

**Martedì 11 febbraio 2025 - Hotel Bristol Palace
Rotary Club di Genova**

Adolescenza e disregolazione emotiva

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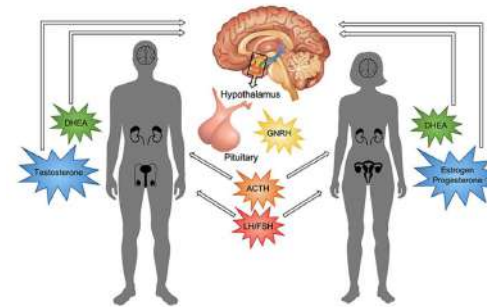
Adolescenza: un momento critico di cambiamenti

Adolescence

Historically defined by WHO as the period between ages 10 and 19 years.¹⁶ It is derived from the Latin *adolescere*—the present participle *adolescens* means growing up, whereas the past participle *adultus* means grown up.

Sarah-Jayne Blakemore The Lancet Vol 393, 2019

- Changes in hormones and the body
- Changes in the brain and mind
- Changes in the social environment



Summary of structural and functional effects	Brain Structure	Brain Function	Model	Hormone(s)	Effect
	Hypothalamus	Hormone secretion; regulation of temperature, appetite, emotions, and sexual behavior	Animal (rat)	↑ Testosterone, progesterone, and estradiol	↑ New cell growth
	Pituitary	Hormone secretion; regulation of hormone production in other endocrine glands	Human (healthy adolescent)	↑ Testosterone and estradiol	↑ Grey matter volume
	Amygdala	Emotion processing; fear, aggression, sexual behaviors, and reward learning	Animal (rat/hamster)	↑ Testosterone	↑ New cell growth
			Human (healthy adolescent)	↑ Testosterone and DHEA	↑ Grey matter volume
			Human (Klinefelter syndrome)	↓ Testosterone	↓ Grey matter volume
	Hippocampus	Learning and memory	Animal (rat)	↑ Estrogen	↑ Synaptic density
	Myelin	Insulates axons; increases speed and efficiency of signal transmission in neurons	Animal (rat)	↑ Sex steroids	
			Human (healthy adolescent)	↑ Testosterone and estradiol	↑ Myelination



Kabotyanski K and Somerville L (2021) Puberty: Your Brain on Hormones. *Front. Young Mind* 2020; <https://www.menstrupedia.com/articles/puberty/emotional-changes>



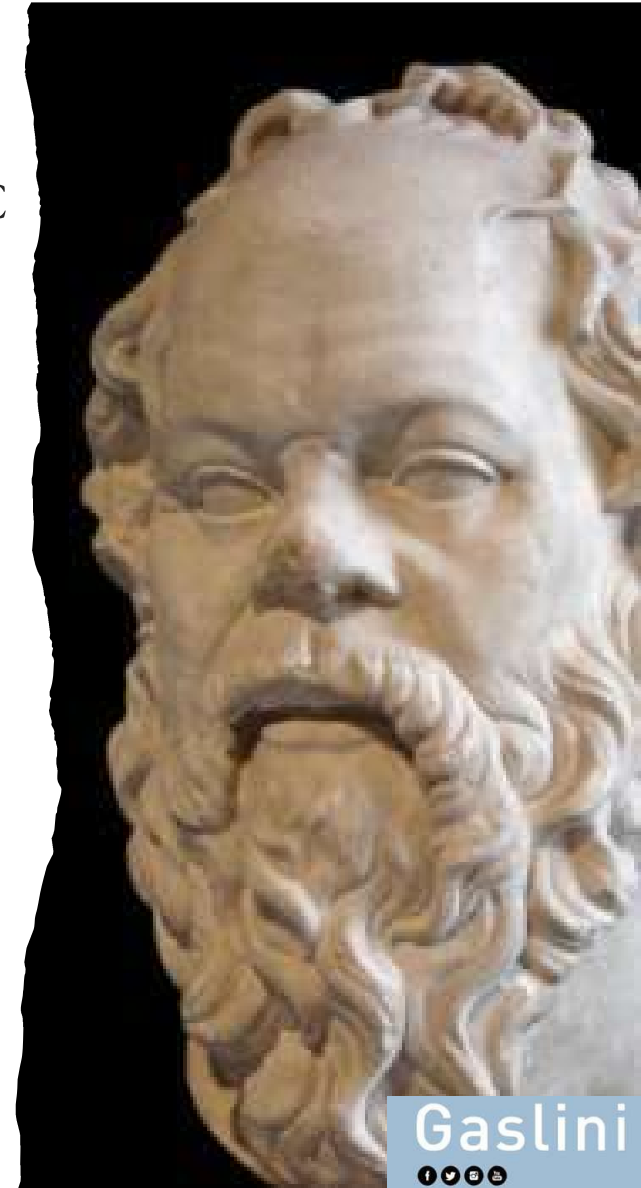
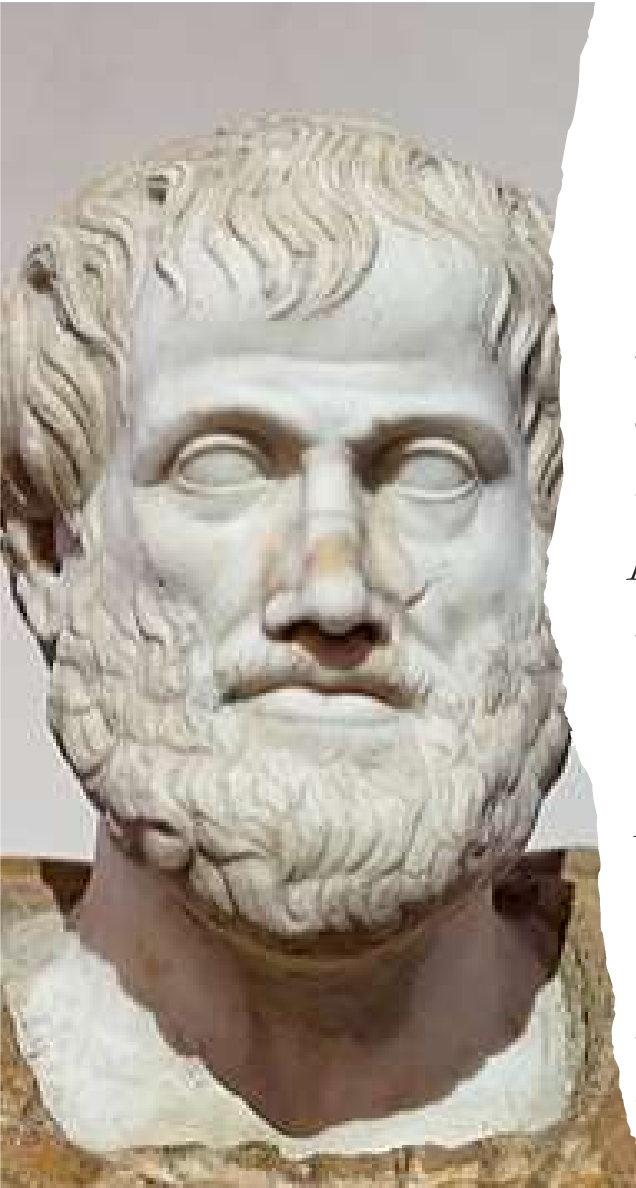
Adolescenza

Socrate 470–399 BC

“Hanno cattive maniere, disprezzo per l'autorità; mancano di rispetto agli anziani e amano le chiacchiere al posto dell'esercizio fisico.Contraddicono i genitori, trangugiano le prelibatezze a tavola, accavallano le gambe e tiranneggiano i loro insegnanti.”

Aristotele 384–322 BC

«...mancano di autocontrollo sessuale, sono volubili nei loro desideri, passionali e impulsivi. ..La giovinezza è l'età in cui le persone sono più devote ai loro amici.



Adolescenza: vitale per l'evoluzione

- Aumentata propensione al rischio quando si trovano in compagnia di coetanei.
- Ricerca di nuove sensazioni.
- Esistono prove di comportamenti tipici dell'adolescenza in tutte le specie.

Developmental Psychology
2012, Vol. 48, No. 3, 598–623

© 2011 American Psychological Association
0012-1649/12/\$12.00 DOI: 10.1037/a0026220

The Evolutionary Basis of Risky Adolescent Behavior:
Implications for Science, Policy, and Practice

