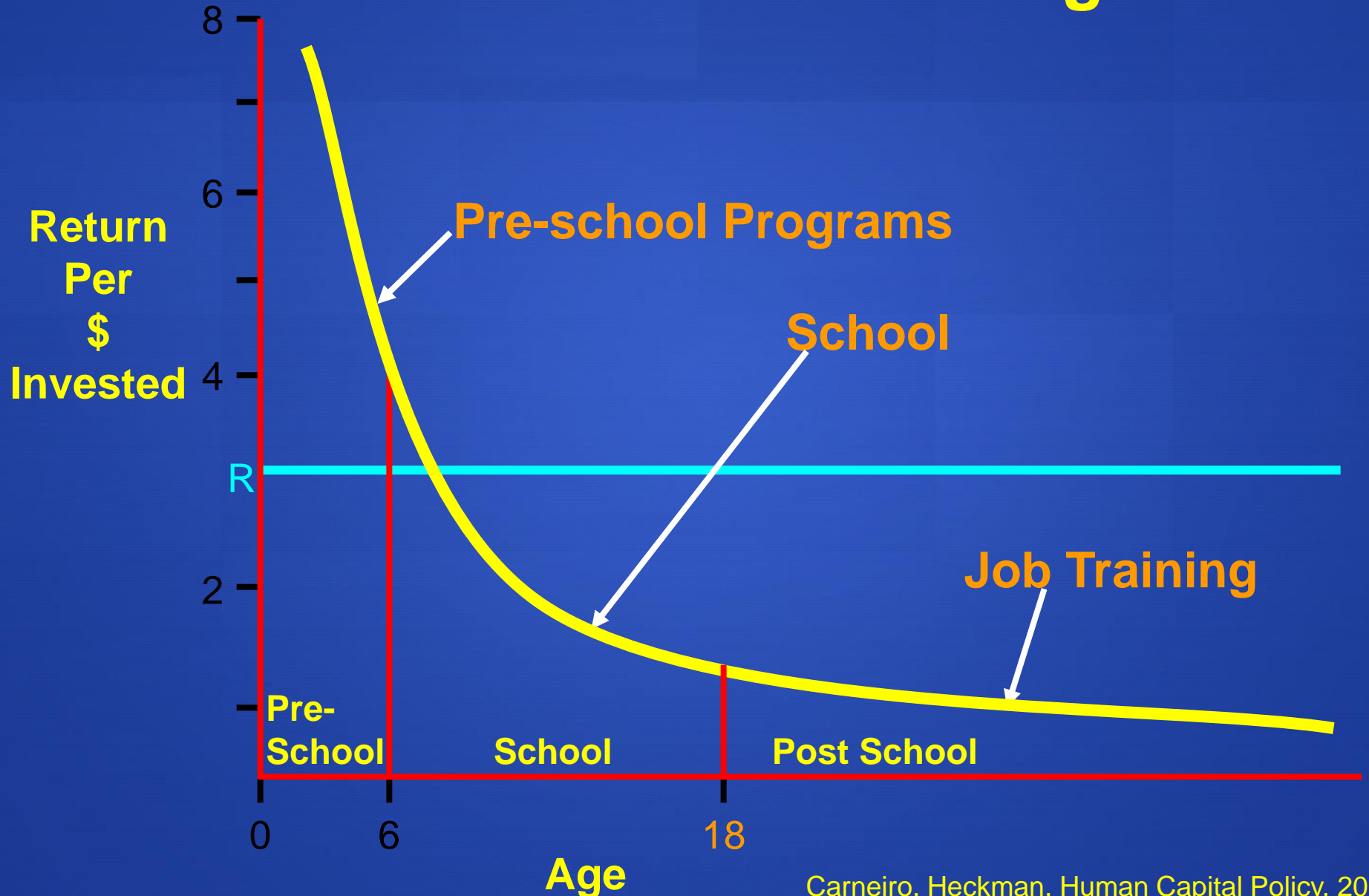


FIGURE 8-1 Human brain development. SOURCE: Charles A. Nelson, University of Minnesota. Reprinted with permission.

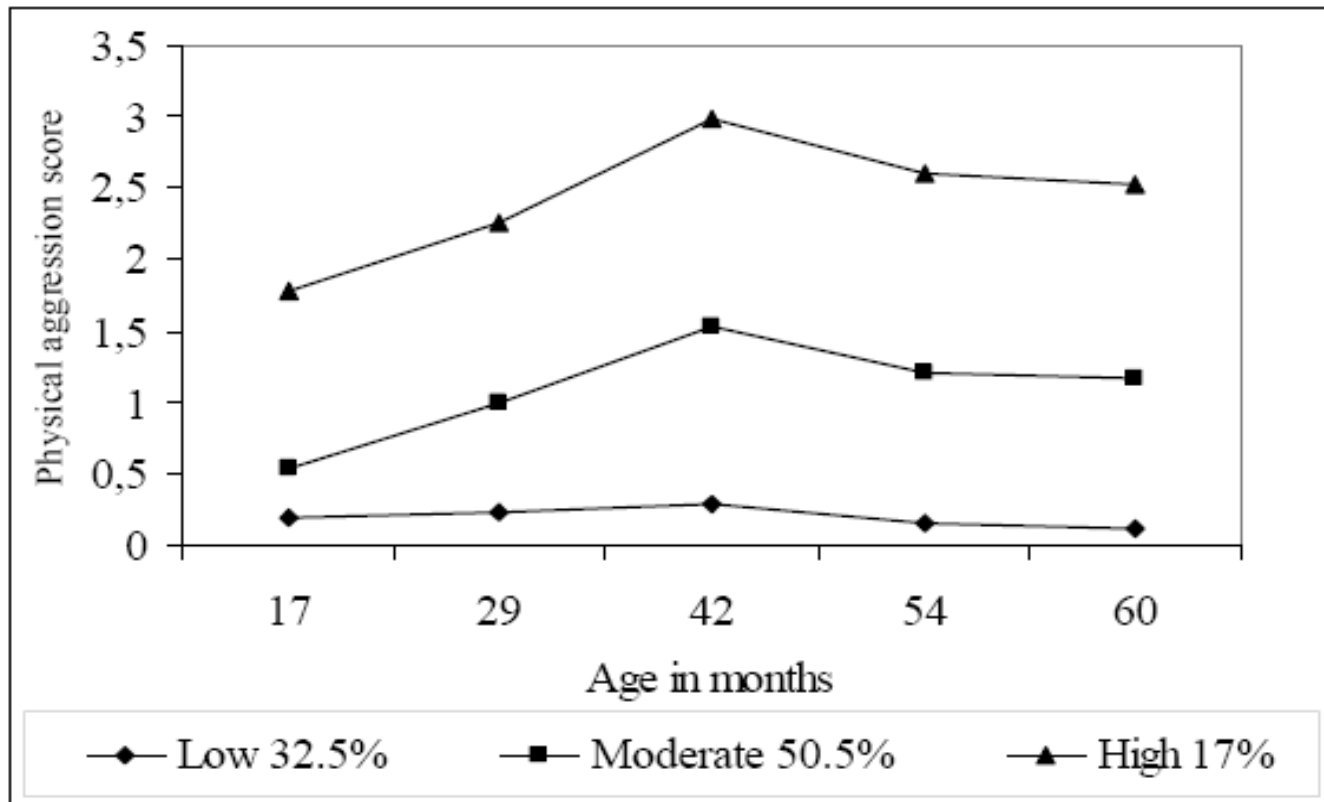
Rates of Return to Human Development Investment Across all Ages

03-074





Physical Aggression Trajectories (17 to 60 months)



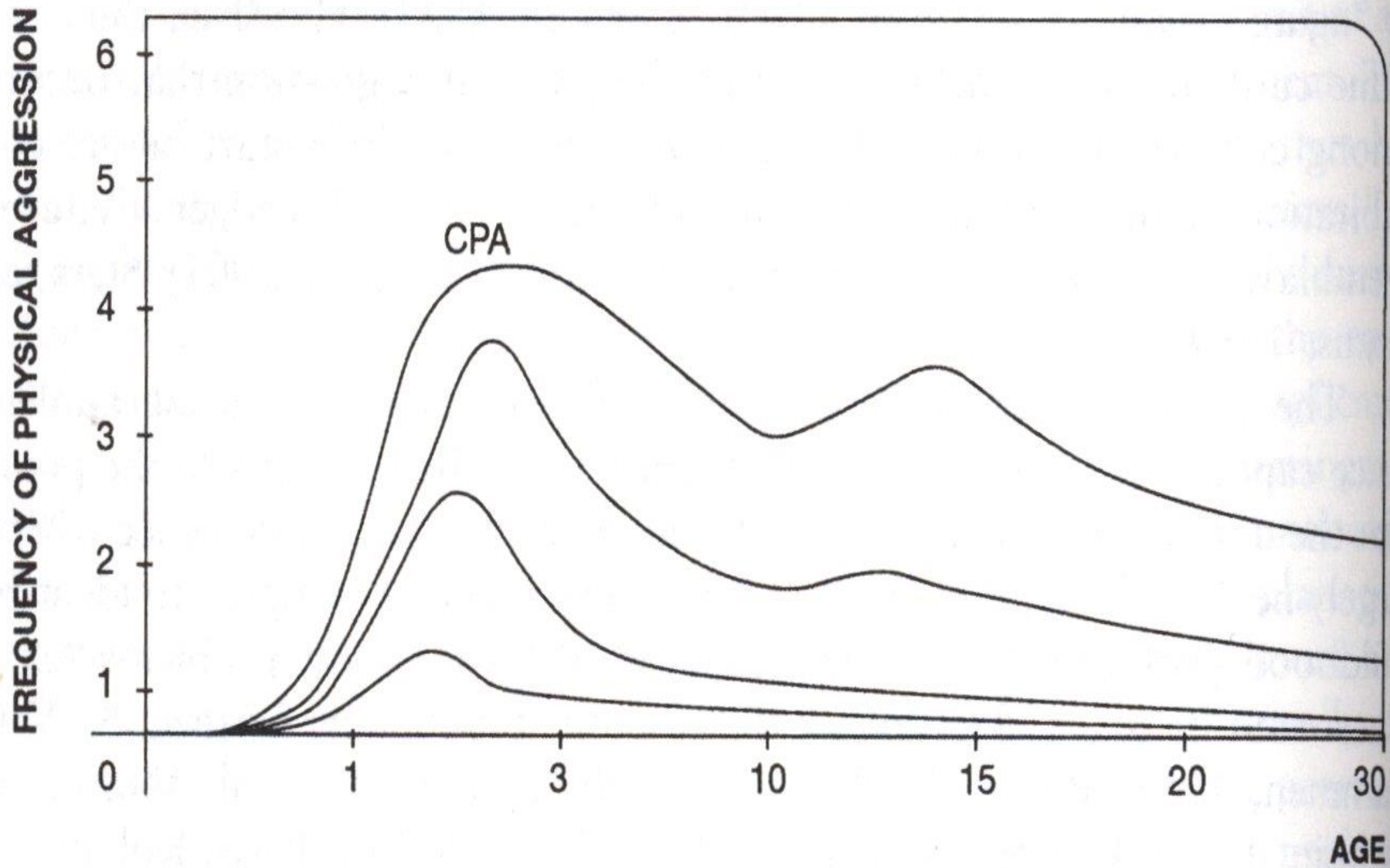


FIGURE 7.2. Age-physical aggression curves (hypothesized).

