




Working with Suicide and Psychosis: From Mechanisms to a Psychological Intervention

Professor Patricia Gooding

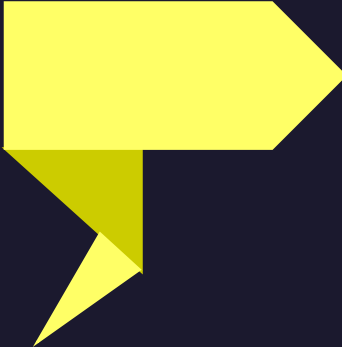
What I'd like to share in this talk ...




1. Psychological
Models of Suicide



2. The CARMS
Project

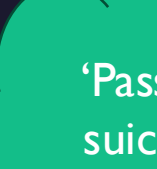


3. Psychological
Resilience to Suicide



4. Clinical
Implications

What do we mean by 'suicidal experiences'?



**‘Passive
suicidal
thoughts’**



Feelings




Images



Desires



Urges




‘Active suicidal thoughts’



Compulsions



Attempts



Plans



Intentions

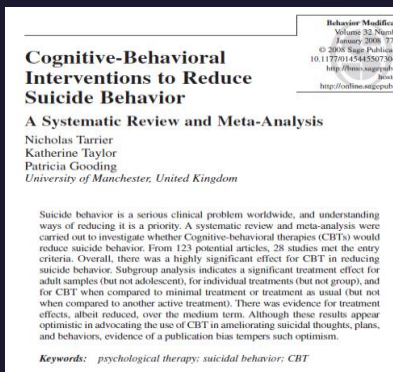
Grounding suicide-focused psychological therapies



Suicide-focused therapies
must be built on.....

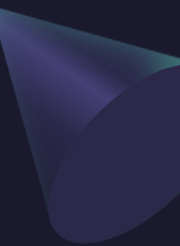


.....an evidence-based model of
suicidal experiences





Psychological models of suicide



Recent Transdiagnostic Psychological Models of Suicide

The Cry of Pain (CoP) model of suicide (Williams, 1997)



The Interpersonal theory of Suicide (IPTS) (Van Orden et al., 2010)



The Three-Step Model of suicide (3ST) (Klonsky & May, 2015)