Applying an Evolutionary Approach of Risk-
Taking Behaviors in Adolescents

Front. Psychol., 10 January 2022

Barbara Natterson-Horowitz
and Kathryn Bowers

NEW YORK TIMES bestselling authors of ZOOBQUIITY

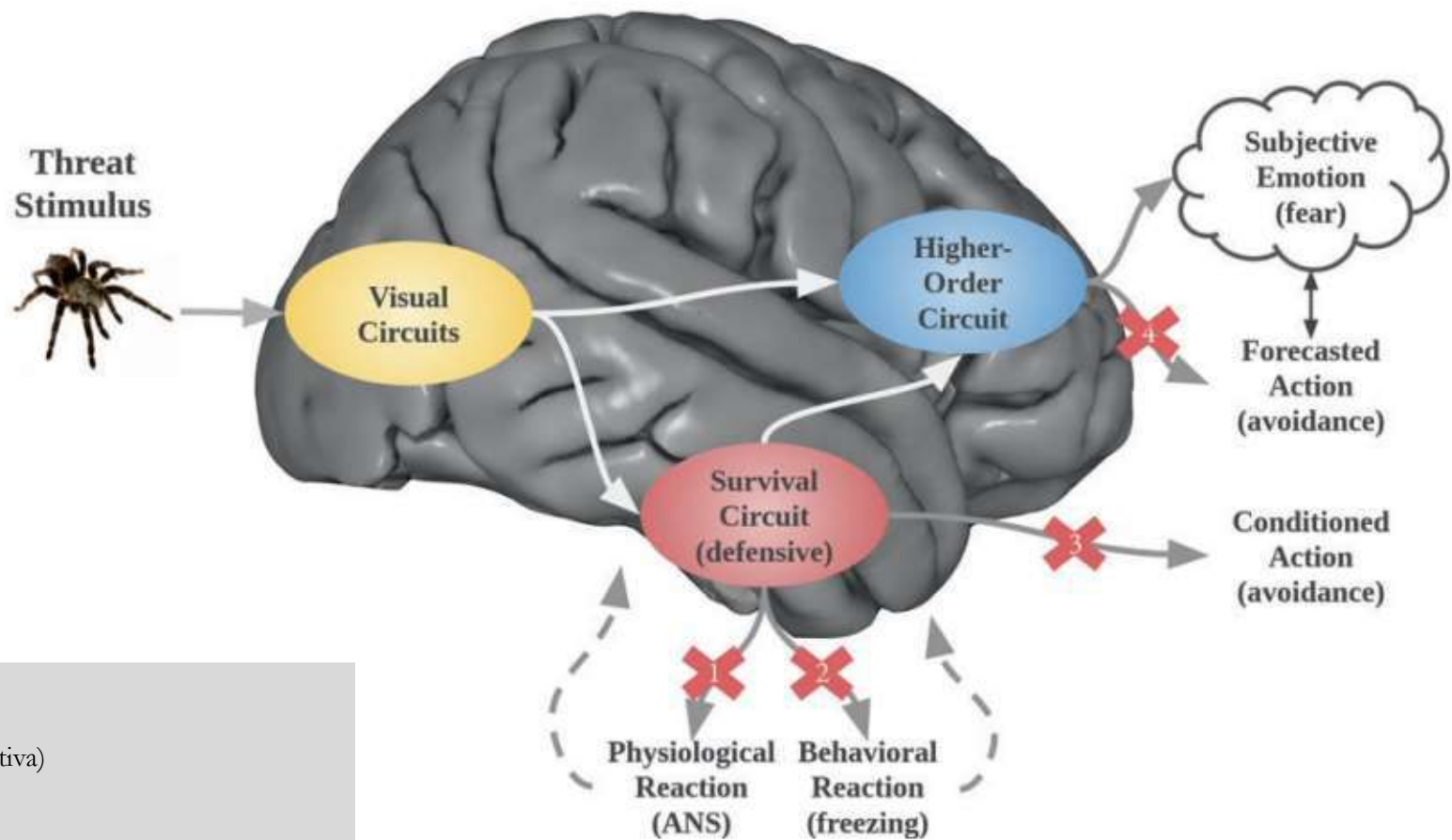
WILDHOOD



The Epic Journey from
Adolescence to Adulthood
in Humans and Other Animals

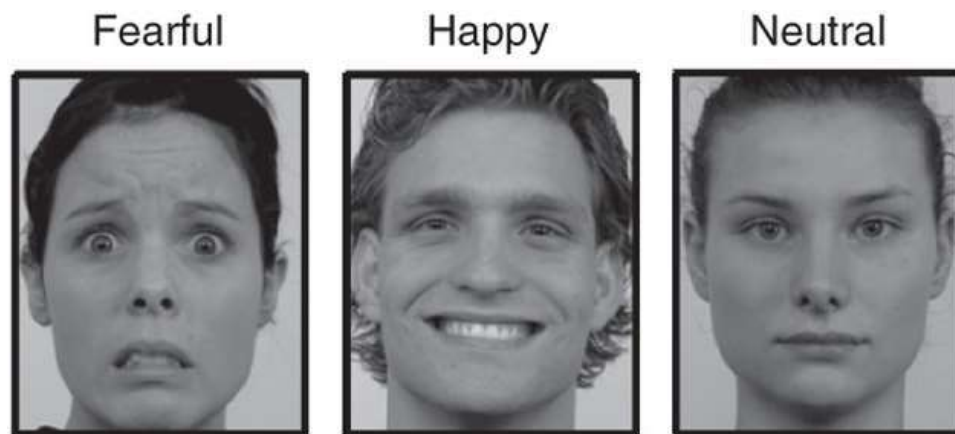
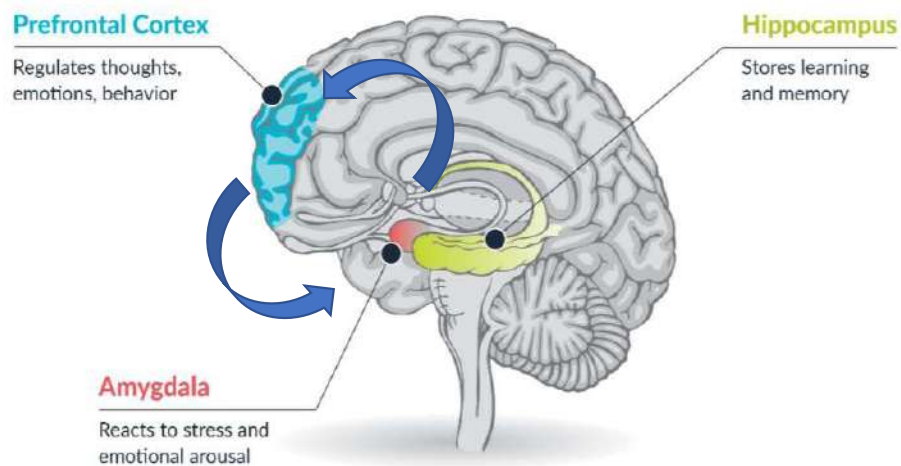


L'assunzione del rischio è vitale per l'evoluzione



Tre sistemi di risposta:

- Verbale (cognitiva, soggettiva)
- Comportamentale
- Risposte fisiologiche

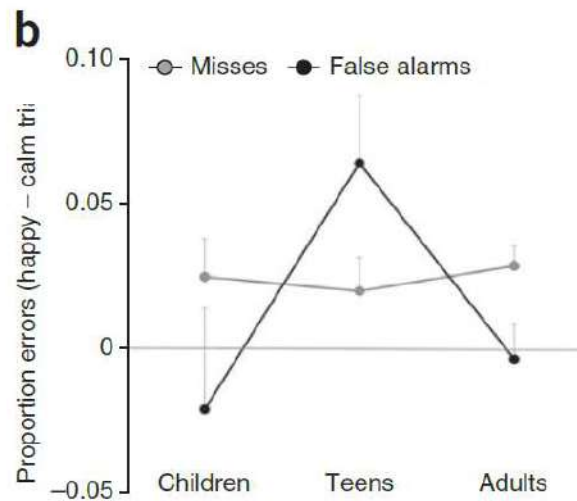
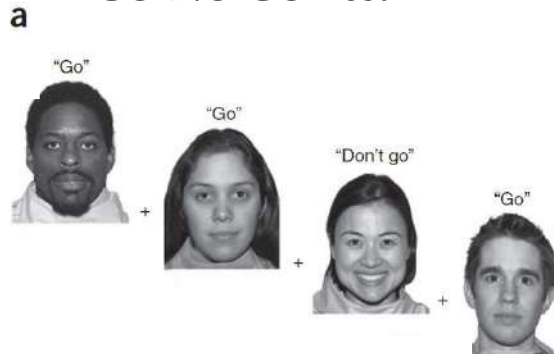


Tre sistemi di risposta:

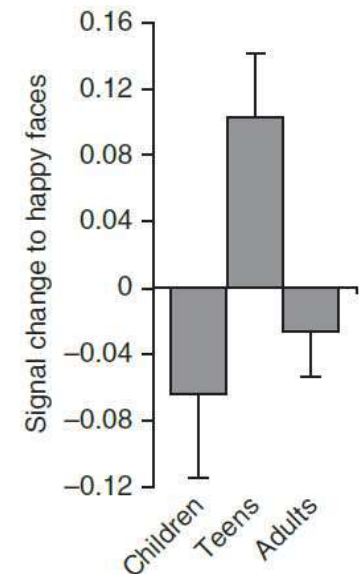
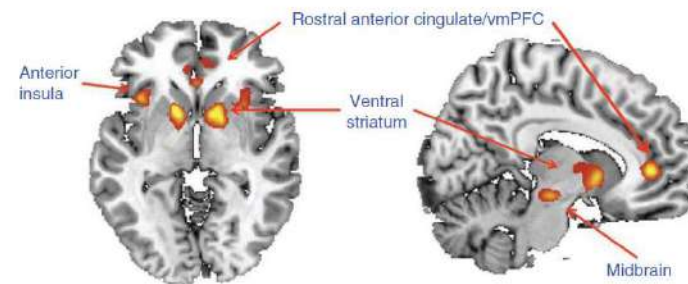
- Verbale (cognitiva, soggettiva)
- Comportamentale
- Risposte fisiologiche

Il processo decisionale nel cervello degli adolescenti: impatto delle emozioni sulle decisioni

GO-NO-GO Test



Major components of the human reward brain circuitry

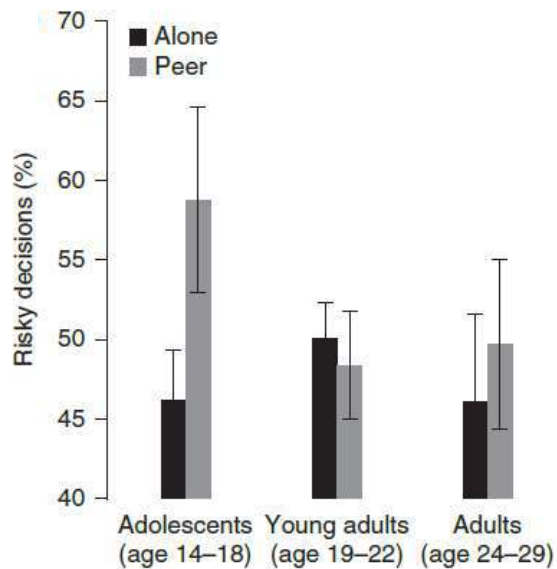


Il processo decisionale nel cervello degli adolescenti: l'influenza sociale dei coetanei

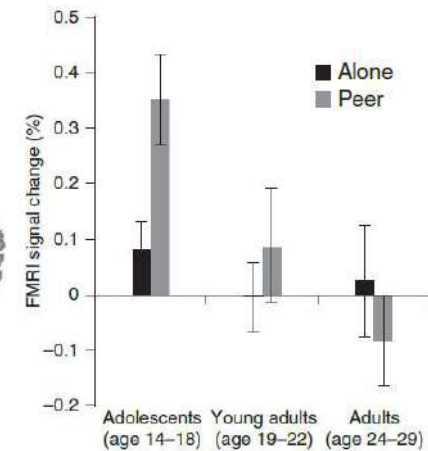
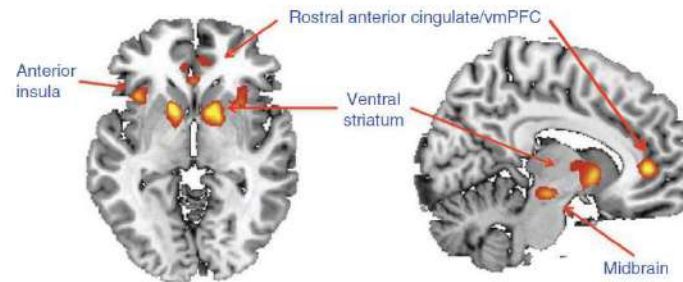
Gaslini



The stoplight driving game study



Major components of the human reward brain circuitry



Blakemore SJ, Robbins TW. Nat Neurosci. 2012

Adolescenza: equilibri instabili

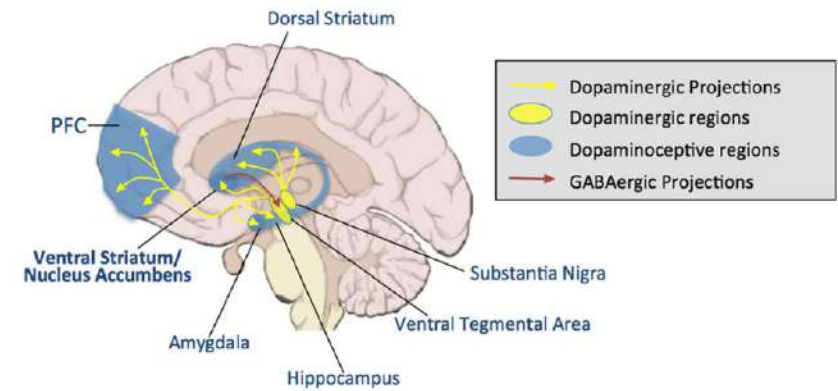
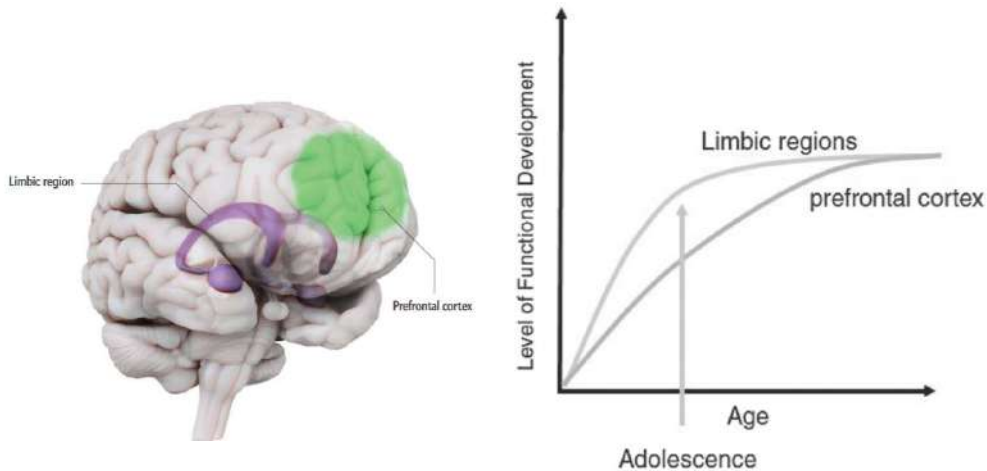
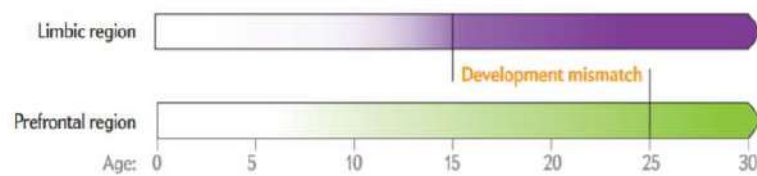


Fig. 1. Dopaminergic pathways in the brain.