The Impact of Child Neglect on Brain Development

3 Year Old Children



Normal

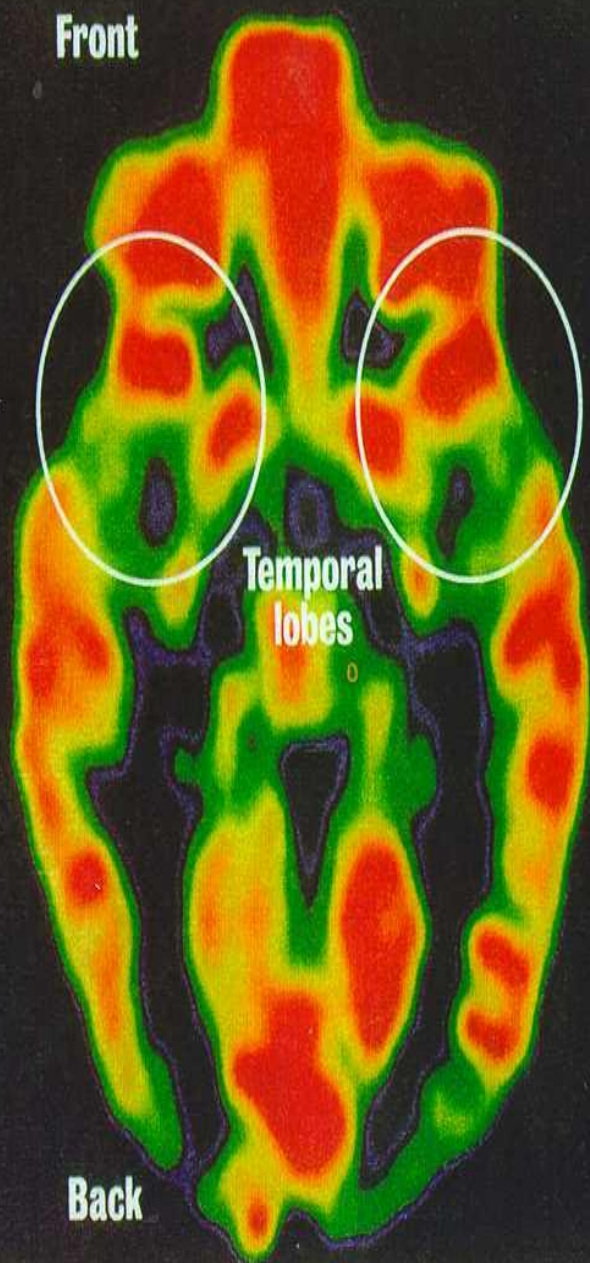


Extreme Neglect

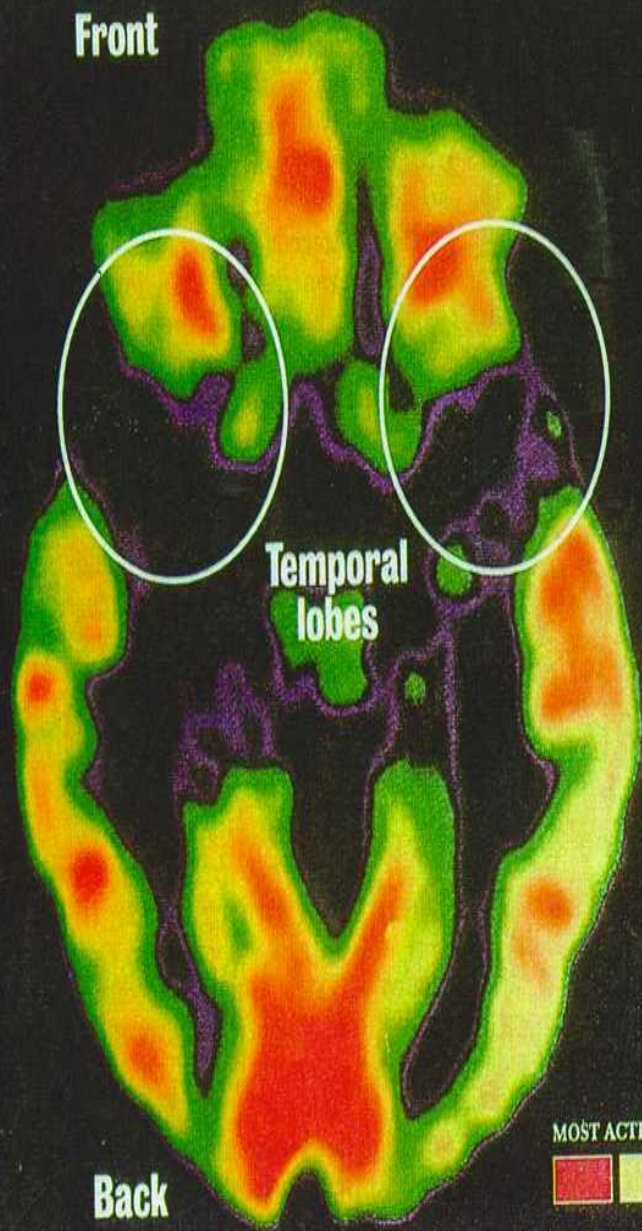


Healthy Brain

This PET scan of the brain of a normal child shows regions of high (red) and low (blue and black) activity. At birth, only primitive structures such as the brain stem (center) are fully functional; in regions like the temporal lobes (top), early childhood experiences wire the circuits.



Front

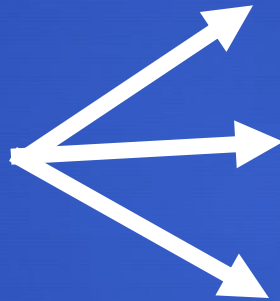


An Abused Brain

This PET scan of the brain of a Romanian orphan, who was institutionalized shortly after birth, shows the effect of extreme deprivation in infancy. The temporal lobes (top), which regulate emotions and receive input from the senses, are nearly quiescent. Such children suffer emotional and cognitive problems.



**Childhood
Chronic
Physical
Aggression**



School Failure

Tobacco

Alcohol

Drugs

Early Sex

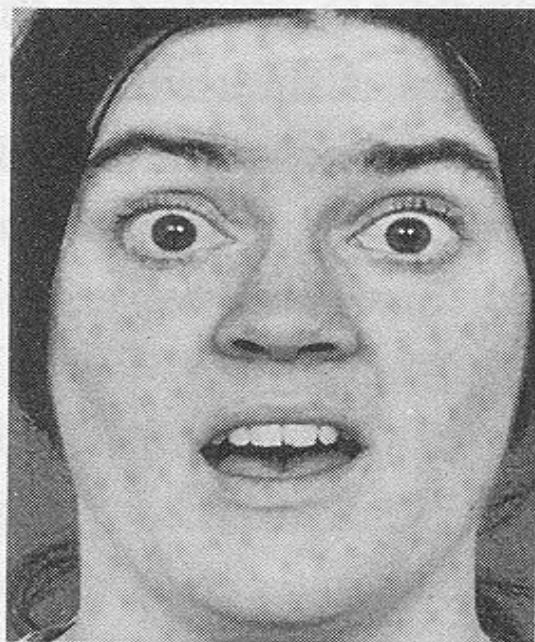
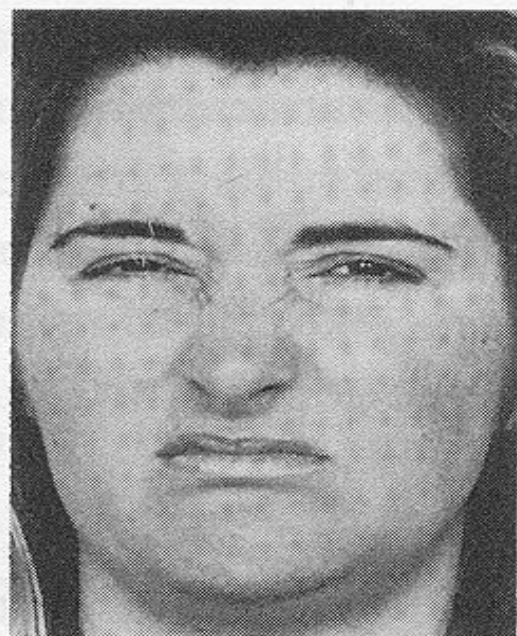
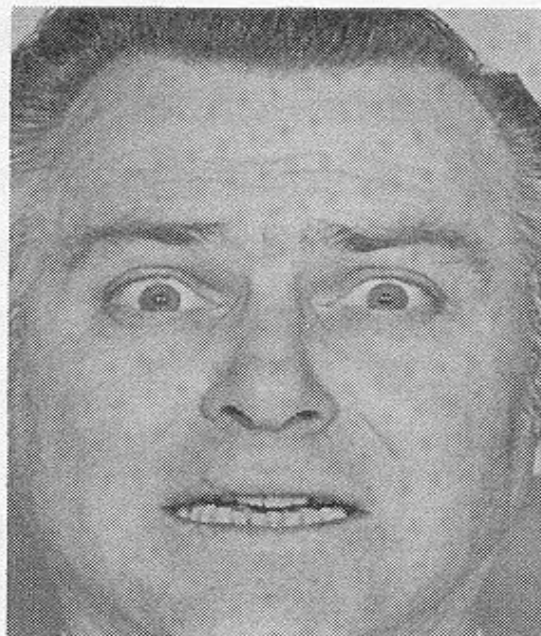
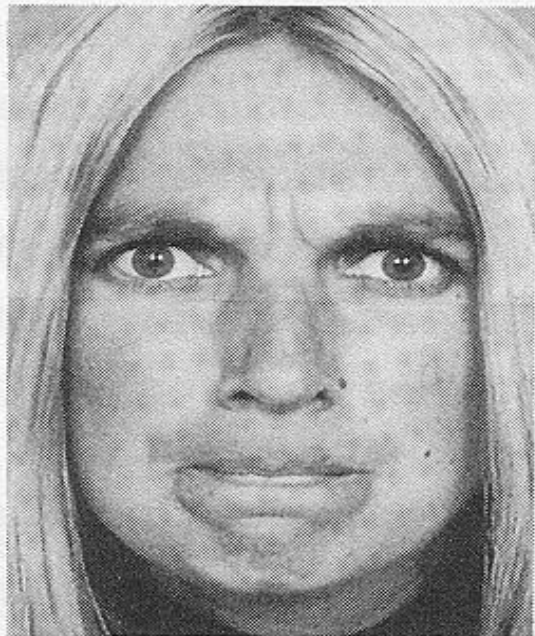
Violence

