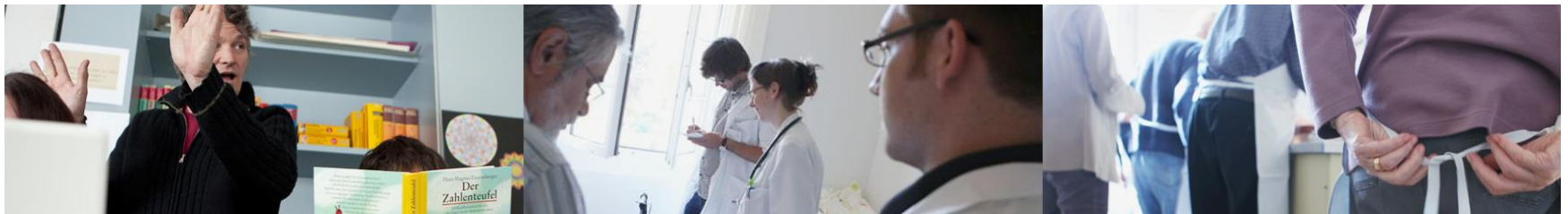


Ergebnisse aus der Suizidforschung im Kindes- und Jugendalter

Prof. Dr. med. Michael Kaess

Ordinarius und Direktor

Universitätsklinik für Kinder- und Jugendpsychiatrie und Psychotherapie



Themen

- Epidemiologie
- Risikofaktoren
- Hilfe erhalten
- Prädiktion
- Prävention / Intervention

Epidemiologie

RESEARCH ARTICLE

Economic and epidemiological impact of youth suicide in countries with the highest human development index

Christopher M. Doran^{1*}, Irina Kinchin^{2,3}

Table 1. Selective indicators for top ranking countries according to human development index.

Country	Human development index score	Life expectancy at birth (years)		GDP per capita (2014 International dollars)	Adjusted GDP per capita	
		Males	Females		Males	Females
Norway	0.949	79.6	83.6	\$66,015	\$74,896	\$57,135
Australia	0.939	80.7	84.6	\$46,880	\$53,187	\$40,574
Switzerland	0.939	81.1	85.1	\$61,902	\$70,230	\$53,575
Germany	0.926	78.5	83.2	\$47,191	\$53,539	\$40,842
Denmark	0.925	78.4	82.3	\$47,901	\$54,345	\$41,457
Singapore	0.925	79.8	85.9	\$86,612	\$98,263	\$74,960
Netherlands	0.924	79.8	83.5	\$49,233	\$55,856	\$42,610
Ireland	0.923	79.1	83.3	\$51,192	\$58,079	\$44,306
Canada	0.920	80.0	84.0	\$45,646	\$51,786	\$39,505
United States	0.920	76.8	81.5	\$55,033	\$62,436	\$47,630

Source: United National Human Development index [19]; World Bank indicators [20]; Organisation for Economic Co-operation and Development [28].

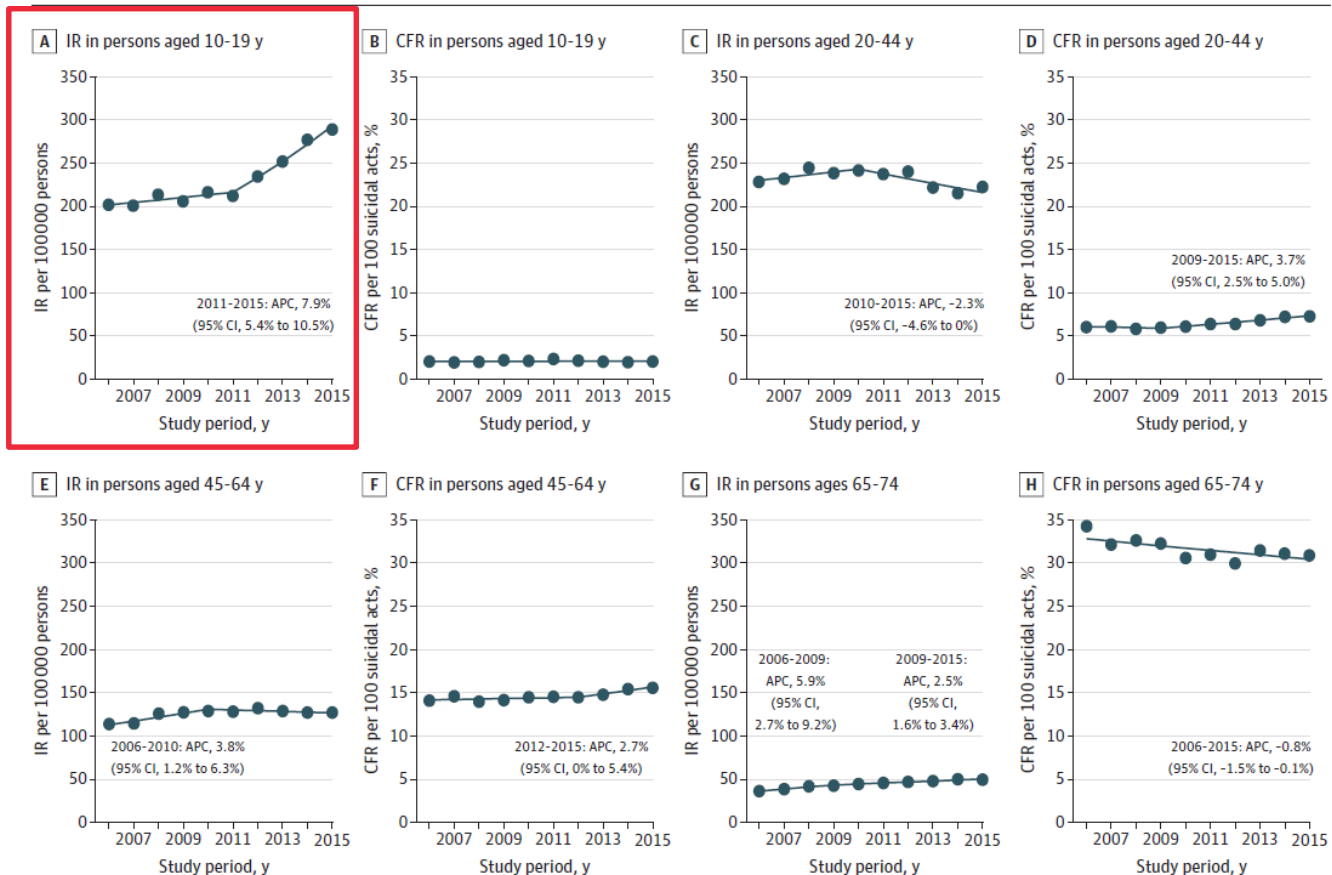
Table 4. Average economic and epidemiological considerations of youth suicide.

Country	Average years of life lost		Average years of productive life lost		Present value of average earnings foregone	
	Males	Females	Males	Females	Males	Females
Norway	60.1	64.1	42.5	42.5	\$1,555,266	\$1,186,434
Australia	61.2	65.1	46.0	46.0	\$1,222,619	\$932,674
Switzerland	61.6	65.6	45.5	44.5	\$1,928,023	\$1,453,980
Germany	59.0	63.7	46.2	46.2	\$1,666,833	\$1,271,542
Denmark	58.9	62.8	45.5	45.5	\$1,426,884	\$1,088,497
Singapore	60.3	66.4	42.5	42.5	\$2,134,632	\$1,628,403
Netherlands	60.3	64.0	46.5	46.5	\$1,734,299	\$1,323,009
Ireland	59.6	63.8	47.5	47.5	\$1,872,954	\$1,428,782
Canada	60.5	64.5	45.5	45.5	\$1,634,872	\$1,247,161
United States	57.3	62.0	46.5	46.5	\$1,681,155	\$1,282,468


Trends in the Incidence and Lethality of Suicidal Acts in the United States, 2006 to 2015

Jing Wang, MD, MPH; Steven A. Sumner, MD, MSc; Thomas R. Simon, PhD; Alex E. Crosby, MD, MPH; Francis B. Annor, PhD; Elizabeth Gaylor, MPH; Likang Xu, MD, MS; Kristin M. Holland, PhD, MPH

Figure 2. Incidence Rates (IRs) and Case Fatality Rates (CFRs) of Suicidal Acts by Age Group



Trajectories of suicide attempts from early adolescence to emerging adulthood: prospective 11-year follow-up of a Canadian cohort

Marie-Claude Geoffroy^{1,2} , Massimiliano Orri^{1,3}, Alain Girard⁴, Lea C. Perret¹ and Gustavo Turecki¹