Degree of Maturation

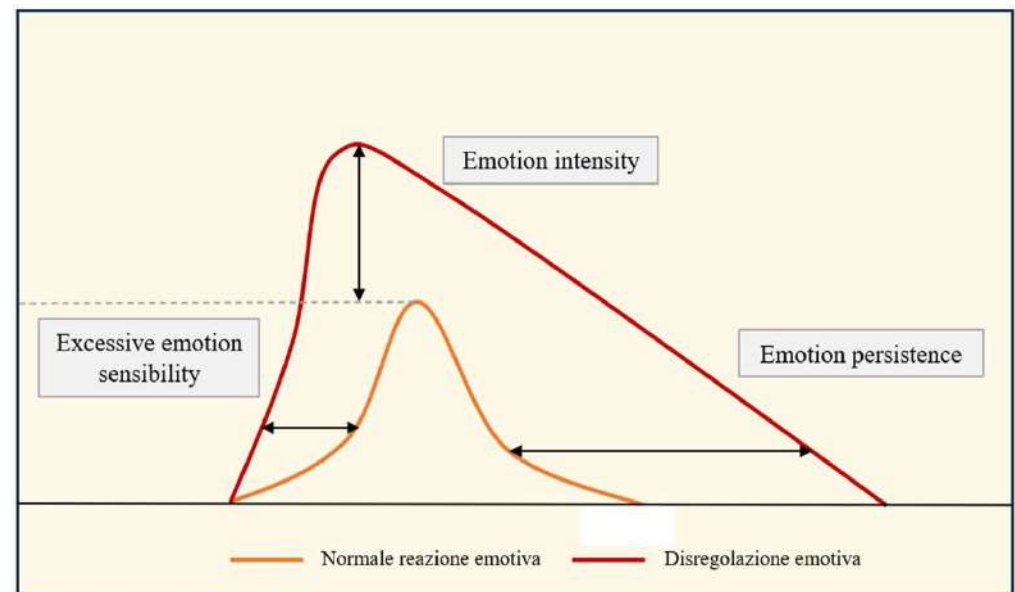


Ventral striatum reactivity can be both a source of vulnerability and opportunity.

Vulnerability	Opportunity
<i>Orientation toward negative rewards</i> • Drug experimentation • Risky sexual behaviors	<i>Orientation toward positive rewards</i> • Academic motivation • Passions and hobbies
<i>Sensitivity to social threat</i> • Heightened depression • Negative peer influence	<i>Sensitivity to social connection</i> • Healthy peer relations • Prosocial behaviors

La disregolazione emotiva

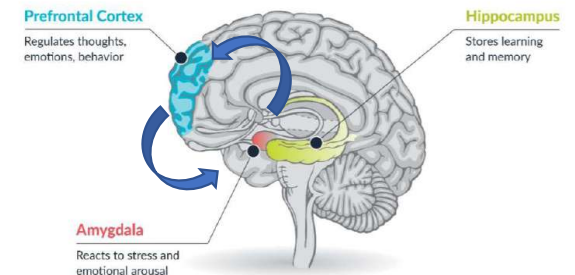
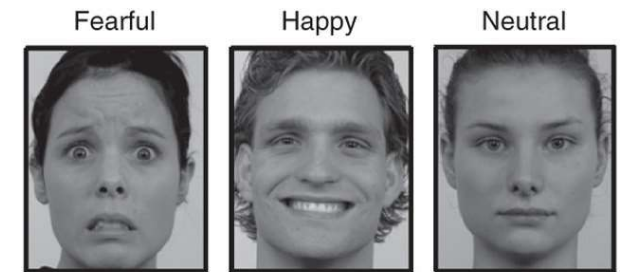
- **Intensità emotiva eccessiva:** Le emozioni vissute sono molto più intense rispetto alla situazione reale, rendendo difficile la gestione e il controllo dell'esperienza emotiva. Anche piccoli stimoli emotivi possono scatenare reazioni emotive sproporzionate.
- **Instabilità emotiva:** Le emozioni possono cambiare rapidamente e in modo drastico. Questo porta a sbalzi d'umore frequenti e difficili da prevedere, creando instabilità nel comportamento e nei rapporti interpersonali.
- **Reattività emotiva:** Le persone con disregolazione emotiva tendono a reagire in maniera eccessiva a stimoli emotivi, spesso più rapidamente e intensamente rispetto a quanto sarebbe considerato appropriato o normale.
- **Difficoltà nel ritorno alla baseline emotiva:** Una volta che si è verificata una reazione emotiva, queste persone possono avere difficoltà a "calmarsi" e tornare a un livello emotivo stabile. Le emozioni possono persistere per molto più tempo rispetto a quanto avviene in individui con una regolazione emotiva adeguata.



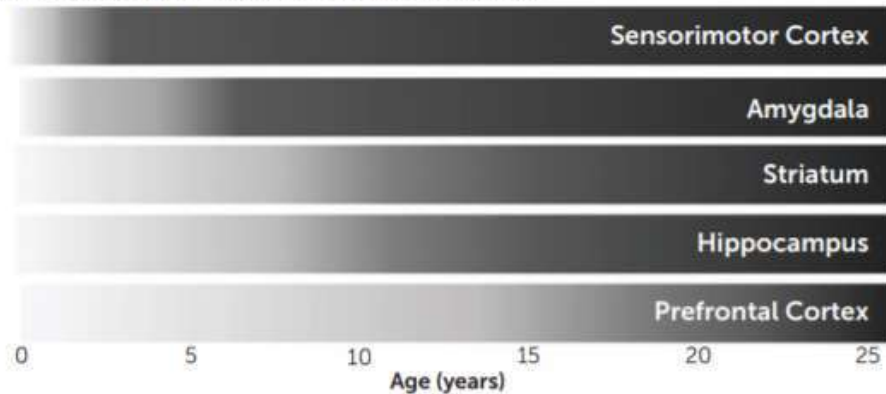
Marwaha et al.,2013

La disregolazione emotiva

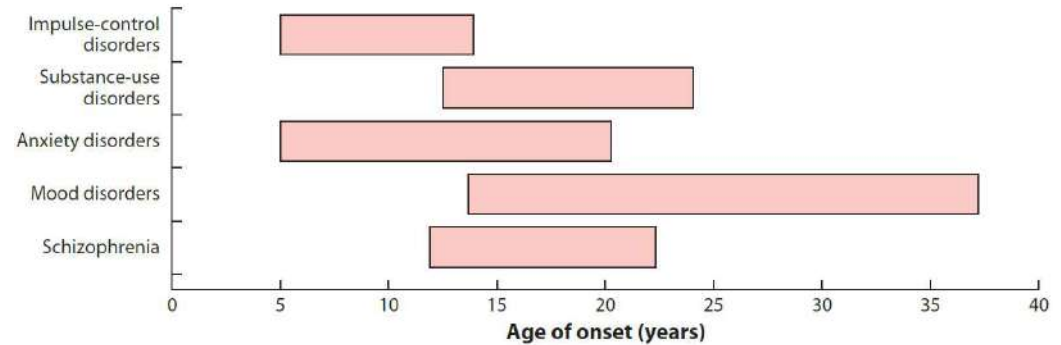
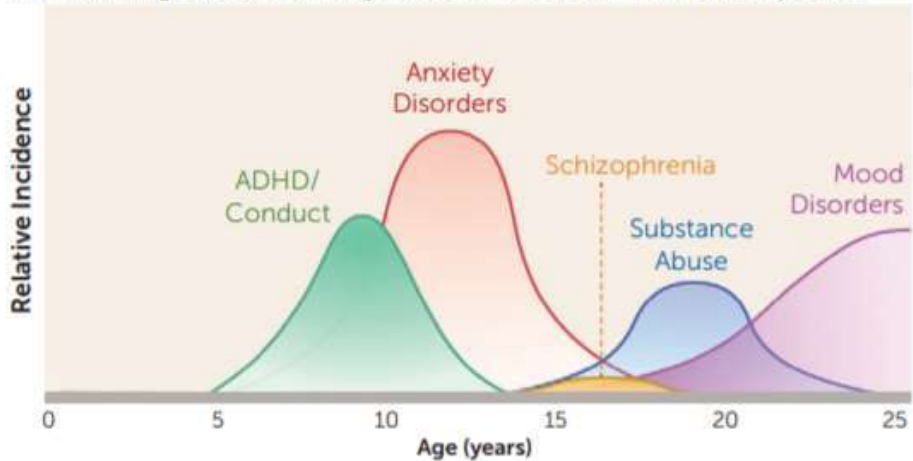
- ✓ **Difficulty in identifying and expressing own emotions**
- ✓ **Challenges in recognizing emotions in others:**
Studies have shown that individuals with emotional dysregulation may misinterpret facial expressions or body language, leading to misunderstandings in social interactions. This can be especially problematic in adolescence, a time when peer relationships are crucial.
- ✓ **Social Implications.** Adolescents may misinterpret social cues, leading to inappropriate responses or conflicts with peers. This can result in feelings of isolation or social rejection, which may further exacerbate emotional challenges.



A. Developmental Course of Brain Maturation



B. Median Age at Onset of Psychiatric Disorders Across Development



Salute mentale del bambino e dell'adolescente: un'emergenza

Child and Adolescent Mental Health: A National Emergency

October 25, 2021

Leah Kuntz

The American Academy of Child and Adolescent Psychiatry, American Academy of Pediatrics, and Children's Hospital Association have declared a national emergency for children and adolescent mental health. Children and families in the United States have experienced "enormous adversity and disruption," which was only exacerbated by the COVID-19 pandemic.

"This [worsening crisis in child and adolescent mental health](#) is inextricably tied to the stress brought on by COVID-19 and the ongoing struggle for racial justice and represents an acceleration of trends observed prior to 2020. Rates of childhood mental health concerns and suicide rose steadily between 2010 and 2020 and by 2018 suicide was the second leading cause of death for youth ages 10-24. The pandemic has intensified this crisis," the groups wrote.¹

STUDENT WELL-BEING

Children, Teens Are in a 'Mental Health State of Emergency,' Child Health-Care Groups Warn



By Alyson Klein — October 19, 2021 2 min read



— ma_jish/istock/Getty

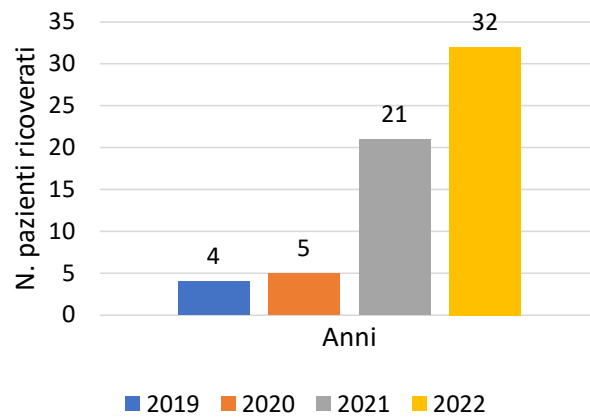
There's been a quieter, parallel pandemic happening alongside COVID-19: a spike in significant mental health problems among young people, spurred by isolation, uncertainty, fear, and grief.