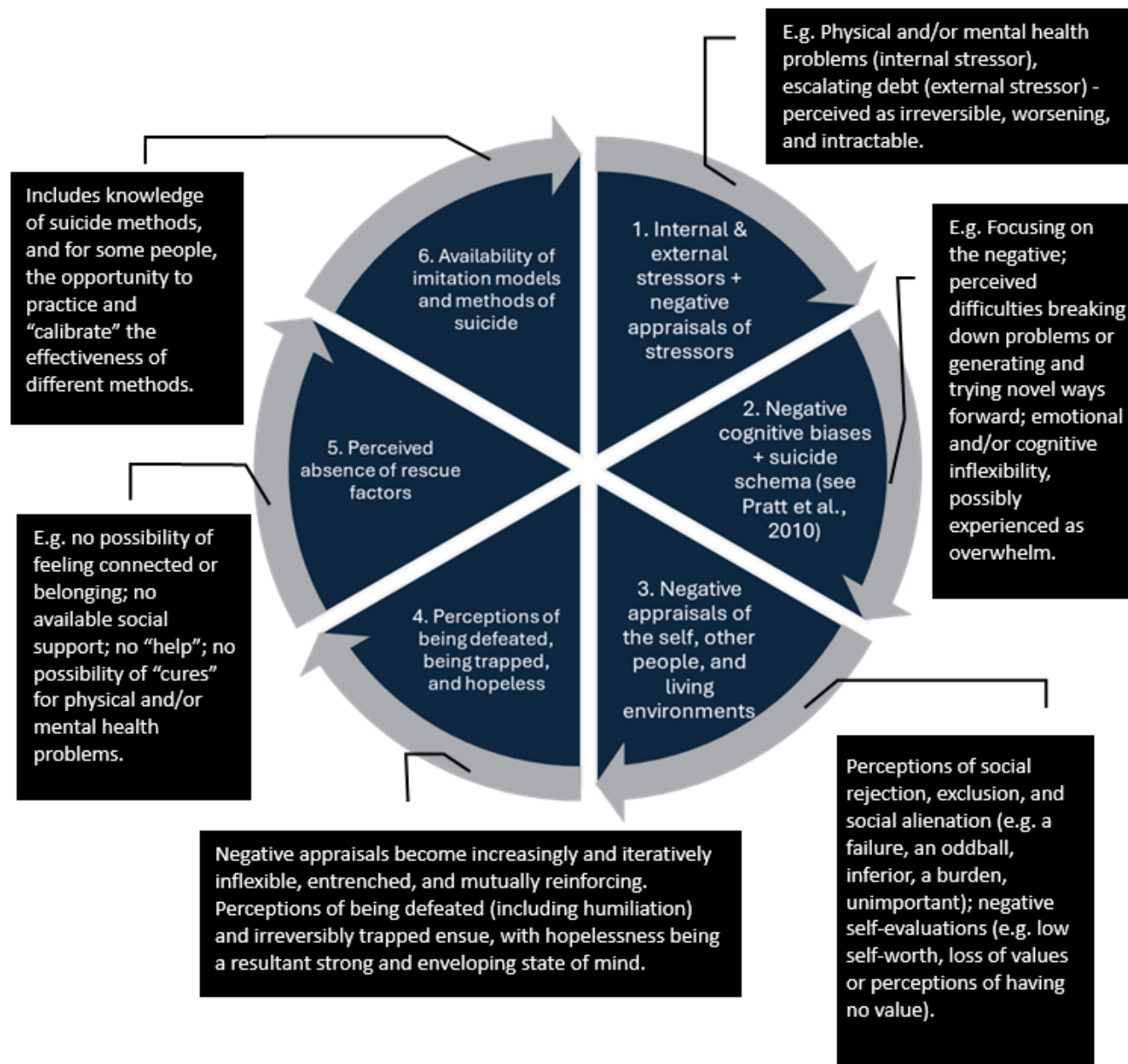


The Integrated Motivational-Volitional model of suicide (IMV) (O'Connor & Kirtley, 2018)



The Schematic Appraisals Model of Suicide (SAMS) (Johnson et al., 2008)