Psychological Medicine

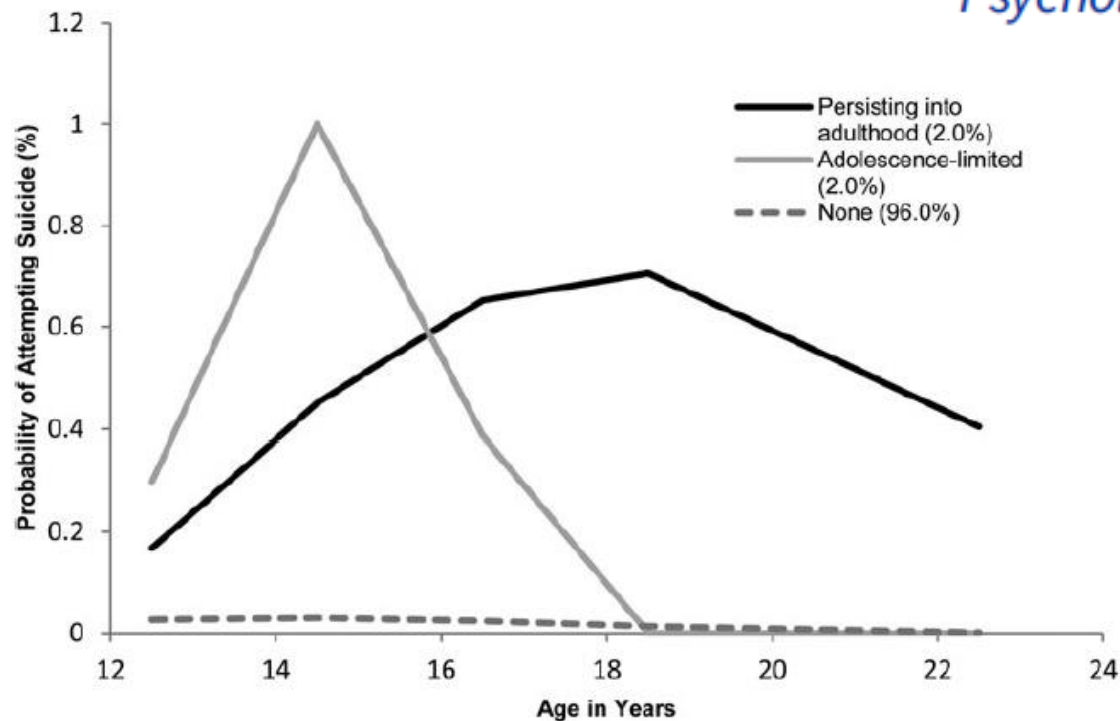


Table 3. Multivariable analysis of pre- and early adolescence risk factors and suicide attempts trajectory

	Adjusted RR (95% CI) ^a		
	Adolescence-limited v. never attempted	Persisting into adulthood v. never attempted	Persisting into adulthood v. adolescence-limited
Female	9.27 (1.73–49.82)	2.50 (0.74–8.43)	0.27 (0.03–2.17)
Maternal education – none beyond high school, at participant age 10–11 years	0.61 (0.18–2.03)	0.65 (0.21–1.96)	1.06 (0.21–5.27)
Depression/anxiety symptoms at 10–11 years	0.86 (0.50–1.49)	1.05 (0.66–1.65)	1.21 (0.61–2.41)
Conduct symptoms at 10–11 years	1.15 (0.70–1.88)	1.10 (0.60–4.23)	0.96 (0.45–2.06)
ADHD symptoms at 10–11 years	1.09 (0.64–1.84)	2.05 (1.29–3.28)	1.89 (0.95–3.74)
Depression/anxiety symptoms at 12–13 years	2.03 (1.02–3.32)	1.21 (0.73–2.01)	0.66 (0.31–1.40)
Conduct symptoms at 12–13 years	1.16 (0.79–1.71)	1.03 (0.67–1.58)	0.88 (0.50–1.55)
ADHD symptoms at 12–13 years	0.75 (0.38–1.51)	1.27 (0.62–2.58)	1.68 (0.64–4.45)
Maternal depression symptoms at participant age 10–11 years	1.07 (1.00–1.15)	0.96 (0.85–1.09)	0.90 (0.78–1.03)
Poor self-esteem at 12–13 years	0.90 (0.64–1.27)	1.00 (0.51–1.97)	1.12 (0.54–2.34)
Bullying in school at 10–11 years	0.94 (0.31–2.49)	1.60 (0.61–4.23)	1.71 (0.40–7.29)
Exposed to someone's suicide at 12–13 years	1.27 (0.34–4.74)	8.41 (3.04–23.27)	6.63 (1.29–34.06)

Mortality in children and adolescents following presentation to hospital after non-fatal self-harm in the Multicentre Study of Self-harm: a prospective observational cohort study

Keith Hawton, Liz Bale, Fiona Brand, Ellen Townsend, Jennifer Ness, Keith Waters, Caroline Clements, Nav Kapur, Galit Geulayov

Lancet Child Adolesc Health
2020; 4: 111-20

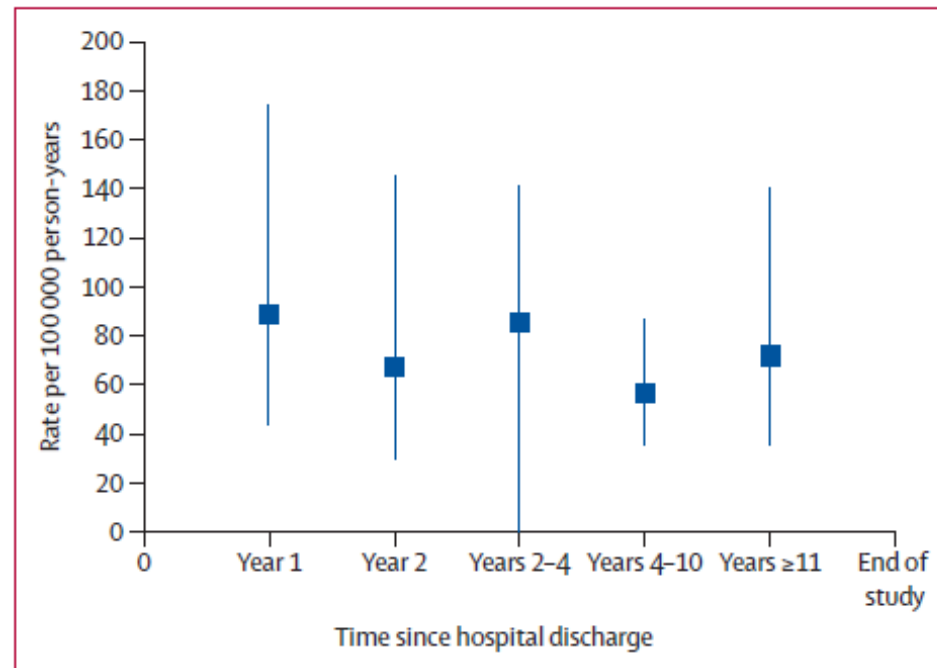
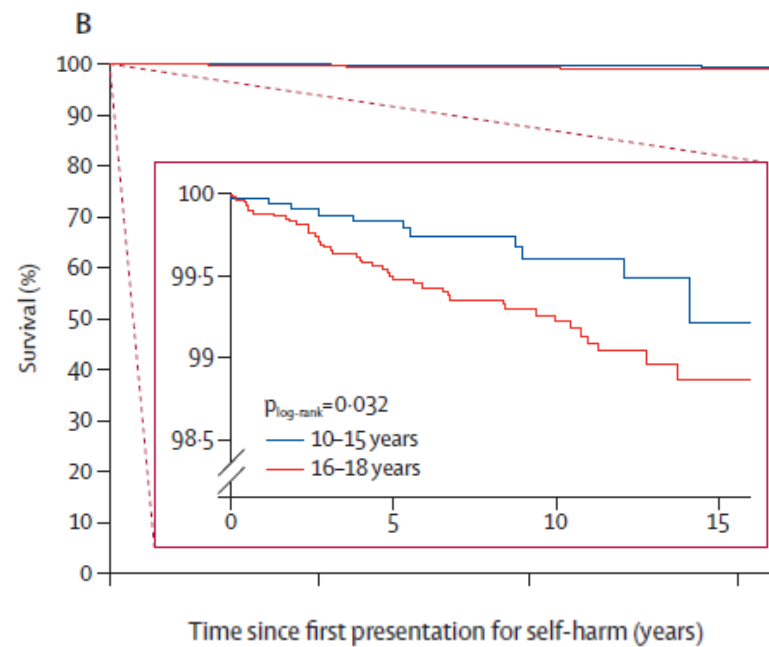
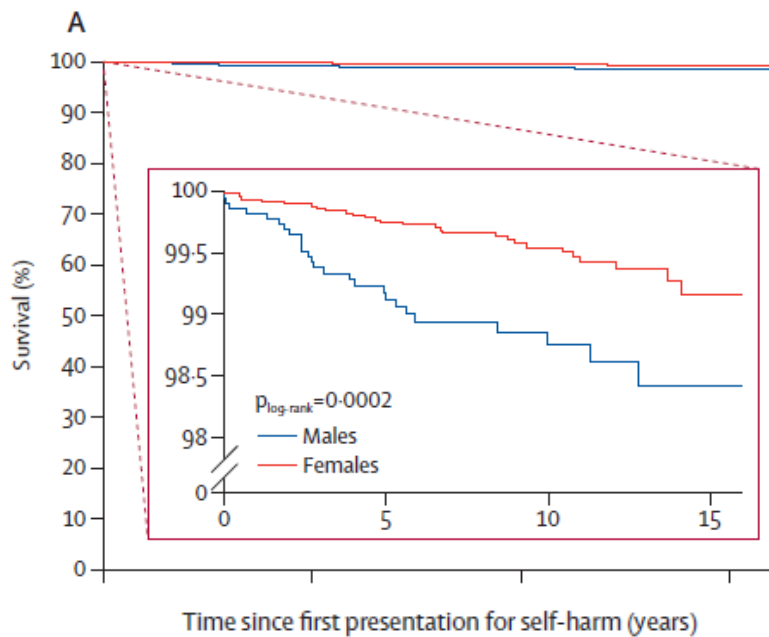
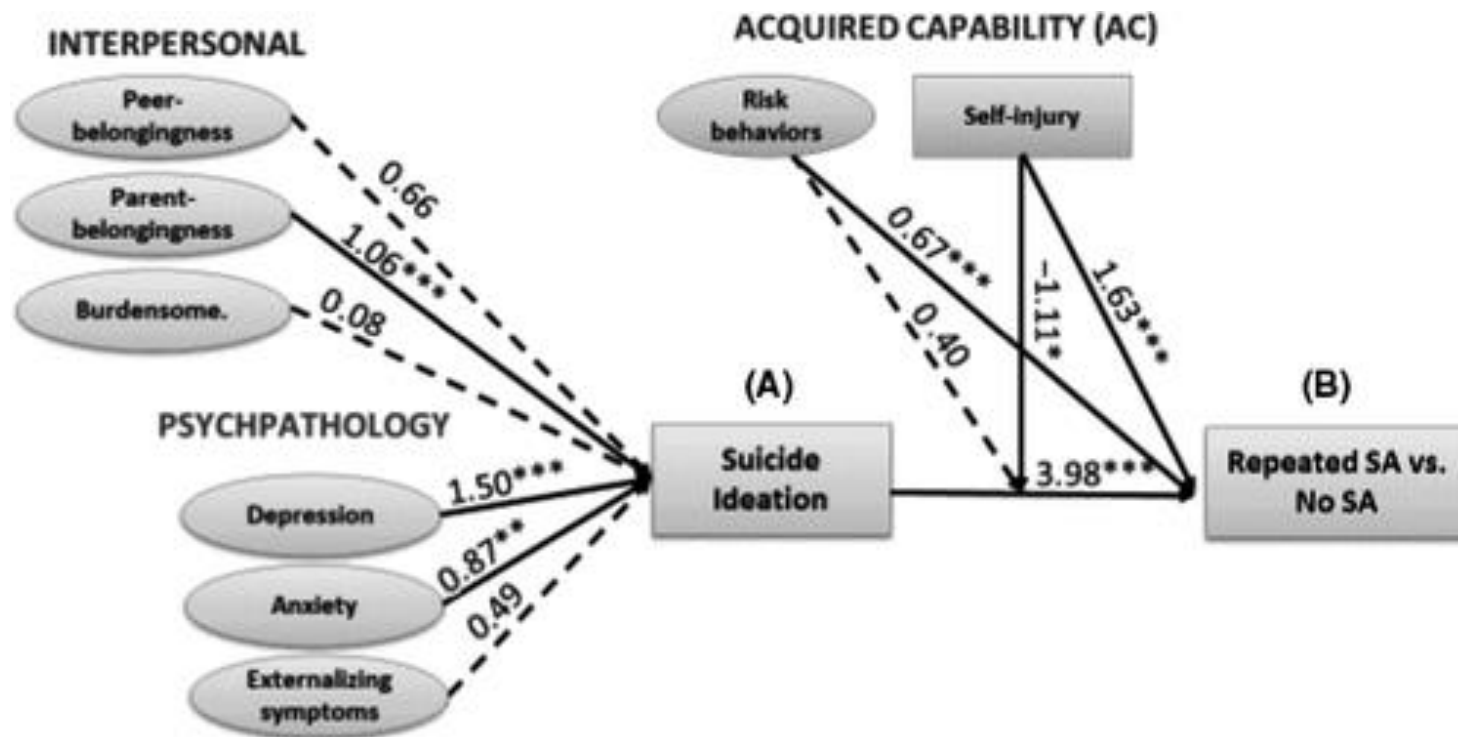