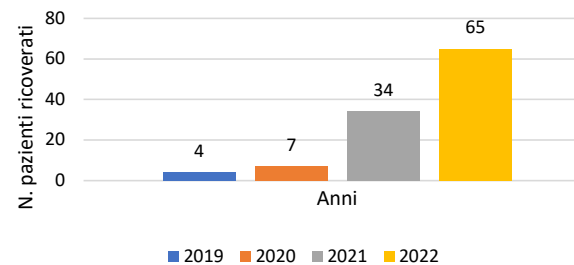
Salute mentale del bambino e dell'adolescente: un'emergenza

RICOVERI U.O. NPI GASLINI

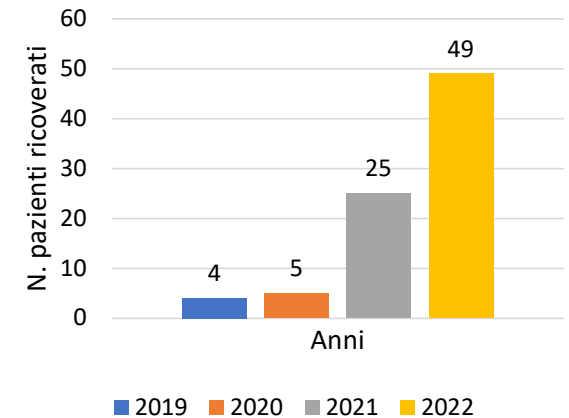
AUTOLESIONISMO



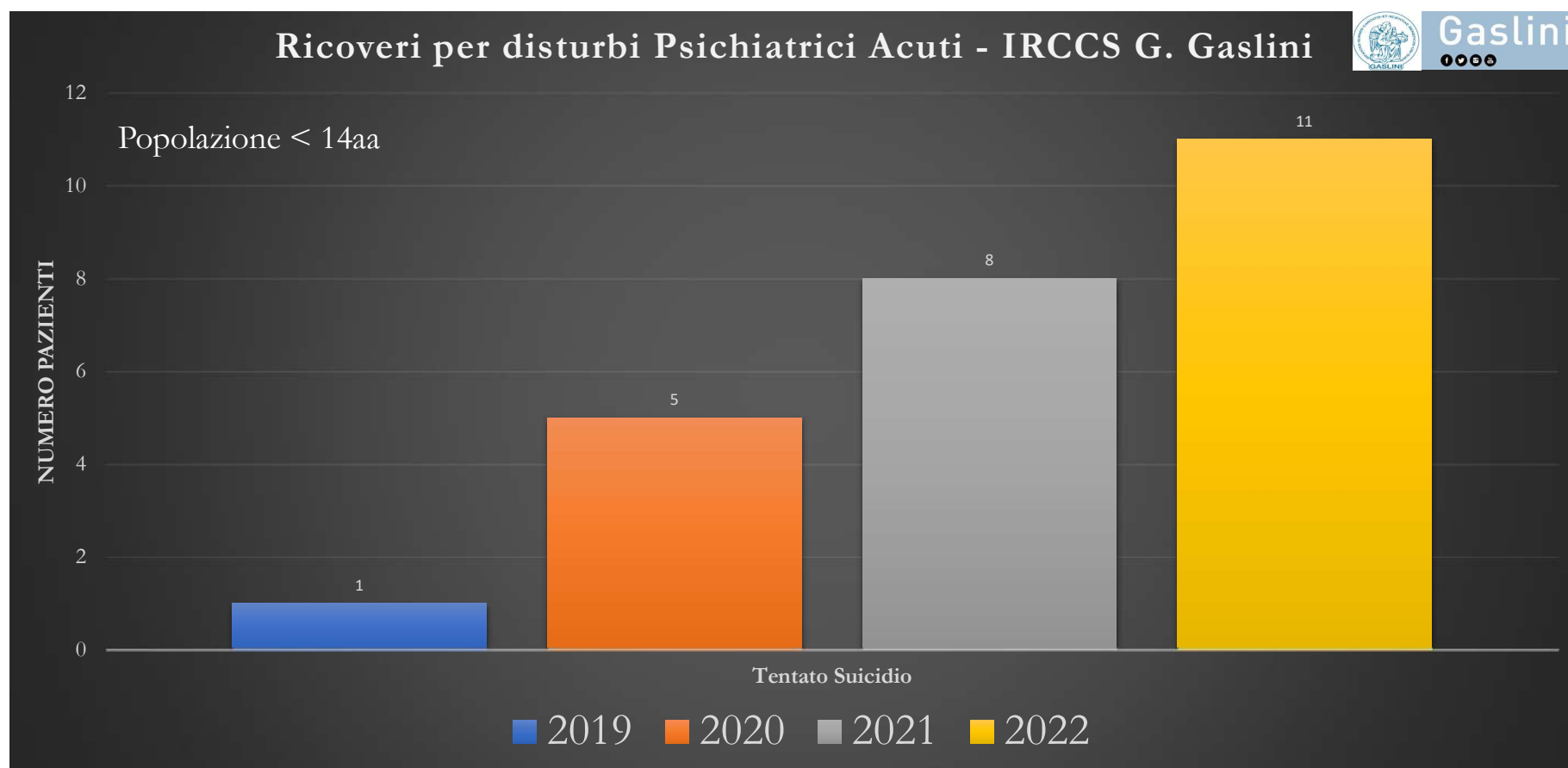
IDEAZIONE SUICIDARIA



TENTATIVI DI SUICIDIO



Tentato Suicidio (alta gravità)



Salute mentale del bambino e dell'adolescente: un'emergenza

JAMA
Network | **Open.**

Original Investigation | Psychiatry

COVID-19 Pandemic School Disruptions and Acute Mental Health in Children and Adolescents

Chiara Davico, MD; Daniele Marcotulli, MD, PhD; Giuseppe Abbracciavento, MD; Thomas Anfosso, MD; Massimo Apicella, MD; Roberto Aversa, MD, PhD; Marzia Bazzoni, MD; Dario Calderoni, MD; Luca Cammisa, MD; Alessandra Carta, MD, PhD; Sara Carucci, MD, PhD; Giorgio Cozzi, MD, PhD; Federica Di Santo, MD; Elisa Fazzi, MD, PhD; Caterina Lux, MD; Chiara Narducci, MD; Lino Nobili, MD, PhD; Ilaria Onida, MD; Tiziana Pisano, MD; Umberto Raucci, MD, PhD; Idanna Sforzi, MD; Laura Siri, MD; Stefano Sotgiu, MD, PhD; Simone Tavano, MD; Arianna Terrinoni, MD; Sara Uccella, MD, PhD; Stefano Vicari, MD; Caterina Zanusi, MD; Benedetto Vitiello, MD; for the Italian Covid-Child and Adolescent Psychiatric Emergencies Study Group

Table 1. Demographic and Clinical Characteristics of Patients With ED Psychiatric Visits

Characteristic	No. (%)				
	2018 (n=2655)	2019 (n=3136)	2020 (n=2563)	2021 (n=4660)	Total (N=13 014)
Sex					
Male	1026 (38.6)	1312 (41.8)	1013 (39.5)	1441 (30.9)	4792 (36.8)
Female	1629 (61.4)	1824 (58.2)	1550 (60.5)	3219 (69.1)	8222 (63.2)
Mean age, y (SD)	13.47 (4.2)	13.91 (3.5)	13.75 (4.0)	13.94 (3.8)	13.80 (3.8)
ED visit reason					
Psychomotor agitation	1011 (38.1)	1092 (34.8)	850 (33.2)	1354 (29.1)	4307 (33.1)
Anxiety	471 (17.7)	632 (20.2)	369 (14.4)	623 (13.4)	2095 (16.1)
Mood disorder	109 (4.1)	101 (3.2)	98 (3.8)	213 (4.6)	521 (4.0)
Eating disorder	214 (8.1)	245 (7.8)	270 (10.5)	631 (13.5)	1360 (10.4)
Somatic symptoms	151 (5.7)	237 (7.6)	201 (7.8)	255 (5.5)	844 (6.5)
Psychosis	74 (2.8)	121 (3.9)	89 (3.5)	92 (2.0)	376 (2.9)
Self-harm	120 (4.5)	145 (4.6)	119 (4.6)	309 (6.6)	693 (5.3)
Suicidal ideation	189 (7.1)	167 (5.3)	222 (8.7)	563 (12.1)	1141 (8.8)
Suicidal attempt	187 (7.0)	226 (7.2)	238 (9.3)	466 (10.0)	1117 (8.6)
Drug abuse	23 (0.9)	19 (0.6)	22 (0.8)	55 (1.2)	119 (0.9)
Maltreatment	47 (1.8)	56 (1.8)	46 (1.8)	45 (1.0)	194 (1.5)
Tics	48 (1.8)	75 (2.4)	36 (1.4)	35 (0.7)	194 (1.5)
Other	11 (0.4)	20 (0.6)	3 (0.1)	19 (0.4)	53 (0.4)

Question Were COVID-19 pandemic-related school disruptions associated with youth mental health emergencies?

Findings In this cross-sectional study of 13 014 pediatric emergency department visits at 9 university hospitals in Italy, school opening following the disruption was associated with an increase in acute psychiatric emergencies. In particular, visits for suicide ideation/suicide attempt increased during the school calendar and especially among females.

Meaning The findings of this study suggest that school may be a major source of stress for youths; factors mediating school-associated mental health disturbances in youth should be investigated.

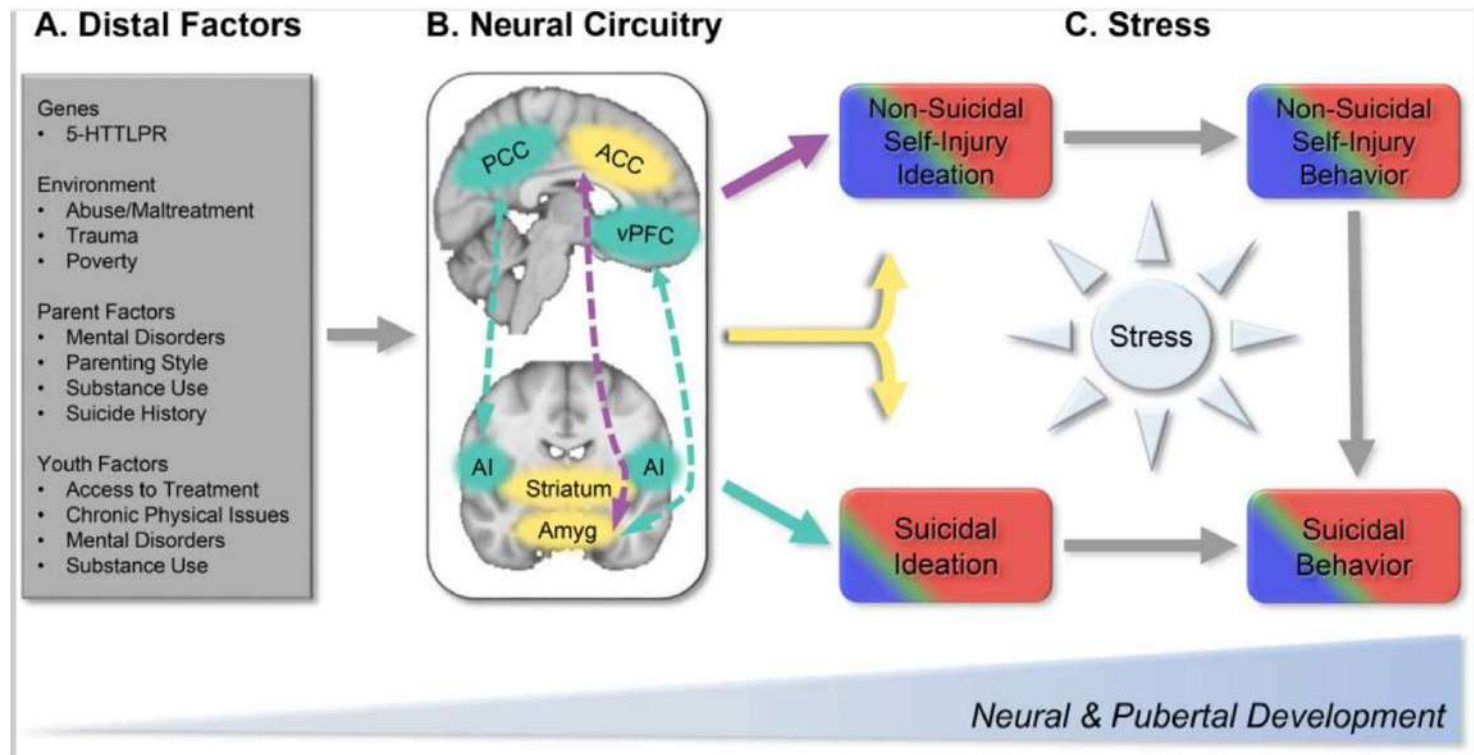
Suicidalità come modello multifattoriale

Fattori di vulnerabilità genetica

Fattori di vulnerabilità biologica

Fattori ambientali

Modello neuroevolutivo del suicidio e dell'autolesività



Suicidalità come modello multifattoriale

FATTORI DI RISCHIO

Personali

Sesso/fattori ormonali, Età, Etnia, Condizione socio-economica
Pregresso tentativo di suicidio; NSSI
Patologia psichiatrica (disturbo dell'umore; ciclotimia)
Storia di malattia medica cronica
Disturbi del neurosviluppo
Familiarità per suicidio/patologia psichiatrica
Abuso di sostanze
Disregolazione emotiva ed impulsività
Autolesionismo
Insonnia
Trauma, bullismo
Eventi vitali sfavorevoli (divorzio, difficoltà scolastiche o lavorative, crisi finanziarie,..)
Isolamento sociale
.....