Depression

Unemployment

Poverty





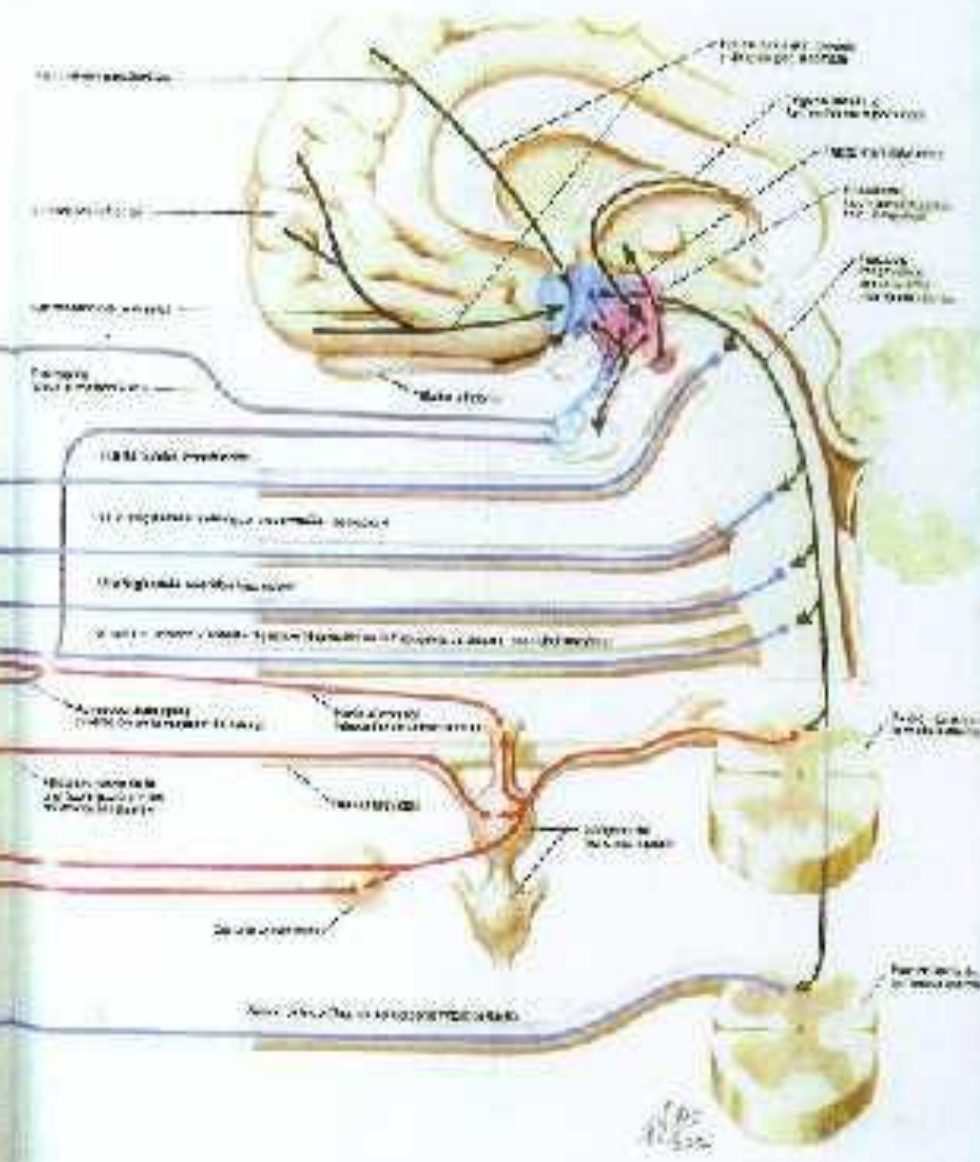
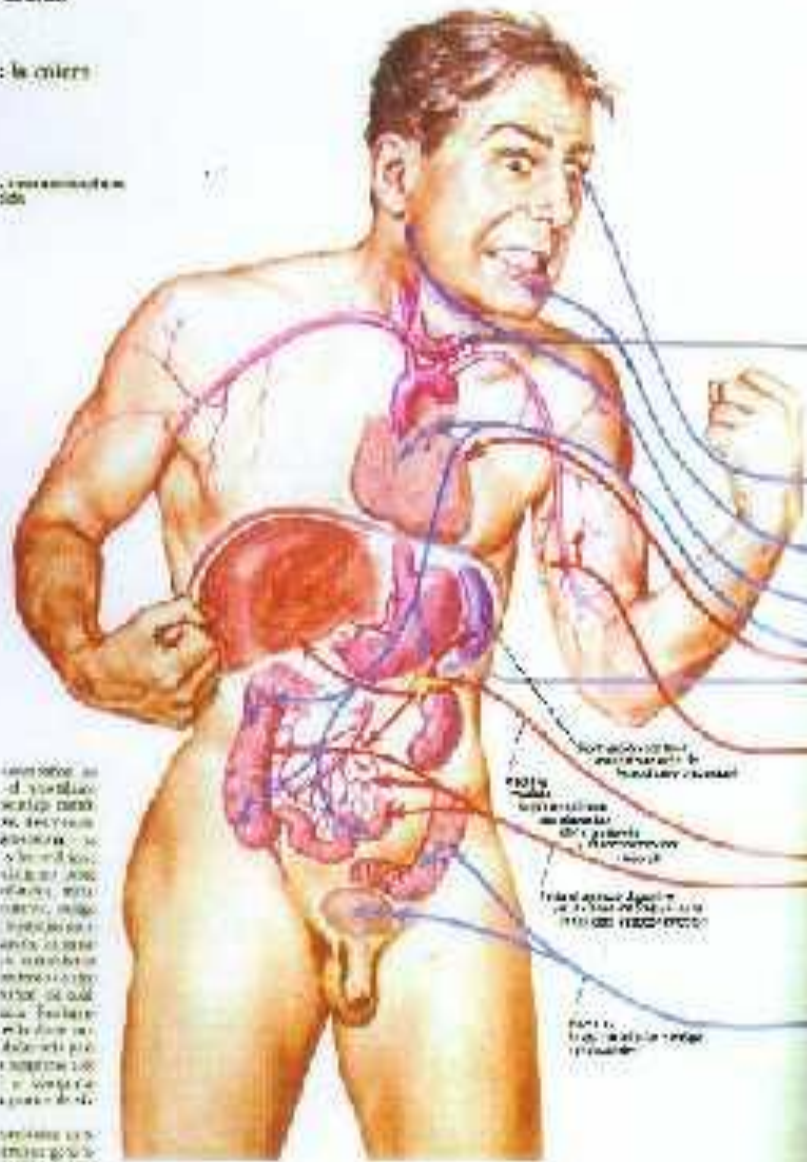
L'Homme

le cerveau

le système nerveux

Le système nerveux est constitué de neurones qui sont des cellules spécialisées pour transmettre et traiter l'information. Les neurones sont regroupés en cellules nerveuses, qui sont regroupées en nerfs. Les nerfs sont des cordons de fibres nerveuses qui transportent les messages du cerveau et de la moelle épinière vers les autres parties du corps. Les messages sont transmis par des impulsions électriques qui se déplacent le long des fibres nerveuses.

Le système nerveux est divisé en deux parties : le système nerveux central (SNC) et le système nerveux périphérique (SNP). Le SNC est constitué du cerveau et de la moelle épinière. Le SNP est constitué des nerfs qui se trouvent dans le reste du corps.

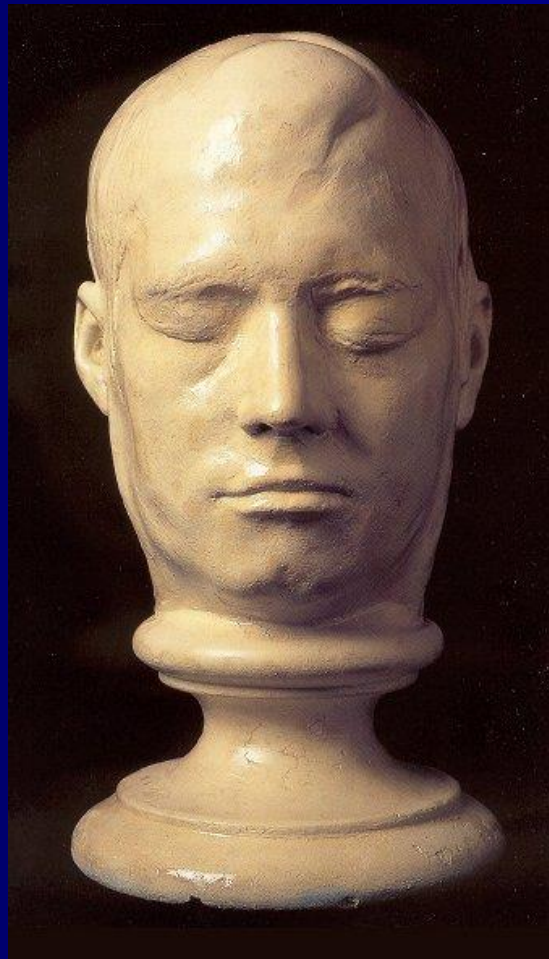


10/10



Figura 5.3 Phineas Gage, no Barnum's American Museum, segurando a haste que destruiu seu córtex pré-frontal.

Máscara mortuária Phineas Gage

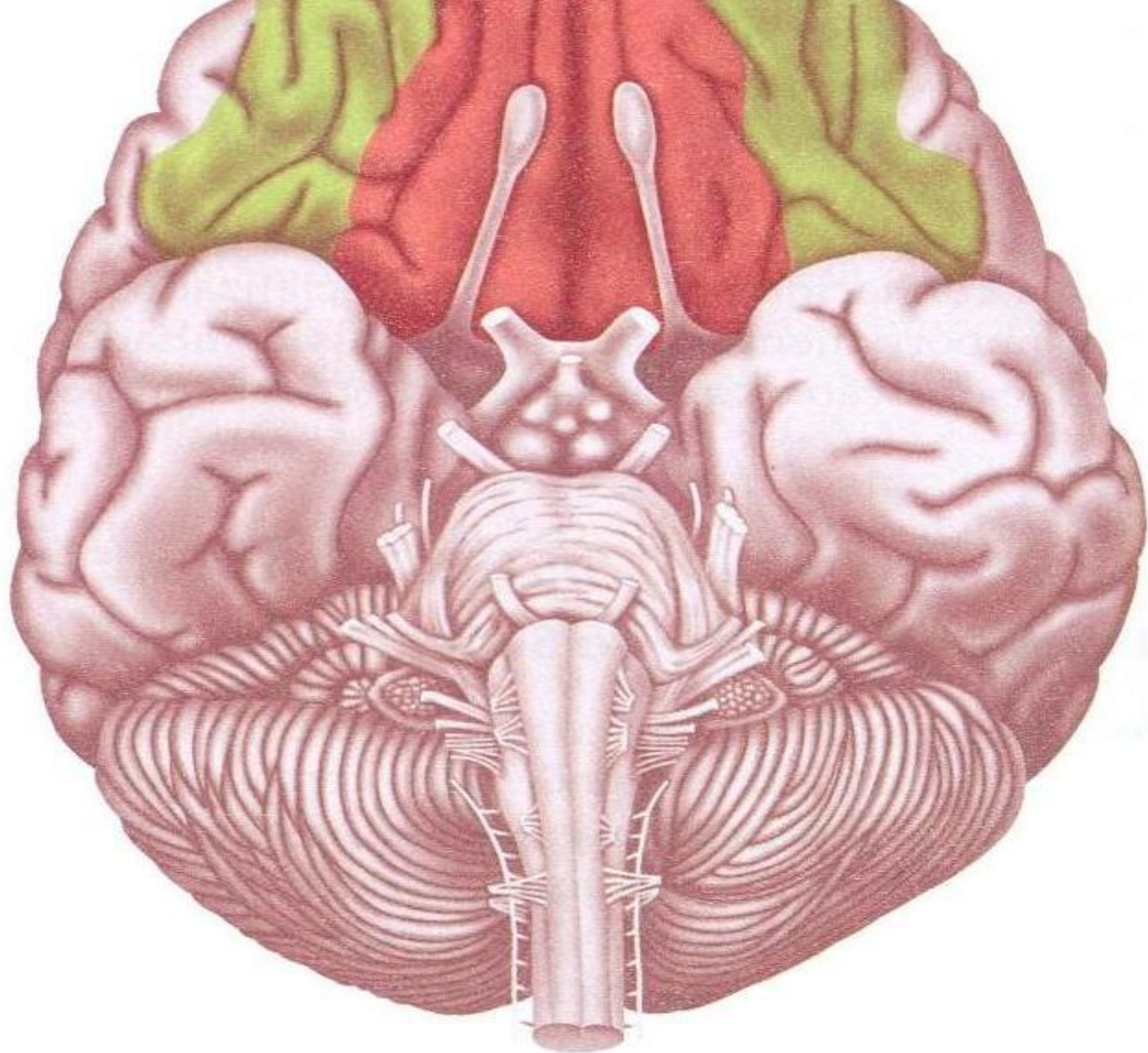




Reconstrução: Hanna Damasio e cols.