Figure 1: Incidence of death by suicide, by time of follow-up since first hospital presentation for self-harm
Error bars are 95% CIs.



Risikofaktoren

Evidenz zur „Interpersonal Theory of Suicide“

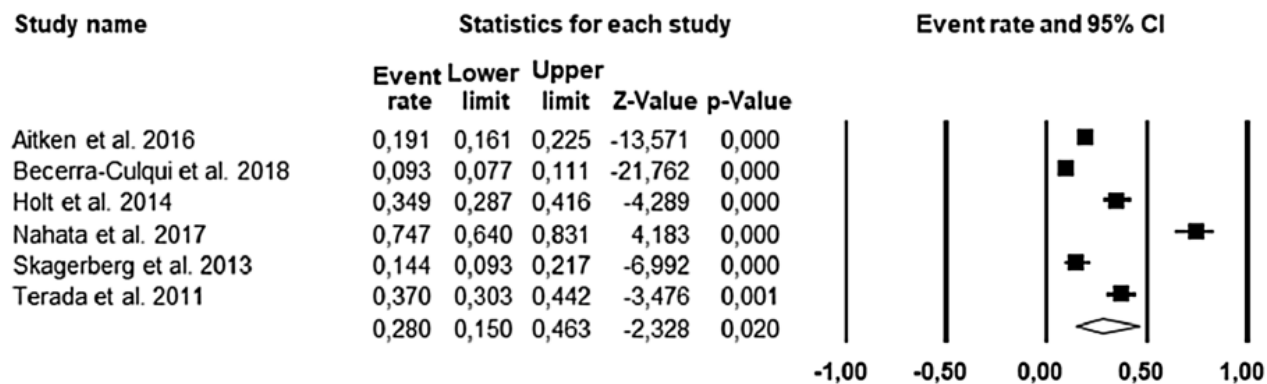


REVIEW

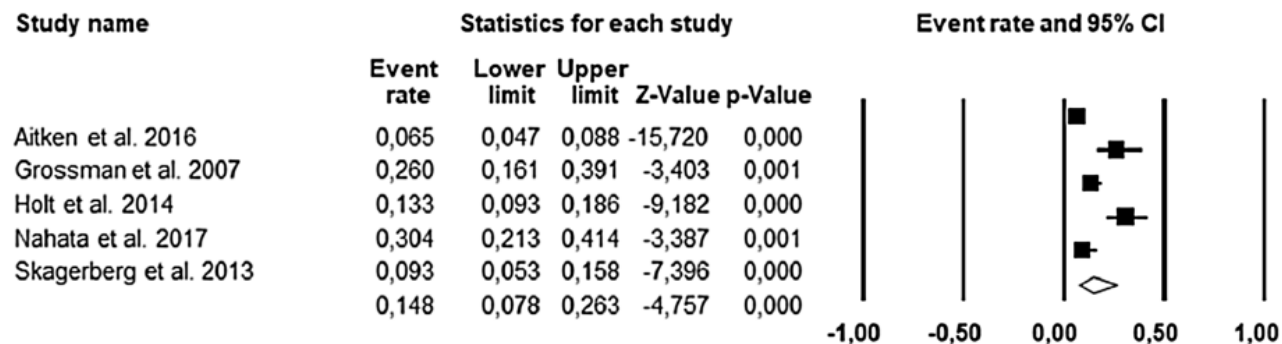
Lifetime prevalence of suicidal ideation and suicidal behaviors in gender non-conforming youths: a meta-analysis

Teresa Surace¹ · Laura Fusar-Poli¹ · Lucia Vozza¹ · Vito Cavone¹ · Chiara Arcidiacono¹ · Rossella Mammano¹ · Lucia Basile² · Alessandro Rodolico¹ · Pablo Bisicchia¹ · Pasquale Caponnetto³ · Maria Salvina Signorelli¹ · Eugenio Aguglia¹

(b) Suicidal ideation



(c) Suicide attempts



Serious and persistent suicidality among European sexual minority youth








Pietro Gambadauro^{1,2,3*}, Vladimir Carli¹, Danuta Wasserman¹, Judit Balazs^{4,5}, Marco Sarchiapone⁶, Gergö Hadlaczky¹

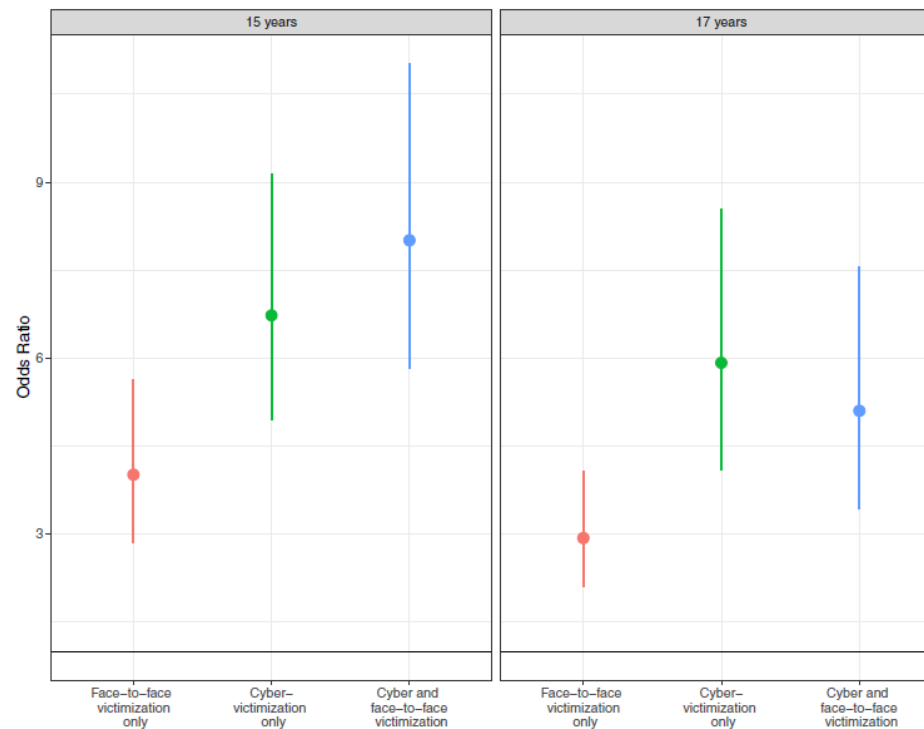
PLOS ONE

Table 3. Sexual orientation and persistent serious suicidal ideation during the study.