Ambientali

Accesso a mezzi letali
Stigma legato alla richiesta di aiuto
Ostacoli all'accesso ai servizi sanitari

FATTORI PROTETTIVI

Personali

Strategie di coping e problem solving funzionali
Alta autostima
Rete sociale e di supporto

Ambientali

Accesso limitato a mezzi letali

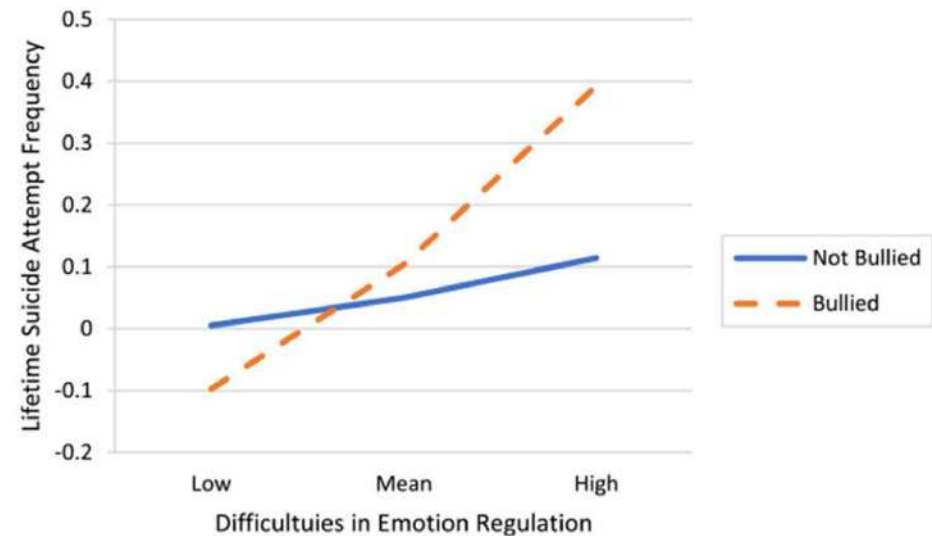
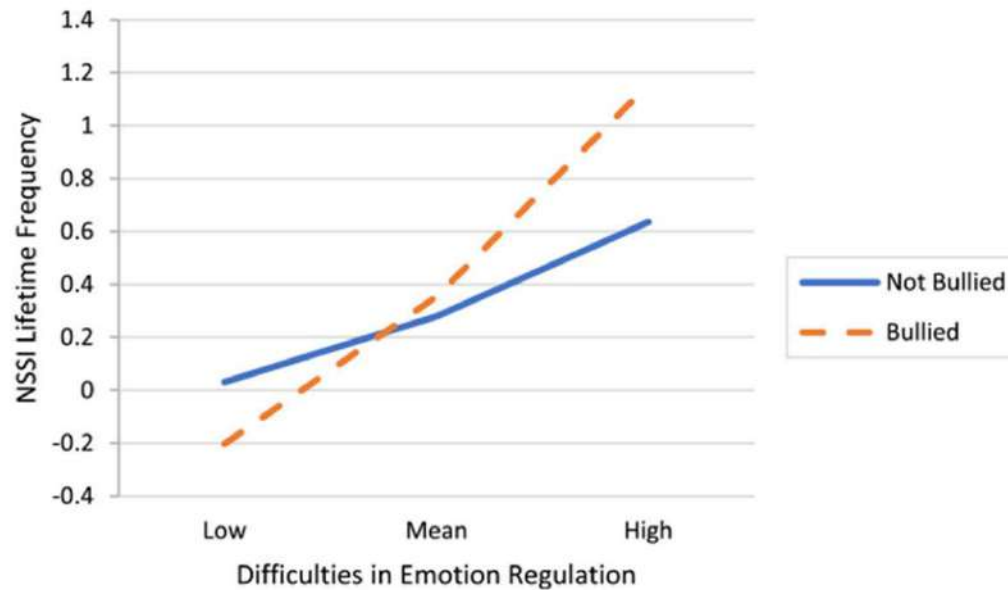
Disregolazione emotiva, bullismo e suicidio

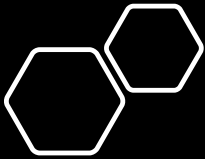
J Affect Disord Rep. 2024 January ; 15: . doi:10.1016/j.jadr.2023.100715.

Emotion dysregulation, bullying, and suicide behaviors in adolescents

Anthony Kennedy,
Amy M. Brausch*

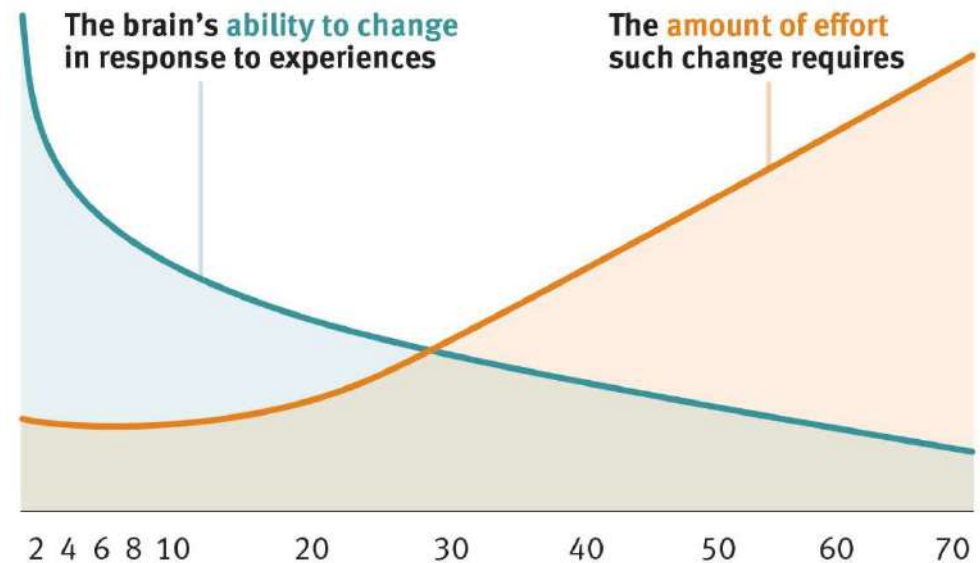
Department of Psychological Sciences, Western Kentucky University, Bowling Green, KY, USA





Brain Plasticity: not always a resource

- Early experiences influence the developing brain
- Chronic stress can be “toxic” to developing brains
- Significant early adversity can lead to lifelong problems
- Early intervention can prevent the consequences of early adversity



Emotional Dysregulation

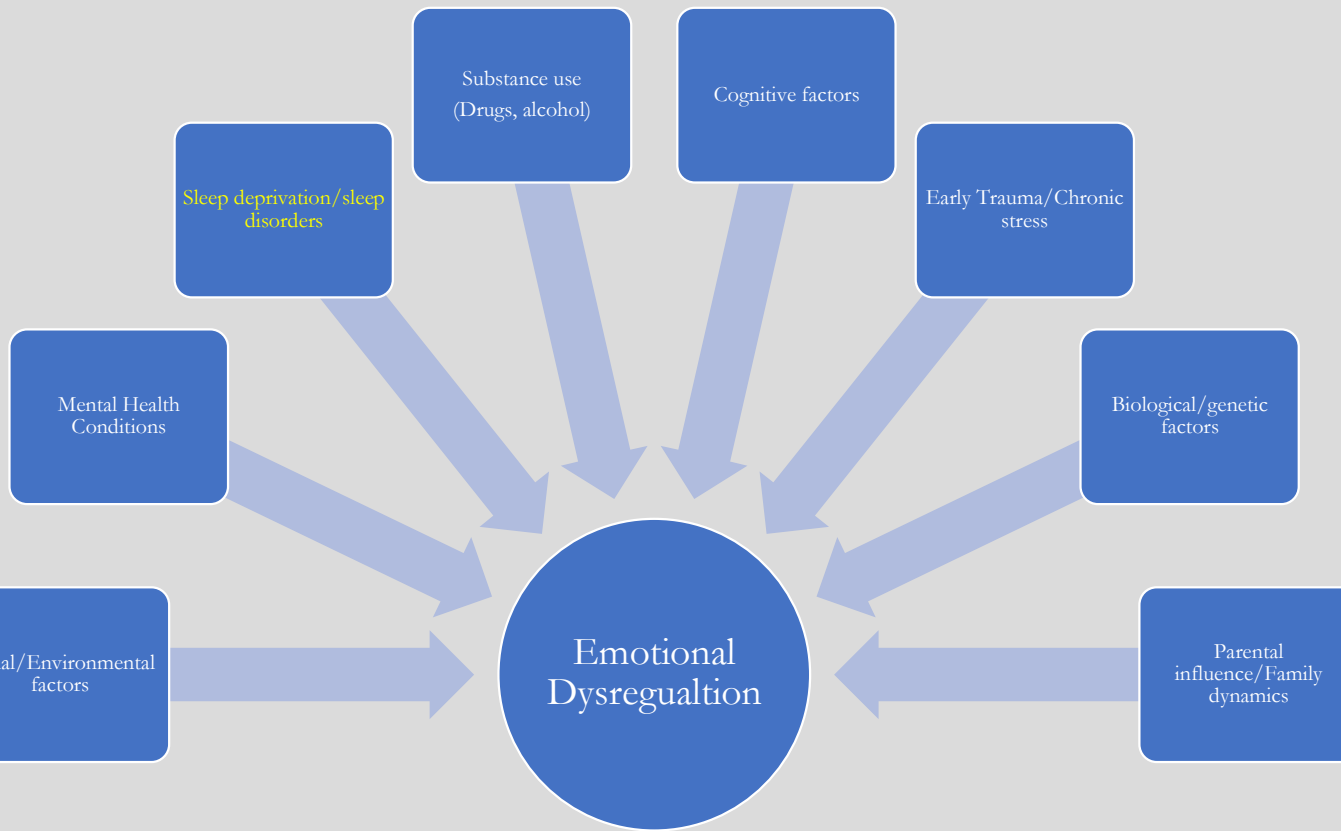
A Trauma-Informed Approach

Brooks R. Keeshin, MD^{a,b,*}, Beverly J. Bryant, MD^c,
Elizabeth R. Gargaro, MD^{a,b}

- Traumatic experiences, subsequent traumatic stress, and other trauma reactions are highly associated with youth who experience emotional dysregulation.
- Evidence-based, trauma-focused treatments should be considered for youth with emotional dysregulation and a clear history of both trauma exposures and resultant traumatic stress.
- Trauma-informed approaches to severely emotionally dysregulated youth, including youth in in-patient and residential settings, can improve emotional and behavioral outbursts while maintaining the safety of the milieu.
- Knowledge about trauma exposures and symptoms is an important consideration when prescribing psychopharmacologic interventions in severely emotionally dysregulated youth.



Disregolazione emotiva: fattori di rischio



Factors Influencing Emotional Dysregulation

Biological/Genetic Factors

Genetic predisposition
Neurodevelopmental differences
Temperament

Early Trauma/Chronic Stress

Adverse childhood experiences
Chronic stress
Insecure attachment

Parental Influence/Family Dynamics

Parental modeling of emotional regulation
Inconsistent/harsh parenting
Overprotective parenting

Cognitive Factors

Limited emotional awareness
Negative thought patterns

Social/Environmental Factors

Peer relationships
School stress
Media/technology exposure

Substance Use (Drugs, Alcohol)

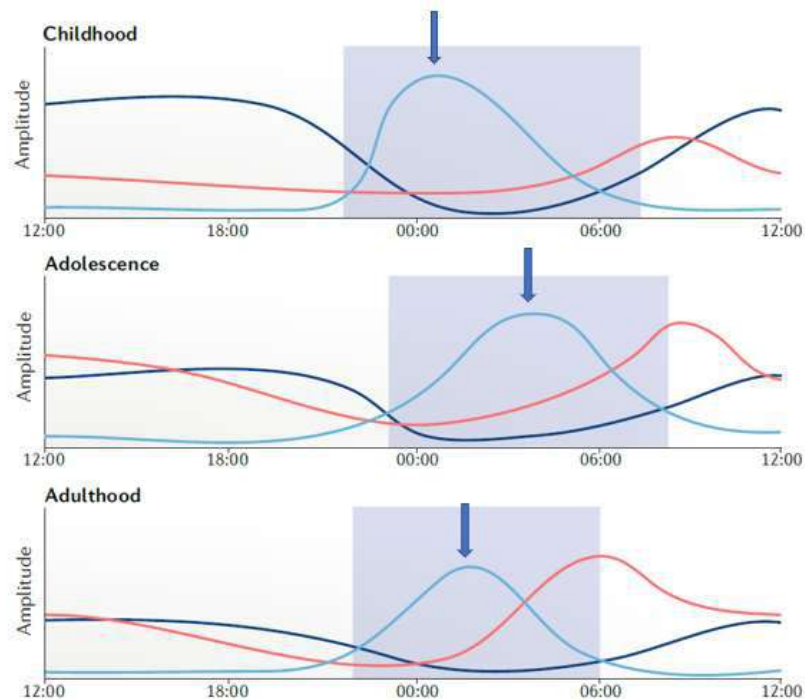
Impaired brain development
Emotional instability
Withdrawal and dependency

Sleep Deprivation

Heightened emotional reactivity
Difficulty processing emotions
Mood disorders

Mental Health Conditions

ADHD
Anxiety disorders
Autism spectrum disorder



Loga and McLung Nat Rev Neurosci 2019 ; Ronnenberg Curr Biol 2004; Carskadon MA 2008, pp 95–109.