TRANSTORNOS MENTAIS

- **ALCOOLISMO - 12 % (18% MASC.)**
- **DROGAS ILÍCITAS – 4 a 6 %**
- **CRACK – 0,5 A 1%**
- **DEPRESSÃO – 10 %**
- **TDAH- 5,6 %**
- **ESQUIZOFRENIA – 1 %**
- **TOD – DE 2 A 16%**
- **TC – 5%**
- **TPAS – 2%**
- **TPB – 2%**
- **T. BIPOLAR- 1,5%**



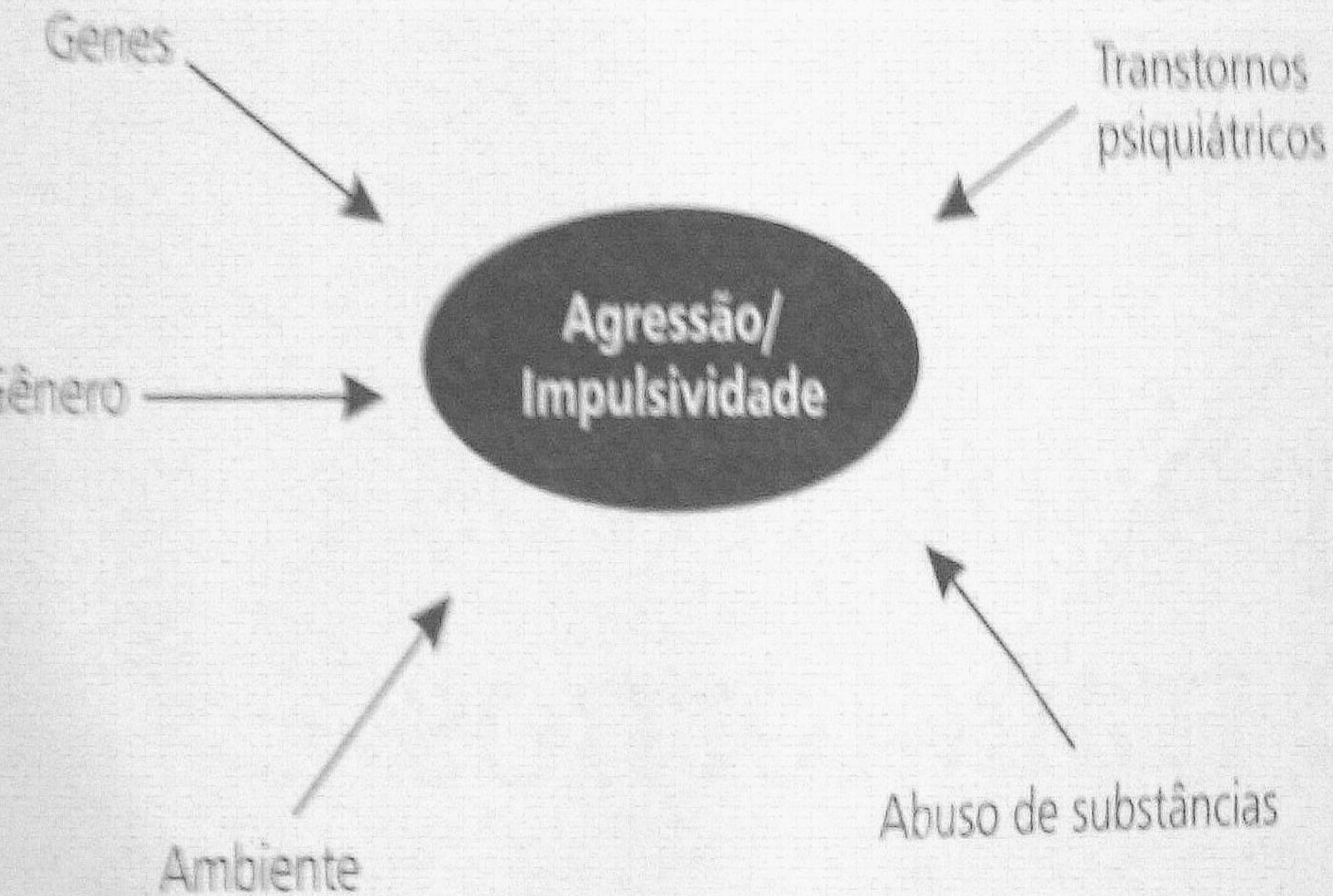
ALCOOLIZADOS

■ 60% DOS ENVOLVIDOS EM ACIDENTES

■ 50% DOS ENVOLVIDOS EM HOMICÍDIOS

DEPRESSIVOS

■ 90% DOS SUICIDAS



Serotonin Gene, Experience, and Depression

03-089

Depression

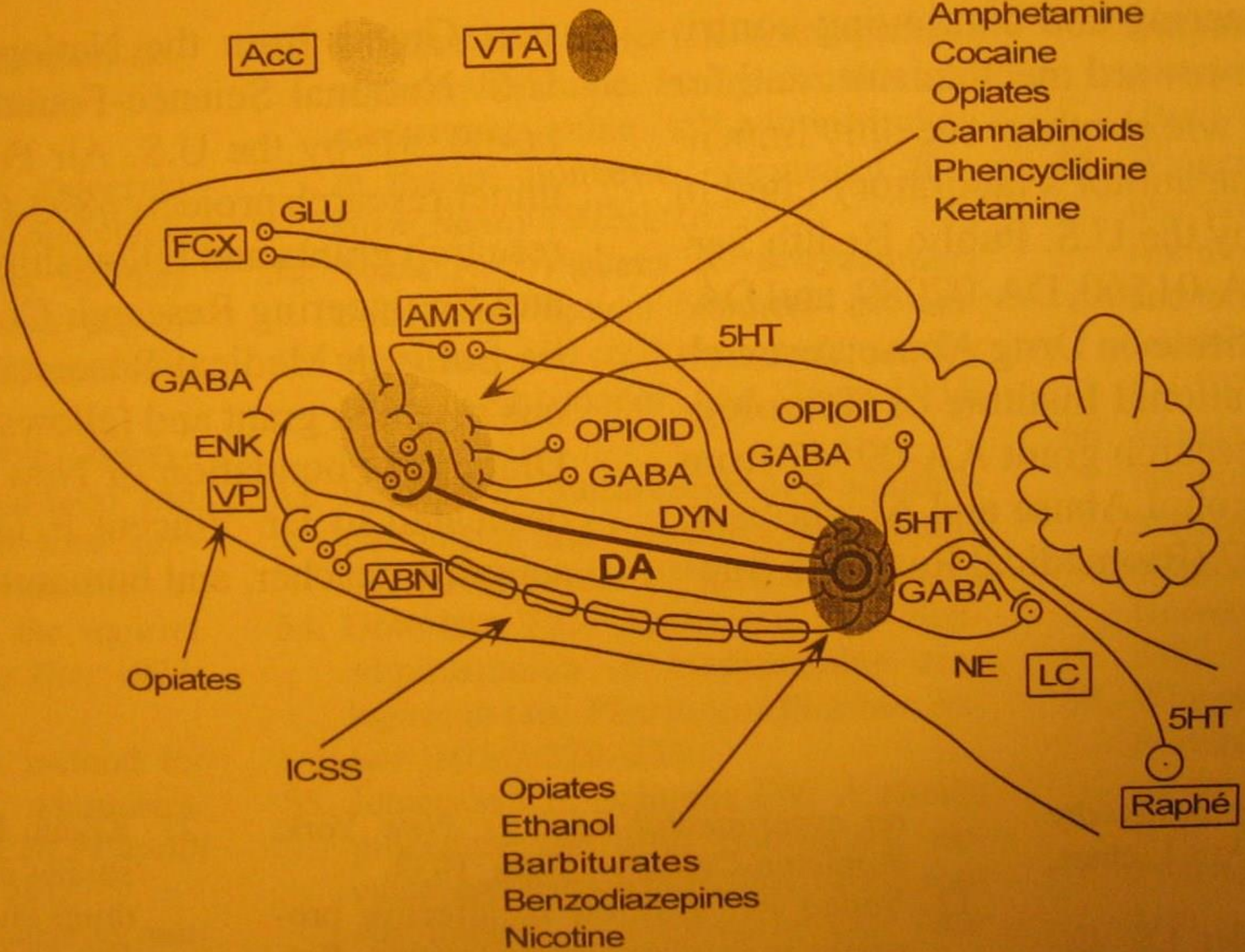
Age 26

Risk



Early Childhood

A. Caspi, Science, 18 July 2003, Vol 301.





O crack já atingiu quase 4% da população americana. Cerca de 8 milhões de americanos com 12 anos ou mais afirmam que já utilizaram crack alguma vez durante a vida,

[2003 National Survey on Drug Use and Health](#)

CRACK NO RS

- **ZERO CASOS EM 1997**
- **100.000 CASOS EM 2010(ESTIMATIVA)**
- **EM 2002 - 80% DOS ATENDIMENTOS DE EMERGÊNCIA DO HSP PARA AD ERA DE ALCOOLISMO.**
- **EM 2008 - 80% JÁ ERA DE DEPENDENTES DO CRACK.**
- **6 ÓBITOS POR DIA POR ALTERAÇÕES ORGANICAS E POR VIOLÊNCIA**
- **50% DOS HOMICÍDIOS**
- **EM 2012 DEVEREMOS TER MAIS DE 150.000 DEPENDENTES**



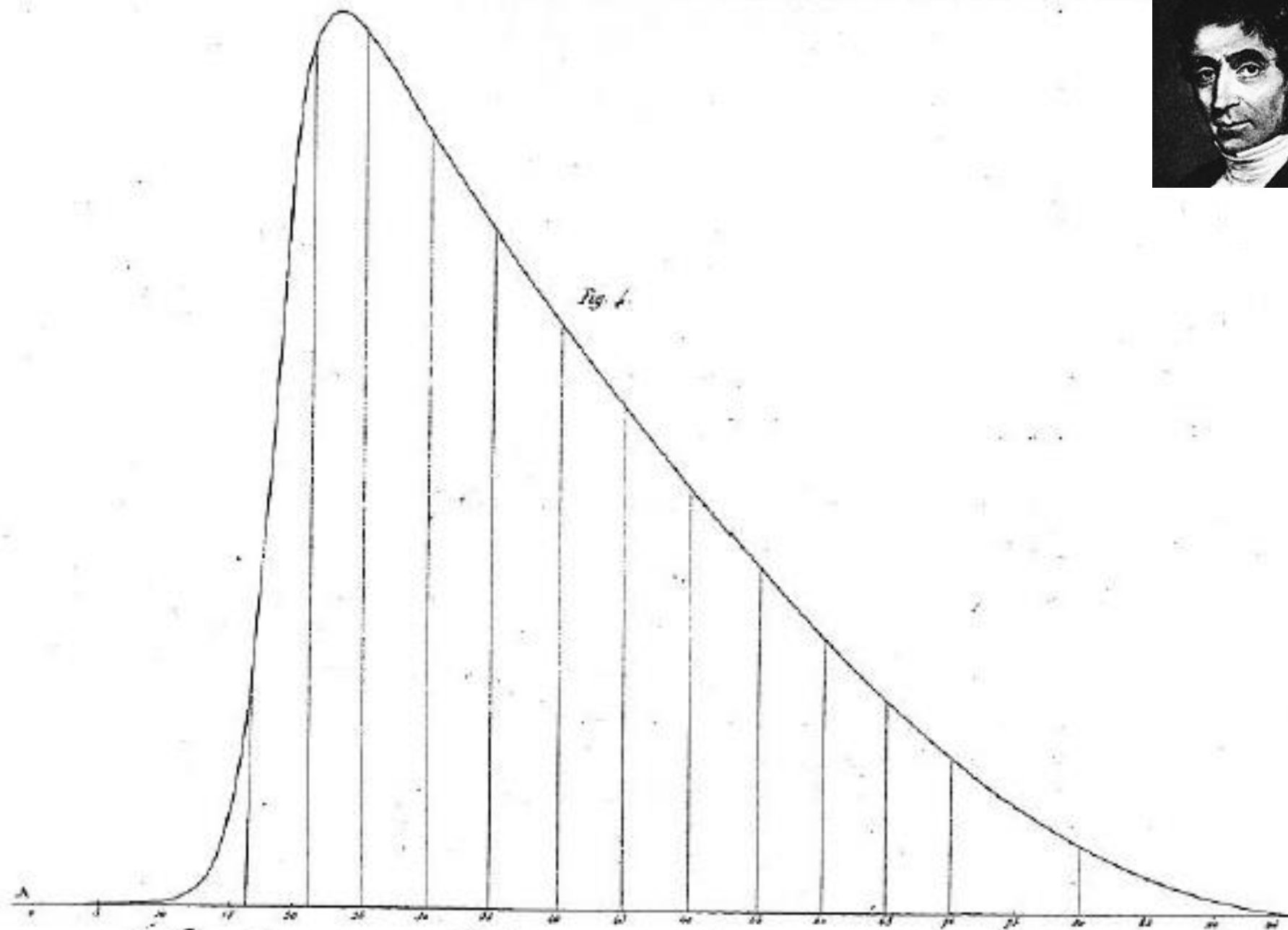
A Síndrome da Adolescência Normal (SNA)

1. Busca de si mesmo e da identidade
2. A tendência grupal
3. Necessidade de intelectualizar e fantasiar
4. Crises religiosas
5. A vivência do tempo
6. A sexualidade
7. Atitude social reivindicatória
8. Condutas contraditórias
9. Separação progressiva dos pais
10. Constantes flutuações do humor

**Transtornos do humor, incluindo
DEPRESSÃO e T. BIPOLAR, tem alta
co-morbidade com abuso de
substâncias na adolescência.**

**Entre 60 a 80% dos adolescentes
com dependência química tem
alguma outra forma de
psicopatologia....**

(Andrés J. Pumariega e cols.)