	Total sample	Females	Males
<i>Simple regression</i> ^a	<i>RR (95%CI)</i>	<i>RR (95%CI)</i>	<i>RR (95%CI)</i>
Sexual orientation (SMY)	2.55 (1.90–3.43) ***	2.05 (1.46–2.88) ***	3.37 (1.81–6.26) ***
<i>Multivariable regression</i> ^b	<i>aRR (95%CI)</i>	<i>aRR (95%CI)</i>	<i>aRR (95%CI)</i>
Sexual orientation (SMY)	1.73 (1.23–2.48) **	1.51 (1.01–2.24) *	3.84 (1.94–7.59) ***
Sex (Female)	1.47 (1.08–2.02) *	-	-
Age	0.96 (0.83–1.11) °	0.87 (0.73–1.04) °	1.25 (0.94–1.67) °
Substance abuse	1.87 (1.30–2.69) **	2.16 (1.41–3.33) ***	1.29 (0.64–2.61) °
Bullying victimization	3.23 (2.28–4.57) ***	3.97 (2.57–6.14) ***	2.03 (1.12–3.67) *
School-related stress	1.76 (1.33–2.34) ***	1.79 (1.28–2.49) **	1.60 (0.89–2.86) °
Suboptimal family interaction	2.77 (2.02–3.79) ***	2.35 (1.62–3.41) ***	4.40 (2.42–8.01) ***
Lower economic status	1.98 (1.41–2.79) ***	1.81 (1.20–2.74) **	3.13 (1.68–5.86) ***
Discordant religiosity	1.38 (1.05–1.82) *	1.37 (0.98–1.90) °	1.34 (0.78–2.29) °

Cybervictimization in adolescence and its association with subsequent suicidal ideation/attempt beyond face-to-face victimization: a longitudinal population-based study

Lea C. Perret,¹  Massimiliano Orri,^{1,2}  Michel Boivin,³  Isabelle Ouellet-Morin,⁴
Anne-Sophie Denault,⁵ Sylvana M. Côté,^{2,6}  Richard E. Tremblay,^{7,8} Johanne
Renaud,^{1,9}  Gustavo Turecki,¹  and Marie-Claude Geoffroy^{1,10} 



Childhood cognitive skill trajectories and suicide by mid-adulthood: an investigation of the 1958 British Birth Cohort

Stéphane Richard-Devantoy^{1,2} , Massimiliano Orri^{1,3}, Josie-Anne Bertrand^{2,4}, Kyle T. Greenway¹, Gustavo Turecki¹, David Gunnell^{5,6}, Chris Power⁷ and Marie-Claude Geoffroy^{1,8}

Psychological Medicine

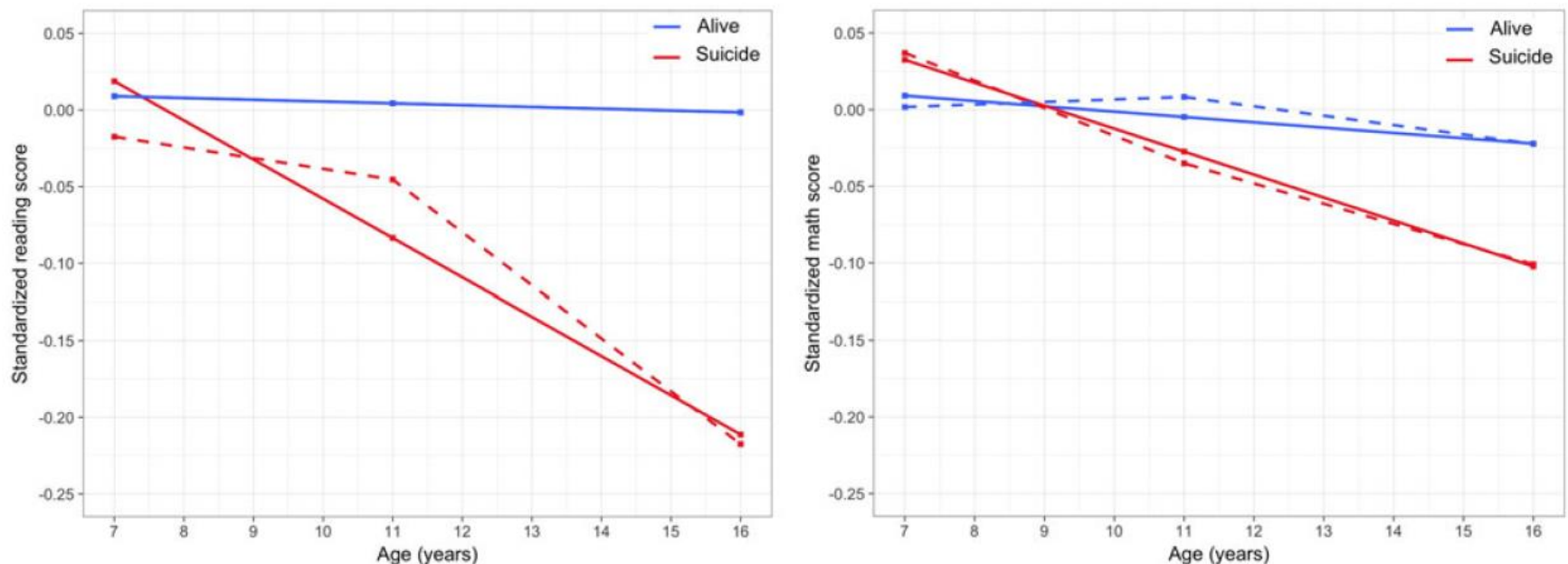


Fig. 1. Trajectories of mathematics and reading abilities from 7 to 16 years in individuals who died by suicide v. still alive, unadjusted associations. Dotted lines represent the observed values, solid lines represent the estimated values.

Trajectories of childhood adversity and mortality in early adulthood: a population-based cohort study

Naja H Rod, Jessica Bengtsson, Esben Budtz-Jørgensen, Clara Clipet-Jensen, David Taylor-Robinson, Anne-Marie Nybo Andersen, Nadya Dich, Andreas Rieckmann