Table 6 Multivariable median regression for total sleep duration

	Total sleep (hours)
Age (years)	-0.24*** [-0.25,-0.22]
BMI (SDS)	-0.02 [-0.06,0.02]
Has TV in bedroom	-0.08 [-0.18,0.03]
Use of display devices	-0.25*** [-0.35,-0.14]
Drinks before sleep	-0.06 [-0.13,0.00]

Only 50 % of children in 10–14 years group had sleep duration in agreement with recommendations.
63.5% of children used video devices (39.6% at age 1–3, increasing thereafter till 79.5% at age 10–13)

Brambilla et al. Italian Journal of Pediatrics (2017)

Sleep deprivation in adolescents

Sleep characteristics across the lifespan in 1.1 million people from the Netherlands, United Kingdom and United States: a systematic review and meta-analysis

Desana Kocavska^{1,2,3,4}, Thom S. Lysen⁵, Aafje Dotinga⁶, M. Elisabeth Koopman-Verhoeff^{7,8}, Maartje P. C. M. Luijk^{9,10}, Niki Antypa¹¹, Nienke R. Biemasa¹², Anneke Blokstra¹³, Johannes Brug^{14,15}, William J. Burk¹⁶, Hannie C. Comijs¹⁷, Eva Corpeleijn¹⁸, Hassan S. Dashti^{19,20}, Édouard J. de Bruin²¹, Ron de Graaf²², Ivonne P. M. Derks²³, Julia F. Dewald-Kaufmann^{24,25}, Petra J. M. Elders²⁶, Reinoldus J. B. J. Gemke²⁷, Linda Grievink²⁸, Lauren Hale²⁹, Catharina A. Hartman³⁰, Cobi J. Heijnen³¹, Martijn Huismans³², Anke Huss³³, M. Arfan Ikram^{34,35}, Samuel E. Jones³⁶, Mariska Klein Velderman³⁷, Maaike Koning³⁸, Anne Marie Meijer³⁹, Kim Meijer⁴⁰, Raymond Noordam⁴¹, Albertine J. Oldehinkel⁴², Joost Oude Groeniger⁴³, Brenda W. J. H. Penninx⁴⁴, H. Susan J. Picavet⁴⁵, Sara Pieters^{46,47}, Sijmen A. Reijneveld^{48,49}, Ellen Reitz⁵⁰, Carry M. Renders^{51,52}, Gerda Rodenburg⁵³, Femke Rutters⁵⁴, Matt C. Smith⁵⁵, Amika S. Singh⁵⁶, Marieke B. Snijder^{57,58}, Karien Stronks⁵⁹, Margreet ten Have⁶⁰, Jos W. R. Twisk⁶¹, Dike Van de Mheen^{62,63}, Jan van der Ende⁶⁴, Kristiaan B. van der Heijden^{64,65}, Peter G. van der Velden⁶⁶, Frank J. van Lenthe⁶⁷, Raphaële R. L. van Litsenburg^{68,69}, Sandra H. van Oostrom⁷⁰, Frank J. van Schalkwijk^{71,72}, Connor M. Sheehan⁷³, Robert A. Verheij⁷⁴, Frank C. Verhulst⁷⁵, Marije C. M. Vermeulen^{76,77}, Roel C. H. Vermeulen^{78,79}, W. M. Monique Verschuren⁸⁰, Tanja G. M. Vrijkotte⁸¹, Alet H. Wijga⁸², Agnes M. Willemsen^{83,84}, Maïke ter Wolbeek⁸⁵, Andrew R. Wood⁸⁶, Yilza Xerxes⁸⁷, Wichor M. Bramer⁸⁸, Oscar H. Franco^{89,90}, Annemarie L. Luik⁹¹, Eus J. W. Van Someren^{92,93} and Henning Tiemeier^{94,95,96}

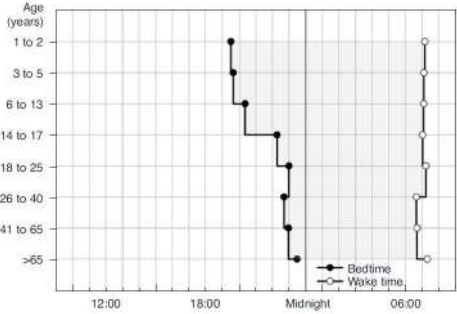
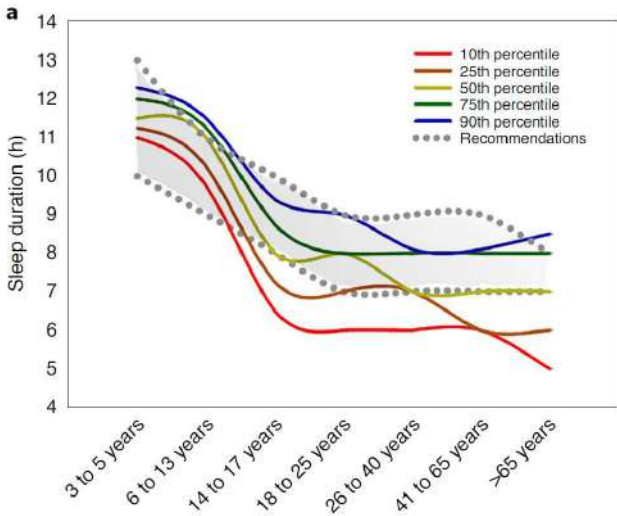


Fig. 3 | Sleep timing across lifespan. Night-time sleep timing across the lifespan ($n=106,282$).

More than half (51.5%) of subjects aged 14–17 years reported sleeping less than recommended 8–10 h per night.



Teenagers in the 25th percentile sleep 54 min less
Teenagers in the 10th percentile sleep 96 min less

Table 2 | Prevalence of insomnia symptoms, stratified by age and sex

Strata by age and sex	Insomnia symptoms					
	Difficulty initiating sleep		Difficulty maintaining sleep		Early morning awakenings	
	Studies (22, 1997–2015) ^a	Studies (15, 1998–2015)	Studies (9, 1997–2015)			
	n	%	n	%	n	%
1–2 years						
Total	1,336	4.5	–	–	–	–
Male	655	4.9	–	–	–	–
Female	681	4.1	–	–	–	–
3–5 years						
Total	5,484	4.0	1,678	6.1	ND	ND
Male	2,778	4.2	834	6.6	ND	ND
Female	2,704	3.8	844	5.7	ND	ND
6–13 years						
Total	13,227	13.2	7,210	9.1	ND	ND
Male	6,697	12.3	3,601	7.9	ND	ND
Female	6,570	14.0	3,602	10.2	ND	ND
14–17 years						
Total	1,631	16.5	1,175	23.2	–	–
Male	719	12.9	501	16.8	–	–
Female	910	19.3	672	28.1	–	–

Table 2 | Prevalence of insomnia symptoms, stratified by age and sex

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	Studies (22, 1997–2015) ^a	Studies (15, 1998–2015)	Studies (9, 1997–2015)			
	n	%	n	%	n	%
18–25 years						
Total	2,227	22.6	1,961	9.4	2,023	10.3
Male	969	19.4	856	8.6	892	9.2
Female	1,252	25.1	1,105	10.0	1,131	11.2
26–40 years						
Total	26,264	7.2	3,795	11.3	1,636	14.1
Male	10,850	5.5	1,550	7.4	722	12.0
Female	15,413	8.3	2,244	13.9	913	15.7
41–65 years						
Total	73,648	9.3	19,056	15.7	8,417	21.0
Male	31,637	5.4	8,640	10.5	3,904	12.5
Female	41,975	12.3	10,416	20.1	4,513	24.0
>65 years						
Total	8,869	14.9	3,255	20.2	3,376	23.5
Male	3,841	8.0	1,527	14.5	1,579	18.3
Female	5,028	20.2	1,728	25.3	1,797	28.0

International Journal of Public Health (2019) 64:487–498
<https://doi.org/10.1007/s00038-018-1188-1>

ORIGINAL ARTICLE

Trends in sleeping difficulties among European adolescents: Are these associated with physical inactivity and excessive screen time?

Ariane Ghekiere¹ · Jelle Van Cauwenberg^{1,2} · Ann Vandendriessche¹ · Joanna Inchley³ · Margarida Gaspar de Matos⁴ · Alberto Borraccino⁵ · Inese Gobina⁶ · Jorma Tynjälä⁷ · Benedicte Deforche^{1,8} · Bart De Clercq¹

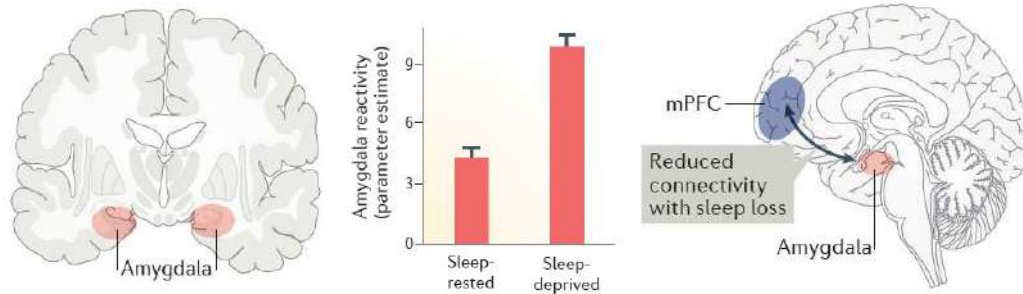
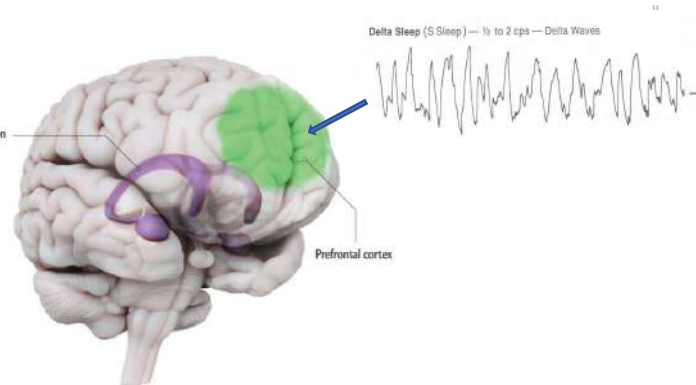
Received: 1 August 2018 / Revised: 21 November 2018 / Accepted: 1 December 2018 / Published online: 10 December 2018
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adolescents exceeding 2-h daily screen time had 20% higher odds of reporting sleep-onset difficulties

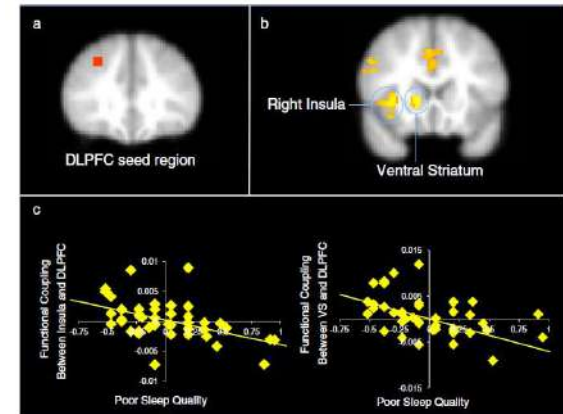
Sleep deprivation, emotional control and risk taking behaviors

The sleep-deprived human brain

Adam J. Krause¹, Eli Ben Simon¹, Bryce A. Mander¹, Stephanie M. Greer¹, Jared M. Saletin¹, Andrea N. Goldstein-Piekarski² and Matthew P. Walker^{1,3}



Krause et al Nature Reviews Neuroscience 2017



- Adolescents who reported poorer sleep exhibited greater risk-taking
- Less recruitment of the dorsolateral prefrontal cortex (DLPFC) during cognitive control
- Greater insula activation during reward processing
- Reduced functional coupling between the DLPFC and affective regions including the insula and ventral striatum during reward processing.

