



University of Glasgow | Institute of Health & Wellbeing



When It Is Darkest: Understanding and Preventing Suicide

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University of Glasgow

TODAY'S WORKSHOP

I'll describe a series of research studies to inform understanding and prevention of suicide

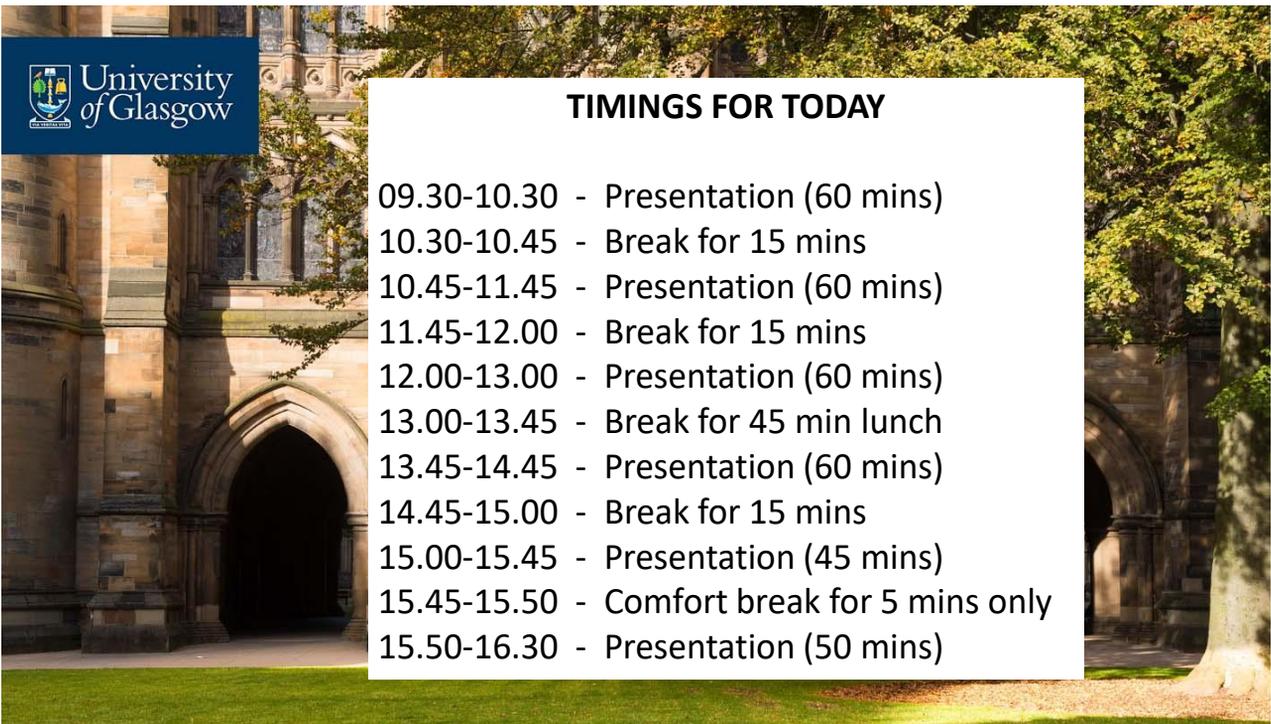
However, I'll distill **THE KEY MESSAGES** throughout to illustrate how mental health science advances suicide prevention research and practice

Regular **Take Home Messages & Reflections**

Post Comments/Questions in the Chat



THE IMPORTANCE OF SELF-CARE TODAY



TIMINGS FOR TODAY

- 09.30-10.30 - Presentation (60 mins)
- 10.30-10.45 - Break for 15 mins
- 10.45-11.45 - Presentation (60 mins)
- 11.45-12.00 - Break for 15 mins
- 12.00-13.00 - Presentation (60 mins)
- 13.00-13.45 - Break for 45 min lunch
- 13.45-14.45 - Presentation (60 mins)
- 14.45-15.00 - Break for 15 mins
- 15.00-15.45 - Presentation (45 mins)
- 15.45-15.50 - Comfort break for 5 mins only
- 15.50-16.30 - Presentation (50 mins)



Suicidal Behaviour Research Laboratory

We conduct interdisciplinary research including experimental research, clinical and non-clinical studies as well as psychosocial interventions as we strive to understand and prevent suicide

The Suicidal Behaviour Research Laboratory (SBRL) at the University of Glasgow



Economic and Social Research Council



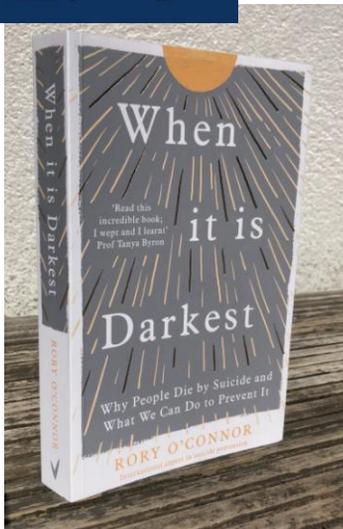
www.suicidresearch.info

You will learn:

- The common myths and misunderstandings surrounding suicide and self-harm
- What the Integrated Motivational-Volitional Model of Suicidal Behaviour consists of and its utility in suicide prevention
- What factors that can lead to suicidal thoughts and how these are different from those associated with suicidal acts
- What the evidence is for what psychological interventions in reducing suicidal behaviour
- Tips about asking difficult questions around suicide and how to support those who have been bereaved

Outline of Topics

- Scale of the challenge including effects of COVID
- Integrated Motivational-Volitional (IMV) model of suicidal behaviour
- Crossing the precipice from thoughts to acts of suicide
- Psychosocial interventions and safety planning-type interventions
- Asking about suicide/supporting those bereaved by suicide
- Conclusions



Introduction

Part 1 Suicide: An Overview

- 1 The How, Who and When of Suicide
- 2 What Suicidal Pain Feels Like
- 3 Myths and Misunderstandings

Part 2 Suicide Is More About Ending the Pain Than Wanting To Die

- 4 Making Sense of a Suicide
- 5 What Suicide is Not
- 6 Towards An Integrated Understanding of Suicide
- 7 The Integrated Motivational-Volitional Model of Suicidal Behaviour
- 8 Crossing the Precipice: From Thoughts of Suicide to Suicidal Behaviour

Part 3 What Works to Keep People Who Are Suicidal Safe

- 9 Brief Contact Interventions
- 10 Safety Planning
- 11 Longer-Term Interventions

Part 4 Supporting People Who Are Vulnerable to Suicide or Bereaved by Suicide

- 12 Asking People About Suicide
- 13 Supporting Those Who Are Suicidal
- 14 Surviving the Aftermath of Suicide

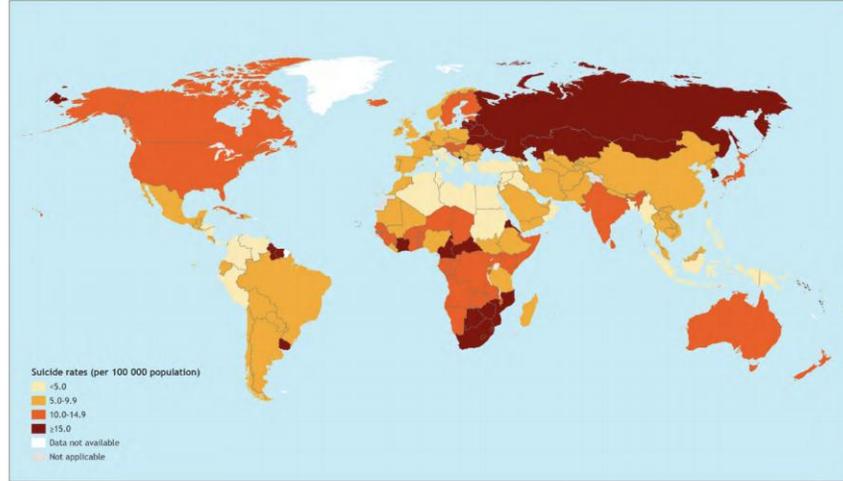
Epilogue



In 2019, an estimated 703 000 people died by suicide.

The global age-standardized suicide rate was 9.0 per 100 000 population for 2019. Rates varied between countries from fewer than two deaths by suicide per 100 000 to over 80 per 100 000 (Figure 1).

Figure 1. Age-standardized suicide rates (per 100 000 population), both sexes, 2019



Source: WHO Global Health Estimates 2000-2019

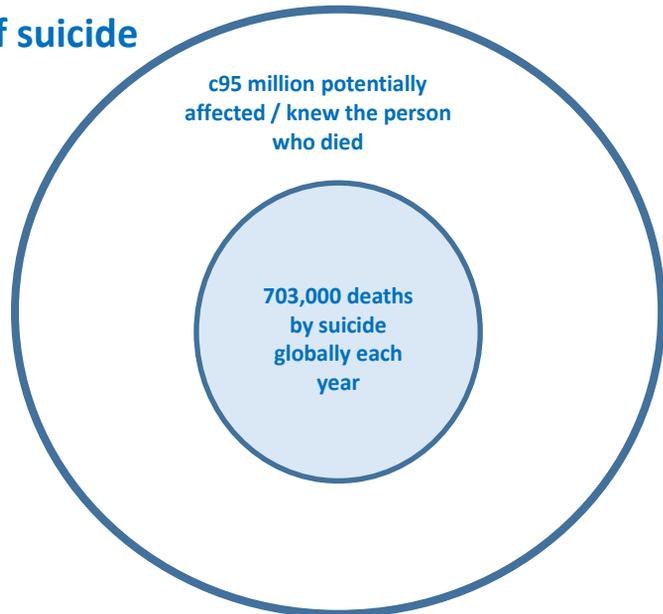
WHO (2021)



The ripples of suicide

Globally, every **40 seconds**
One person dies by suicide
20 people will attempt suicide

In UK, **75%** of suicides are by men
 Suicide **leading cause** of death among men aged **35-49** and for men and women aged **20-34** years



WHO (2021); Cerel et al. (2019); ONS (2020)

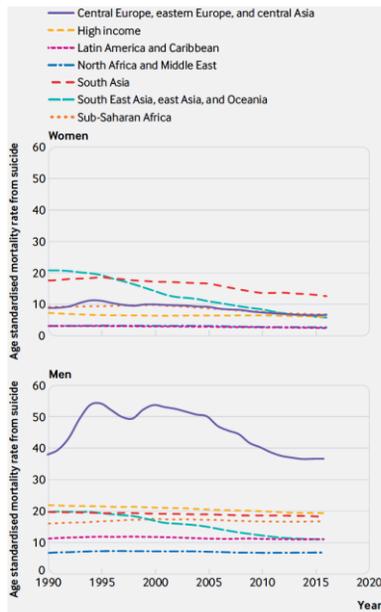


Fig 1 | Age standardised mortality rate from suicide, by Global Burden of Disease super region, for women and men, 1990 to 2016

WHAT IS ALREADY KNOWN ON THIS TOPIC

Suicide is a global public health concern
 The World Health Organization reports approximately 800 000 global suicide deaths annually
 Men, younger adults, and older adults are reported to have higher rates of suicide than women and middle aged adults

WHAT THIS STUDY ADDS

The global age standardised mortality rate from suicide decreased by almost a third between 1990 and 2016
 Men had higher mortality rates from suicide than women, at all ages except for the 15 to 19 age group
 Men experienced a lower decrease in age standardised mortality rate from suicide from 1990 to 2016 (23.8%) compared with women (49.0%)

However, suicide rates in many countries including UK, USA and Australia have increased recently

Naghavi et al. (2019) BMJ



Suicide trends in the early months of the COVID-19 pandemic: an interrupted time-series analysis of preliminary data from 21 countries



Jane Pirikis, Ann John, Sangsoo Shin, Marcos DelPozo-Barros, Vikas Arya, Pablo Analuisa-Aguilar, Louis Appleby, Ella Arensman, Jason Bantjes, Anna Baron, Jose M Bertolote, Guilherme Borges, Petrona Bredic, Eric Caine, Giulia Castelpietra, Shu-Sen Chang, David Colchester, David Crompton, Marko Curkovic, Eberhard A Deisenhammes, Chengan Du, Jeremy Dwyer, Annette Erlangsen, Jeremy S Faust, Sarah Fortune, Andrew Garrett, Devin George, Rebekka Gerstner, Renske Gillissen, Madelyn Gould, Keith Hawton, Joseph Kanter, Navneet Kapur, Murad Khan, Olivia Kirtley, Duleeka Kiriya, Kaiti Kolves, Stuart Leske, Kedar Marahatta, Ellenor Mittendorfer-Rutz, Nikolay Neznamov, Thomas Niederkrottenhauer, Emma Nielsen, Menete Nordentoft, Hans-Joerg Oberhammer, Rory O'Connor, Melissa Pearson, Michael R Phillips, Steve Platt, Paul L Pliener, Georg Pitsa, Ping Qin, Daniel Radelski, Christa Rados, Andreas Reif, Christine Ref-Leonhard, Vsevolod Rozanov, Christiane Schlang, Barbara Schneider, Natalia Semenova, Mark Sinyor, Ellen Townsend, Michiko Ueda, Lakshmi Vijayakumar, Roger T Webb, Manjula Weerasinghe, Gil Zalsman, David Gunnell*, Matthew J Spittal*

Interpretation This is the first study to examine suicides occurring in the context of the COVID-19 pandemic in multiple countries. In high-income and upper-middle-income countries, suicide numbers have remained largely unchanged or declined in the early months of the pandemic compared with the expected levels based on the pre-pandemic period. We need to remain vigilant and be poised to respond if the situation changes as the longer-term mental health and economic effects of the pandemic unfold.

Abstract In high-income and upper-middle-income countries, suicide numbers have remained largely unchanged or declined in the early months of the pandemic compared with the expected levels based on the pre-pandemic period. We need to remain vigilant and be poised to respond if the situation changes as the longer-term mental health and economic effects of the pandemic unfold.

(Prof J Pirikis PhD, S Shin MPH, V Arya MSc, J Dwyer PhD, M J Spittal PhD), Swansea University Medical School, Swansea, UK (Prof A John MD, M DelPozo-Barros PhD), Translational Health Research Institute, Western Sydney University, Campbelltown, NSW, Australia (V Arya), Ministry of Public Health, Department of Health Promotion, Quito, Ecuador (P Analuisa-Aguilar MPH), National Confidential Inquiry into Suicide and Safety in Mental Health (Prof L Appleby FRCPsych) and Centre for Mental Health and Safety and National Institute for Health Research Patient Safety Translational Research Centre (Prof N Kapur FRCPsych, Prof R T Webb PhD), University of Manchester, Manchester.



Findings We sourced data from 21 countries (16 high-income and five upper-middle-income countries), including whole-country data in ten countries and data for various areas in 11 countries. Rate ratios (RRs) and 95% CIs based on the observed versus expected numbers of suicides showed no evidence of a significant increase in risk of suicide since the pandemic began in any country or area. There was statistical evidence of a decrease in suicide compared with the expected number in 12 countries or areas: New South Wales, Australia (RR 0.81 [95% CI 0.72–0.91]); Alberta, Canada (0.80 [0.68–0.93]); British Columbia, Canada (0.76 [0.66–0.87]); Chile (0.85 [0.78–0.94]); Leipzig, Germany (0.49 [0.32–0.74]); Japan (0.94 [0.91–0.96]); New Zealand (0.79 [0.68–0.91]); South Korea (0.94 [0.92–0.97]); California, USA (0.90 [0.85–0.95]); Illinois (Cook County), USA (0.79 [0.67–0.93]); Texas (four counties), USA (0.82 [0.68–0.98]); and Ecuador (0.74 [0.67–0.82]).

Interpretation This is the first study to examine suicides occurring in the context of the COVID-19 pandemic in multiple countries. In high-income and upper-middle-income countries, suicide numbers have remained largely unchanged or declined in the early months of the pandemic compared with the expected levels based on the pre-pandemic period. We need to remain vigilant and be poised to respond if the situation changes as the longer-term mental health and economic effects of the pandemic unfold.



But...

There is a need to ensure that efforts that might have kept suicide rates down until now are continued, and to remain vigilant as the longer-term mental health and economic consequences of the pandemic unfold. There are some concerning signals that the pandemic might be adversely affecting suicide rates in low-income and lower-middle-income countries, although data are only available in a small minority of these countries and tend to be of suboptimal quality. Even in high-income and upper-middle-income countries, the effect of the pandemic on suicide might vary over time and be different for different subgroups in the population.