Lancet 2020; 396: 489-97

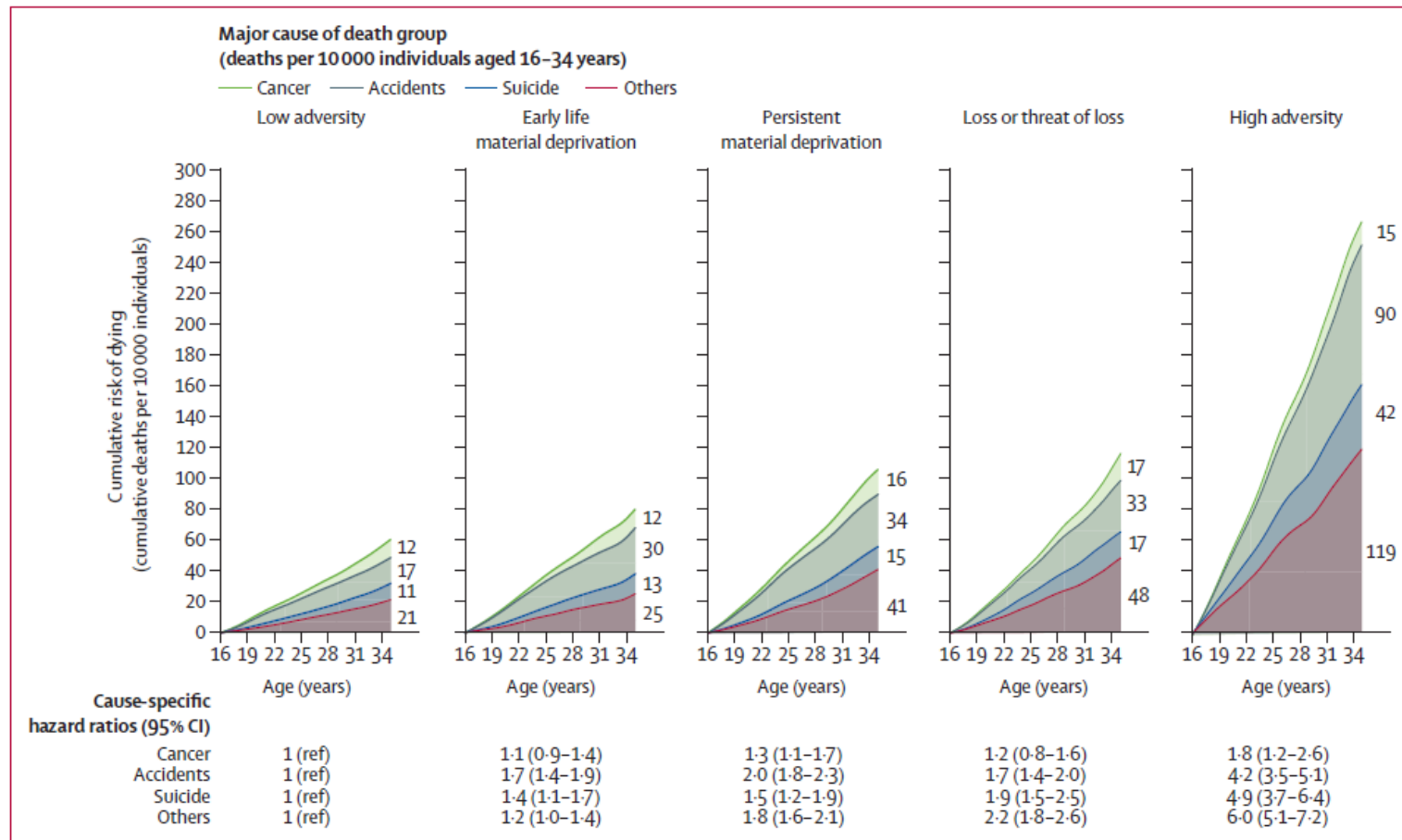



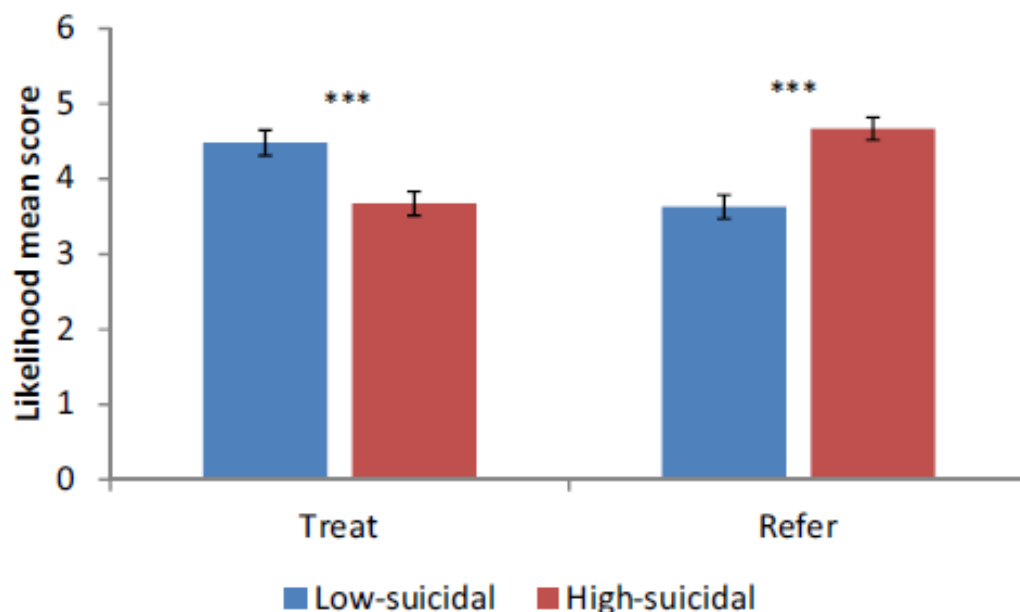
Figure 4: Cumulative cause-specific mortality among Danish children

1 097 628 Danish children were divided into the five estimated trajectory groups of childhood adversities.

Hilfe erhalten

Will you agree to treat a suicidal adolescent? A comparative study among mental health professionals

Y. Gvion¹  · H. Rozett² · T. Stern²



*** $p < .001$.

	Likelihood to treat	Likelihood to refer
Professional characteristics		
Seniority	- 0.01	- 0.23***
Experience with suicidal patients	- 0.08	- 0.20**
Competence	0.55***	- 0.59***
Tools	0.49***	- 0.58***
Personal characteristics		
Depression	- 0.03	0.05
Therapists' suicidal probability	- 0.13*	0.02
Patient reminds actual patient	0.24***	- 0.24***
Patient reminds familiar adolescent	0.24***	- 0.13 [#]

** $p < 0.01$, *** $p < 0.001$, [#] $p < 0.06$

Google searches for suicide and suicide risk factors in the early stages of the COVID-19 pandemic

PLOS ONE

Emily A. Halford¹, Alison M. Lake¹, Madelyn S. Gould^{1,2,3*}

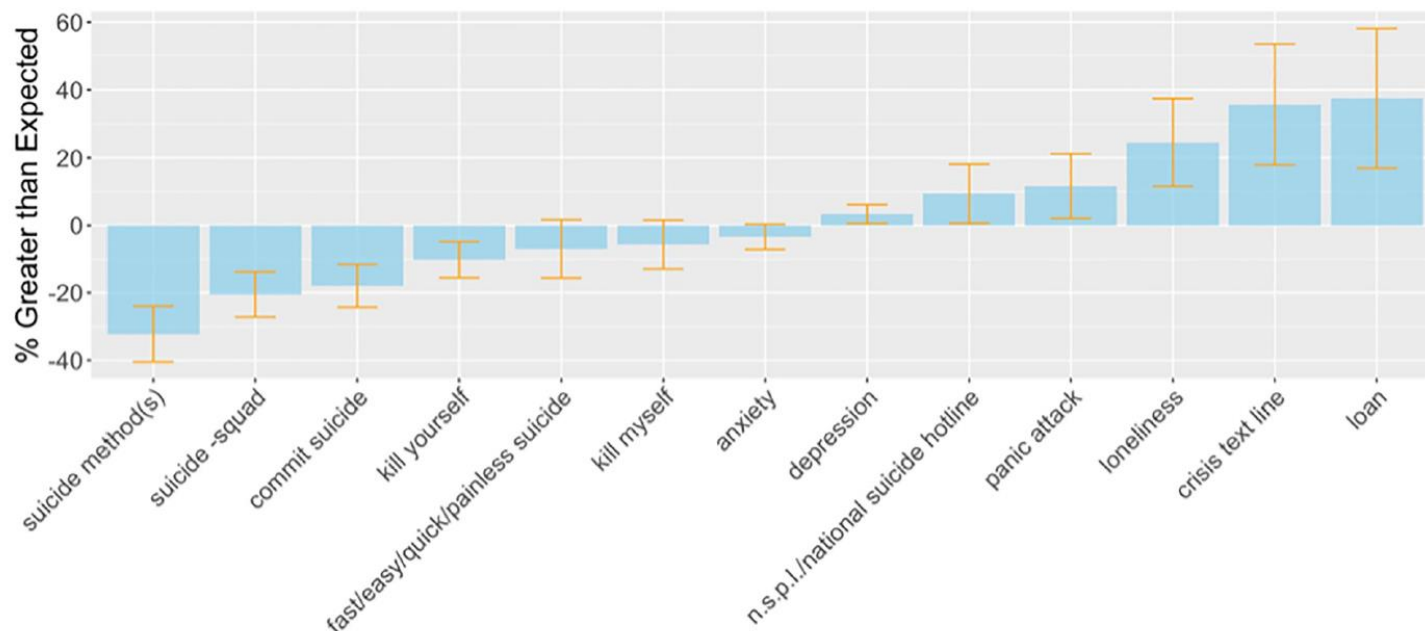
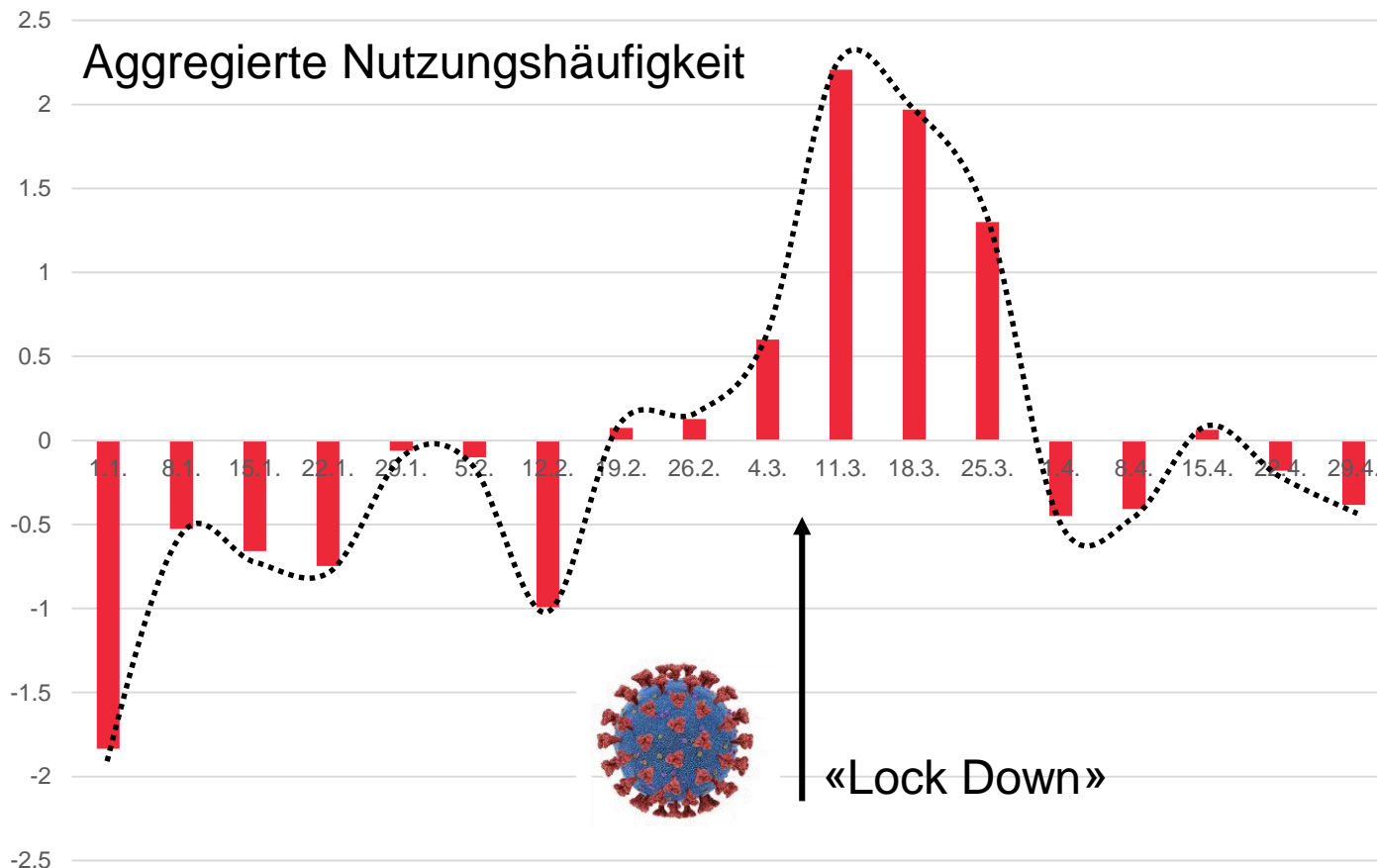