Course indiquant les degrés de penchant au crime avec différents âges.

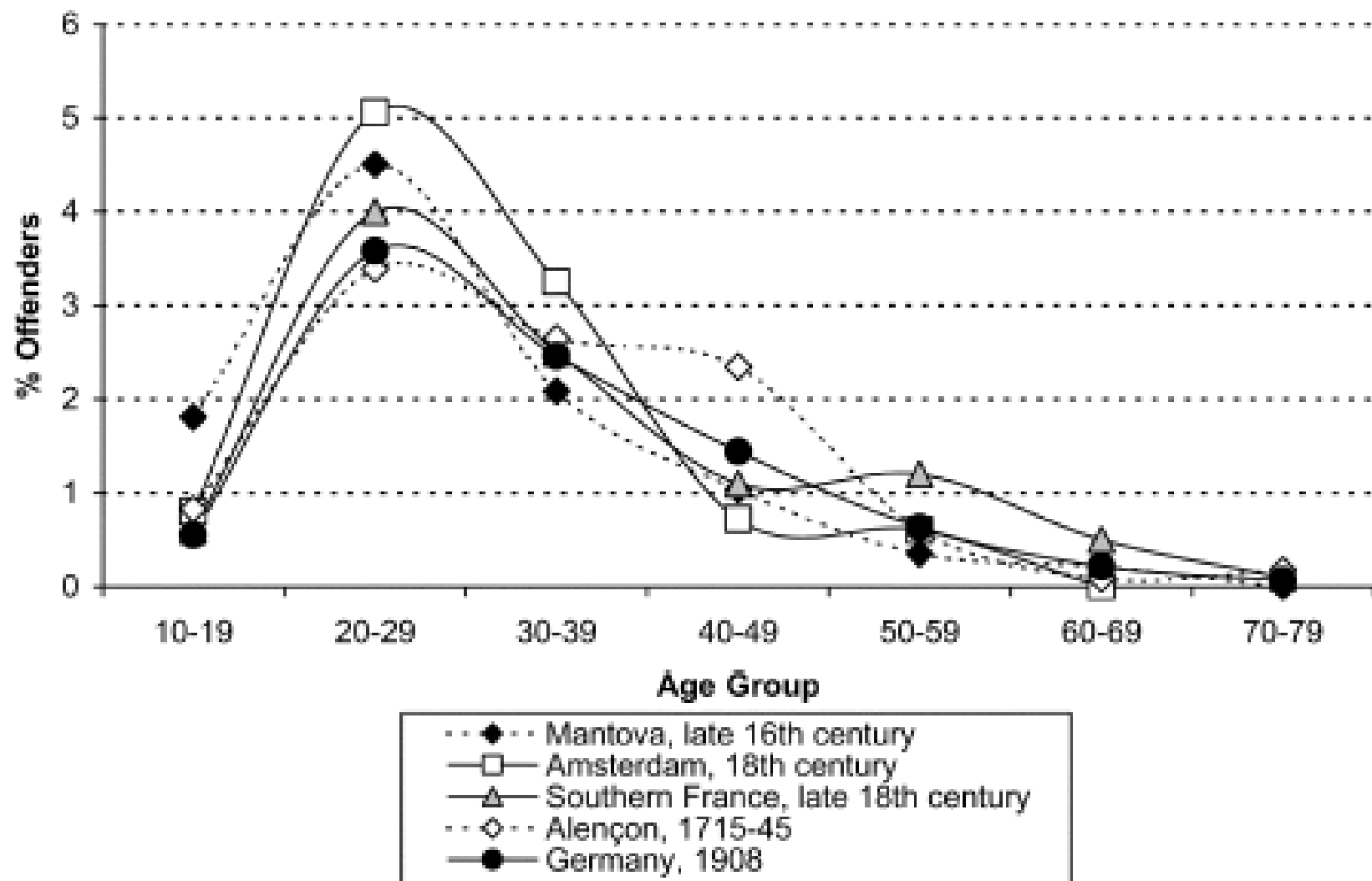
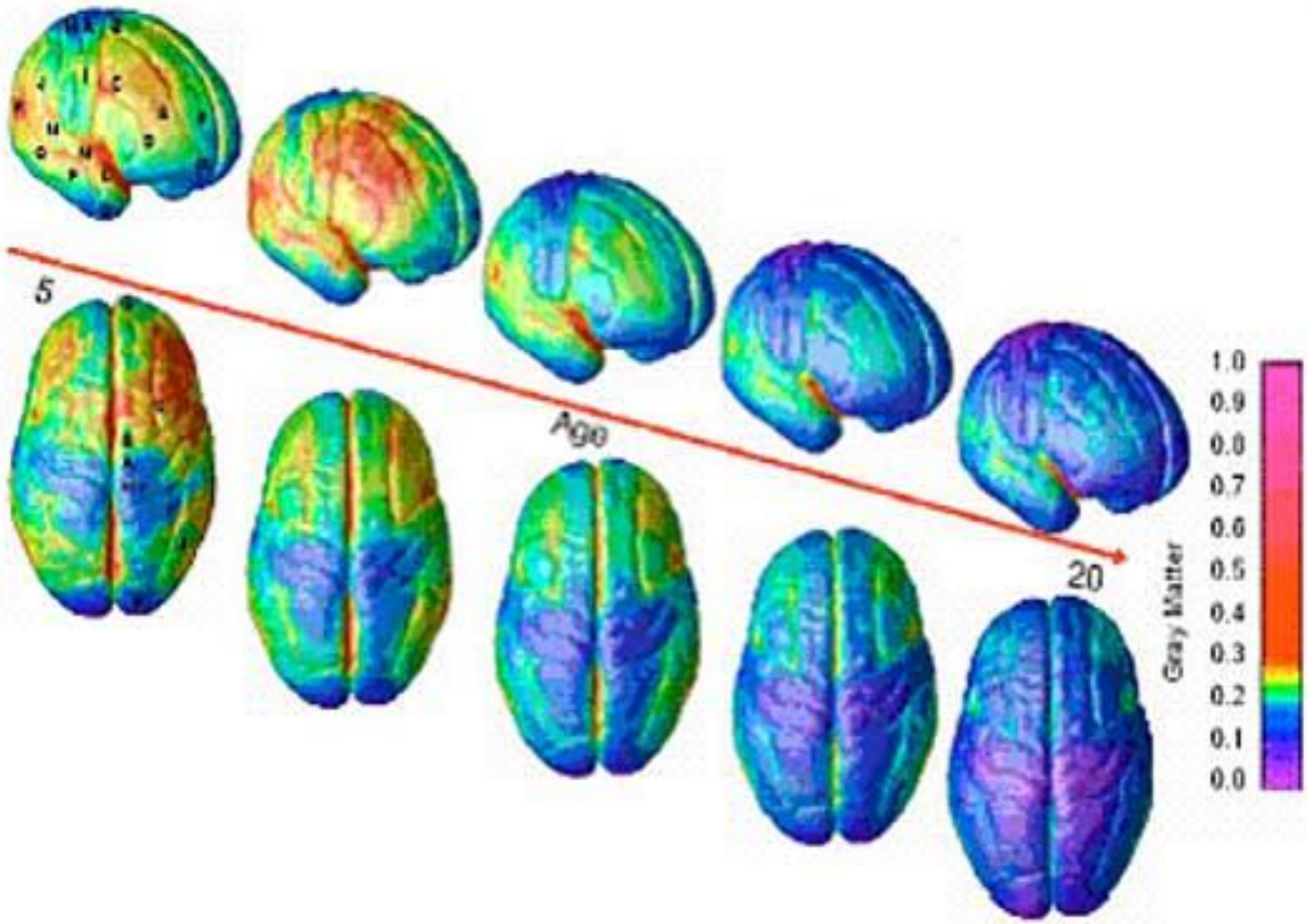
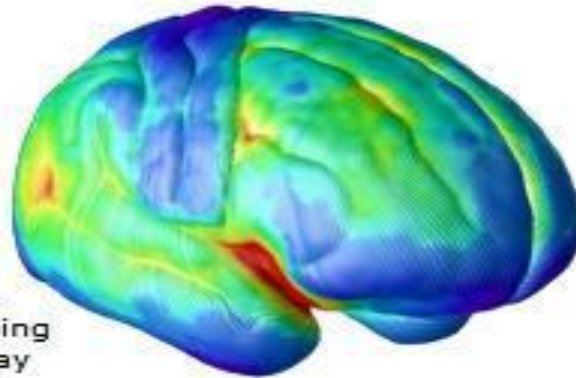


FIG. 10.—Age distribution of violent offenders across time and space. Note: Persons convicted of assault in 1908 in Germany added for comparative reasons. Sources: Mantova: Romani 1980; Amsterdam: Spierenburg 1984, p. 321; southern France: Ruff 1984, p. 90; Alençon: Champin 1972, p. 55; Germany: von Mayr 1917, p. 766.

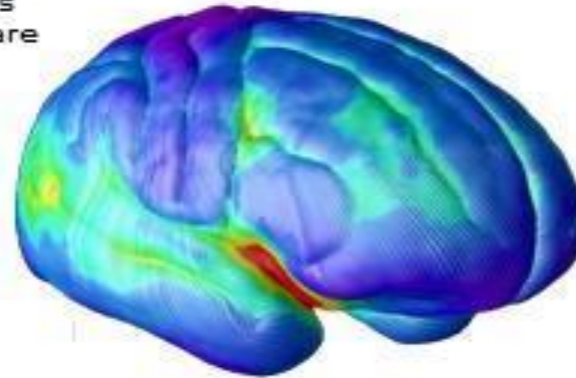


Age 12

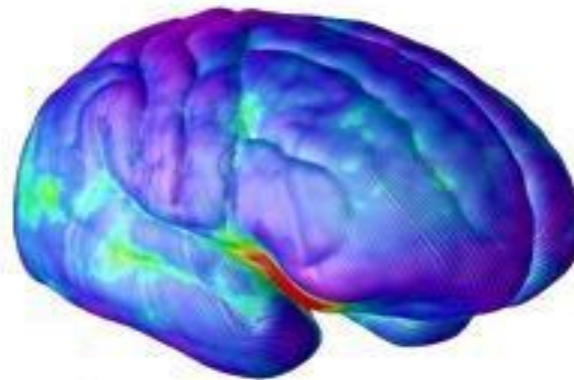
During adolescence, the brain is undergoing a lot of changes. Gray matter diminishes as neural connections are pruned.