Pirkis et al. (2021) *Lancet Psychiatry*

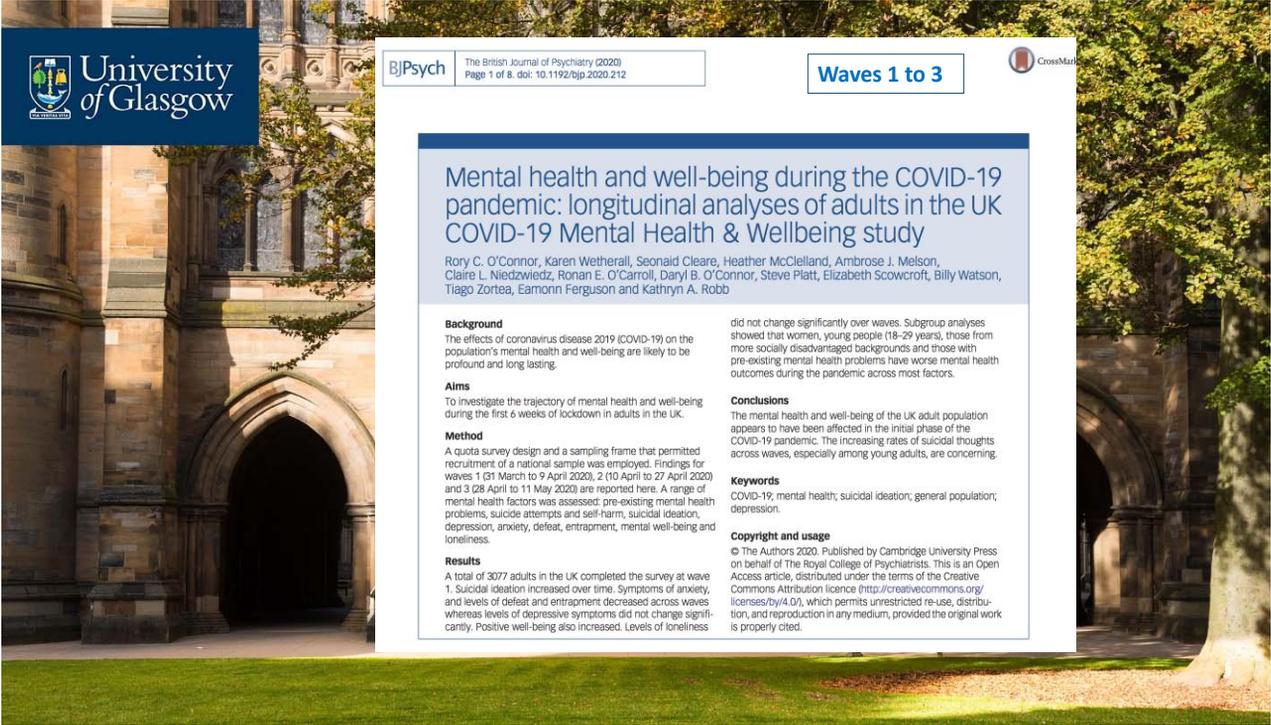


UK COVID-19 Mental Health and Wellbeing study (UK COVID-MH)

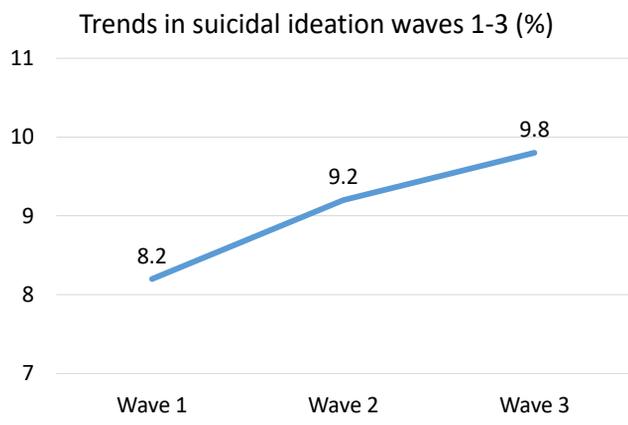
To investigate the immediate and medium-term impact of the COVID-19 pandemic and the required social distancing and self-isolation measures on people's mental health and wellbeing in the UK.

Using a national, non-probability sample of adults from across the UK (n=3,077) with at least 7 follow-ups over 12-15 months, we asked people questions about their mental wellbeing in the weeks and months following the COVID-19 outbreak.

Research Team: Rory C O'Connor, Karen Wetherall, Seonaid Cleare, Heather McClelland, Ambrose J Melson, Claire L Niedzwiedz, Ronan E O'Carroll, Daryl B O'Connor, Steve Platt, Elizabeth Scowcroft, Billy Watson, Tiago Zortea, Eamonn Ferguson, & Kathryn A Robb



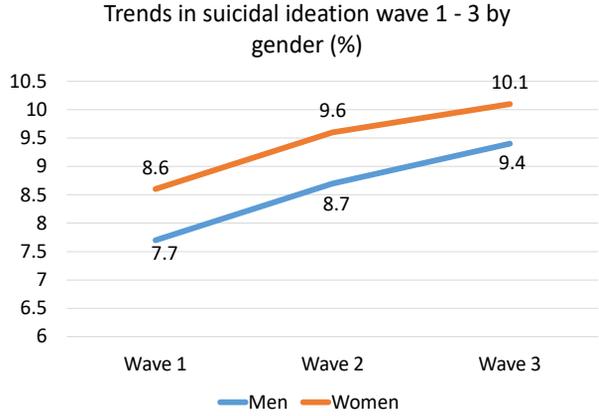
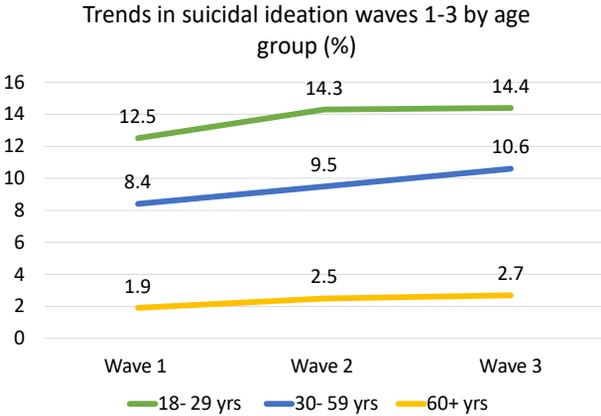
Trends in suicidal ideation in last week



- Participants were asked: “How often have you thought about taking your life in the last week?” (‘never’, to ‘nearly everyday’)
- Suicidal ideation= at least one day/week
- Rates of suicidal ideation in the last week increased from wave 1 to wave 2 and from wave 1 to wave 3



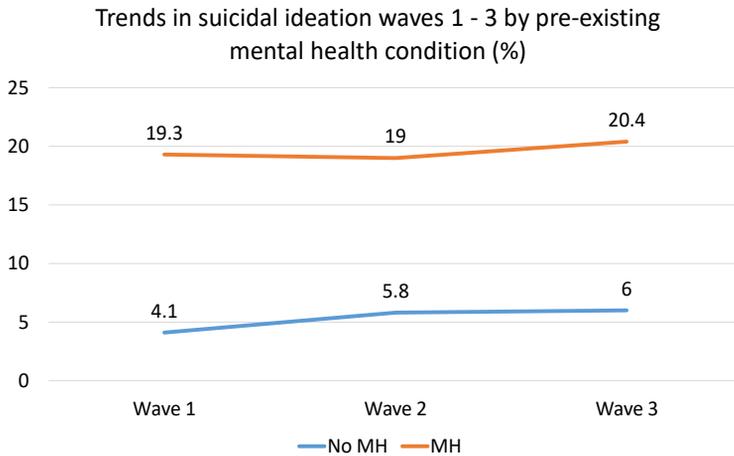
Trends in suicidal ideation by age and gender



- Young people (18-29 year olds) reported the highest rates of suicidal ideation, and older adults reported the lowest levels
- Women reported slightly higher levels of suicidal ideation, but this was not significantly different



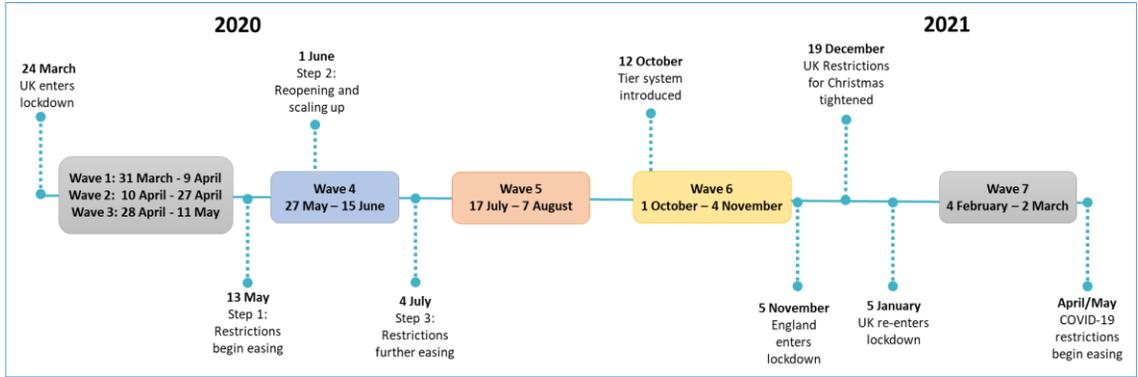
Trends in suicidal ideation by pre-existing mental health condition (MH)



- o Participants were asked if they had a pre-existing mental health condition
- o Of those who did (n=852) more people reported anxiety (21.5%) or depression (18%)
- o Those with a MH condition reported higher suicidal ideation over each wave



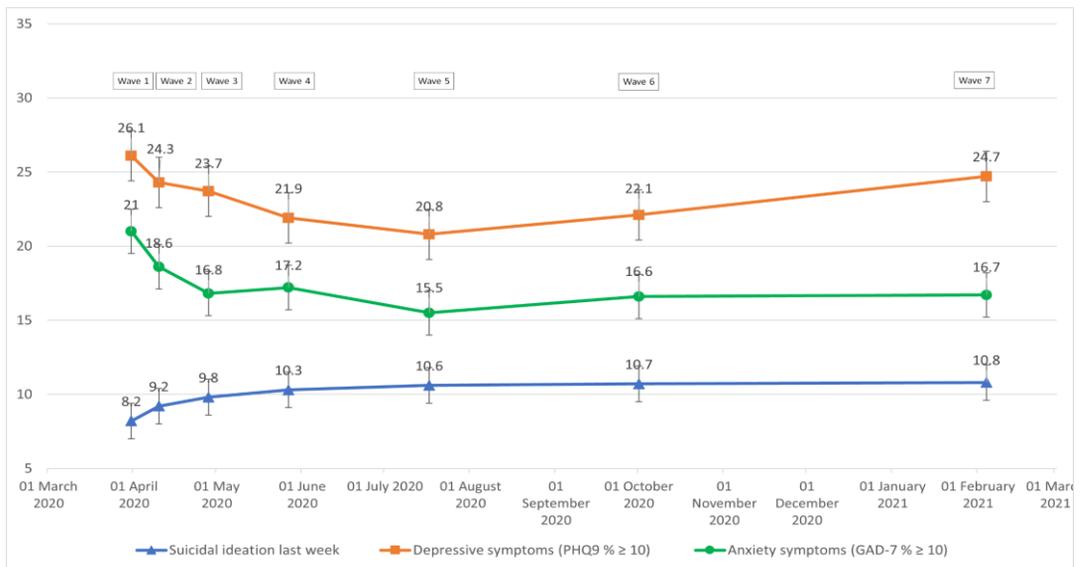
Figure 1. Overview of the waves of the UK COVID-19 Mental Health & Wellbeing study and key events during the COVID-19 pandemic in the UK



Wetherall, K., Cleare, S., McClelland, H., Melson, A.J., Niedzwiedz, C.L., O'Carroll, R.E., O'Connor, D.B., Platt, S., Scowcroft, E., Watson, B., Zorzea, T., Ferguson, E., Robb, K.A., & O'Connor, R.C. (in press). Longitudinal analyses of the UK COVID-19 Mental Health & Wellbeing Study (COVID-MH) during the second wave of COVID-19. *BJPsych Open*.



Figure 2: Percentages and 95% confidence intervals (error bars) of suicidal ideation, depressive symptoms, anxiety symptoms (%) over waves 1 – 7 of the UK COVID-19 Mental Health and Wellbeing study (n=3077)



Wetherall et al (in press)



Means and 95% confidence intervals (Cis) of defeat, entrapment and loneliness scores over waves 1 – 7 of the UK COVID-19 Mental Health and Wellbeing study (n=3077)



Wetherall et al
(in press)



“The mental health and wellbeing of the UK population deteriorated from July/August 2020 to October 2020 and February 2021, a period coinciding with the second wave of COVID-19. Suicidal thoughts did not decrease significantly suggesting a need for continued vigilance as we recover from the pandemic.”

Wetherall, K., Cleare, S., McClelland, H., Melson, A.J., Niedzwiedz, C.L., O’Carroll, R.E., O’Connor, D.B., Platt, S., Scowcroft, E., Watson, B., Zortea, T., Ferguson, E., Robb, K.A., & O’Connor, R.C. (in press). Longitudinal analyses of the UK COVID-19 Mental Health & Wellbeing Study (COVID-MH) during the second wave of COVID-19. *BJPsych Open*.



What about self-harm during the early period of the COVID-19 pandemic in England?

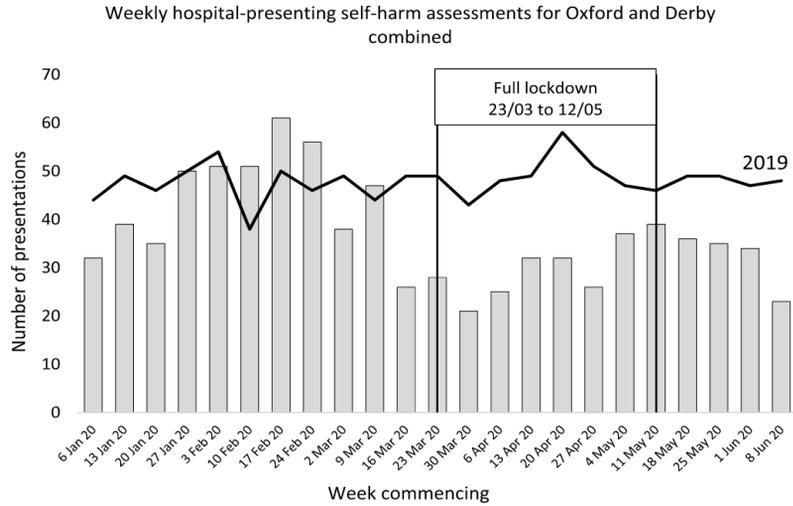
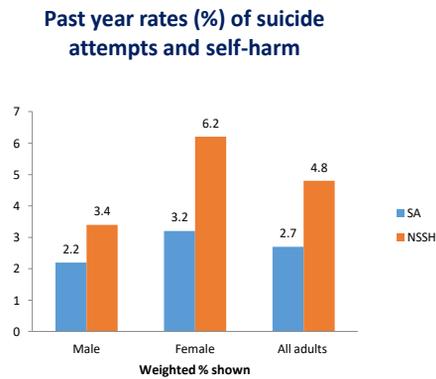
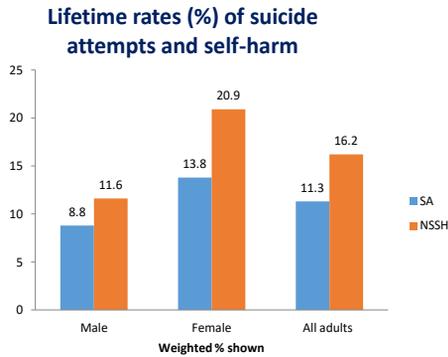


Fig. 1. Weekly hospital presentations for self-harm in Oxford and Derby, January 6th – June 14th, 2020 and 2019. Data refer to assessed individuals.

Hawton, K., Casey, D., Bale, E., Brand, F., Ness, J., Waters, K., Kelly, S., & Geulayov, G. (2021). *Journal of Affective Disorders*.



Before COVID: Self-harm (NSSH) and Suicide Attempts (SA) in those 18-34 years



O'Connor et al. *BJPsych Open* (2018)



What explains apparent inconsistencies between increases in distress but no consistent evidence of an increase in suicide rates?

Implications for all of us including workplaces and communities

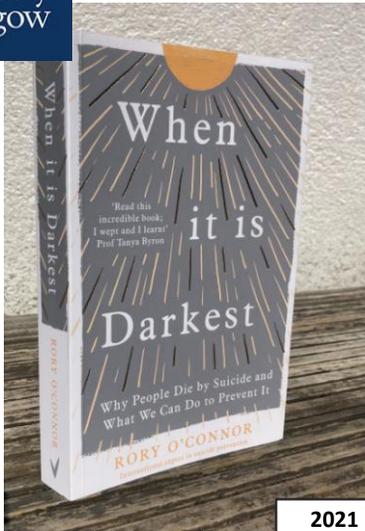


FIGURE 1. Potential risk and protective factors that may influence suicide rates during the COVID-19 pandemic.

Sinyor et al. (2021). *ASR*



Poll on Things we Know about Suicide



2021

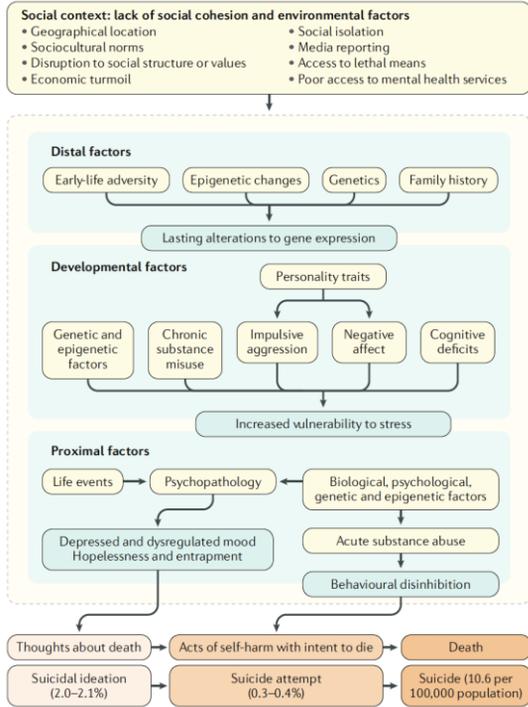
MYTHS ABOUT SUICIDE

1. Those who talk about suicide are not at risk of suicide.
2. All suicidal people are depressed or mentally ill.
3. Suicide occurs without warning.
4. Asking about suicide 'plants' the idea in someone's head.
5. Suicidal people clearly want to die.
6. When someone becomes suicidal they will always remain suicidal.
7. Suicide is inherited.
8. Suicidal behaviour is motivated by attention-seeking.
9. Suicide is caused by a single factor.
10. Suicide cannot be prevented.
11. Only people of a particular social class die by suicide.
12. Improvement in emotional state means lessened suicide risk.
13. Thinking about suicide is rare.
14. People who attempt suicide by a low-lethality means are not serious about killing themselves.