Fig 1. Google searches between March 1 and April 18, 2020. (A) Average percent difference between observed relative search proportion and relative search proportion predicted with pre-COVID-19 data. Percentage greater than expected shown for all search queries with 95% confidence intervals. (B) Data presented is the same as in panel A, but limited to search queries with percent greater than expected. $<|100\%$.

Online Help-Seeking bei Jugendlichen während COVID-19



SchülerInnen

N = 1,042 (w: 72%)
Ø Alter: 14.6 Jahre

Prädiktion

Fearlessness about death predicts adolescent suicide attempt: A preliminary analysis

Mikael S. Ferm MSW¹ | Laura A. Frazee MS¹ | Betsy D. Kennard PsyD^{1,2}
Jessica D. King PhD² | Graham J. Emslie MD^{1,2} | Sunita M. Stewart PhD^{1,2}

Abstract

Objective: Several theories of suicide suggest that people will only attempt suicide if they have both the desire to die and the capability for suicide. Fearlessness about death is a key component of capability for suicide. There is little information in the literature about the prospective relationship between fearlessness about death and suicide attempt in adolescents.

Method: We obtained baseline fearlessness about death from adolescents ($N = 122$; ages 12–18; 80% girls; 82% Caucasian) who received intensive outpatient treatment for active suicidal ideation and/or a recent attempt. We tested if fearlessness about death at treatment entry predicted an attempt ($n = 14$) between entry and six-month follow-up after discharge from the program.

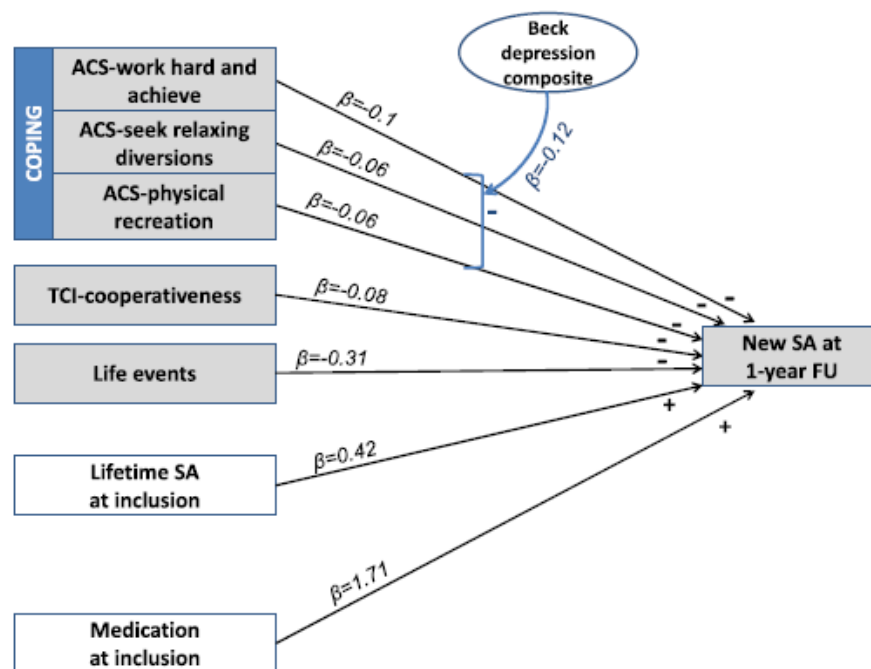
Results: Fearlessness about death significantly predicted the presence of an attempt between treatment entry and six-month follow-up after controlling for common covariates (Quade $F = 2.15, p < .02$).

Conclusions: In a preliminary analysis of a group of suicidal adolescents, fearlessness about death was a significant independent predictor of attempt between treatment entry and six months post-discharge, even when controlling for other commonly cited risk factors.



Repeating a suicide attempt during adolescence: risk and protective factors 12 months after hospitalization

Bojan Mirkovic^{1,2} · David Cohen^{1,3} · Sébastien Garny de la Rivière⁴ · Hugues Pellerin¹ · Jean-Marc Guilé^{4,5} · Angèle Consoli¹ · Priscille Gerardin^{1,6}




ACS: Adolescent Coping Scale, SA: Suicide Attempt, TCI: Temperament and Character Inventory, FU: Follow-up

Fig. 2 Modelling suicidality at the 12-month follow-up in adolescent inpatients who had attempted suicide

Prävention / Intervention



Influence of coping strategies on the efficacy of YAM (Youth Aware of Mental Health): a universal school-based suicide preventive program

Jean-Pierre Kahn^{1,2,3,4}  · Renaud F. Cohen^{1,3} · Alexandra Tubiana³ · Karine Legrand^{5,6} · Camilla Wasserman^{7,8} · Vladimir Carli⁷ · Alan Apter⁹ · Judit Balazs^{10,11} · Raphaele Banzer¹² · Francesca Baralla¹³ · Shira Barzilai⁹ · Julio Bobes¹⁴ · Romuald Brunner¹⁵ · Paul Corcoran¹⁶ · Doina Cosman¹⁷ · Francis Guillemin^{1,2,5,6} · Christian Haring¹² · Michael Kaess^{15,18} · Urša Mars Bitenc¹⁹ · Gergely Mészáros^{10,20} · Elaine McMahon¹⁶ · Vita Postuvan¹⁹ · Pilar Saiz¹⁴ · Airi Varnik^{21,22} · Peeter Varnik^{21,22} · Marco Sarchiapone¹³ · Christina W. Hoven^{8,23} · Danuta Wasserman⁷

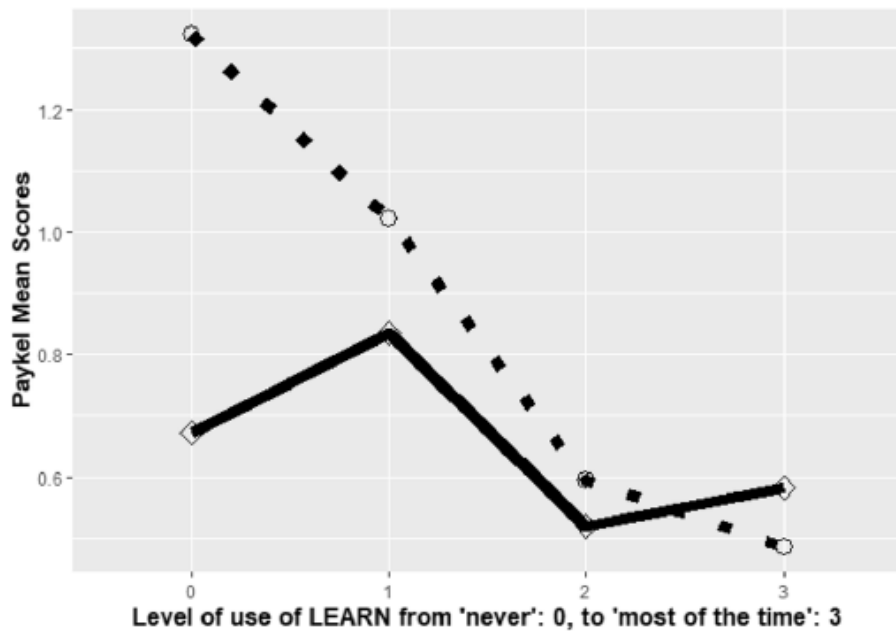
Sekundäranalyse zu

School-based suicide prevention programmes: the SEYLE cluster-randomised, controlled trial