Telzer et al Neuroimage 2013

Sleep deprivation reduces cortical control and favours increased activity of reward circuitry in adolescents

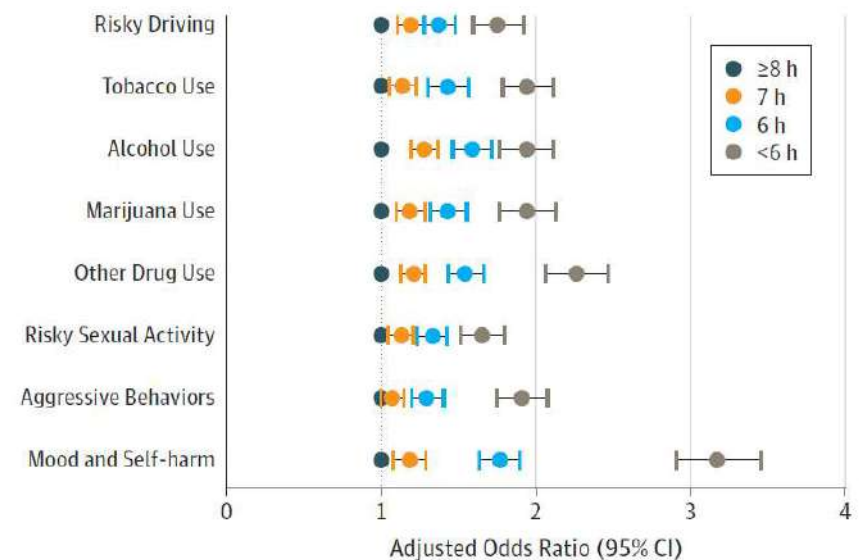
The Youth Risk Behavior Survey between February 2007 and May 2015.

67 615 surveys

99.3% were age 14 years or more

Only 20538 students (30.4%) reported 8 hours or more of sleep on an average school night.

Figure. Adjusted Association Between Sleep Duration and Risk-Taking Behaviors



Estimated odds ratios are from weighted logistic regression models adjusted for age, sex, race/ethnicity, and year of survey.

Sleep disturbances and emotional and behavioral difficulties in preschool children

Original Investigation | Pediatrics

Sleep Disturbances and Emotional and Behavioral Difficulties Among Preschool-Aged Children

Yujiao Deng, PhD; Zichen Zhang, BA; Yiding Gui, BA; Wen Li, PhD; Tingyu Rong, PhD; Yanrui Jiang, PhD; Qi Zhu, BA; Jin Zhao, PhD; Yunting Zhang, PhD; Guanghai Wang, PhD; Fan Jiang, MD, PhD

20,324 children aged 3 to 4 years (191 kindergartens)
17,233 (84.8%) participated in the 2-year follow-up

Children's Sleep Habits Questionnaire (CSHQ)
Strengths and Difficulties Questionnaire

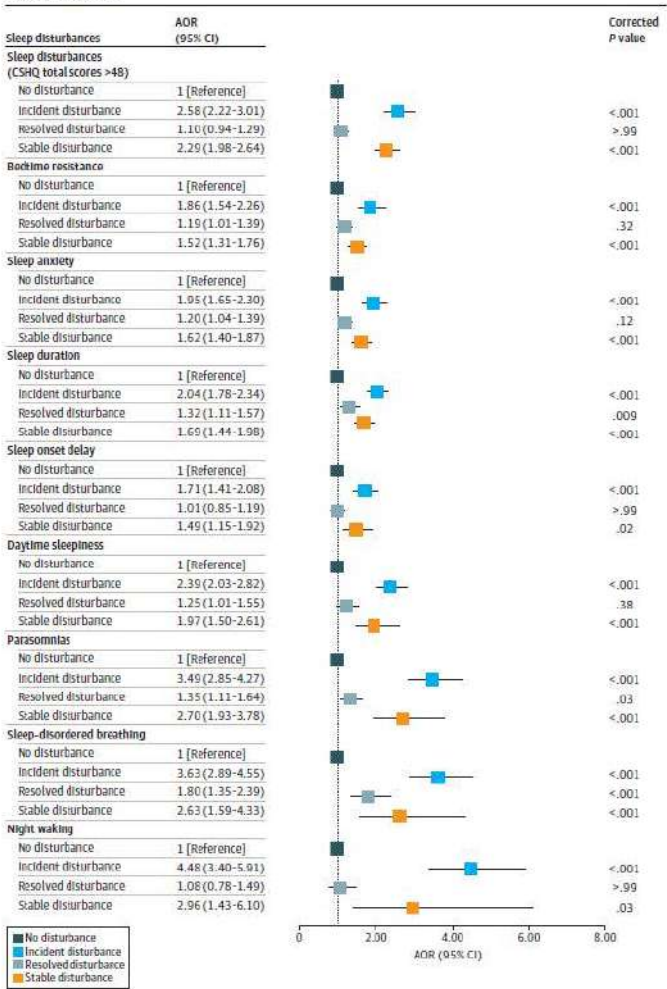
Key Points

Question Is a natural history of sleep disturbances associated with resolved and incident emotional and behavioral difficulties (EBDs) during preschool years?

Findings In this cohort study of 17 182 preschool-aged children in Shanghai, China, incident and stable sleep disturbances were negatively associated with resolved EBDs but positively associated with incident EBDs after adjustment. Resolved sleep disturbances were positively associated with resolved EBDs.

Meaning These findings underscore the association between sleep disturbances and EBDs among preschool-aged children and the importance of sleep health in promoting their mental well-being.

Figure 2. Odds of Incident Emotional and Behavioral Difficulties for Children With Transition of Different Sleep Disturbances



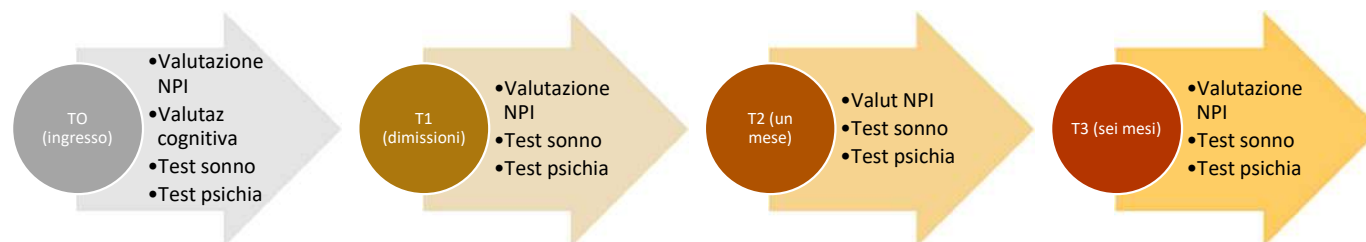
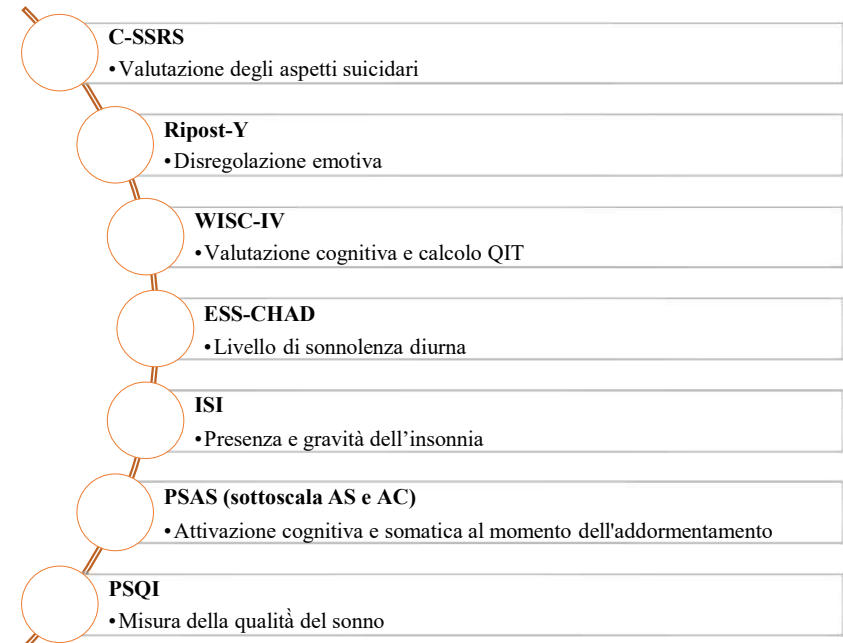
Lo studio SLEA

The **S**leep that hurts: rethinking mental **L**hEalth in **A**dolescents, implications for non-suicidal self-harm and suicidal ideation

Da Marzo 2023 a Dicembre 2024

Studio prospettico osservazionale longitudinale

Criteri di inclusione
Età compresa tra i 10 e i 18 anni
Ingresso c/o il ns reparto per acuzie psichiatrica
Provenienza da PS, valutazione ambulatoriale o invio da NPI territoriale
Punteggio CGI-S < 5
Permanenza c/o altro reparto non superiore ai 3 giorni
Acquisizione di consenso informato scritto (paziente e genitore)

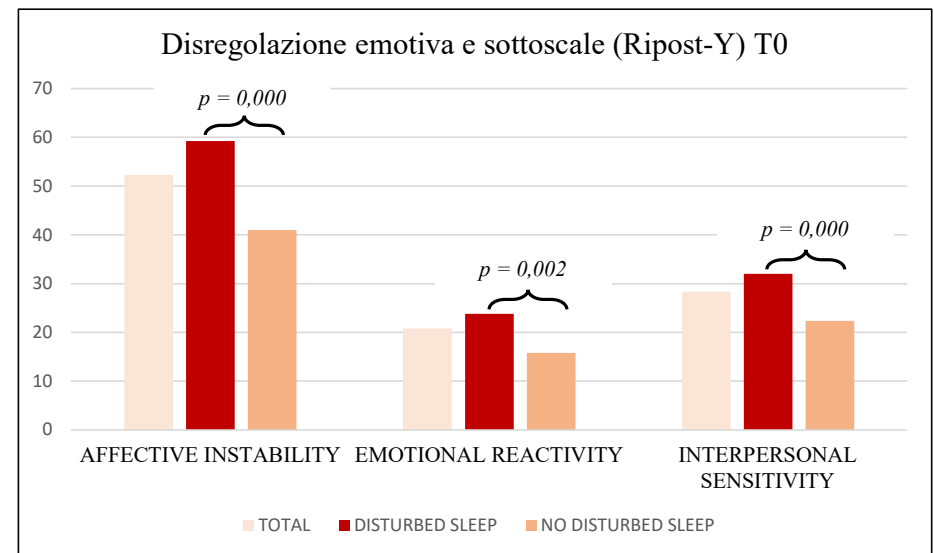
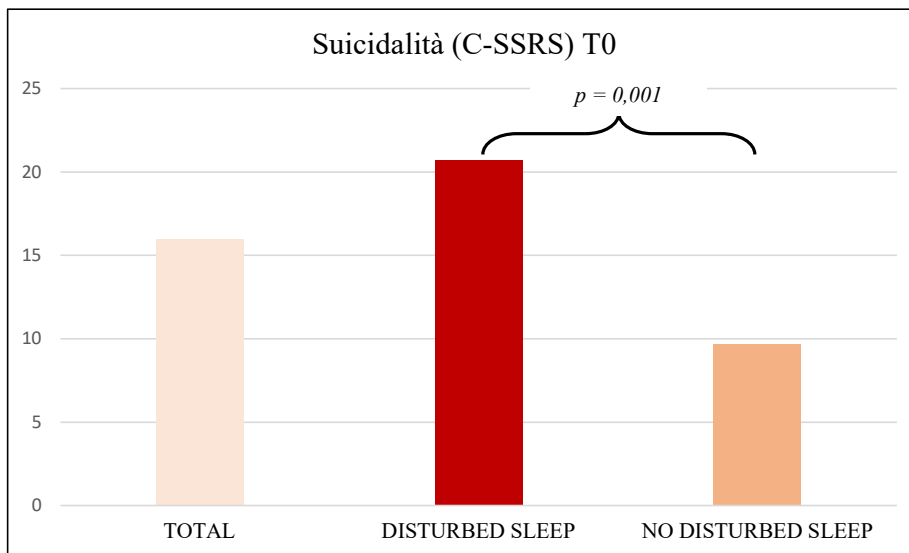