Vermilion  Penguin
Random House
UK



Take Home Messages and Reflections



Biopsychosocial model of suicide risk

nature reviews
disease primers

Gustavo Turecki^{1*}, David A. Brent², David Gunnell^{3,4}, Rory C. O'Connor⁵, Maria A. Oquendo⁶, Jane Pirkis⁷ and Barbara H. Stanley⁸

2019



Risk Factors for Suicidal Behaviour in Men: systematic review

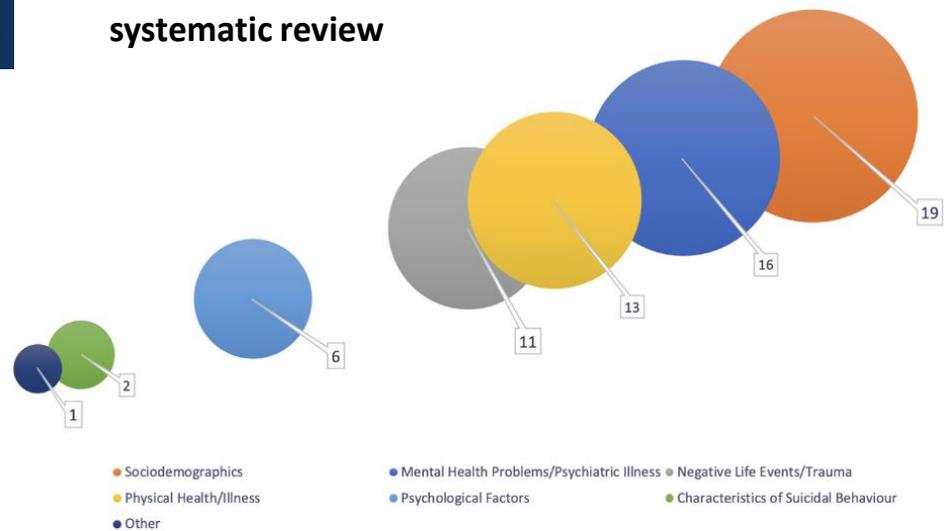


Fig. 2. Bubble chart of number and type of risk factors identified across prospective and retrospective studies.

Richardson, Robb & O'Connor (2021). *Social Science & Medicine*



Suicide, Suicide Attempts, and Suicidal Ideation

E. David Klonsky, Alexis M. May, and Boaz Y. Saffer

Department of Psychology, University of British Columbia, Vancouver, BC V6T 1Z4 Canada; email: EDKlonsky@gmail.com

Table 1 Three theories of suicide positioned within the ideation-to-action framework

Theory	Main factors causing suicidal ideation	Main factors causing progression from ideation to attempts
Interpersonal (Joiner 2005)	Perceived burdensomeness and thwarted belongingness	Acquired capability for suicide
Integrated motivational-volitional (O'Connor 2011)	Defeat and entrapment (facilitated by threat-to-self and motivational moderators)	Capability, impulsivity, planning, access to means, imitation, and other volitional moderators
Three-step (Klonsky & May 2015)	Combination of pain and hopelessness, especially when pain exceeds connectedness	Dispositional, acquired, and practical contributors to increased capacity for suicide

Annual Review of Clinical Psychology (2016)

PHILOSOPHICAL
TRANSACTIONS B

rstb.royalsocietypublishing.org

Review



Cite this article: O'Connor RC, Kirtley OJ. 2018 The integrated motivational–volitional model of suicidal behaviour. *Phil. Trans. R. Soc. B* **373**: 20170268. <http://dx.doi.org/10.1098/rstb.2017.0268>

IMV model first published in 2011 & updated in 2018

Keywords:

The integrated motivational–volitional model of suicidal behaviour

Rory C. O'Connor¹ and Olivia J. Kirtley²

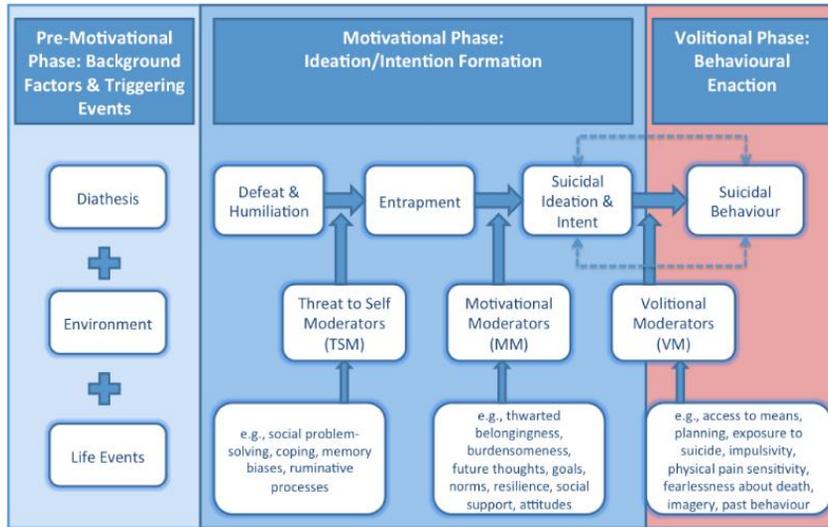
¹Suicidal Behaviour Research Laboratory, Institute of Health & Wellbeing, University of Glasgow, Gartnavel Royal Hospital, Glasgow G12 0XH, UK

²Center for Contextual Psychiatry, Department of Neuroscience, KU Leuven, 3000 Leuven, Belgium

RCO, 0000-0002-3650-4994

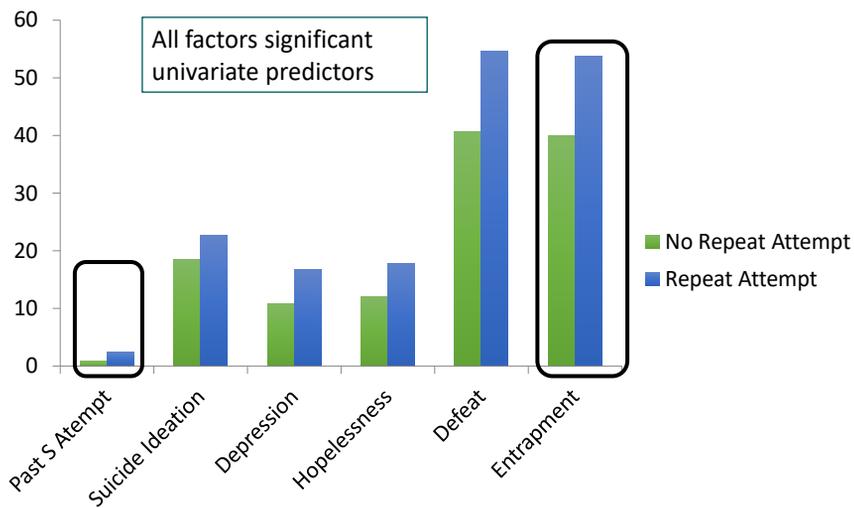
Suicide is a major public health concern accounting for 800 000 deaths globally each year. Although there have been many advances in understanding suicide risk in recent decades, our ability to predict suicide is no better now than it was 50 years ago. There are many potential explanations for this lack of progress, but the absence, until recently, of comprehensive theoretical models that predict the emergence of suicidal ideation distinct from the transition between suicidal ideation and suicide attempts/suicide is key to this lack of progress. The current article presents the integrated motivational–volitional (IMV) model of suicidal behaviour, one such theoretical model. We propose that defeat and entrapment drive the emergence of suicidal ideation and that a group of factors, entitled volitional moderators (VMs), govern the transition from suicidal ideation to suicidal behaviour. According to the IMV model, VMs include access to the means of suicide, exposure to suicidal behaviour, capability for suicide (fearlessness about death and increased physical pain tolerance), planning, impulsivity, mental imagery and past suicidal behaviour. In this article, we describe the theoretical origins of the IMV model, the key premises underpinning the model, empirical tests of the model and future research directions.

Integrated motivational-volitional (IMV) model of suicidal behaviour



O'Connor, R.C., Kirtley, O.J. (2018). The Integrated Motivational-Volitional Model of Suicidal Behaviour *Philosophical Transactions of the Royal Society B*. 373: 20170268

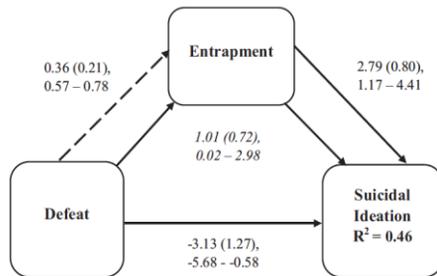
Predicting Suicide Attempts/Suicide over 4 Years



O'Connor et al. (2013). *Journal of Consulting & Clinical Psychology*



Wetherall, Robb & O'Connor (2018). *Suicide & Life-Threatening Behavior*



Owen, Dempsey, Jones, & Gooding (2017). *Suicide & Life-Threatening Behavior*

www.suicideresearch.info



Predicting suicidal ideation in a nationally representative sample of young adults: a 12-month prospective study

Psychological Medicine
2020

Karen Wetherall¹, Seonaid Cleare¹, Sarah Eschle¹, Eamonn Ferguson², Daryl B. O'Connor³, Ronan E. O'Carroll⁴ and Rory C. O'Connor¹

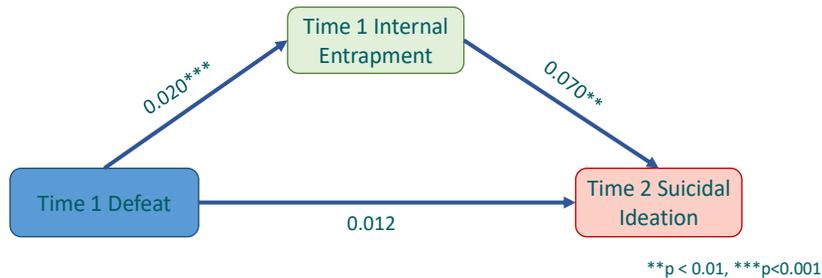
Table 1. Multiple linear regression models testing the extent to which baseline variables predict suicidal ideation at 12 months (n = 2382)

Variables	β	S.E.	95% CI
Baseline suicidal ideation	0.43***	0.03	0.38-0.48
Depressive symptoms	-0.02	0.01	-0.05-0.003
Thwarted belongingness	0.002	0.01	-0.03-0.03
Perceived burdensomeness	0.07***	0.02	0.04-0.10
Defeat	0.01	0.01	-0.01-0.04
External entrapment	-0.004	0.02	-0.03-0.03
Internal entrapment	0.07**	0.02	0.02-0.12

** p < 0.01 *** p < 0.001.



Mediation analysis of the relationship of baseline defeat and entrapment with 12 month (Time 2) suicidal ideation



Indirect effect: $b = 0.014$ (SE = 0.007), 95% CI = 0.001 – 0.027

Controlling for baseline (T1) depressive symptoms, suicidal ideation, perceived burdensomeness (PB), thwarted belongingness (TB), PB*TB

NB. Same effect with total entrapment



Development of the 4-item Entrapment Scale Short-Form (E-SF)

Both classical & modern test theory methods applied to Gilbert & Allan (1998) **16 item Entrapment Scale**

Clinical sample (n= 497) patients following self-harm

Population sample (n= 3457)

Correlations between the **4-item** short-form and the **16-item** full scale were nearly perfect:

0.94 for the clinical sample
0.97 for the population-based sample

De Beurs, Cleare, Wetherall, Byrne, Ferguson, O'Connor & O'Connor (2020). *Psychiatry Research*



The 4-item Entrapment Scale Short-Form (E-SF)

1. I often have the feeling that I would just like to run away
2. I feel powerless to change things
3. I feel trapped inside myself
4. I feel I'm in a deep hole I can't get out of

E-SF provides very comparable information about the latent trait of entrapment

Its brevity will increase use in clinical practice & research studies (we hope!)

De Beurs, Cleare, Wetherall, Byrne, Ferguson, O'Connor & O'Connor (2020).
Psychiatry Research



Clinical *take-home* messages

- Target burdensomeness and entrapment in treatment
- Monitor entrapment routinely in clinical care



What might increase your sensitivity to defeat and entrapment?



“Am I really alive?”: Understanding the role of homophobia, biphobia and transphobia in young LGBT+ people’s suicidal distress

Hazel Marzetti ^{a,b,*}, Lisa McDaid ^{b,c}, Rory O’Connor ^d

2022



Understanding suicide as a response

‘Queer entrapment’ and suicide as escape:

in which queerphobic conflict about their LGBT+ identity was perceived to be irresolvable and from which suicide was seen as an escape.

Lily (24; she/her): “there have been times when I’ve just been like, oh, if I just ended my life it would just stop everything [...] No one would have to deal with it, no one would have to be like, “oh, we’ve got a gay daughter” – no one would have to deal with it, it would just stop all the problems. I felt like that was the only way out of it all was just to like disappear.”



Social Perfectionism (Pre-motivational phase)



Social perfectionism (SPP)

(socially prescribed perfectionism)

- taps beliefs about excessive (often unrealistic) expectations we perceive significant others have of us

(e.g., “I find it difficult to meet others’ expectations of me”)

Hewitt et al. (1991) *JPSP*



Amanda: An archetypal social perfectionist

Even though part of me knows what I am doing is perfectly okay, I just cannot stop myself thinking that I am not good enough and that if only I worked harder, I'd be able to please them. And even when I think I have done well, I know that I will have to try even harder to do as well the next time.

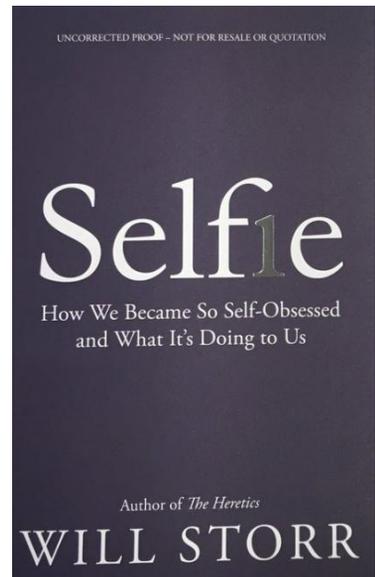
O'Connor (2021). *When It Is Darkest*



© Damien Tran

The male suicides: how social perfectionism kills

In every country in the world, male suicides outnumber female. Will Storr asks why.





Loneliness and Suicide Risk



Review article

Loneliness as a predictor of suicidal ideation and behaviour: a systematic review and meta-analysis of prospective studies

Heather McClelland^{a,*}, Jonathan J. Evans^b, Rebecca Nowland^c, Eamonn Ferguson^d, Rory C. O'Connor^a

Loneliness was a significant predictor of both suicidal ideation and behaviour and there was evidence that depression acted as a mediator.

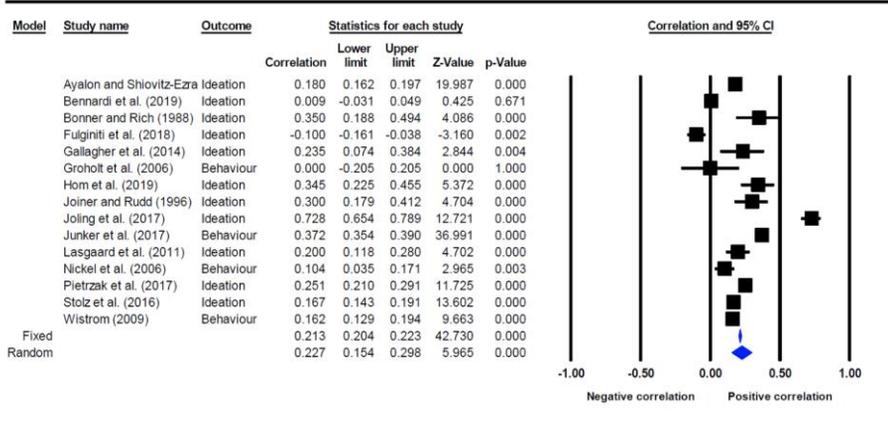


Fig. 2. Forest plot of overall effect sizes from whole participant group



Exploring the role of loneliness in relation to self-injurious thoughts and behaviour in the context of the integrated motivational-volitional model

Heather McClelland^{a,*}, Jonathan J. Evans^b, Rory C. O'Connor^a

2021

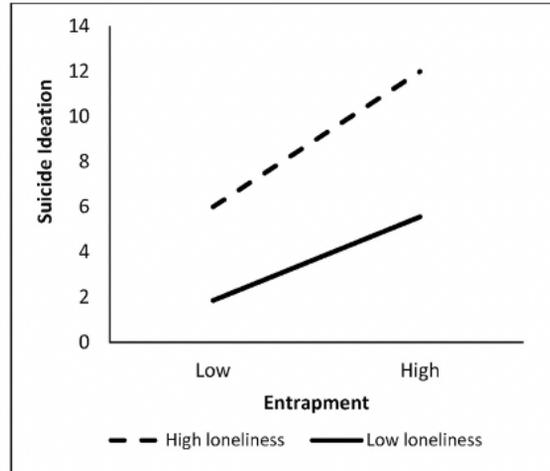


Fig. 3. Loneliness as a moderator between Entrapment and Suicidal Ideation.

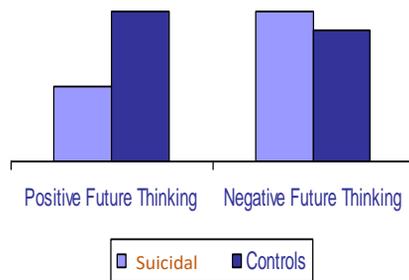


Future Thinking (Motivational Moderator, MM)



Global Hopelessness versus Specific Positive Future Thoughts

Future Thinking Task (FTT;
MacLeod et al., 1997, 1998)



Those with suicidal history report **significantly fewer positive** future thoughts (PFT) on Future Thinking Task (FTT) than controls but show **no difference** in the number of **negative** events

(eg, MacLeod et al., 1997, 1998; O'Connor et al., 2007)



Are specific positive future thoughts (PFT) better predictors of suicidal ideation than global hopelessness?