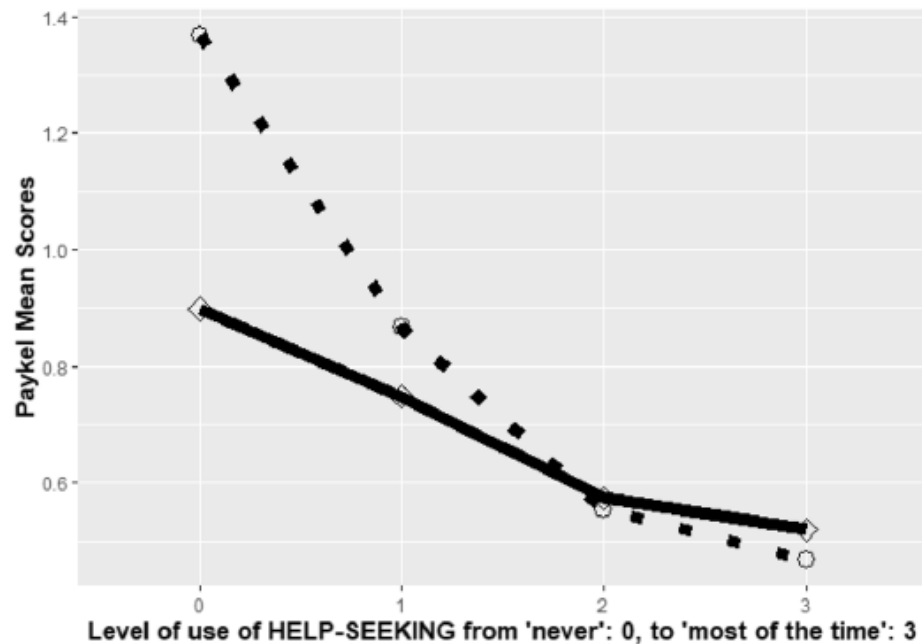
Danuta Wasserman, Christina W Hoven, Camilla Wasserman, Melanie Wall, Ruth Eisenberg, Gergö Hadlaczky, Ian Kelleher, Marco Sarchiapone, Alan Apter, Judit Balazs, Julio Bobes, Romuald Brunner, Paul Corcoran, Doina Cosman, Francis Guillemin, Christian Haring, Miriam Iosue, Michael Kaess, Jean-Pierre Kahn, Helen Keeley, George J Musa, Bogdan Nemes, Vita Postuvan, Pilar Saiz, Stella Reiter-Theil, Airi Varnik, Peeter Varnik, Vladimir Carli

Lancet 2015; 385: 1536–44

a Interaction between Arm and LEARN



b Interaction between Arm and HELP-SEEKING





Evidence-Based Interventions for Youth Suicide Risk

Danielle R. Busby¹ • Claire Hatkevich¹ • Taylor C. McGuire¹ • Cheryl A. King¹

- Insgesamt wenige gute Studien, beste Datenlage derzeit für die Dialektisch-Behaviorale Therapie bei Adoleszenten (DBT-A)
- Neue Trends:
 - Integration von Technologie
 - Berücksichtigung spezifischer Populationen (z.B. männliche Jugendliche, Jugendliche in Armut)
 - Personalisierung entsprechend Risikoprofilen

REVIEW

Open Access

Does treatment method matter? A meta-analysis of the past 20 years of research on therapeutic interventions for self-harm and suicidal ideation in adolescents



Oswald D. Kothgassner¹, Kealagh Robinson², Andreas Goreis^{3,4}, Dennis Ougrin⁵ and Paul L. Plener^{1,6*}

Abstract

Background: Self-harm is a clinically relevant and prevalent behaviour which peaks in adolescence. Given the high prevalence of self-harm, the high levels of psychiatric comorbidity, and its role as a risk factor for suicide, delivering evidence-based care is critical.

Methods: We conducted a systematic review and meta-analysis of the literature on treating self-harm in adolescents (12–19 years) published in the last 20 years, identifying 25 randomised controlled trials. We calculated the effect of treatment interventions relative to active control conditions in reducing self-harm, suicidal ideation and depressive symptoms.

Results: Overall, treatment interventions fared slightly better than active controls in decreasing self-harm ($d = 0.13$, 95% CI 0.04–0.22, $p = .004$), suicidal ideation ($d = 0.31$, 95% CI 0.12–0.50, $p = .001$) and depressive symptoms ($d = 0.22$, 95% CI 0.07–0.38, $p = .006$). Subgroup analysis of specific therapies revealed moderate effects of DBT-A in reducing self-harm ($d = 0.51$, 95% CI 0.18–0.85, $p = .002$) and suicidal ideation ($d = 0.48$, 95% CI 0.17–0.80, $p = .003$), as well as moderate effects of family-centred therapy in the treating suicidal ideation ($d = 0.58$, 95% CI 0.01–1.15, $p = .049$).

(Continued on next page)

DBT-A

Mehlum et al. 2014		0.42 [-0.03, 0.87]
McCauley et al. 2018		0.63 [0.14, 1.12]
Submodel (Q = 0.39, p = 0.535; I ² = 0.0%)		0.51 [0.18, 0.85]

CBT

Kaess et al. 2019		0.00 [-0.46, 0.46]
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Group Therapy

Wood et al. 2001		0.53 [0.01, 1.04]
Hazell et al. 2009		-0.70 [-1.72, 0.31]
Schuppert et al. 2009		0.49 [-0.31, 1.29]
Green et al. 2011		0.07 [-0.16, 0.30]
Schuppert et al. 2012		-0.08 [-0.53, 0.38]
Submodel (Q = 6.65, p = 0.156; I ² = 19.0%)		0.11 [-0.12, 0.34]

Family Therapy

Diamond et al. 2010		0.45 [-0.29, 1.19]
Asarnow et al. 2011		0.11 [-0.63, 0.85]
Cottrell et al. 2018		0.04 [-0.11, 0.19]
Submodel (Q = 1.15, p = 0.563; I ² = 0.0%)		0.06 [-0.09, 0.21]

MBT-A

Roussow & Fonagy 2012		0.75 [0.14, 1.35]
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Cognitive Analytic Therapy

Chanen et al. 2008		0.05 [-0.51, 0.61]
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Brief Interventions + TAU

King et al. 2006		0.12 [-0.13, 0.38]
King et al. 2009		0.14 [-0.16, 0.44]
Kennard et al. 2018		-0.01 [-0.50, 0.49]
Submodel (Q = 0.27, p = 0.874; I ² = 0.0%)		0.11 [-0.07, 0.29]

Therapeutic Assessment

Ougrin et al. 2013		0.20 [-0.42, 0.82]
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RE Model (Q = 19.01, df = 16, p = 0.268; I ² = 2.5%)		0.13 [0.04, 0.22]
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Favors Control Intervention

Favors Therapeutic Intervention



Cohen's d



Fig. 2 Forest plot of trials comparing the effect of therapeutic interventions and controls on self-harm. Note: Displays the standardized mean difference (Cohen's *d*) in post-treatment self-harm, a positive effect size indicates that the outcome was in favour of therapeutic interventions. The average effect was calculated using a random-effects model

Symptom clusters in adolescent depression and differential response to treatment: a secondary analysis of the Treatment for Adolescents with Depression Study randomised trial

Lancet Psychiatry 2020;
7: 337–43

Julia Bondar, Arthur Caye, Adam M Chekroud, Christian Kieling

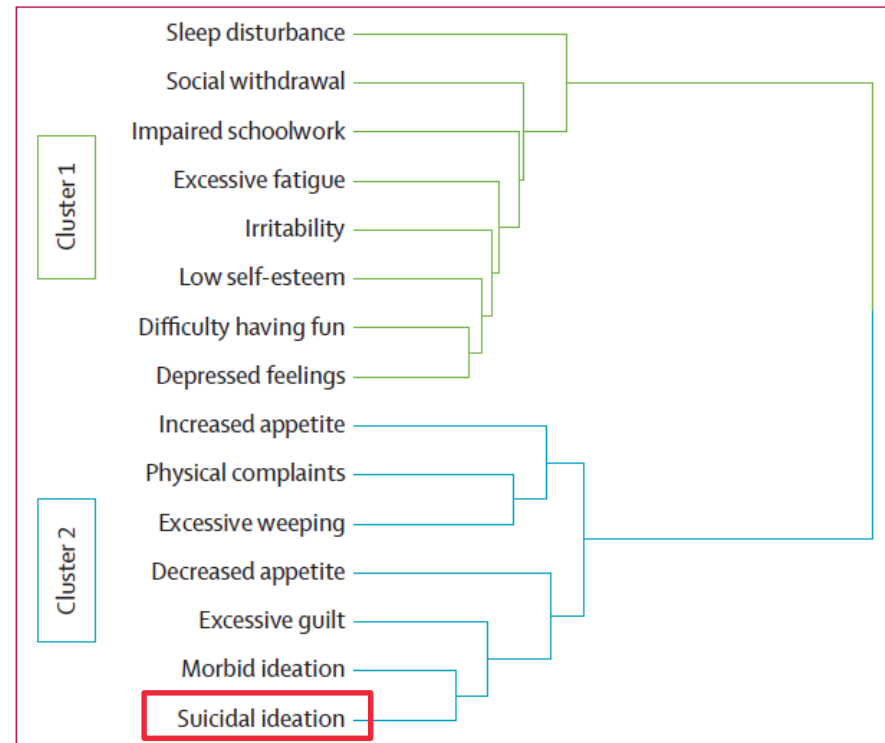


Figure 1: Dendrogram of clustering of Children's Depression Rating Scale-Revised symptoms at baseline

In the clustering procedure, individual symptoms are sequentially grouped according to similarity of mean scores. The longer the lines between the joining of individual symptoms and of groups of symptoms, the greater the difference between their mean scores.