Age 16



Age 20



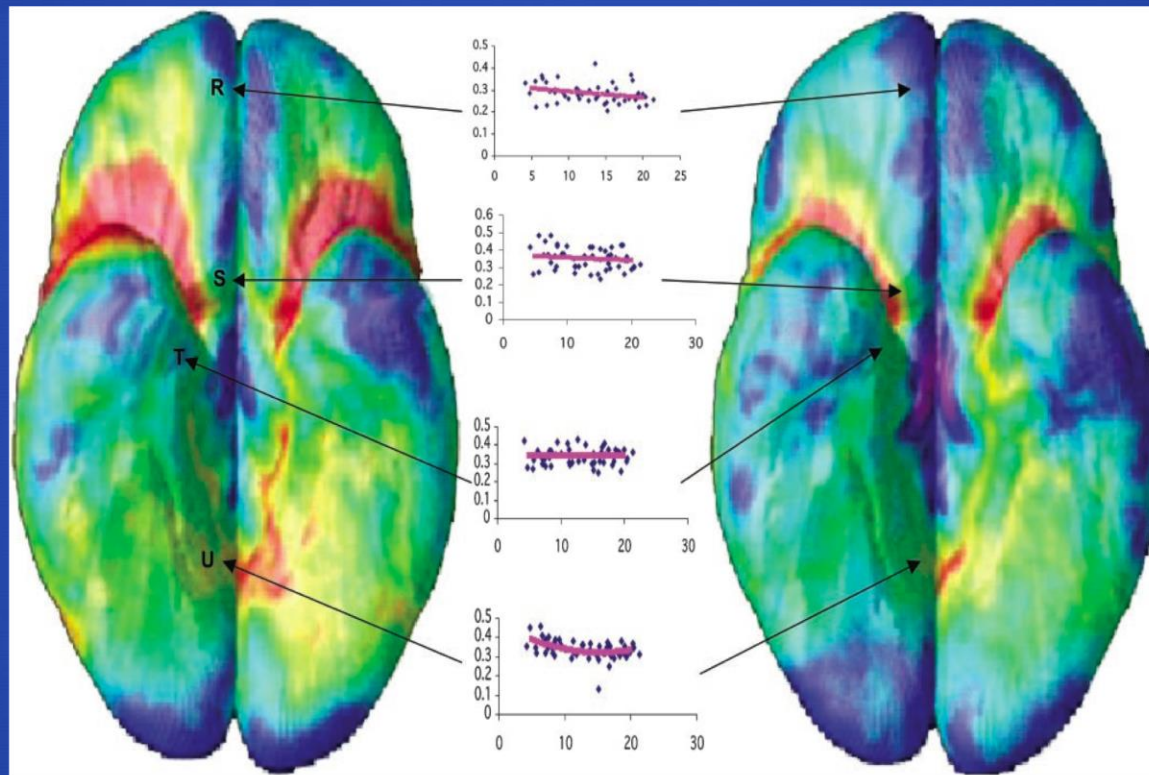


Fig. 2. Bottom view of the brain showing early and late time-lapse images. Points correspond to anterior and posterior ends of the olfactory sulcus (R and S) and collateral sulcus (T and U), and mixed-model graphs corresponding to the regions of interest on the right hemisphere are shown in the middle. x-axis values show ages in years, and y-axis values show GM volumes.

temporal detail. We have overcome these limitations by studying a longitudinally acquired pre- and postpubertal sample, in which the same children were rescanned prospectively over a 10-year period. Our results, while highlighting heterochronicity of human cortical development, suggest that individual subregions follow temporally distinct maturational trajectories in which higher-order association areas mature only after the lower-order

H–J). Visually, the prefrontal cortex and the inferior parietal cortex on the left side matured earlier than the corresponding regions on the right side, which may be because of the fact that the majority of children in this sample are right-handed, with a left-dominant hemisphere that matures early.

The temporal lobe followed a distinct maturation pattern. Temporal poles matured early. Most of the remaining temporal

T P A S – PSICOPATAS

■ 2 % da população

■ 50 % dos apenados

■ 60 % dos homicídios mais cruéis

**Na ausência de
regulação, sentimentos
e a alteração do humor
podem influenciar e
distorcer a percepção, a
atenção e a capacidade
de julgamento**

(Christine I. Hooker e Robert T. Knight no
livro " O Córtex Orbitofrontal", pag.315)

Robert D. Hare

SEM **CONSCIÊNCIA**



O mundo perturbador dos
PSICOPATAS
que vivem entre nós



TRANSTORNO DE PERSONALIDADE ANTI-SOCIAL.(TPAS)

APRESENTA PELO MENOS 4 DOS SEGUINTE COMPORTAMENTOS:

- incapaz de manter comportamento consistente para o trabalho;
- falha em se adaptar às normas sociais;
- facilmente irritável e agressivo;
- falha em honrar obrigações financeiras;
- dificuldade em planejar futuro de curto, médio e longo prazo;
- não tem preocupação com a verdade;
- negligência com a sua segurança e com a dos demais;
- sem capacidade de desempenhar a função parental;
- não consegue manter relações monogâmicas;
- não sente remorso.

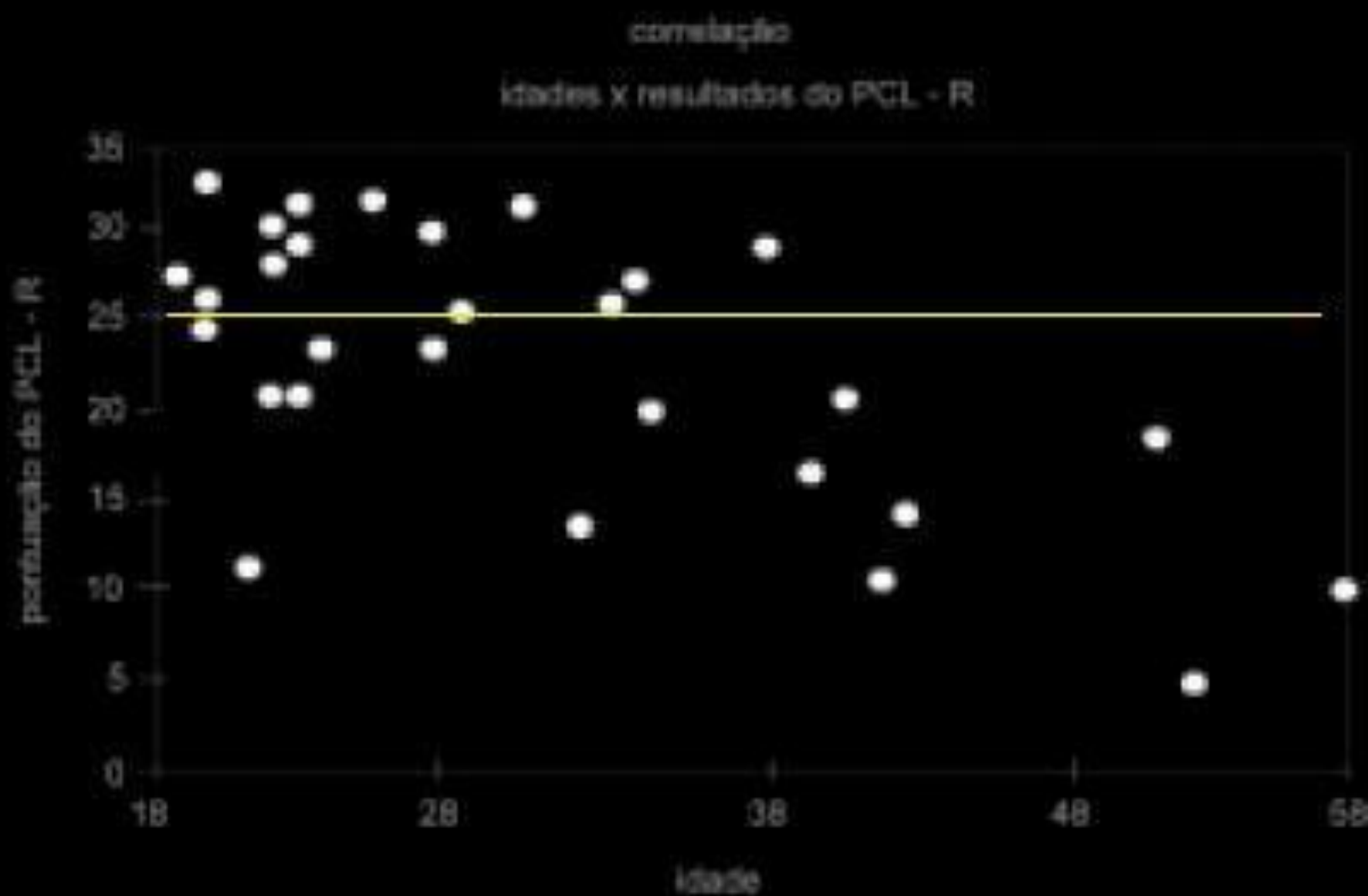
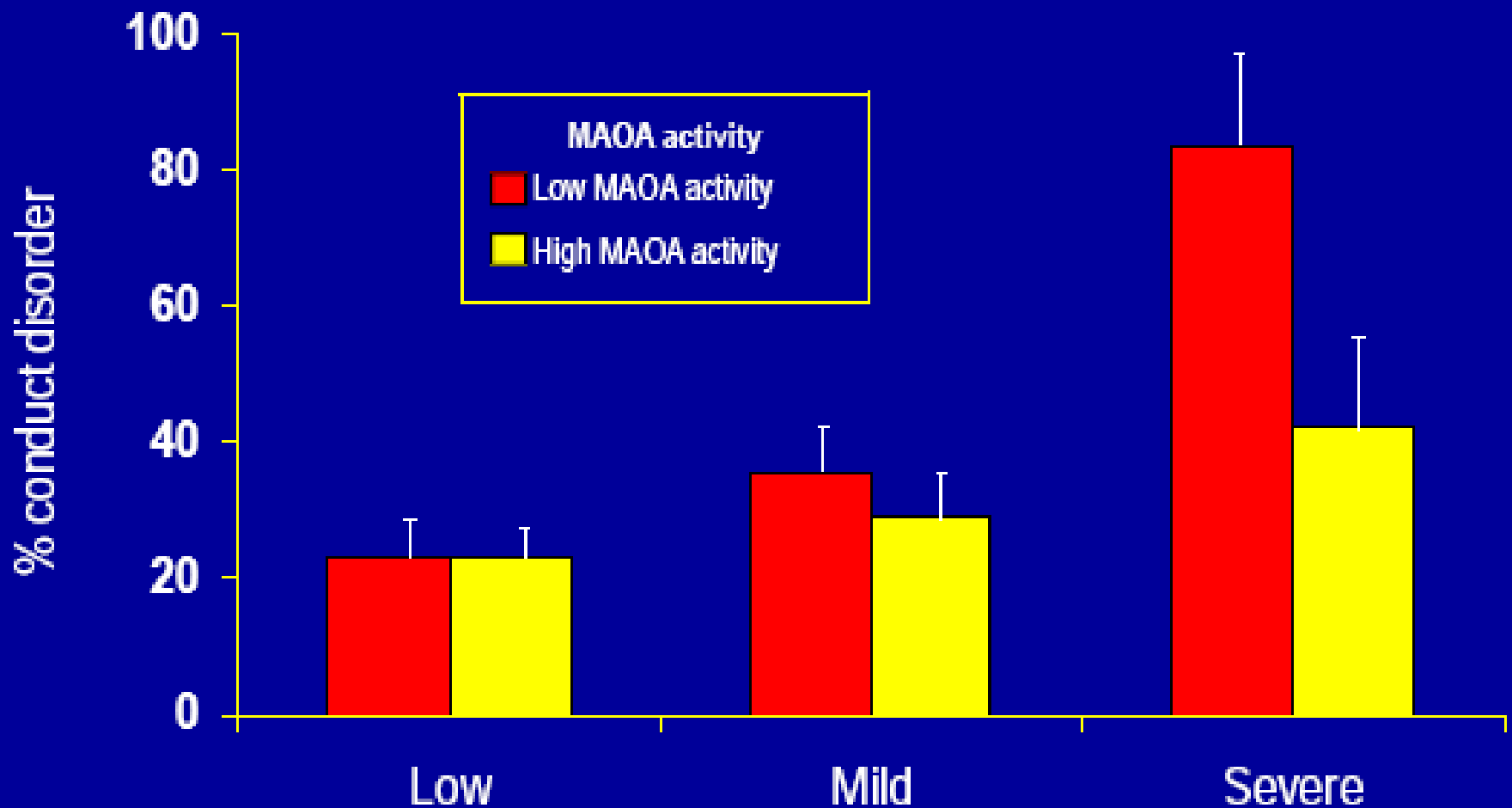