144 adults hospitalised following repeat suicide attempt completed range of clinical and psychological measures at Baseline (Time 1) and Time 2 (2.5 months following discharge)

O'Connor et al., 2008; *J Affective Disorders*

Hierarchical regression analysis testing the mediating effects of positive future thinking (PFT) on the relationship between hopelessness and Time 2 suicidal ideation among suicidal self-harmers

Step	Variable	β at step	ΔR^2 for step	Total R^2
Step 1	Age	.058		
	Sex	-.034		
	Depression	.205*		
	Anxiety	.061		
	Suicidal-T1	.326***	.211***	.211***
Step 2	Age	.038		
	Sex	-.037		
	Depression	.099		
	Anxiety	.028		
	Suicidal-T1	.203*		
	Hopelessness	.284**	.041**	.252***
Step 3	Age	-.002		
	Sex	-.001		
	Depression	.062		
	Anxiety	.051		
	Suicidal-T1	.241*		
	Hopelessness	.186		
	PFT	-.251**	.049**	.301***

Note: * $p < .05$, ** $p < .01$, *** $p < .001$. Suicidal-T1 = suicidal ideation at Time 1, PFT = Positive Future Thinking Total.



Intrapersonal Positive Future Thinking Predicts Repeat Suicide Attempts in Hospital-Treated Suicide Attempters

2015

Rory C. O'Connor
University of Glasgow

Roger Smyth
Royal Infirmary of Edinburgh, Edinburgh, Scotland

J. Mark G. Williams
University of Oxford

Need to think
about the type of
positive future
thoughts

Ask yourself
whether the future
thought is realistic
and/or whether it
contributes to
entrapment?

Objective: Although there is clear evidence that low levels of positive future thinking (anticipation of positive experiences in the future) and hopelessness are associated with suicide risk, the relationship between the content of positive future thinking and suicidal behavior has yet to be investigated. This is the first study to determine whether the positive future thinking–suicide attempt relationship varies as a function of the content of the thoughts and whether positive future thinking predicts suicide attempts over time. **Method:** A total of 388 patients hospitalized following a suicide attempt completed a range of clinical and psychological measures (depression, hopelessness, suicidal ideation, suicidal intent and positive future thinking). Fifteen months later, a nationally linked database was used to determine who had been hospitalized again after a suicide attempt. **Results:** During follow-up, 25.6% of linked participants were readmitted to hospital following a suicide attempt. In univariate logistic regression analyses, previous suicide attempts, suicidal ideation, hopelessness, and depression—as well as low levels of achievement, low levels of financial positive future thoughts, and high levels of intrapersonal (thoughts about the individual and no one else) positive future thoughts predicted repeat suicide attempts. However, only previous suicide attempts, suicidal ideation, and high levels of intrapersonal positive future thinking were significant predictors in multivariate analyses. **Discussion:** Positive future thinking has predictive utility over time; however, the content of the thinking affects the direction and strength of the positive future thinking–suicidal behavior relationship. Future research is required to understand the mechanisms that link high levels of intrapersonal positive future thinking to suicide risk and how intrapersonal thinking should be targeted in treatment interventions.



Understanding [Suicidal] Behaviour: two interacting systems

1. Reflective System
Conscious behaviour
Rational / planned
Reflects values, attitudes

2. Automatic System
Unconscious behaviour
Non-deliberative Habit / impulse
/ implicit attitudes

Kahneman (2011) *Thinking, Fast and Slow*

Suicide research has largely ignored Automatic System



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0021-843X/18/\$12.00

Journal of Abnormal Psychology

<http://dx.doi.org/10.1037/abn0000358>

Testing Mood-Activated Psychological Markers for Suicidal Ideation

Christine B. Cha
Teachers College, Columbia University

Rory C. O'Connor
University of Glasgow

Olivia Kirtley
University of Glasgow and KU Leuven

Seonaid Cleare, Karen Wetherall, and Sarah Eschle
University of Glasgow

Katherine M. Tezanos
Teachers College, Columbia University

Matthew K. Nock
Harvard University



Implicit Cognitions & Suicide Risk

- **Implicit Association Test (IAT;** Greenwald et al., 1998), modified into Death/Life IAT (Nock et al., 2010)
- Classify words into categories related to Life (thrive) or Death (suicide) as being 'Like me' or 'Not like me'
- Compares speed of matched (Life/me) vs non-matched (Life/Not me) pairings
- **A higher and less negative IAT *D* score = Increased suicide risk**



Death/Life IAT (Nock et al., 2010)



<u>Death</u>	<u>Life</u>
Suicide	Alive
Die	Live
Funeral	Thrive
Lifeless	Survive
Deceased	Breathing

<u>Me</u>	<u>Not me</u>
Myself	Them
My	They
Mine	Theirs
I	Their
Self	Other



Implicit associations (identification with life/death) as markers of suicide risk

- Is identification with life weakened after a negative suicide history?
YES
- Is there a difference in identification with life/death between those with a suicidal ideation history and those without?
YES

Why are these findings important?

- Identification with death (versus life) predict future suicidal ideation (1 and 6 months)?
YES

Cha, O'Connor, Kirtley, Cleare, Wetherall, Eschle, Tezanos & Nock (2018) *J Abnormal Psychology*



Take Home Messages and Reflections



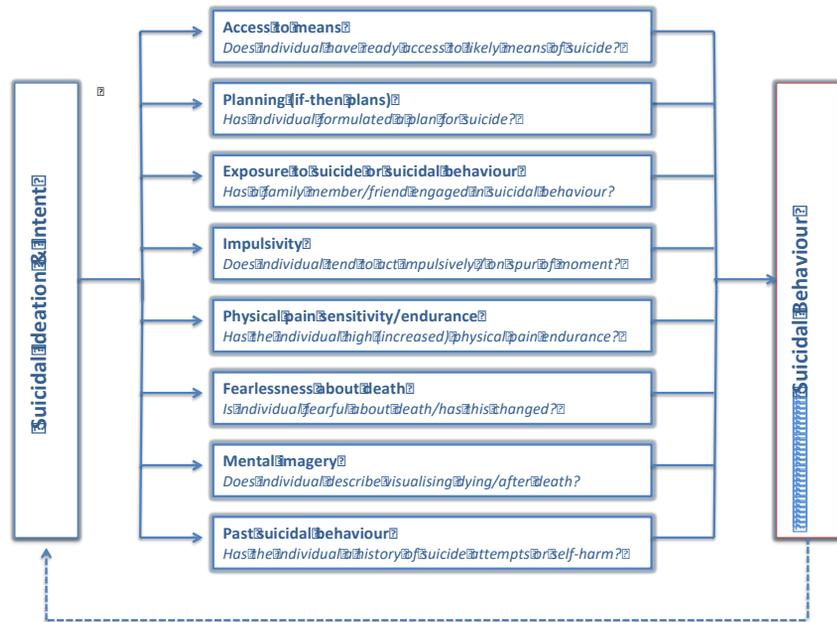
Crossing the Precipice: From Thoughts of Suicide to Suicidal Behaviour

I never thought he'd do it. A few weeks before his death, he had told me that he had thoughts about being dead, but I was too scared to ask him directly whether he would kill himself. I haven't stopped asking myself why I didn't ask him. Not a day passes when I don't torment myself with this question. When I look back on it now, I just didn't think he was the type of person who would kill himself. I know how ridiculous that sounds, but he was just always so full of life.

O'Connor (2021). *When It Is Darkest*



From Suicidal Thoughts to Suicidal Behaviour: Volitional Factors



O'Connor, R.C., Kirtley, O.J. (2018). The Integrated Motivational-Volitional Model of Suicidal Behaviour *Philosophical Transactions of the Royal Society B*. 373: 20170268



Scottish Wellbeing Study: Differentiating Suicide Ideation from Suicide Attempts

- Representative sample of young adults (18-34 years) from across Scotland (n=3508)
- Three groups identified within the sample:
 - **Controls with no suicidal history (n=2534)**
 - **lifetime suicide ideation (n=498)**
 - **lifetime suicide attempt (n=403)**
- According to IMV model, volitional phase factors most important in differentiating IDEATION from ATTEMPTS

Wetherall et al. (2018). *Journal of Affective Disorders*



Multivariable multinomial logistic regression

Demographics and Mood Age and gender Ethnicity, marital status, economic activity Depressive symptoms	ATTEMPTS significantly older and female
	No difference between IDEATION vs ATTEMPTS
	No difference between IDEATION vs ATTEMPTS
Motivational Phase Factors (ideation) Defeat Entrapment Burdensomeness Belongingness Goal regulation Social support Resilience	No difference between IDEATION vs ATTEMPTS
	No difference between IDEATION vs ATTEMPTS
	No difference between IDEATION vs ATTEMPTS
	No difference between IDEATION vs ATTEMPTS
	No difference between IDEATION vs ATTEMPTS
	No difference between IDEATION vs ATTEMPTS
	No difference between IDEATION vs ATTEMPTS
Volitional Phase Factors (attempts) Impulsivity Acquired capability Mental images of death Exposure to suicidal attempt of friend Exposure to suicidal attempt of family Exposure to suicide death	ATTEMPTS significantly higher than IDEATION
	No difference between IDEATION vs ATTEMPTS
	No difference between IDEATION vs ATTEMPTS

Wetherall et al., (2018) *Journal of Affective Disorders*



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Journal of Psychiatric Research

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



Distinguishing suicide ideation from suicide attempts: Further test of the Integrated Motivational-Volitional Model of Suicidal Behaviour

Dawn Branley-Bell^{a,*,1}, Daryl B. O'Connor^a, Jessica A. Green^a, Eamonn Ferguson^b,
Ronan E. O'Carroll^c, Rory C. O'Connor^d

299 adults completed a face-to-face interview:
Suicide attempt group (N= 100)
Suicide ideation group (N= 105)
Control group (N= 94)

The attempt group differed from the ideation group on all volitional phase factors:

- higher capability for suicide
- more likely to have been exposed to self-harm/suicide attempt
- more impulsive

Distinguishing adolescents who think about self-harm from those who engage in self-harm

Rory C. O'Connor, Susan Rasmussen and Keith Hawton

Background

Adolescent self-harm is a major public health concern, yet little is known about the factors that distinguish adolescents who think about self-harm but do not act on these thoughts from those who act on such thoughts.

Aims

Within a new theoretical model, the integrated motivational-volitional model, we investigated factors associated with adolescents having thoughts of self-harm (ideators) v. those associated with self-harm enactment (enactors).

Method

Observational study of school pupils employing an anonymous self-report survey to compare three groups of adolescents: self-harm enactors ($n=628$) v. self-harm ideators ($n=675$) v. those without any self-harm history ($n=4219$).

Results

Enactors differed from ideators on all of the volitional factors. Relative to ideators, enactors were more likely to have a family member/close friend who had self-harmed, more likely to think that their peers engaged in self-harm and they were more impulsive than the ideators. Enactors also reported more life stress than ideators. Conversely, the two self-harm groups did not differ on any of the variables associated with the development of self-harm thoughts.

Conclusions

As more adolescents think about self-harm than engage in it, a better understanding of the factors that govern behavioural enactment is crucial in the effective assessment of the risk of self-harm.

Declaration of interest

None.

British Journal of Psychiatry (2012)

Predictors of future suicide attempt among adolescents with suicidal thoughts or non-suicidal self-harm: a population-based birth cohort study

Becky Mars, Jon Heron, E David Klonsky, Paul Moran, Rory C O'Connor, Kate Tilling, Paul Wilkinson, David Gunnell

First population-based birth cohort study to explore predictors of future suicide attempts among adolescents who have suicidal thoughts or engage in non-suicidal self-harm.

Among participants with suicidal thoughts, we found that the strongest predictors of transition to attempts were **non-suicidal self-harm**, cannabis use, other illicit drug use, **exposure to self-harm**, and higher levels of the personality type intellect/openness.

Lancet Psychiatry 2019;
6: 327-37



Article

The Male Experience of Suicide Attempts and Recovery: An Interpretative Phenomenological Analysis

Cara Richardson ^{1,*}, Adele Dickson ², Kathryn A. Robb ¹ and Rory C. O'Connor ¹

Exposure to suicide as risk factor for a suicide attempt

The death of his brother is something that Stephen (45 years) has struggled to come to terms with:

“yeah . . . emm yeah because I think we were quite similar because I was was really close to be brother and always looked up to him . . . I always thought he was he was brilliant. . . really funny and laughing . . . so yeah there was that comparison thing well if he’s away then why should I be here, you know what I mean?”

2021 International Journal of
*Environmental Research
and Public Health*



Network analysis & suicide risk

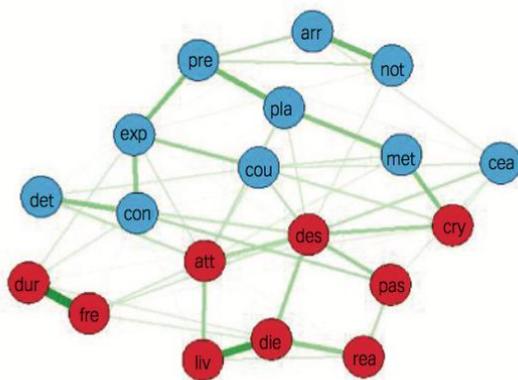
Association between suicidal symptoms and repeat suicidal behaviour within a sample of hospital-treated suicide attempters

Derek P. de Beurs, Claudia D. van Borkulo and Rory C. O'Connor

BJPsych
Open

BJPsych Open (2017)
3, 120–126. doi: 10.1192/bjpo.bp.116.004275

(a)



Blue nodes:
volitional phase factors/symptoms

Red nodes:
motivational phase factors/symptoms

Cortisol: the Stress Hormone



Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Psychoneuroendocrinology

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



Cortisol reactivity and suicidal behavior: Investigating the role of hypothalamic-pituitary-adrenal axis responses to stress in suicide



Daryl B. O'Connor (PhD)^{a,*}, Jessica A. Green (MSc)^a, Eamonn Ferguson (PhD)^b,
Ronan E. O'Carroll (PhD)^c, Rory C. O'Connor (PhD)^d

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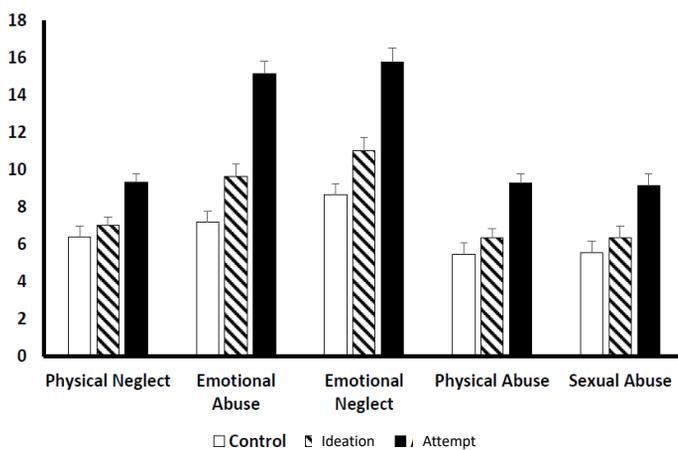
Allostatic load

ABSTRACT

Every 40 s a person dies by suicide somewhere in the world. The causes of suicidal behavior are not fully understood. Dysregulated hypothalamic-pituitary-adrenal (HPA) axis activity, as measured by cortisol levels, is one potential risk factor. The current study aimed to investigate whether cortisol reactivity to a laboratory stress task differentiated individuals who had previously made a suicide attempt from those who had thought about suicide (suicide ideators) and control participants. One hundred and sixty participants were recruited to a previous attempt, a suicidal ideation or a control group. Participants completed background questionnaires before completing the Maastricht Acute Stress Test (MAST). Cortisol levels were assessed throughout the stress task. Measures of suicide behavior were measured at baseline, 1 month and 6 month follow-up. Participants who had made a previous suicide attempt exhibited significantly lower aggregate cortisol levels during the MAST compared to participants in the control group; suicide ideators were intermediate to both groups. This effect, however, was driven by participants who made an attempt within the past year, and to some degree by those with a family history of attempt. Participants who made a suicide attempt and had a family history of suicide exhibited the lowest levels of cortisol in response to stress. Finally, lower levels of cortisol in response to the MAST were associated with higher levels of suicidal ideation at 1-month follow-up in the suicide attempter group. These results are consistent with other findings indicating that blunted HPA axis activity is associated with some forms of suicidal behavior. The challenge for researchers is to elucidate the precise causal mechanisms linking stress, cortisol and suicide risk.

Childhood trauma, stress and cortisol in individuals vulnerable to suicide?

Childhood trauma & suicidal history

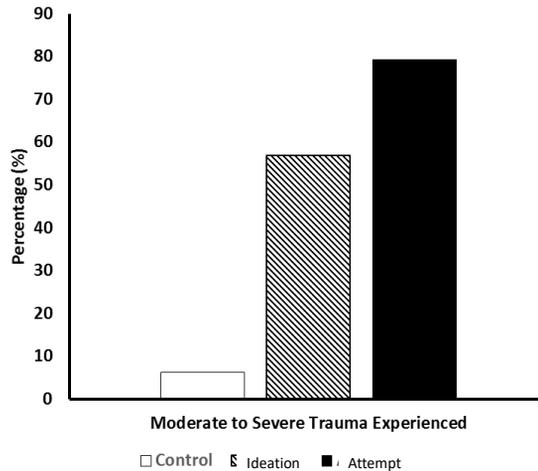


- ❖ Suicide attempt history scored sig. higher on all scales compared to both those in ideation and control groups
- ❖ Ideation group intermediate to the other two groups
- ❖ Ideation group different from controls on physical neglect ($p < 0.001$), emotional abuse ($p = 0.038$), and emotional neglect ($p = 0.058$).