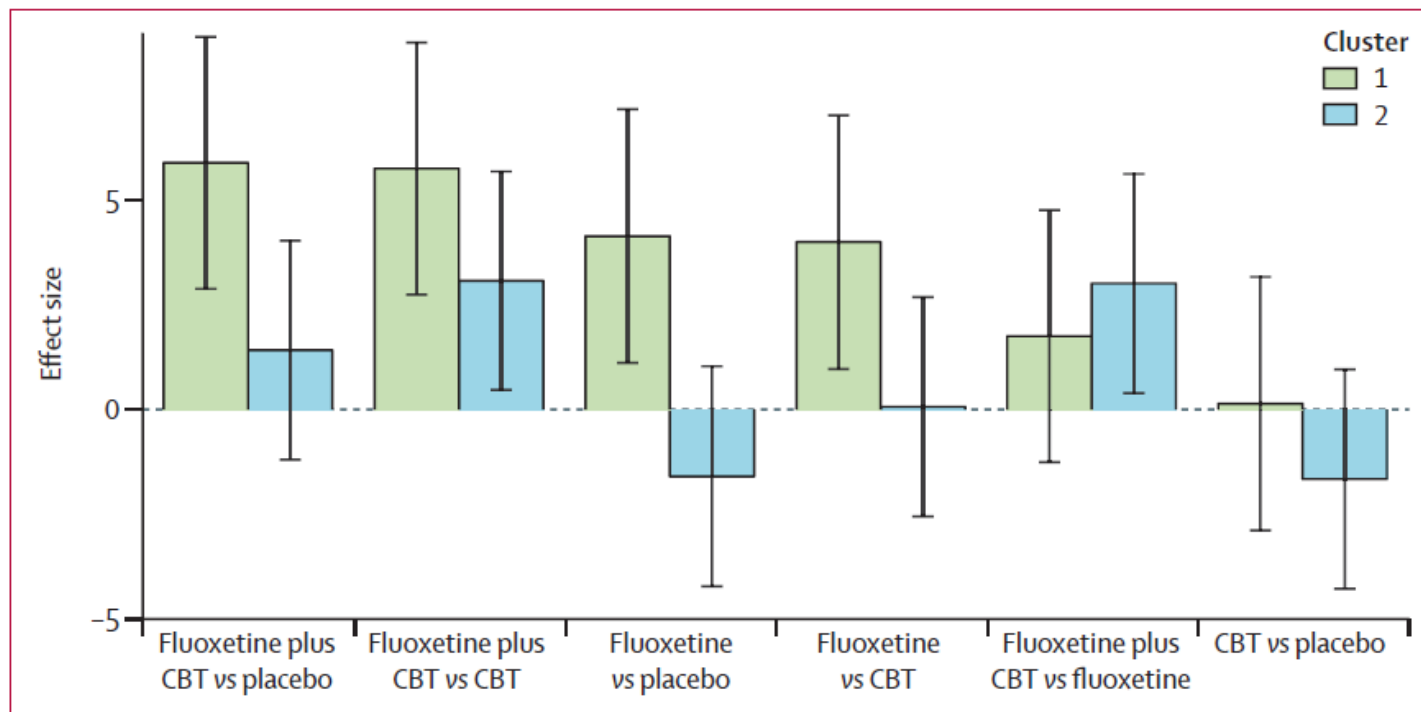


Figure 3: Between-group differences in improvements in CDRS-R scores at 12 weeks

Error bars represent 95% CIs. Improvement is expressed as a reduction in CDRS-R points. Effect sizes reflect the number of additional CDRS-R points reduced by the first treatment compared with the second. Effect sizes are given for each cluster and are derived from mixed-effects model estimates multiplied by treatment duration. CDRS-R=Children's Depression Rating Scale-Revised. CBT=cognitive behavioural therapy.

Comparative efficacy and acceptability of antidepressants, psychotherapies, and their combination for acute treatment of children and adolescents with depressive disorder: a systematic review and network meta-analysis

Xinyu Zhou, Teng Teng*, Yuqing Zhang*, Cinzia Del Giovane, Toshi A Furukawa, John R Weisz, Xuemei Li, Pim Cuijpers, David Coghill, Yajie Xiang, Sarah E Hetrick, Stefan Leucht, Mengchang Qin, Jürgen Barth, Arun V Ravindran, Lining Yang, John Curry, Li Fan, Susan G Silva, Andrea Cipriani†, Peng Xie†*

*Lancet Psychiatry 2020;
7: 581-601*

Interpretation Despite the scarcity of high-quality evidence, fluoxetine (alone or in combination with CBT) seems to be the best choice for the acute treatment of moderate-to-severe depressive disorder in children and adolescents. However, the effects of these interventions might vary between individuals, so patients, carers, and clinicians should carefully balance the risk-benefit profile of efficacy, acceptability, and suicide risk of all active interventions in young patients with depression on a case-by-case basis.

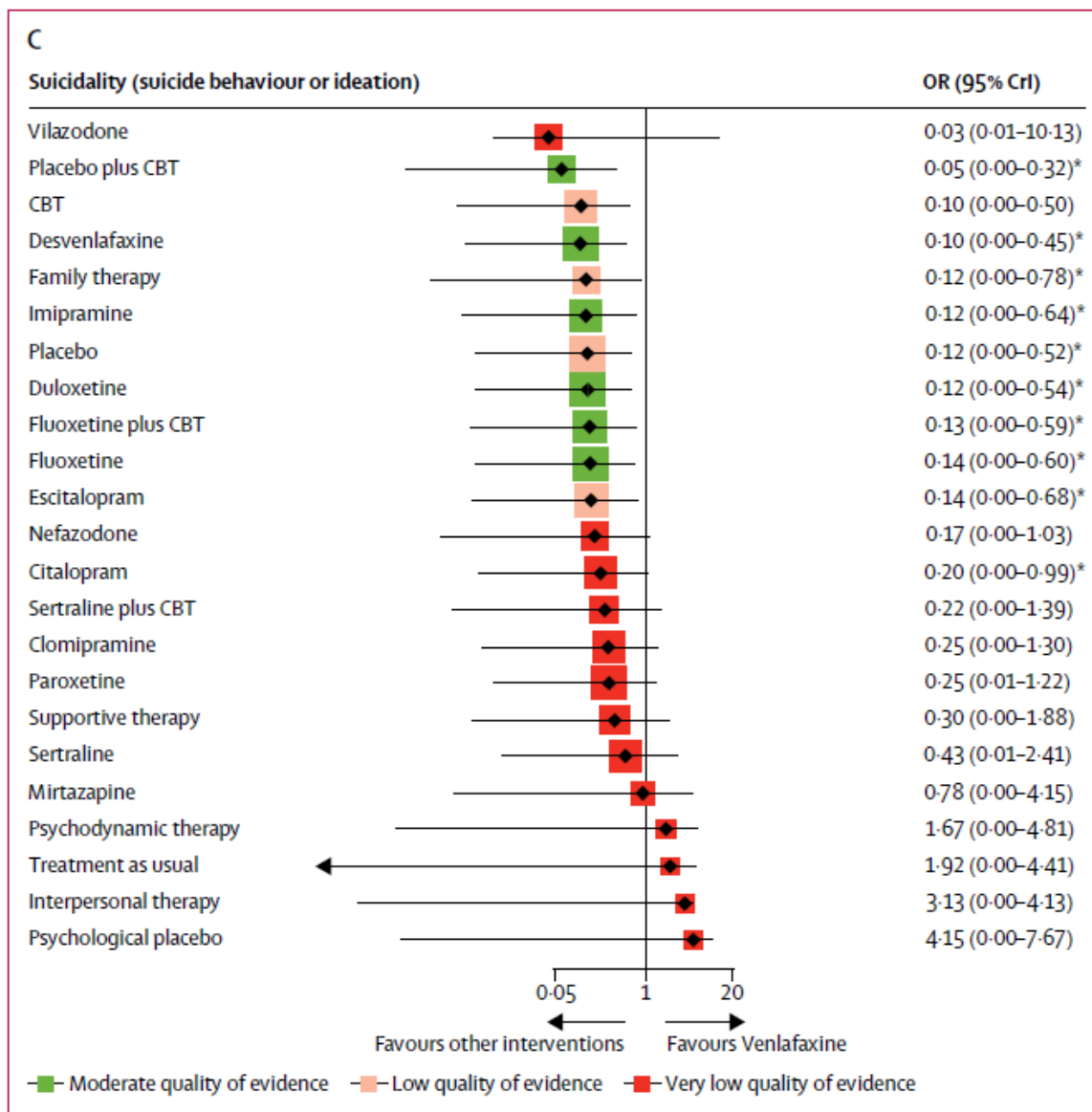


Figure 4: Forest plots of network meta-analysis

(A) Efficacy. (B) Acceptability. (C) Suicidality. Interventions were compared with pill placebo for efficacy and acceptability and with venlafaxine for suicidality. CBT=Cognitive-behavioural therapy. CrI=credible interval. OR=odds ratio. SMD=standardised mean difference. *Significant results.

Diskussion