Figura - Correlação entre a idade dos homicidas e os escores no PCL-R

Male conduct disorder: Child maltreatment interacts with MAOA genotype



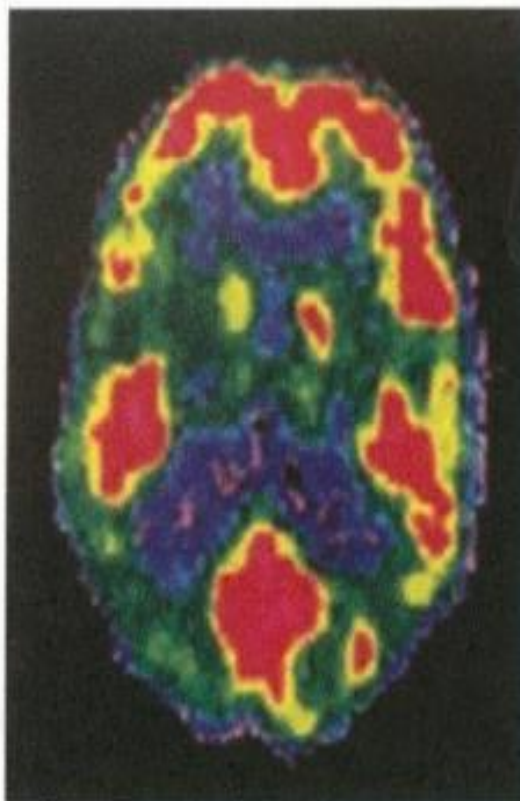


**RELAÇÃO ENTRE O
COMPORTAMENTO AGRESSIVO E/ OU
VIOLENTO E ALTERAÇÕES NA
NEUROIMAGEM:**

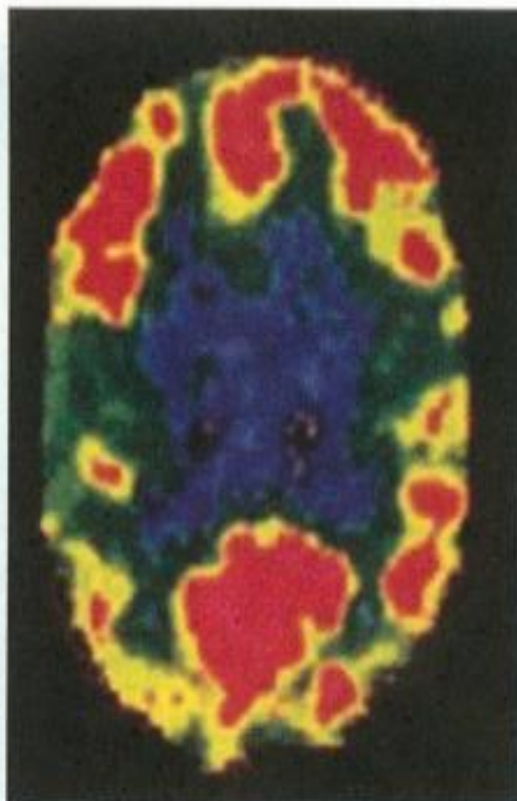
UMA REVISÃO SISTEMÁTICA

OSMAR GASPARINI TERRA

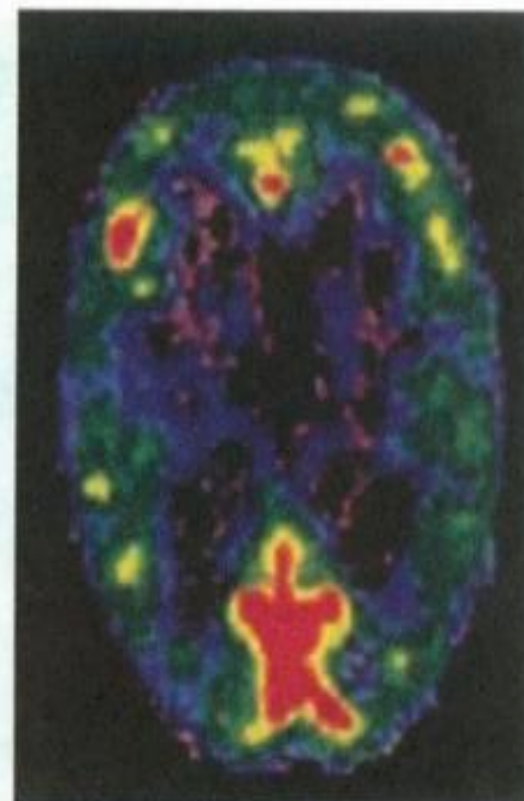
Em praticamente **todos os trabalhos foram encontradas **alterações estruturais ou funcionais** numa proporção significativa, nos indivíduos com comportamento violento em relação aos grupos controle.**



Controle
normal



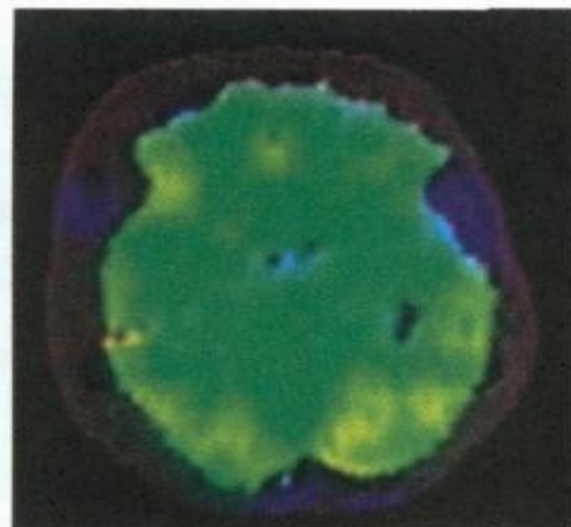
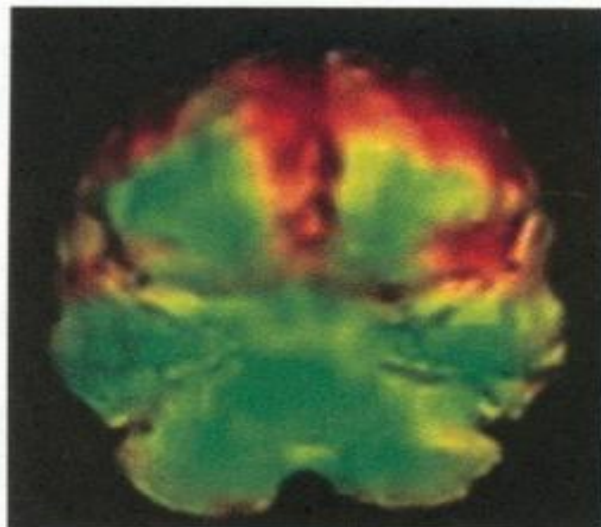
Assassino:
ambiente doméstico ruim



Assassino:
ambiente doméstico bom

Figura 8.4 Visão panorâmica de PET scan mostrando funcionalmente pré-frontal (topo da imagem) reduzido em assassino proveniente de ambiente doméstico bom. As cores vermelho e amarelo indicam alto funcionamento cerebral.

Donta Page



Controles normais

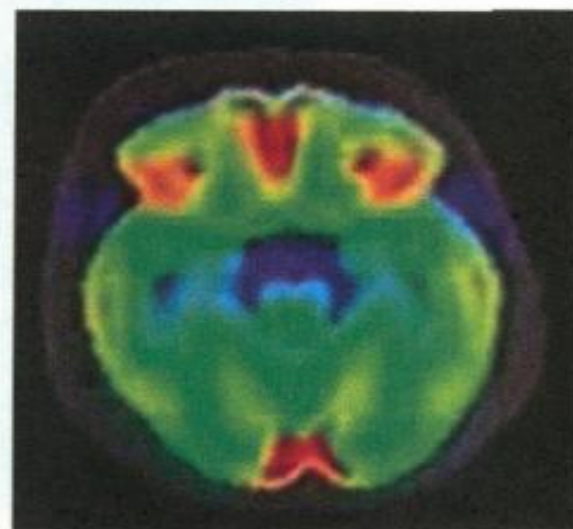
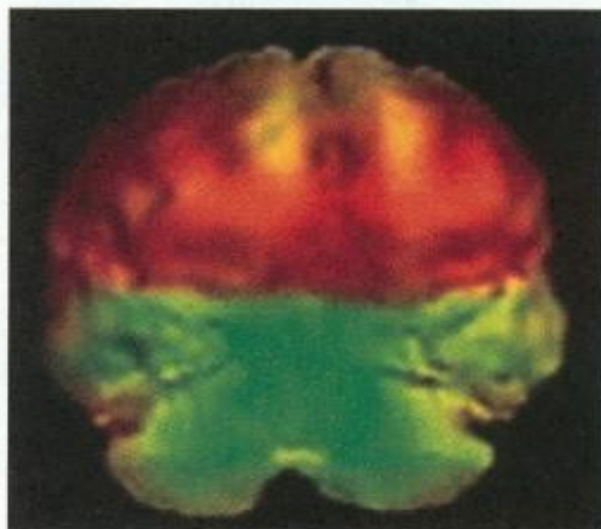


Figura 10.1 PET scan mostrando funcionamento reduzido na área pré-frontal ventral no assassino Donta Page em comparação com controles normais. A coluna da direita mostra uma visão panorâmica. Na coluna da esquerda, pode-se ter uma visão de frente e ligeiramente de cima do cérebro.