O'Connor, D., Green, J., Ferguson, E., O'Carroll, O'Connor, R. (2018) *Psychoneuroendocrinology*



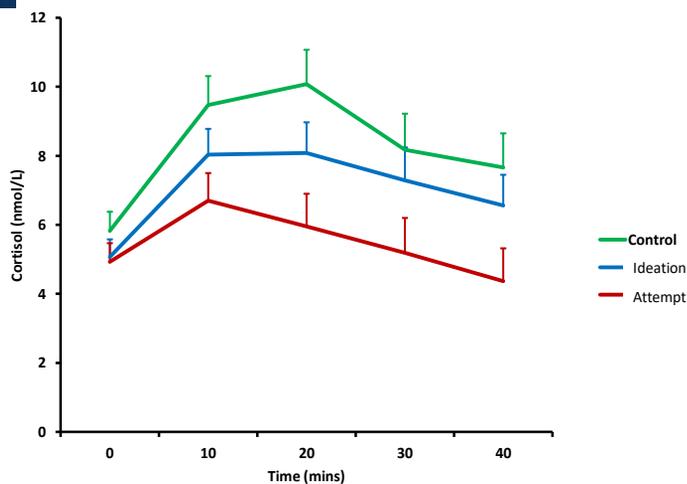
Exposure to “moderate to severe” childhood trauma



O'Connor et al., 2020



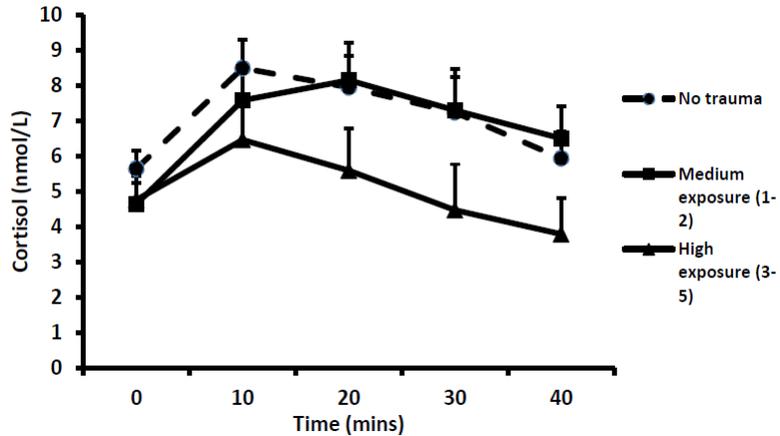
Effects of group on cortisol during the MAST (stress task) (n=145)



Main effect of group for cortisol levels, $p=0.02$; $AUC_g, p=0.02$, $AUC_i, p=0.04$
 Note: All analyses controlled for age, BMI, medication usage, time of day, smoking, & gender



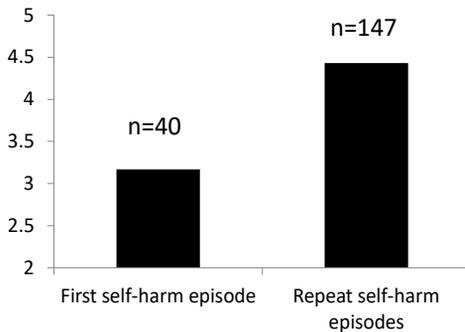
Effects of childhood trauma on cortisol reactivity to stress (AUCg)



O'Connor, D., Green, J., Ferguson, E., O'Carroll, O'Connor, R. (2018) *Psychoneuroendocrinology*



Mean Number of Adverse Childhood Experiences (ACEs) & Hospital-Treated Self-harm



Repeat group 1.7 times more likely to have experienced 4+

- ACEs***
- ◆ Verbal/physical abuse
 - ◆ Physical abuse
 - ◆ Sexual abuse
 - ◆ Emotional neglect
 - ◆ Neglect
 - ◆ Parental separation
 - ◆ Maternal abuse
 - ◆ Substance abuse in home
 - ◆ Mental ill-health in home
 - ◆ Family member sent to prison

*ACEs: Vulnerability vs Not Inevitability

Cleare, Wetherall, Clark, Ryan, Kirtley, Smith & O'Connor (2018) *IJERPH*



“My parents were, like, very abusive to one another and also to me, and that pushed me out of the home, like, from quite an early age anyways. So I was, like, getting into bad stuff, like getting into drugs at the age of 13 and with that came other unpleasant things. So yeah, I felt like I was in this circle, I just felt a bit trapped by life, like, also having... not liking being inside my own brain even, so it’s not even like I had a safe space inside myself, it was, kind of, like, didn’t really like myself either, because I didn’t like being, yeah, trapped in my brain type thing, I wanted to shut that off, yeah.”

Zortea, Dickson, Gray, & O’Connor (2019) *Social Science & Medicine*



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2021

Original Investigation | Psychiatry

Assessment of Somatosensory Function and Self-harm in Adolescents

Tatum M. Cummins, MSc; Oliver English, MSc; Helen Minnis, PhD; Daniel Stahl, PhD; Rory C. O’Connor, PhD; Kirsty Bannister, PhD; Stephen B. McMahon, PhD; Dennis Ougrin, PhD, MBBS

Is pain sensitivity associated with self-harm frequency in children and adolescents aged 12 to 17 years?

To assess somatosensory function using quantitative sensory testing (QST) in children and adolescents living in care and compare their somatosensory profiles with community control participants to investigate associations with the incidence or frequency of self-harm.

Compare responses to pain and non-pain sensory tests



Table 1. Participant Characteristics (N = 64)

Characteristic	No. (%)			
	Control ^a	No SH	SH 1-4	SH ≥5
No.	14	17	12	21
Age, mean (SD), y	16.4 (0.67)	16.5 (1.02)	16.2 (1.39)	16.3 (0.99)
Gender				
Male	2 (14.3)	16 (94.1)	8 (66.7)	4 (19)
Female	12 (85.7)	1 (5.9)	4 (33.3)	17 (81)
Ethnicity				
White British	11 (78.6)	15 (88.2)	11 (91.7)	18 (85.7)
Ethnic minority ^b	3 (21.4)	2 (11.8)	1 (8.3)	3 (14.3)
Medication				
None	12 (85.7)	14 (82.4)	5 (41.7)	8 (38.1)
Antidepressant	2 (14.2)	1 (5.9)	4 (33.3)	3 (14.3)
Antipsychotic	1 (7.1)	2 (11.8)	1 (8.3)	2 (9.5)
Other	0	3 (17.7)	5 (41.7)	13 (61.9)
Diagnosis ^c				
None	14 (100)	6 (35.3)	1 (8.3)	1 (4.8)
Internalizing	0	4 (23.5)	5 (41.7)	18 (85.7)
Externalizing	0	8 (47.1)	5 (41.7)	0
Neurodevelopmental	0	1 (5.9)	3 (25)	4 (19.1)
BPD threshold ^d				
Mean (SD)	3 (2.22)	3.06 (2.28)	6.64 (2.25)	6.76 (2.63)
Suicidal thinking prior 6 mos	3 (21.4)	0 (0)	2 (16.7)	12 (57.1)

Abbreviations: BPD, borderline personality disorder; SH, episodes of self-harm within the previous year.

^a Community control group included 3 participants with history of self-harm but not within previous year.

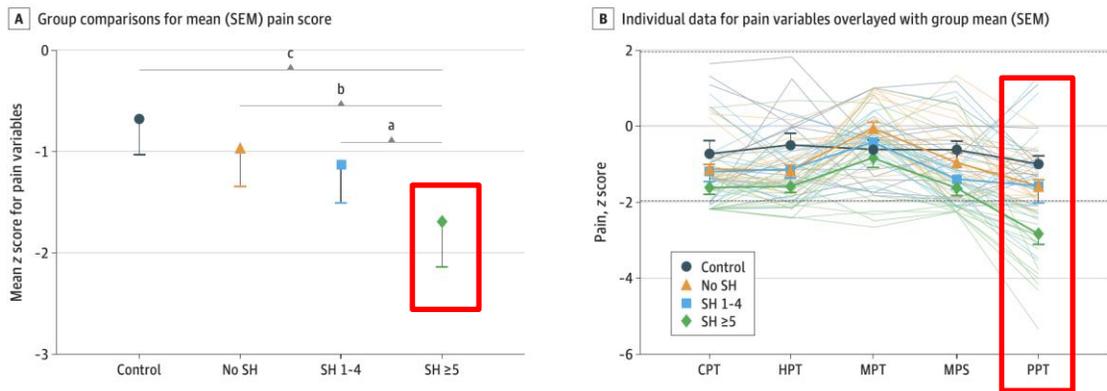
^b Ethnic minority describes individuals self-identifying as any ethnic group except the White British group.

^c Diagnosis included internalizing (ie, anxiety, depression, and mood disorders); externalizing (ie, conduct and substance disorders); neurodevelopmental (ie, attention deficit hyperactivity disorder).

^d BPD threshold was collected using the McLean Screening Instrument. The range of possible scores is 0-10; scores greater than or equal to 7 meet criteria for BPD.

Responses to Pain Sensory Tests

Figure 1. Quantitative Sensory Testing (QST) z Scores for Unadjusted Pain Parameters



Each parameter shows significant variation by group and a similar trend to the group mean (SEM) pain scores, with the most frequent self-harm group showing significant hyposensitivity. Results outside of the SD of 1.96 (dotted line) indicate potentially abnormal thresholds. CPT indicates cold pain threshold; HPT, heat pain threshold; MPT, mechanical pain threshold; MPS, mechanical pain sensitivity; PPT, pressure pain threshold; SH, episodes of self-harm within the previous year; SH 1-4, 1 to 4 self-harm

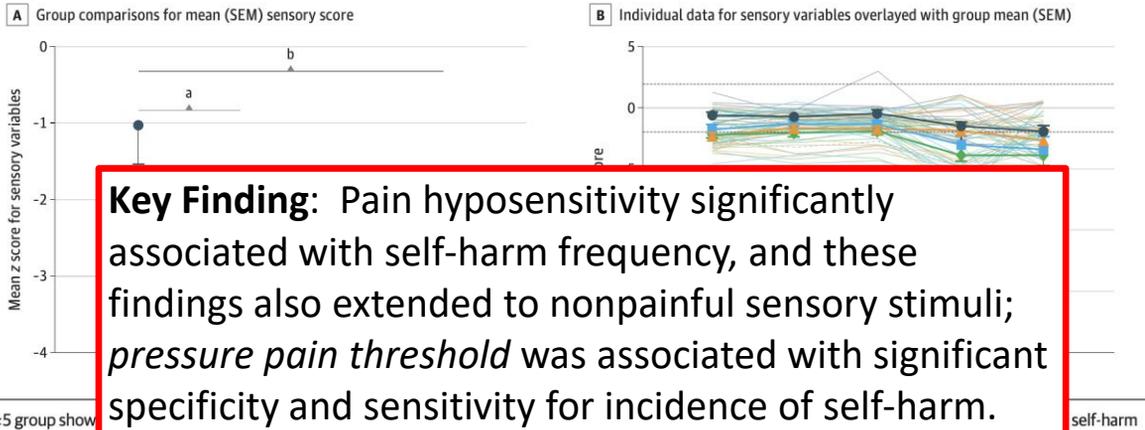
episodes within the previous year; SH ≥5, 5 or more self-harm episodes within the previous year.

^a $P < .05$.
^b $P < .001$.
^c $P < .01$.

PPT=Pressure Pain Threshold

Responses to Non-Pain Sensory Tests

Figure 2. Quantitative Sensory Testing (QST) z Scores for Sensory (Nonpain) Parameters (Unadjusted)

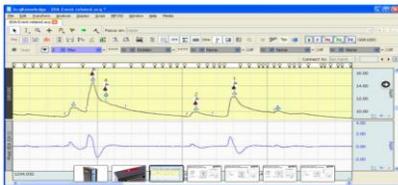
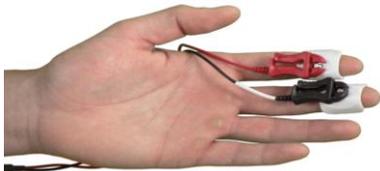


The SH ≥ 5 group show young people in residential care with no SH show significant variation in thermal sensitivity compared with community control participants. Results outside of the SD of 1.96 (dotted line) indicate potentially abnormal thresholds. CDT indicates cold detection threshold; WDT, warm detection threshold; TSL, thermal sensory limen; MDT, mechanical detection threshold; SH, episodes of self-harm within the previous year; SH episodes within the previous year; VDT, vibration detection threshold.

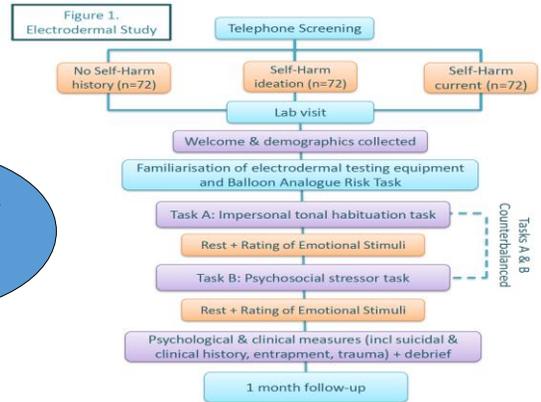
^a $P < .05$.
^b $P < .001$.

Does electrodermal activity (EDA) act as a volitional moderator facilitating transition from thoughts of self-harm to self-harm acts?

EDA as index of emotion processing



Restarted after COVID delay





1

Seven Premises of IMV Model

Vulnerability factors combined with stressful life events (including early life adversity) provide the backdrop for the development of suicidal ideation.

2

The presence of pre-motivational vulnerability factors (e.g. socially prescribed perfectionism) increases the sensitivity to signals of defeat.

3

Defeat/humiliation and entrapment are the key drivers for the emergence of suicidal ideation.

4

Entrapment is the bridge between defeat and suicidal ideation.

5

Volitional-phase factors govern the transition from ideation/intent to suicidal behaviour.

6

Individuals with a suicide attempt or self-harm history will exhibit higher levels of motivational and volitional-phase variables than those without a history.

7

Distress is higher in those who engage in repeated suicidal behaviour and over time, and intention is translated into behaviour with increasing rapidity.

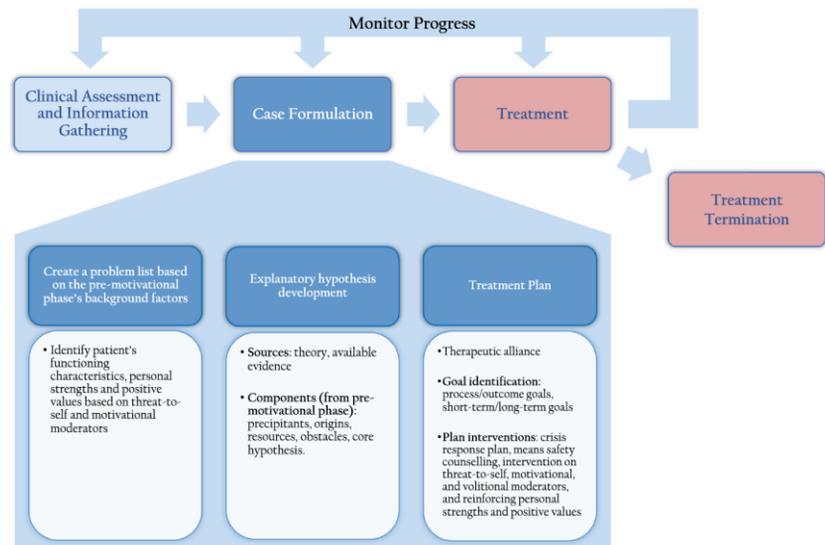


Fig. 4 Integrative model of case formulation and therapy. Adapted from Eells (2015) to the context of the IMV model.

The IMV model can be used to inform case formulation & treatment planning

Zortea, T. C., Cleare, S., Wetherall, K., Melson, A. J., O'Connor, R. C. (In press). On Suicide Risk: From Psychological Processes to Clinical Assessment and Intervention. In Gordon J. G. Asmundson. *Comprehensive Clinical Psychology Handbook, Second Edition*. Elsevier.



Psychosocial interventions to prevent suicidal behaviour



Psychosocial interventions following self-harm in adults: a systematic review and meta-analysis

Keith Hawton, Katrina G Witt, Tatiana L Taylor Salisbury, Ella Arensman, David Gunnell, Philip Hazell, Ellen Townsend, Kees van Heeringen

Interpretation CBT seems to be effective in patients after self-harm. Dialectical behaviour therapy did not reduce the proportion of patients repeating self-harm but did reduce the frequency of self-harm. However, aside from CBT, there were few trials of other promising interventions, precluding firm conclusions as to their effectiveness.



2019

nature reviews
disease primers

Gustavo Turecki^{1*}, David A. Brent², David Gunnell^{3,4}, Rory C. O'Connor⁵,
Maria A. Oquendo⁶, Jane Pirkis⁷ and Barbara H. Stanley⁸

Box 2 | Interventions for suicidal ideation and suicidal behaviour

Psychosocial

Longer-term psychosocial interventions

- Cognitive behavioural therapy
- Dialectic behavioural therapy
- Collaborative assessment and management of suicidality
- Acceptance and commitment therapy
- Mentalization
- Interpersonal psychotherapy

Brief interventions

- Caring contacts
- No suicide contacts
- Safety planning intervention
- Crisis response planning

- Attempted suicide short intervention programme
- Volitional help sheet

Pharmacological

Pharmacological agents with potential effect on suicidal behaviour

- Lithium
- Clozapine^a
- Ketamine
- Selective serotonin reuptake inhibitors
- Buprenorphine

^aClozapine is indicated in treatment of patients with schizophrenia who present with suicidal ideation.



ORIGINAL ARTICLE

Two-Year Randomized Controlled Trial and Follow-up of Dialectical Behavior Therapy vs Therapy by Experts for Suicidal Behaviors and Borderline Personality Disorder

Masha M. Linehan, PhD; Katherine Anne Compton, PhD; Angela M. Murray, MA, MSW; Milton Z. Brown, PhD; Robert J. Gallop, PhD; Heidi L. Hearl, PhD; Kathryn E. Korland, PhD; Darren A. Taick, MS; Sarah K. Reynolds, PhD; Noam Lindenhorst, MS

Context: Dialectical behavior therapy (DBT) is a treatment for suicidal behavior and borderline personality disorder with well-documented efficacy.

Objectives: To evaluate the hypothesis that unique aspects of DBT are more efficacious compared with treatment offered by non-behavioral psychotherapy experts.

Design: One-year randomized controlled trial, plus 1 year of posttreatment follow-up.

Setting: University outpatient clinic and community practice.

Participants: One hundred one clinically referred women with recent suicidal and self-harmful behaviors meeting DSM-IV criteria, matched by condition on age, suicide attempt history, negative prognostic indication, and number of lifetime intentional self-harm and psychiatric hospitalizations.

Interventions: One year of DBT or 1 year of community treatment by experts (developed to maximize internal validity by controlling for therapist use, availability, expertise, allegiance, training and experience, consultation availability, and institutional prestige).