L'effetto di un sonno disturbato

**Gruppo ad alto livello di
sonno disturbato (N = 26)**
Indice di sonno disturbato ≥ 3

vs

**Gruppo a basso livello di
sonno disturbato (N = 22)**
Indice di sonno disturbato < 3

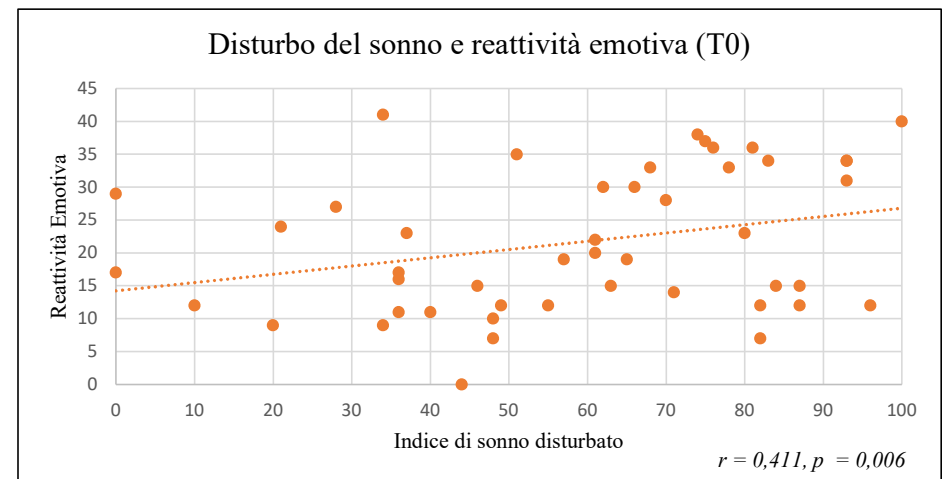
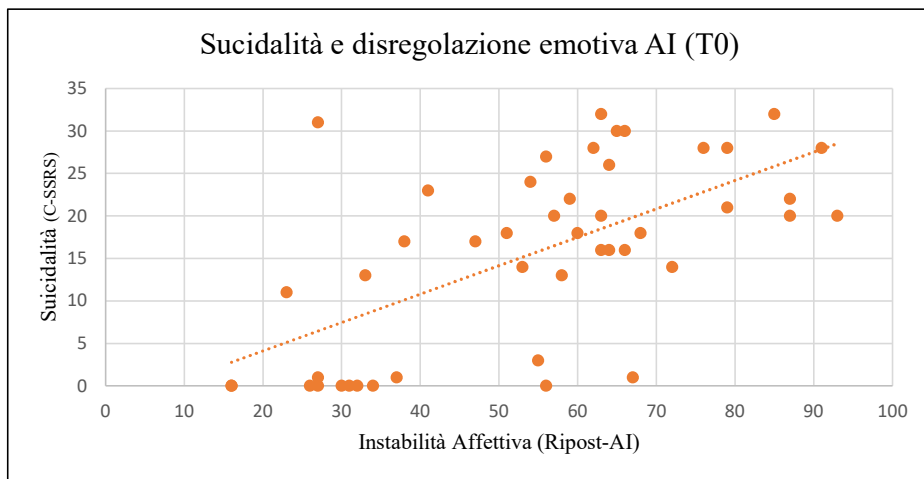


Alla valutazione effettuata all'ingresso in reparto (T0), la presenza di un **disturbo del sonno** mostra un'associazione significativa con i livelli di **disregolazione emotiva** e di **suicidalità**

Disregolazione emotiva e suicidalità

Test di correlazione bivariata a due code di Pearson

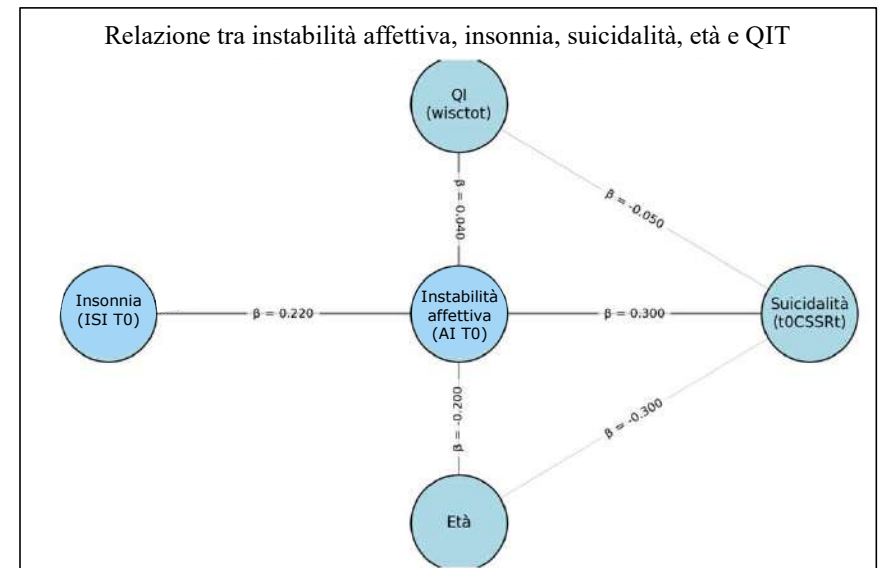
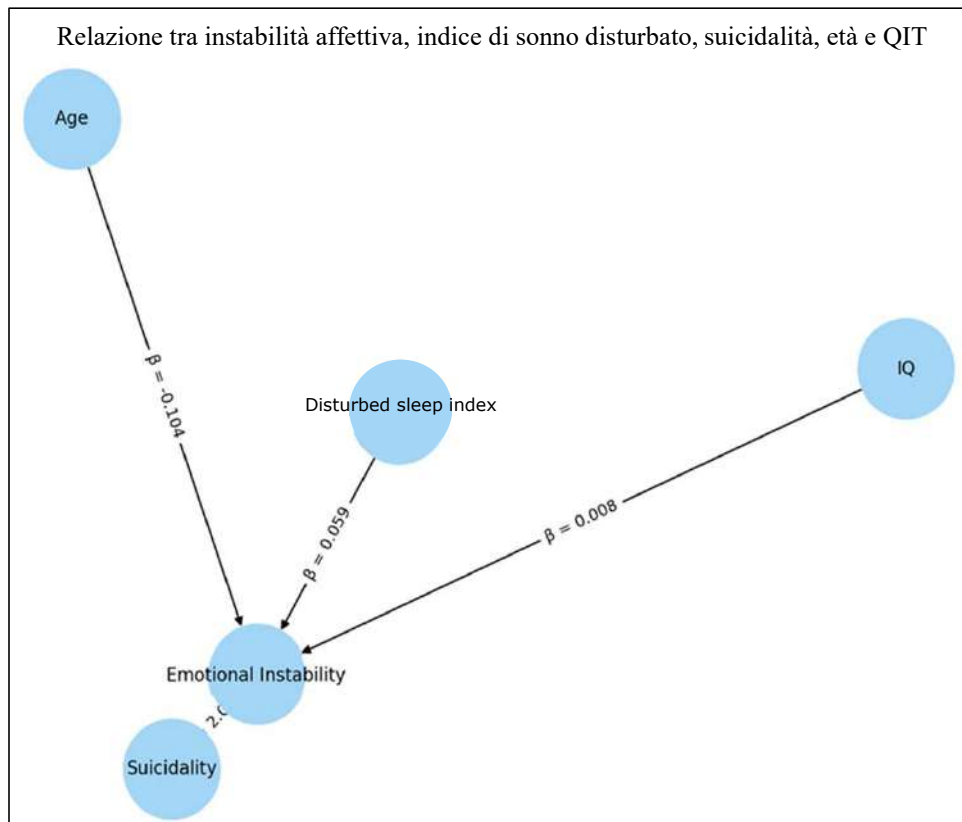
$$r = 0,635, p = 0,000$$



Alla valutazione effettuata all'ingresso in reparto (T0), i pazienti con maggiore **disregolazione emotiva** presentavano maggiori livelli di **suicidalità**

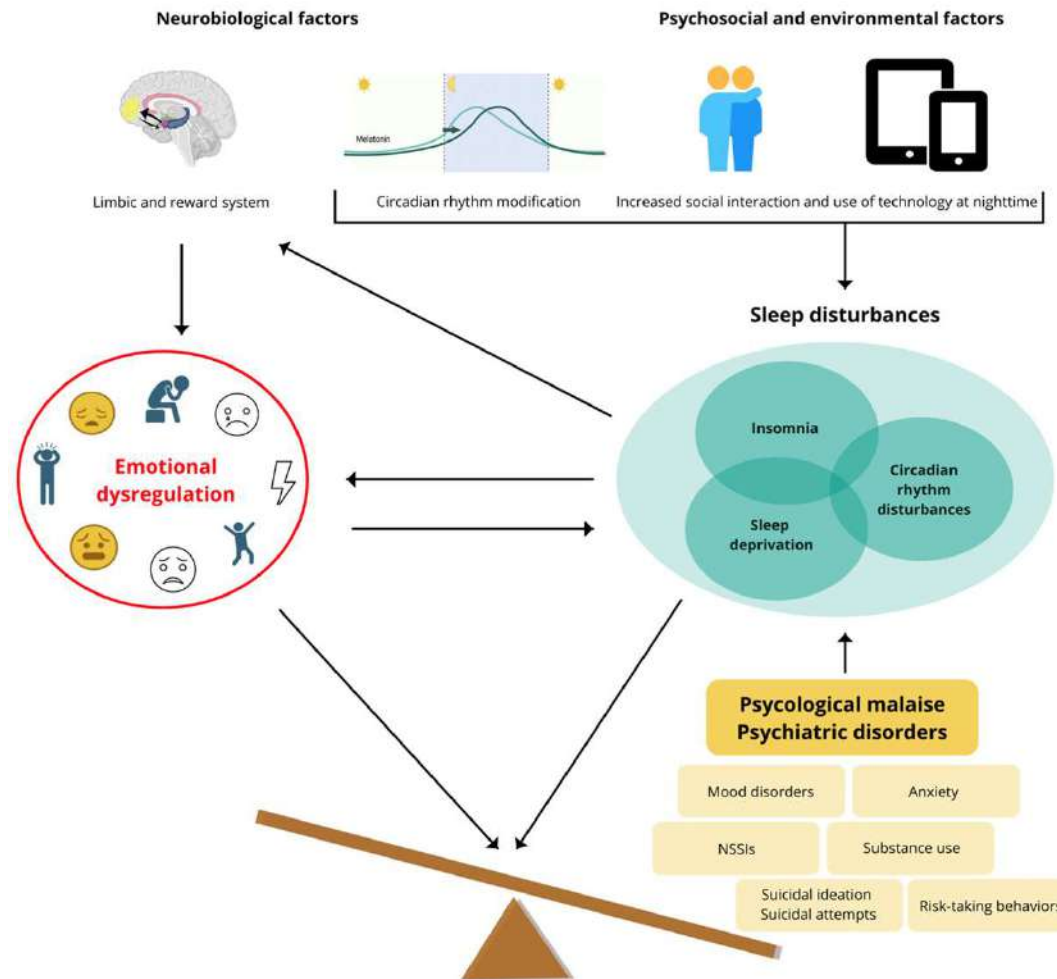
Disturbo del sonno e suicidalità: effetto diretto o indiretto?

Analisi di moderazione con metodo Process



Sonno disturbato (insonnia) come **moderatore di suicidalità** tramite la dimensione dell'instabilità affettiva (mediatore)

Deprivazione di sonno, disregolazione emotiva e psicopatologia



Uccella, Cordani et al, Brain Sciences, 2023

Medici della Neuropsichiatria Infantile
Psicologi
Terapisti della Riabilitazione Psichiatrica
Infermieri
Psicomotricisti

GRAZIE