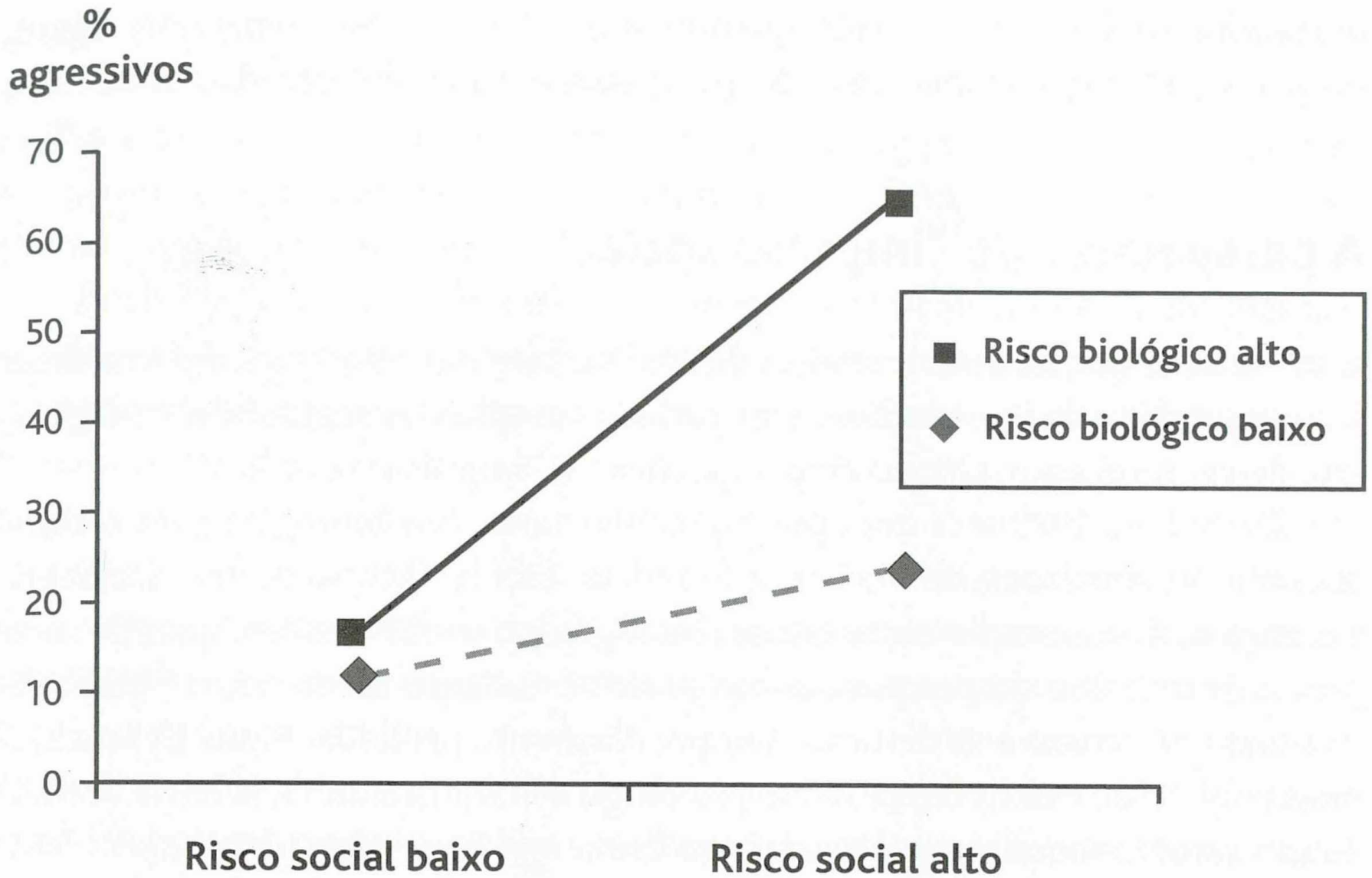
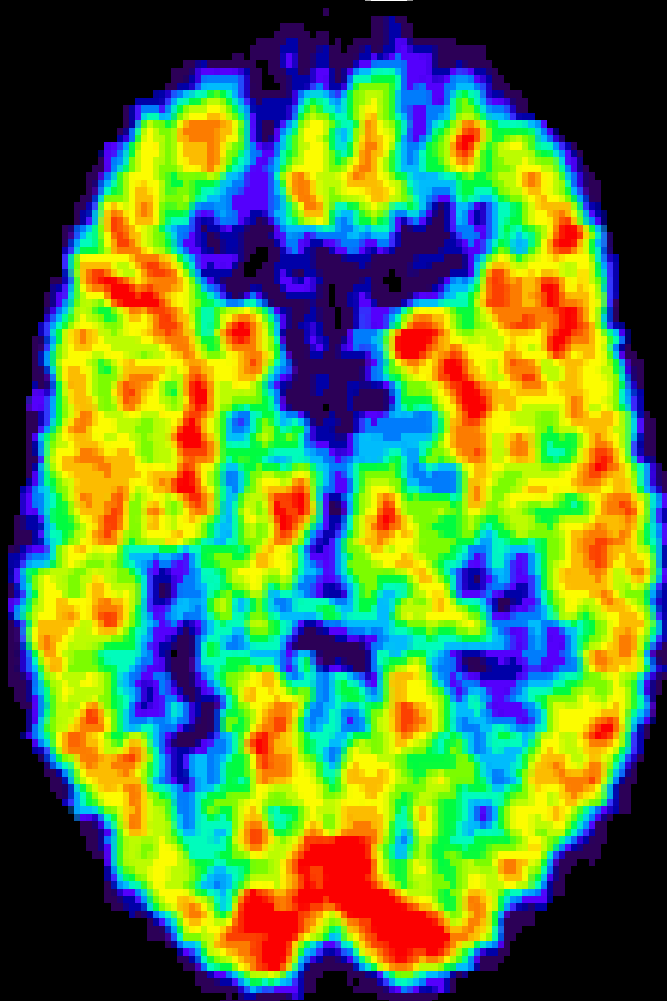
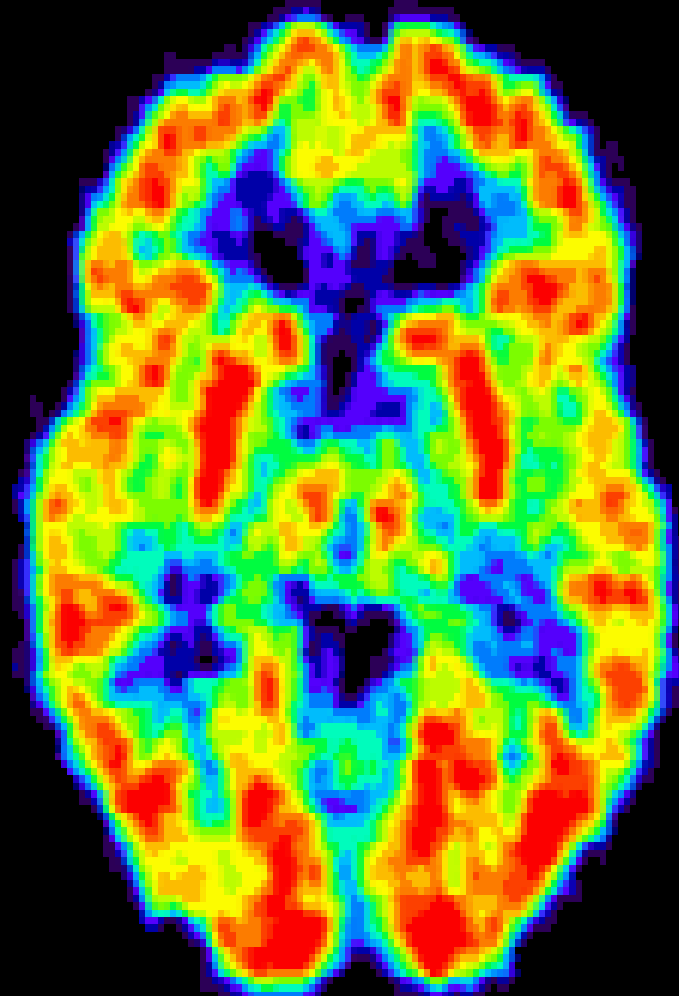


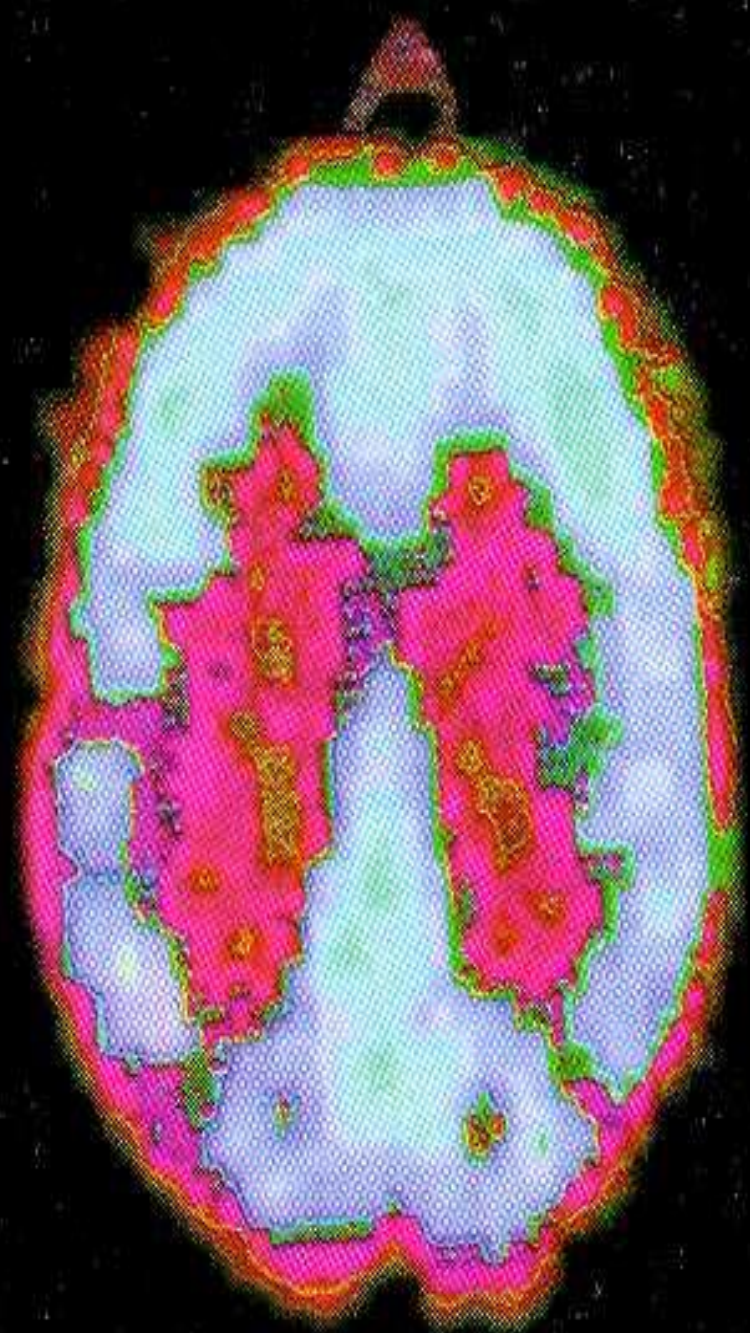
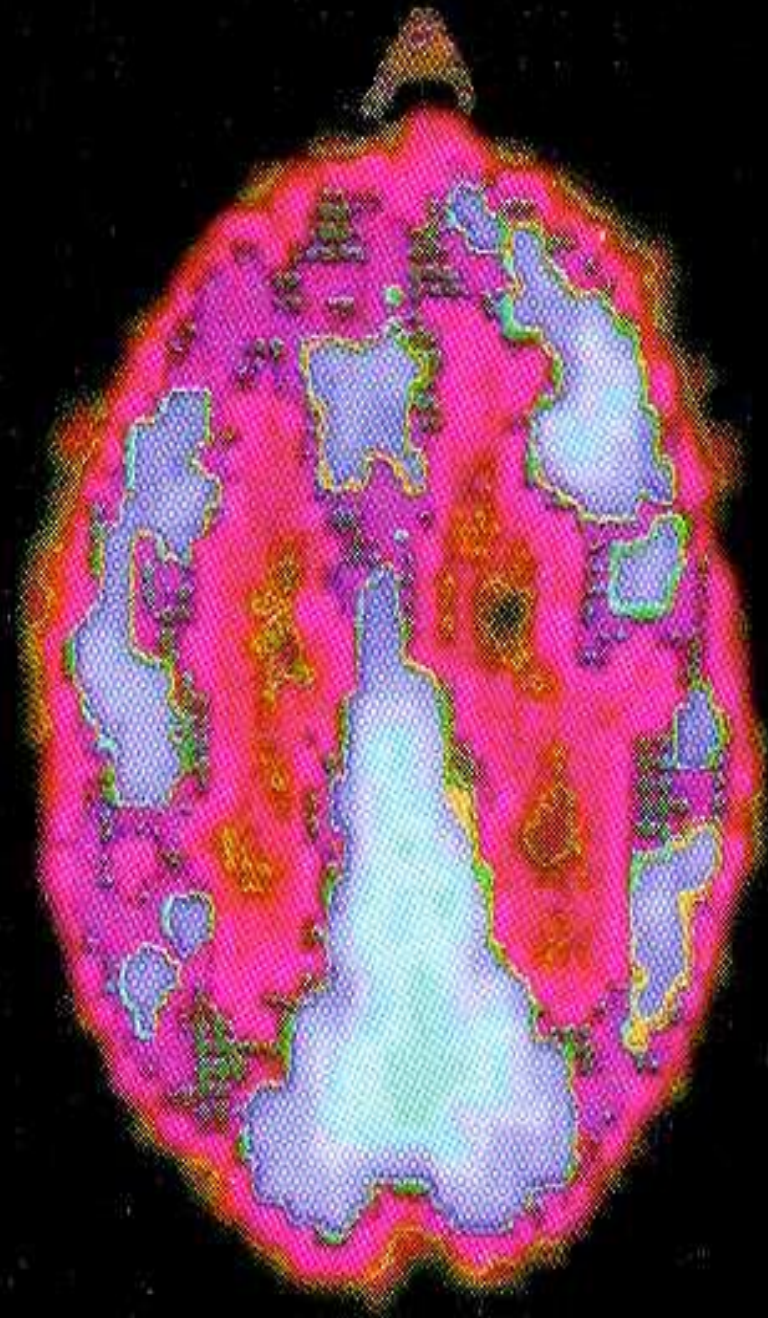
Figura 8.3 Interação entre fatores de risco biológicos precoces e ambiente doméstico ruim na predisposição à agressão em adolescentes na Austrália.

1A



1B





Conclusões

- 1. Os seres humanos não aprendem a ser agressivos, eles aprendem a não ser.
- 2. A agressão física crônica não é uma coisa que começa na adolescência (idem para o vandalismo, roubo).
- 3. Efeitos ambientais na agressão física, como os efeitos genéticos, são fortemente intergeracionais.

Conclusões gerais sobre o ECD.



- **1. O cérebro humano é o órgão que nos torna humanos civilizados.**
- **2. O cérebro humano é como um fundo de pensão, quanto mais cedo investimos maior será o retorno.**
- **3. Nosso principal plano de investimentos no cérebro data do século 19: Educação universal começando aos 5-7 anos de idade.**

Global ECD Conclusions

4. A grande maioria das crianças não tem acesso a serviços de educação e estímulo ao desenvolvimento humano inicial.
5. **As melhores práticas usualmente tem as seguintes características: início precoce, intensas, amplas, e com uma equipe bem treinada.**
6. Para reduzir desigualdades na educação, saúde, e qualidade de vida, devemos começar por oferecer serviços efetivos aos menos privilegiados desde o começo da gestação.

**Necessitamos de uma revisão
global do código penal brasileiro,
aumentando seu rigor**

**Podemos ampliar as penas de
privação da liberdade dentro do
proprio ECA**