Main Outcome Measures: Trimester assessments of suicidal behaviors, emergency services use, and general psychological functioning. Measures were selected based on previous outcome studies of DBT. Outcome variables were evaluated by blinded assessors.

Results: Dialectical behavior therapy was associated with better outcomes in the intent-to-treat analysis than community treatment by experts in most target areas during the 2-year treatment and follow-up period. Subjects receiving DBT were half as likely to make a suicide attempt (hazard ratio, 2.66; P = .003), required less hospitalization for suicide ideation (F_{1,107} = 3.3; P = .004), and had lower medical risk (F_{1,107} = 3.2; P = .04) across all suicide attempt and self-harmful acts combined. Subjects receiving DBT were less likely to drop out of treatment (hazard ratio, 3.2; P < .001) and had fewer psychiatric hospitalizations (F_{1,107} = 6.0; P = .002) and psychiatric emergency department visits (F_{1,107} = 2.9; P = .04).

Conclusions: Our findings replicate those of previous studies of DBT and suggest that the effectiveness of DBT cannot reasonably be attributed to general factors associated with expert psychotherapy. Dialectical behavior therapy appears to be uniquely effective in reducing suicide attempts.

Arch Gen Psychiatry. 2006;63:737-746

Those in DBT group were half as likely to attempt suicide over follow-up

SUICIDAL BEHAVIOR IS A BROAD term that includes death by suicide and intentional, non-fatal, self-harmful acts committed with or without intent to die. It is associated with several mental disorders, including depression, substance dependence, and schizophrenia. Borderline personality disorder (BPD) is 1 of only 2 DSM-IV diagnoses for which suicidal behavior is a criterion. Borderline personality disorder is a severe and persistent mental disorder characterized by severe emotional distress and behavioral dyscontrol.^{1,2} Among patients with BPD, 60% to 80% engage in suicidal behav-

ior,^{3,4} with a suicide rate of up to 9%.^{5,6} Forty percent of the highest users of inpatient psychiatric services receive a diagnosis of BPD.^{7,8} Patients with BPD use more services than those with major depression⁹ and other personality disorders.¹⁰ Among patients with BPD seen for treatment, 72% have had at least 1 psychiatric hospitalization and 0% have received outpatient treatment from a mean of 6.1 previous therapists.¹¹ Despite this high-use pattern, patients with BPD have high rates of treatment failure.^{12,13} Outpatient dialectical behavior therapy (DBT)^{14,15} and mentalization-based treatment provided in a partial hospital pro-

Author Affiliations are listed at the end of this article.

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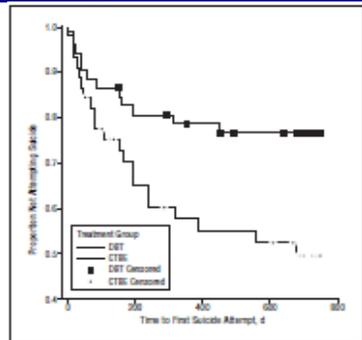
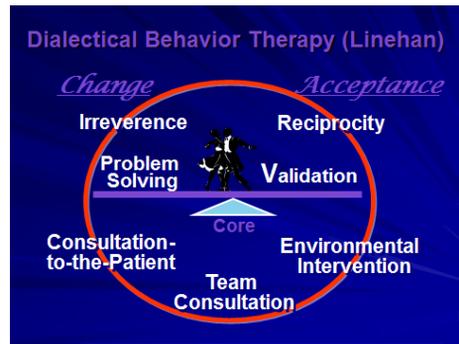


Figure 3. Survival analysis for time to first suicide attempt. The treatment period ended at 365 days, and the follow-up period ended at 730 days. CTBE indicates community treatment by experts; DBT, dialectical behavior therapy.



ORIGINAL CONTRIBUTION

Cognitive Therapy for the Prevention of Suicide Attempts A Randomized Controlled Trial

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Thomas T. Hays, PhD
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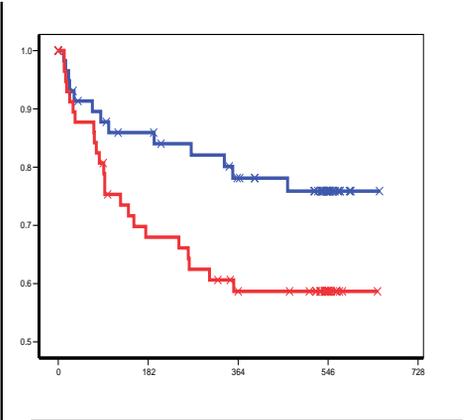
Context: Suicide attempts constitute a major risk factor for completed suicide, yet few interventions specifically designed to prevent suicide attempts have been evaluated.
Objective: To determine the effectiveness of a 10-session cognitive therapy intervention designed to prevent repeat suicide attempts in adults who recently attempted suicide.
Design, Setting, and Participants: Randomized controlled trial of adults (N = 120) who attempted suicide and were evaluated at a hospital emergency department within 48 hours of the attempt. Potential participants (N = 302) were consecutively recruited from October 1999 to September 2002; 66 refused to participate and 164 were ineligible. Participants were followed up for 18 months.
Intervention: Cognitive therapy or enhanced usual care with tracking and referral services.
Main Outcome Measures: Incidence of repeat suicide attempts and number of days until a repeat suicide attempt. Suicide ideation (dichotomized), hopelessness, and depression severity at 1, 3, 6, 12, and 18 months.
Results: From baseline to the 18-month assessment, 13 participants (24.1%) in the cognitive therapy group and 23 participants (41.6%) in the usual care group made at least 1 subsequent suicide attempt (symptomatic score, 1.37; P = .049). Using the Kaplan-Meier method, the estimated 18-month hazard ratio of the probability of the cognitive therapy group was 0.76 (95% confidence interval [CI], 0.62-0.95) and in the usual care group was 0.38 (95% CI, 0.14-0.70). Participants in the cognitive therapy group had a significantly lower reattempt rate (Wald, $\chi^2 = 3.5$; P = 0.06) and were 50% less likely to reattempt suicide than participants in the usual care group (hazard ratio, 0.51; 95% CI, 0.26-0.997). The safety of self-reported depression was significantly lower for the cognitive therapy group than for the usual care group at 6 months (P = .02), 12 months (P = .008), and 18 months (P = .046). The cognitive therapy group reported significantly less hopelessness than the usual care group at 6 months (P = .045). There was no significant difference between groups based on rates of suicide ideation at any assessment point.
Conclusion: Cognitive therapy was effective in preventing suicide attempts for adults who recently attempted suicide.
www.jama.com

Empirical evidence for treatment: that effectively prevent repetition of suicide attempts is limited.² Randomized controlled trials of individuals who have attempted suicide have used intensive follow-up treatment or intensive case management,^{3,4} interpersonal psychotherapy,⁵ and cognitive behavioral therapy.⁶ Several studies suggesting the efficacy of cognitive behavioral therapy or problem-solving therapy for reducing suicide behavior⁷⁻⁹ have highlighted the need for randomized controlled trials with sufficient power to detect treatment differences.¹⁰

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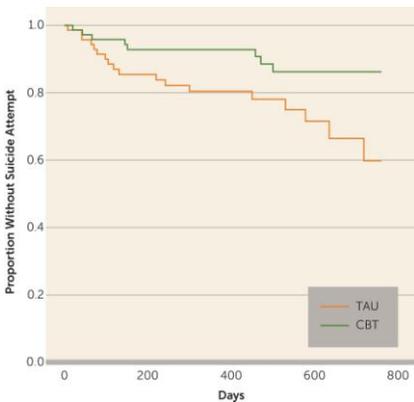
© 2015 American Medical Association. All rights reserved. JAMA. 2015;314(12):1543-1551. doi:10.1001/jama.2015.1111



Those in Cognitive Therapy group were 50% less likely to attempt suicide over 18 months compared to usual care



Brief Cognitive-Behavioral Therapy Effects on Post-Treatment Suicide Attempts in a Military Sample.



- At 24-month follow-up, eight participants in brief CBT (13.8%) and 18 participants in treatment as usual (40.2%) made at least one suicide attempt
- Soldiers in brief CBT were approximately **60% less** likely to make a suicide attempt during follow-up than soldiers in treatment as usual.

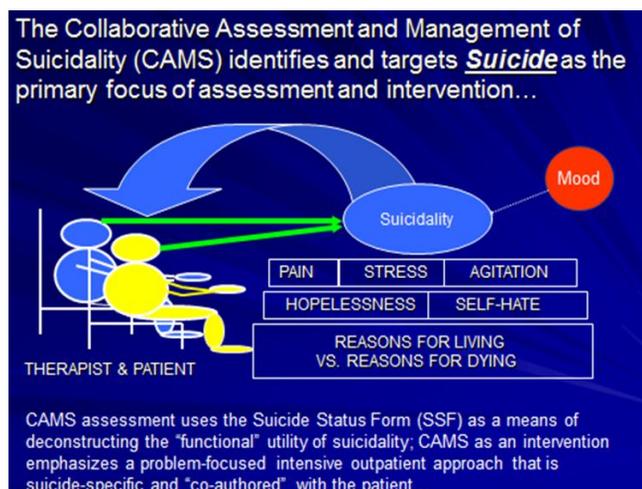
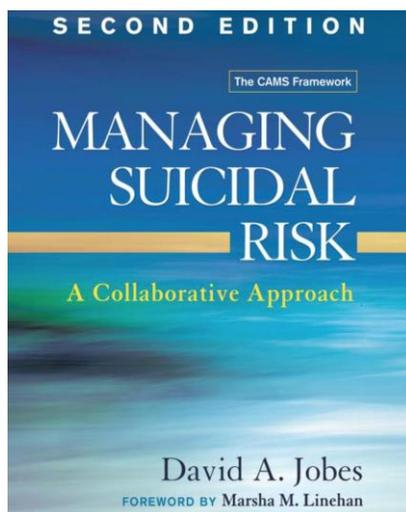
Rudd, Bryan et al. (2015) *American Journal of Psychiatry*



Brief CBT: 12 sessions across 3 phases

- **Phase I (five sessions):**
 - Assessment & Identification of patient-specific factors
 - Cognitive-behavioral conceptualization
 - Collaborative development of crisis response plan
 - Taught basic emotion-regulation skills (e.g., mindfulness)
- **Phase II (five sessions):**
 - Application of cognitive strategies to reduce beliefs and assumptions that serve as vulnerabilities
- **Phase III (two sessions):**
 - a relapse prevention task: imagine circumstances of a previous suicidal episode and the internal experiences associated with this event (i.e., thoughts, emotions, and physiological responses) and then imagined themselves successfully resolve the crises.

Collaborative Assessment and Management of Suicidality (CAMS)





Collaborative assessment and management of suicidality (Jobs)

- Therapeutic framework for the assessment and treatment of suicidality
- Is a framework rather than a treatment itself
- Use clinical experience to guide interventions selection
- Suicide risk assessment, treatment planning, and management of suicide risk
- Suicide Status Form (SSF) is used throughout CAMS
- SSF Assessment, Stabilization Planning, Driver-Specific Treatment Planning



CAMS Initial Session Slide Courtesy of Dave Jobs

CAMS Suicide Status Form—SSF IV (Initial Session)

Patient: Keith Clinician: DJ Date: Session 1 Time: _____

Section A (Patient):

Rate and fill out each item according to how you feel right now. Then rank in order of importance 1 to 5 (1=most important to 5=least important).

1) RATE PSYCHOLOGICAL PAIN (hurt, anguish, or misery in your mind, gut, stress, not physical pain).
 Low pain: 1 2 3 4 5 High pain
 What I find most painful is: Guilt over firefight/causing my wife pain

2) RATE STRESS (your general feeling of being pressured or overwhelmed).
 Low stress: 1 2 3 4 5 High stress
 What I find most stressful is: Getting over it and everything else in my life

3) RATE AGITATION (emotional urgency; feeling that you need to take action; gut irritation; gut annoyance).
 Low agitation: 1 2 3 4 5 High agitation
 I most need to take action when: After a fight with my wife

4) RATE HOPELESSNESS (your expectation that things will not get better no matter what you do).
 Low hopelessness: 1 2 3 4 5 High hopelessness
 I am most hopeless about: Ever being over what happened there

5) RATE SELF-HATE (your general feeling of disliking yourself; having no self-esteem; having no self-respect).
 Low self-hate: 1 2 3 4 5 High self-hate
 What I hate most about myself is: How I make my wife feel

6) RATE OVERALL RISK OF SUICIDE: Extremely low risk (will not kill self) 1 2 3 4 5 Extremely high risk (will kill self)

1) How much is being suicidal related to thoughts and feelings about yourself? Not at all: 1 2 3 4 5 (completely)
 2) How much is being suicidal related to thoughts and feelings about others? Not at all: 1 2 3 4 5 (completely)

Please list your reasons for wanting to live and your reasons for wanting to die. Then rank in order of importance 1 to 5.

Rank	REASONS FOR LIVING	Rank	REASONS FOR DYING
1	wife	1	My wife
2	family	2	I'm a scumbag
		3	What I did over there

I wish to live to the following extent: Not at all: 0 1 2 3 4 5 6 7 8 :Very much
 I wish to die to the following extent: Not at all: 0 1 2 3 4 5 6 7 8 :Very much
 The one thing that would help me no longer feel suicidal would be: getting rid of the guilt

CAMS Suicide Status Form—SSF IV (Copyright David A. Jobs, Ph.D. All Rights Reserved)

CAMS Suicide Status Form—SSF IV (Initial Session—page 2)

Section B (Clinician):

1) N Suicide plan: When: at night after work after fight & wife drinking
 Where: at home someone in basement 670H
 How: hand gun "glock" N Access to means
 How: gun in month Y Access to means

2) N Suicide Preparation Describe: has a will, no specific prep

3) N Suicide Rehearsal Describe: yes put gun in mouth to see if fits

4) N History of Suicidality
 • Ideation Describe: every day
 • Frequency 2-3 per day _____ per week _____ per month
 • Duration _____ seconds _____ minutes _____ hours
 • Single Attempt Describe: 0
 • Multiple Attempts Describe: 0

5) N Current Intent Describe: after fight when drunk

6) N Impulsivity Describe: same history - reacts this

7) N Substance abuse Describe: 0 drugs & pot, drinks & friends @ work

8) N Significant loss Describe: first lost work site, lost friend in combat

9) N Interpersonal isolation Describe: has some drinking buddies

10) N Relationship problems Describe: marriage

11) N Burden to others Describe: to wife

12) Y Health problems Describe: _____

13) Y Physical pain Describe: shrapnel in leg & pain

14) Y Legal problems Describe: ownes on some credit cards

15) N Shame Describe: across his life @ to fire fight incident

Section C (Clinician) TREATMENT PLAN (Refer to Sections A & B)

Problem	Problem Description	Goals and Objectives	Interventions	Duration
1	Self-Harm Potential	Safety and Stability	Stabilization Plan Completed <input checked="" type="checkbox"/>	3 mos
2	guilt of what happened in combat	Cope w/ guilt ↓ PTSD sv's	PE? group?	3 mos
3	marital distress	↓ conflict in marriage	Couples' treatment	3 mos

YES NO Patient understands and concurs with treatment plan?
 YES NO Patient at imminent danger of suicide (hospitalization indicated)?

Patient Signature: Keith Date: _____ Clinician Signature: DJ Date: _____



Collaborative Assessment and Management of Suicidality

Psychological Health Center of Excellence Psych Health Evidence Briefs

October 2018

Q. Is there any recent research on CAMS as a treatment for suicidality?

A. A September 2018 literature search identified three randomized controlled trials (RCTs) of CAMS. A recently published RCT compared CAMS to enhanced care as usual in 148 soldiers with significant suicidal ideation (Jobes et al., 2017). Both study groups improved over time across all outcome measures. CAMS patients were significantly less likely to report suicidal ideation compared to control at 3-month follow-up, but not at 1-, 6-, or 12-month follow-up, and no other differences were found between groups. A second RCT compared CAMS to dialectical behavior therapy (DBT) in 108 adults with borderline personality traits or disorder and a recently attempted suicide, and found no significant differences between DBT and CAMS for reduction in self-harm or suicide attempts (Andreasson et al., 2016). A third trial was a feasibility study comparing CAMS to enhanced care as usual in 32 suicidal patients (Comtois et al., 2011). CAMS patients showed significant reductions in suicidal ideation compared to enhanced care as usual.



RESEARCH ARTICLE

A Novel Brief Therapy for Patients Who Attempt Suicide: A 24-months Follow-Up Randomized Controlled Study of the Attempted Suicide Short Intervention Program (ASSIP)

Anja Gysin-Maillart¹, Simon Schwab², Leila Soravia², Millie Megert³, Konrad Michel^{1*}

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Attempted Suicide Short Intervention Program (ASSIP)

3 Sessions, followed by regular letters over 2 years

Session No.	Therapeutic elements	ASSIP Modules
1	Establish a therapeutic relationship	-> Narrative interview, video recorded; SSF-III
2	Emotional activation, restructuring Develop a shared understanding	-> Video playback; confrontation -> Handout (homework; psychoeducation)
3	Safety Planning	-> Written summary of vulnerability & triggers -> Individual safety card
4	Continuous therapeutic relationship	-> Semi-standardized letters over 2 years 3 mths in 1 st year, every 6 months in 2 nd year



Table 2. Repeated suicide attempts during 24-month follow up: ITT analysis ($n = 120$).

Follow-Up Period	Group	<i>N</i>	Attempts	Persons
1–6 months	ASSIP	59	1	1
	CG	52	18	7
7–12 months	ASSIP	59	1	1
	CG	50	6	5
1–12 months	ASSIP	59	2	2
	CG	43	24	10
13–18 months	ASSIP	55	1	1
	CG	42	8	5
19–24 months	ASSIP	56	2	2
	CG	42	9	5
13–24 months	ASSIP	55	3	3
	CG	40	17	9
1–24 months	ASSIP	55	5	5
	CG	43	41	16

ASSIP group: ASSIP therapy plus TAU ($n = 60$); control group (CG): clinical assessment plus TAU ($n = 60$); person sums include individuals with more than one suicide attempt.

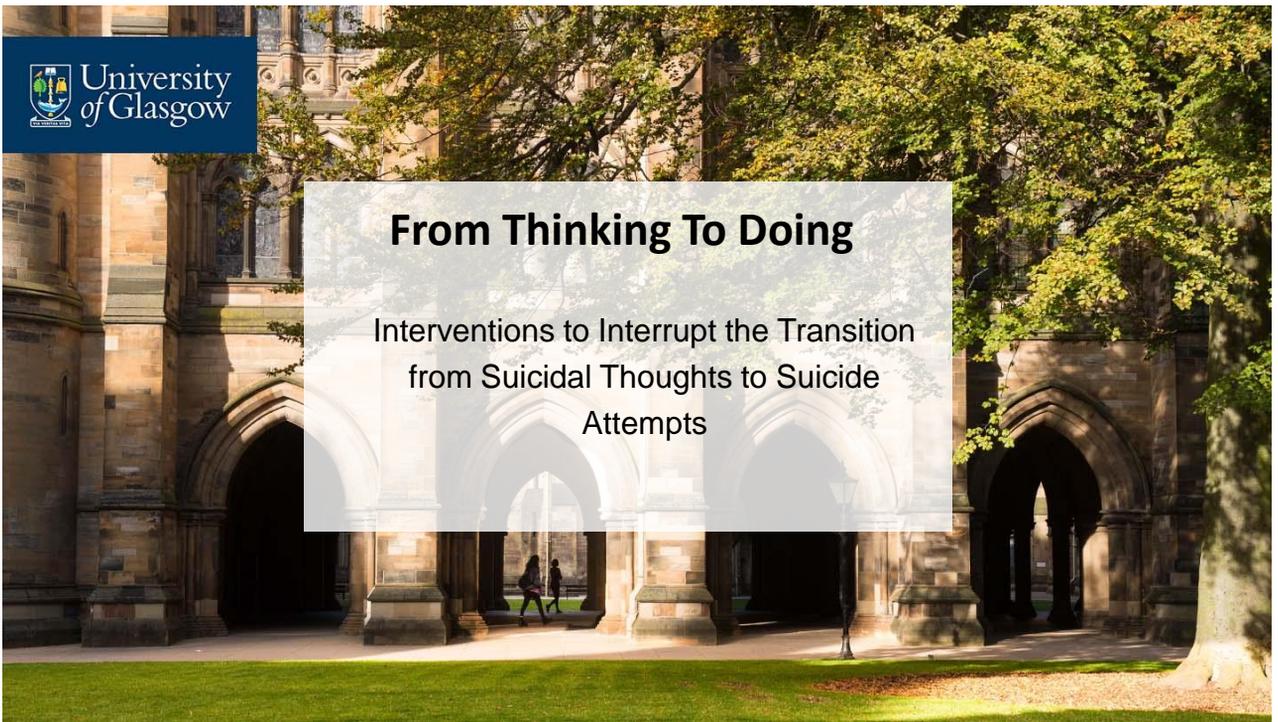
Conclusions

ASSIP, a manual-based brief therapy for patients who have recently attempted suicide, administered in addition to the usual clinical treatment, was efficacious in reducing suicidal behavior in a real-world clinical setting. ASSIP fulfills the need for an easy-to-administer low-cost intervention. Large pragmatic trials will be needed to conclusively establish the efficacy of ASSIP and replicate our findings in other clinical settings.



Take Homes: Common themes across reviews / meta-analyses

- Evidence that psychosocial interventions are effective in those who reduce self-harm
- CBT-type interventions likely to be most effective, though effects are modest
- Unclear what the active ingredients are
- Unclear what the optimal 'dose' / number of sessions is
- Unclear who they work for (e.g., men) and when
- Evidence for children is limited
- Role of therapeutic alliance unclear





Implementation Intentions and self-harm (SH)

➤ In the present context

- an 'if' situation may be: 'If I want to get relief from a terrible state of mind' and
- the 'then' behavioural response would be an alternative to SH (e.g., then I will think about the impact of my self-harming on the people around me').

➤ Volitional Help Sheet (modified from Armitage, 2008)

- 11 critical situations and 11 alternative solutions
- In other words, they form the alternative actions participants should try to take when they are tempted to SH



Help Sheet

We want you to plan to avoid self-harming. Research shows that if people can spot situations in which they will be tempted to self-harm and then link them with a way to overcome those situations, they are much more likely to be successful in avoiding self-harming.

On the left hand side of the page below is a list of common situations in which people feel tempted to self-harm; on the right hand side of the page is a list of possible solutions.

For each situation that applies to you personally (left hand side),  please draw a line linking it to a solution (right hand side) that you think might work for you. Please draw a line linking one situation to one solution at a time, **but make as many (or as few) situation-solution links as you like. There is a blank situation box and a blank solution box at the bottom for you to include anything else which might also apply to you.**

SITUATIONS	Please draw lines to the boxes that are relevant	SOLUTIONS
If I am tempted to self-harm when I want to get relief from a terrible state of mind ...	<input type="checkbox"/>	<input type="checkbox"/> ... then I will do something else instead of self-harming
If I am tempted to self-harm when I want to punish myself ...	<input type="checkbox"/>	<input type="checkbox"/> ... then I will tell myself that I can stop self-harming if I want to
If I am tempted to self-harm when I want to die ...	<input type="checkbox"/>	<input type="checkbox"/> ... then I will recall information people have given me about the benefits of stopping self-harming
If I am tempted to self-harm when I want to show how desperate I am feeling ...	<input type="checkbox"/>	<input type="checkbox"/> ... then I will tell myself that Society is changing in ways that make it easier for people to stop self-harming
If I am tempted to self-harm when I want to find out whether someone really loves me ...	<input type="checkbox"/>	<input type="checkbox"/> ... then I will make sure I am rewarded by others if I don't self-harm
If I am tempted to self-harm when I want to get some attention ...	<input type="checkbox"/>	<input type="checkbox"/> ... then I will think about the impact of my self-harming on the people around me
If I am tempted to self-harm when I want to frighten someone ...	<input type="checkbox"/>	<input type="checkbox"/> ... then I will remember that I react emotionally to warnings about my self-harming
If I am tempted to self-harm when I want to get my own back on someone	<input type="checkbox"/>	<input type="checkbox"/> ... then I will remember that I get upset when I think about my self-harming
...	<input type="checkbox"/>	<input type="checkbox"/> ... then I will put things around my home or place

An exploratory randomised trial of a simple, brief psychological intervention to reduce subsequent suicidal ideation and behaviour in patients admitted to hospital for self-harm

Christopher J. Armitage, Wirda Abdul Rahim, Richard Rowe and Rory C. O'Connor

Background

Implementation intentions link triggers for self-harm with coping skills and appear to create an automatic tendency to invoke coping responses when faced with a triggering situation.

Aims

To test the effectiveness of implementation intentions in reducing suicidal ideation and behaviour in a high-risk group.

Method

Two hundred and twenty-six patients who had self-harmed were randomised to: (a) forming implementation intentions with a 'volitional help sheet'; (b) self-generating implementation intentions without help; or (c) thinking about triggers and coping, but not forming implementation intentions. We measured self-reported suicidal ideation and behaviour, threats of suicide and likelihood of future suicide attempt at baseline and then again at the 3-month follow-up.

Results

All suicide-related outcome measures were significantly lower at follow-up among patients forming implementation intentions compared with those in the control condition ($d > 0.35$). The volitional help sheet resulted in fewer suicide threats ($d = 0.59$) and lowered the likelihood of future suicide attempts ($d = 0.29$) compared with patients who self-generated implementation intentions.

Conclusions

Implementation intention-based interventions, particularly when supported by a volitional help sheet, show promise in reducing future suicidal ideation and behaviour.

Declaration of interest

None.

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A brief psychological intervention to reduce repetition of self-harm in patients admitted to hospital following a suicide attempt : a randomised controlled trial

Rory C O'Connor, Eamonn Ferguson, Fiona Scott, Roger Smyth, David McDaid, A-La Park, Annette Beautrais, Christopher J Armitage

Summary

Background We investigated whether a volitional helpsheet (VHS), a brief psychological intervention, could reduce repeat self-harm in the 6 months following a suicide attempt.

Methods We did a prospective, single-site, randomised controlled trial. Patients admitted to a hospital in Edinburgh, UK, after a suicide attempt were deemed eligible for the study if they were over the age of 16 years, had a self-reported history of self-harm, were fluent in English, were medically fit to interview, and were not participating in other research studies within the hospital. Eligible patients were randomly assigned (1:1), via web-based randomisation to receive either VHS plus usual treatment (intervention group) or only treatment as usual (control group). Randomisation was stratified by sex and self-reported past self-harm history. The Information Services Division of the National Health Service (NHS-ISD) staff and those extracting data from medical notes were masked to which study group the participant was allocated to. Clinical staff working within the hospital were also masked to participants' randomisation status. There were three primary outcomes: the proportion of participants who re-presented to hospital with self-harm over the 6-month follow-up period; the number of times a participant re-presented at hospital with self-harm during the 6-month follow-up period; and cost-effectiveness of the VHS as measured by estimated incremental cost per self-harm event averted. Primary outcomes were analysed in all randomised patients. Follow-up data collection was extracted from the Information Services Division of the NHS and from patient medical records. Primary outcomes were analysed in the intention-to-treat population. The trial is registered with International Standard Randomised Controlled Trial Number Registry, number ISRCTN99488269.



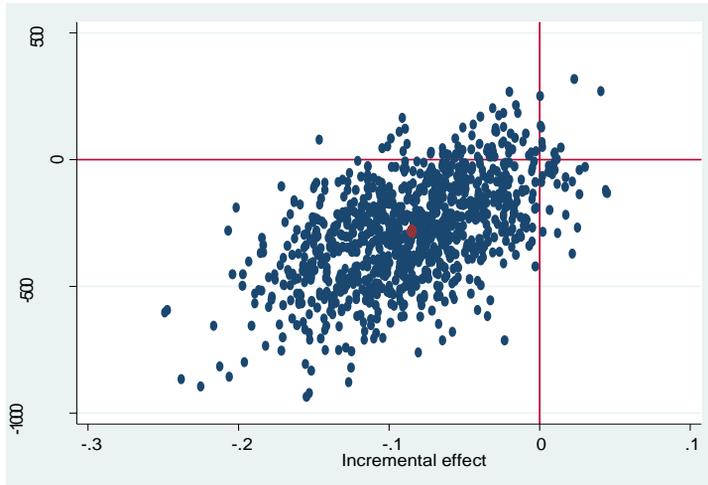
Lancet Psychiatry 2017

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See Online/Comment
<http://dx.doi.org/10.1016/P11>
Suicidal Behaviour Research Laboratory, Institute of Health & Wellbeing, University of Glasgow, Glasgow, UK (Prof R C O'Connor PhD, F Scott MSc); School of Psychology, University of Nottingham, Nottingham, UK (Prof E Ferguson PhD); Department of Psychological Medicine, Royal Infirmary of Edinburgh, Edinburgh, UK (R Smyth FRCPsych); Personal Social Services Research Unit, Department of Social Policy,



Cost effectiveness plane per protocol past self-harm history subgroup: VHS and treatment as usual versus treatment as usual only



Observations in the **south west quadrant** indicates that it is both less costly and more effective.

Nearly all of the bootstrapped values fall in the **south west quadrant** where the VHS group is less costly than TAU.

90% probability of the VHS being cost effective regardless of **willingness to pay threshold** if the intervention

O'Connor et al. (2017). *Lancet Psychiatry*



TAKE HOME MESSAGE

Volitional helpsheet (VHS) may be an effective tool among those who have previously self-harm

Replication is required



2021

Acceptability of a Brief Web-Based Theory-Based Intervention to Prevent and Reduce Self-harm: Mixed Methods Evaluation

Chris Keyworth¹, PhD; Rory O'Connor², PhD; Leah Quinlivan³, PhD; Christopher J Armitage^{3,4,5}, PhD

- Patient and public involvement partners evaluated the original VHS from a lived experience perspective, which was subsequently translated into a web-based format.
- Second, a representative sample of adults who had previously self-harmed were recruited via a YouGov survey (N=514) and were asked to rate the acceptability of the VHS

Conclusions: Our findings show high levels of acceptability among some people who have previously self-harmed, particularly among younger adults, people of White ethnic backgrounds, and people without long-term health conditions.

Future research should aim to improve acceptability among older adults, people from minority ethnic groups, and people with long-term health conditions.



What do we know about brief interventions?



JAMA Psychiatry | Original Investigation

2020

Association of Suicide Prevention Interventions With Subsequent Suicide Attempts, Linkage to Follow-up Care, and Depression Symptoms for Acute Care Settings A Systematic Review and Meta-analysis

Stephanie K. Douplik, MD, MSHP; Brittany Rudd, PhD; Timothy Schmutte, PhD; Diana Worsley, MPH; Cadence F. Bowden, MSW, MPH; Erin McCarthy, MD; Elliott Eggan, MD; Jeffrey A. Bridge, PhD; Steven C. Marcus, PhD

A total of 14 studies, representing outcomes for 4270 patients, were included.

Most interventions included multiple components; the most common components were care coordination, **safety planning**, brief follow-up contacts, and brief therapeutic interventions.

Conclusions and Relevance In this meta-analysis, brief suicide prevention interventions were associated with reduced subsequent suicide attempts. Suicide prevention interventions delivered in a single in-person encounter may be effective at reducing subsequent suicide attempts and ensuring that patients engage in follow-up mental health care.



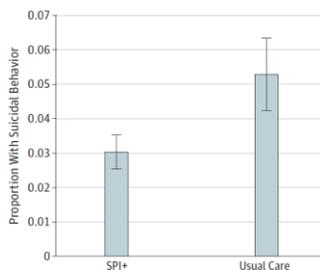
JAMA Psychiatry | Original Investigation

2018

Comparison of the Safety Planning Intervention With Follow-up vs Usual Care of Suicidal Patients Treated in the Emergency Department

Barbara Stanley, PhD; Gregory K. Brown, PhD; Lisa A. Brenner, PhD; Hanga C. Galfalvy, PhD; Glenn W. Currier, MD; Kerry L. Knox, PhD; Sadia R. Chaudhury, PhD; Ashley L. Bush, MMA; Kelly L. Green, PhD

Figure 1. Suicidal Behavior in 6-Month Follow-up for Safety Planning Intervention With Structured Follow-up Telephone Contact (SPI+) and Usual Care



Proportion of patients with suicidal behavior in the 6 months following emergency department discharge in SPI+ compared with usual care patients. Error bars denote the standard error of the proportion.

- Patients in the SPI+ condition were less likely to engage in suicidal behavior (n = 36 of 1186; 3.03%) than those receiving usual care (n = 24 of 454; 5.29%) during the 6-month follow-up period.
- The SPI+ was associated with 45% fewer suicidal behaviors
- Those in SPI+ condition more likely to have treatment engagement



Open access **Protocol**

BMJ Open SAFETEL randomised controlled feasibility trial of a safety planning intervention with follow-up telephone contact to reduce suicidal behaviour: study protocol

Rory O'Connor,¹ Janina-Marie Lundy,¹ Corinna Stewart,¹ Susie Smilla,² Heather McClelland,¹ Suzy Syrett,¹ Marcela Gavigan,² Alex McCormack,² Michael Smith,¹ Daniel J Smith,² Gregory K Brown,² Barbara Stanley,² Sharon Anne Simpson²

Abstract
Introduction: There are no evidence based interventions that can be administered in hospital settings following a general hospital admission after a suicidal attempt.
Aim: To determine whether a safety planning intervention (SPI) with follow-up telephone support (SAFETEL) is feasible and acceptable to patients admitted to UK hospitals following a suicide attempt.
Methods and analysis: Three phase development and feasibility study with embedded process evaluation. Phase 1: comprises training on SPI with telephone follow-up (especially designed for use in the UK), for use in the UK. Phase 2 involves piloting the intervention with patients (n=20) who have been hospitalised following a suicide attempt. Phase 3 is a feasibility randomised controlled trial of 120 patients who have been hospitalised following a suicide attempt with a 6-month follow-up. Phase 3 participants will be recruited from across four National Health Service hospitals in Scotland and randomised to receive either the SPI with telephone follow-up and treatment as usual (n=60) or treatment as usual only (n=60). The primary outcomes are feasibility outcomes and include the acceptability of the intervention to participants and recruitment and the feasibility of delivery in the setting, recruitment, retention and intervention adherence as well as the feasibility of collecting the self-harm information to hospital outcome data. Statistical analyses will include description of recruitment rates, intervention administration, response rates and estimates of the primary outcome and costs, and intervention effect size (Phase 3). Thematic analysis will be conducted on interview and focus group data.
Ethics and dissemination: The East of Scotland Research Ethics Service (ESRES) approved the study in March 2017 (2017/08176/01) Ref: 13/ES04336. The study results will be disseminated in peer-reviewed publication and conference presentations. A participant summary paper will also be disseminated to patients, service providers and policy makers alongside the main publication.
Trial registration number: ISRCTN181241.

Strengths and limitations of this study

- SAFETEL will test the feasibility and acceptability of a safety planning intervention (SPI) with follow-up telephone support to patients admitted to UK hospitals following a suicide attempt.
- We have employed a collaborative approach to support the development of the SPI by involving those with lived experience as well as academic and clinicians.
- A process evaluation is embedded within the study.
- We have employed a mixed methods approach (interviews, questionnaires, focus groups, medical records) and hospital admission data.
- In terms of generalisability, the study is conducted in four hospitals.

INTRODUCTION
 Suicide and self-harm are major public health problems. According to WHO, 954 000 people die by suicide each year across the globe,¹ with approximately 6000 people dying by suicide each year in the UK. Those with a history of self-harm are at a markedly increased risk of suicide:² indeed 10% of those who are treated in hospital will have self-harmed again within 1 year and 1 in 25 patients will die by suicide within 5 years.³ Despite the increased risk for those who have attempted suicide specifically, although there are challenges in determining suicidal intent and debate about definitions of self-harm,⁴ the majority of patients admitted to hospital following self-harm are cases of attempted suicide.⁵ Therefore, delivering effective treatment in hospital and by other means in the weeks following a

Check for updates

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BMJ

O'Connor RC, et al. BMJ Open 2019;9:e020591. doi:10.1136/bmjopen-2019-020591

- During the telephone calls, at least 81% of participants discussed the content of their Safety Plan and reflected on the relevance of any people and activities they had listed on their Safety Plan.
- 6 in 10 of the intervention group participants who completed a Safety Plan said they had used it at least once since baseline

O'Connor et al. (under revision)

Key Question: Important to determine the extent to which the Safety Plan – in isolation – is effective in interrupting the transition from suicidal thoughts to suicide attempts



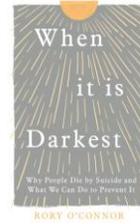
Safety Plan...

...Is

- A written, dynamic document
- A list of internal and social distractions & people to call for help
- Easy to read
- Collaborative
- To fill important gaps in care/ end of care

...Isn't

- A long-term tool for mood
- For someone at imminent risk of suicide
- For individuals with cognitive impairment (unless adapted)

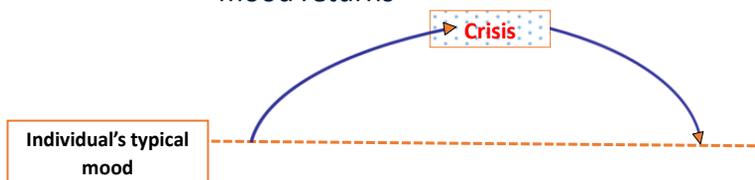


Safety Planning

Safety planning is a structured intervention co-created usually between a patient and a mental health professional.³ Its aim is to identify warning signs as well as techniques to help keep someone safe. Put simply, a safety plan is an ‘emergency plan’ designed to help prevent people from acting on their suicidal feelings. As illustrated in Figure 3 overleaf, a safety plan comprises six steps to be completed by someone, usually after a suicide crisis.⁴

Introducing the Safety Plan

1. Understand the individual’s story which led to the suicidal behaviour; usually spanning the last <24 hours
2. Usually thoughts of suicide last approximately 15 minutes (though frequency can fluctuate considerably)
3. The Safety Plan is a short-term intervention to distract from thoughts of suicide until the individual’s typical day-to-day mood returns





Step 1: Recognising Warning Signs

Warning signs which precede suicidal crisis are explored collaboratively between individual and the clinician and recorded in the person's own words.

Examples:

- **Thoughts:** "Things will never get better"
- **Feelings:** Hopelessness, entrapment, despair, numbness
- **Behaviours:** Reckless behaviour, isolating self from others, self-neglect



Step 2: Identifying Internal Coping Strategies

Internal coping strategies are collaboratively explored with participants, these are strategies an individual can do alone in order to cope with suicidal thoughts/urges. Collectively these would be things that are easily accessible regardless of location or time of day

Example coping strategies:

- Listening to favourite music
- Taking a relaxing bath
- Playing video games
- Watching TV
- Walking dog
- Exercising etc...

**Check for
barriers**



Step 3: Identify Distractors

These are people and social settings which can serve to distract individuals from their suicidal thoughts / urges.

Examples of distractors:

- Friends, family, acquaintances
- Social settings such as coffee shops, park, gym, places of worship, museums, cinema etc...

Places to avoid:

- Bars, nightclubs
- Environments where drugs are in use/available
- Gambling settings (betting shops, casinos)

**Check for
barriers**



Step 4: Contact Chosen Family/Friends for Support with Suicidal Thoughts/Urges

These are safe and trusted people the individual feels comfortable to disclose suicidal thoughts in the event the individual feels the other steps have not or will not keep them safe.

The individual is encouraged to:

- Rate likelihood of use and barriers to contacting people.
- Notify each contact that they are being included on their safety plan.

Ideally the individual would share a copy of their safety plan with these individuals, however sharing is not mandatory.

**Check for
barriers**



Step 5: Contacting Professionals for Help

This is a list of professionals and agencies that the individual can contact when they are reaching crisis point and feel the previous steps have not or would not reduce their suicidal thoughts and urges.

Examples of professionals & agencies:

- GP
- Mental Health team (if they are under the care of)
- Crisis Team number (accessed through Mental Health service)
- Telephone contact e.g., Samaritans or even emergency services

Check for barriers



Step 6: Making the environment safe

Following the risk assessment and Safety Plan Steps 1-5, a picture of the individual's needs as well as the means they have identified which pose a significant risk.

Work collaboratively to remove/restrict lethal means (e.g., large quantities of prescription drugs, other environmental triggers)

Important to make a plan in the moment on how the person is going to reduce access to lethal means



Safety Planning: the 5 R's

Rationale of the Safety Plan

Explain:

- How suicidal crises come and go and identify warning signs (linked to the individuals own experiences)
- How the Safety Plan helps to prevent acting on suicidal feelings
- How the Safety Plan is a series of steps- go to the next step if the current step is not helpful (though it is not linear!)

Safety Plan Pocket Card
<p>Rationale of the safety plan</p> <p>Explain:</p> <ul style="list-style-type: none"> • How suicidal crises come and go and identify warning signs (link to the individual's own experiences). • How the safety plan helps to prevent acting on suicidal feelings. • How the safety plan is a series of steps – go to the next step if the current step is not helpful (though it is not linear!).
<p>React to the crisis to decrease suicide risk</p> <p>Collaborate:</p> <ul style="list-style-type: none"> • To understand the reasons for each step. • Brainstorm ideas for each coping strategy or resource. • Be specific. • Improve feasibility/remove barriers.
<p>Remove access to lethal means</p> <p>Work together to develop an action plan to:</p> <ul style="list-style-type: none"> • Limit access to preferred method or plan for suicide. • Limit access to firearms.
<p>Review the safety plan to address concerns</p> <p>Obtain feedback to assess:</p> <ul style="list-style-type: none"> • Helpfulness and likelihood of using safety plan. • Where to keep the safety plan and when to use it. • Was the safety plan helpful for preventing you from acting on suicidal thoughts? If not, why not? • How can the safety plan be revised to be more helpful? <p>Gregory K. Brown and Barbara Stanley (2017)</p>



Safety Planning: the 5 R's

React to the crisis to decrease suicide risk

Collaborate:

- To understand the reasons for each step
- Brainstorm ideas for each coping strategy or resource
- Be specific
- Improve feasibility/ remove barriers

Safety Plan Pocket Card
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Safety Planning: the 5 R's

Remove access to lethal means

Work together to develop an action plan to:

- Limit access to preferred method of plan for suicide
- Limit access to firearms (especially in areas/ groups of high gun ownership)

Safety Plan Pocket Card
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Safety Planning: the 5 R's

Review the Safety Plan to address Concerns

Obtain feedback to assess:

- Helpfulness and likelihood of using Safety Plan
- Where to keep the Safety Plan and when to use it

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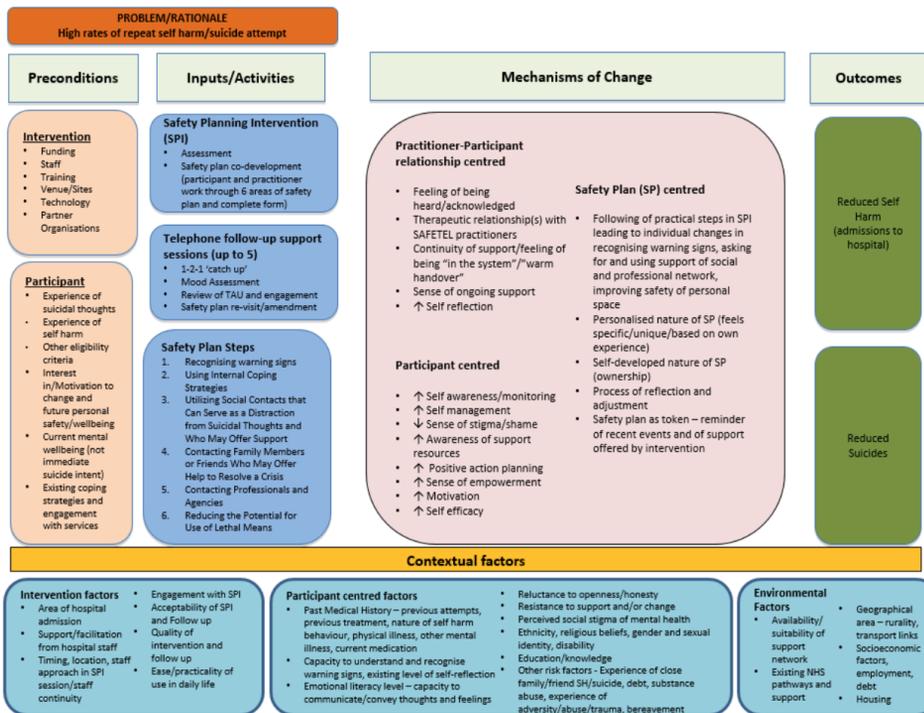
Safety Planning: the 5 R's

Revise at follow-up visits/ calls

Ask

- Do you remember the last Safety Plan you developed?
- Have you actually used your Safety Plan?
- Was the Safety Plan helpful for preventing you from acting on suicidal thoughts? If not, why not?
- How can the Safety Plan be revised to be more helpful?

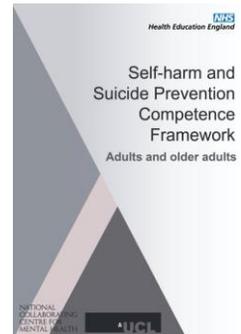
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Clinical and professional issues relevant to supporting people who have self-harmed and/or are suicidal

- Working collaboratively with the person
- Person-centred rather than protocol-centred
- Sharing information with families, carers and significant others
- Managing transitions between services
- Relationship between self-harm and suicide
- Risk assessment
- Postvention
- Conducting inquiries into deaths by suicide and/or serious incidents
- Reflective practice



**Take Home Messages
and Reflections**

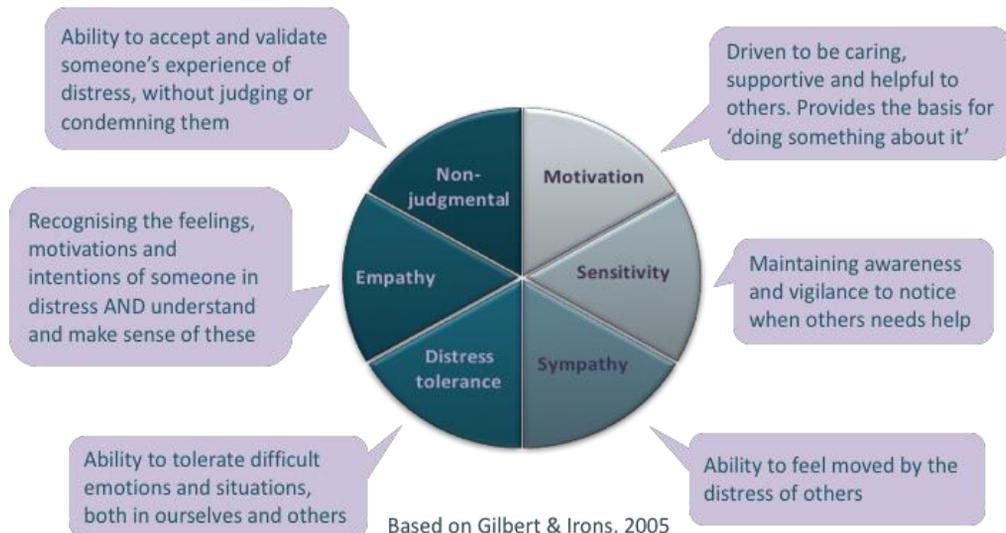


Tips about asking difficult questions around suicide

- Be non-judgmental
- Show compassion and try to be self-compassionate
- Validate how they are feeling
- Active listening – you don't have to solve their problems
- Build trust and collaborate
- Empower
- Common humanity



Compassion: A sensitivity to distress, together with the commitment, courage and wisdom to do something about it





Supporting people who are bereaved



Supporting people who are bereaved

- We are all unique, therefore someone's experience of grief is unique.
- There is no set pathway through bereavement.
- Try not to tell someone how they should feel and, if you are bereaved, try to be patient if someone does, as they mean well.
- The pain of suicide loss can be felt acutely by those seemingly distant in relations from the person who has died (e.g., friends and colleagues).
- Feelings of grief can be overwhelming as well as being intertwined with moments of calmness.

O'Connor (2021). *When It Is Darkest*



Supporting people who are bereaved

- In the weeks and months following the death, it can be hard to predict the intensity of emotions. The only thing that is predictable is the unpredictability of grief.
- Feelings may range from anger to shock, guilt, shame, rejection, fear, loneliness, entrapment and stigma.
- Grief can affect someone physically, and may include palpitations, dizziness and headaches.
- Mental health can be affected, with people who are bereaved reporting depression, anxiety, post-traumatic stress and suicidal thoughts.
- In among the pain, some people report a sense of acceptance as their loved one is no longer suffering and it was their choice to end their life.

O'Connor (2021). *When It Is Darkest*



The impact on mental health practitioners of the death of a patient by suicide: A systematic review

David M. Sandford^{1,2} | Olivia J. Kirtley³ | Richard Thwaites⁴ | Rory C. O'Connor²

54 studies were included in the final narrative synthesis.

Most common personal reactions in qualitative studies included guilt, shock, sadness, anger, and blame.

13 studies (total n = 717 practitioners) utilized the Impact of Event Scale, finding that between 12% and 53% of practitioners recorded clinically significant scores.

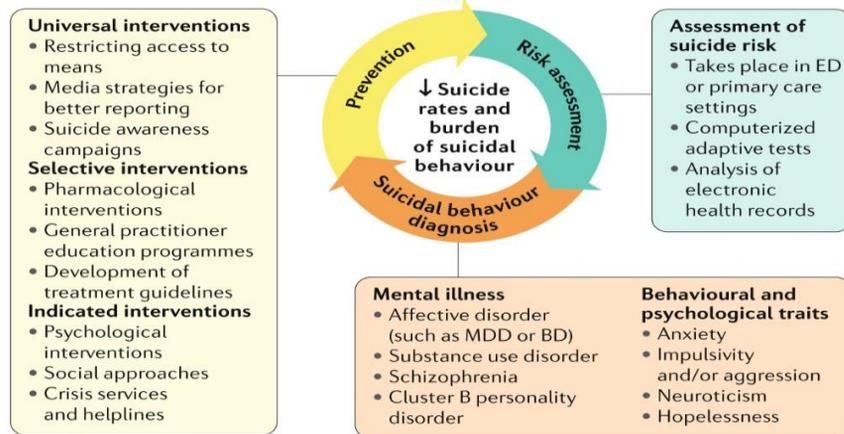
Key Practitioner Messages

- The death of a patient by suicide can have a considerable, and lasting, emotional impact on mental health professionals most commonly manifested as guilt, blame, shock, anger, sadness, anxiety, and grief.
- The impact is comparable with that of other traumatic life events, and therefore, active monitoring of practitioners for symptoms of PTSD is recommended.
- There were notable impacts on professional practice including self-doubt and being more cautious and defensive in the management of suicide risk.
- More should be done to prepare and support mental health professionals for the event that they may lose a patient through suicide.

Approaches for preventing suicide

2019

nature reviews
disease primers



Gustavo Turecki^{1*}, David A. Brent², David Gunnell^{3,4}, Rory C. O'Connor⁵,
Maria A. Oquendo⁶, Jane Pirkis⁷ and Barbara H. Stanley⁸

nature
REVIEWS
DISEASE
PRIMERS



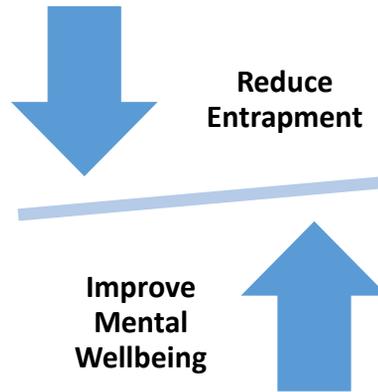
Take home Messages: Suicide prevention in workplaces & communities

- Suicide is more about wanting to end mental pain rather than desire to die
- Do communities/workplaces promote defeat/humiliation/shame/entrapment?
- Trauma-informed support in workplaces as well as in clinical services
- Joined up crisis support including co-creation of safety plan
- Tackling stigma and myths around suicide
- Suicide prevention interventions targeted at:
 - motivational phase (development of suicidal thoughts)
 - volitional phase (interrupting suicidal thoughts)
- Tailored support for those who are bereaved by suicide



Call to Action

To promote mental health, to tackle stigma & to reduce suicide we all should target *entrapment*

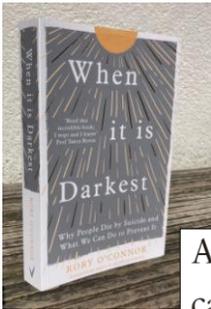


University of Glasgow

- Suicide is more about ending pain than ending one's life
 - Trapped by mental pain
- To prevent suicide takes more than treating mental health problems
 - Tackling inequality, stigma, discrimination, COVID-19
 - We can support each other
 - Compassion and collaboration are key
- The factors that lead to suicidal thoughts are different from those associated with suicide attempts/death
- Brief interventions such as safety planning are important in preventing suicidal behaviour in individuals who are at high risk

"I am terribly sorry for having chosen to take my own life, but I have just reached the point where I feel that I have no alternative...The feeling of being helpless and incapable is something that I am unable to cope with. I can't see any future other than a continual decline into a situation of helplessness and even worse unhappiness which is not something that I think I can bear...It is the unrelenting nature of the depression and the way that it robs me of everything..., and which despite my best efforts seems to be impossible for me to overcome that gives me no hope for the future..."

Charles Deluvio



Although we can never bring back those who we have lost, we can better support those left behind and, if we work together, we can save more lives. My ultimate hope is that, as a society, if we are kinder and more compassionate, both to ourselves and to those around us, then we will go some distance in protecting all of us from the devastation of suicide.