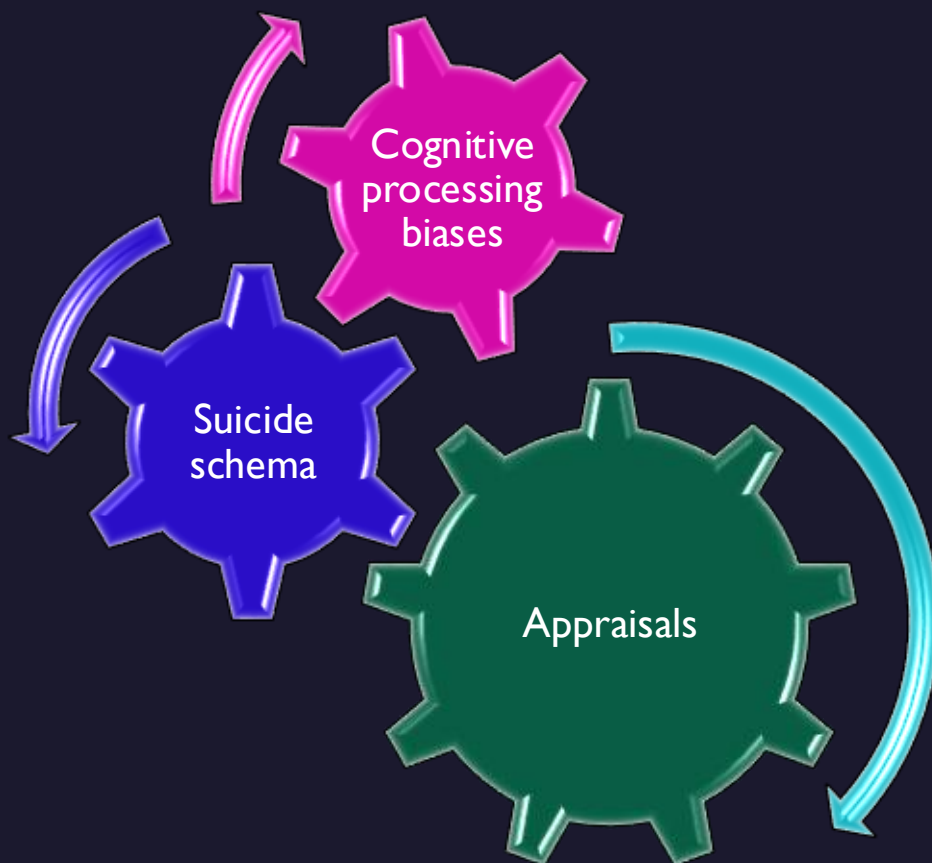
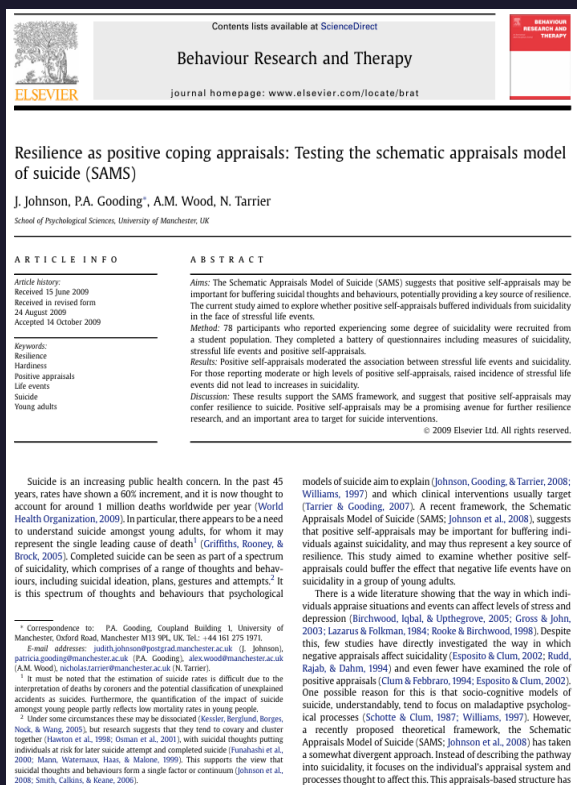


The Cry of Pain Model of Suicide

Mark Williams and colleagues, 1997

Schematic Appraisals Model of Suicide (SAMS)

(Johnson, Gooding & Tarrier, 2008)



Resilience as positive coping appraisals: Testing the schematic appraisals model of suicide (SAMS)

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| ARTICLE INFO | ABSTRACT |
|--|---|
| <p>Article history: Received 13 June 2009 Received in revised form 24 August 2009 Accepted 14 October 2009</p> <p>Keywords: Resilience Hardiness Positive appraisals Life events Suicide Young adults</p> | <p>Aims: The Schematic Appraisals Model of Suicide (SAMS) suggests that positive self-appraisals may be important for buffering suicidal thoughts and behaviours, potentially providing a key source of resilience. The current study aimed to explore whether positive self-appraisals buffered individuals from suicidality in the face of stressful life events.</p> <p>Method: 78 participants who reported experiencing some degree of suicidality were recruited from a student population. They completed a battery of questionnaires including measures of suicidality, stressful life events and positive self-appraisals.</p> <p>Results: Positive self-appraisals moderated the association between stressful life events and suicidality. For those reporting moderate or high levels of positive self-appraisals, raised incidence of stressful life events did not lead to increases in suicidality.</p> <p>Discussion: These results support the SAMS framework, and suggest that positive self-appraisals may confer resilience to suicide. Positive self-appraisals may be a promising avenue for further resilience research, and an important area to target for suicide interventions.</p> <p>© 2009 Elsevier Ltd. All rights reserved.</p> |

Suicide is an increasing public health concern. In the past 45 years, rates have shown a 60% increment, and it is now thought to account for around 1 million deaths worldwide per year (World Health Organization, 2009). In particular, there appears to be a need to understand suicide amongst young adults, for whom it may represent the single leading cause of death¹ (Griffiths, Rooney, & Brock, 2005). Completed suicide can be seen as part of a spectrum of suicidality, which comprises of a range of thoughts and behaviours, including suicidal ideation, plans, gestures and attempts.² It is this spectrum of thoughts and behaviours that psychological

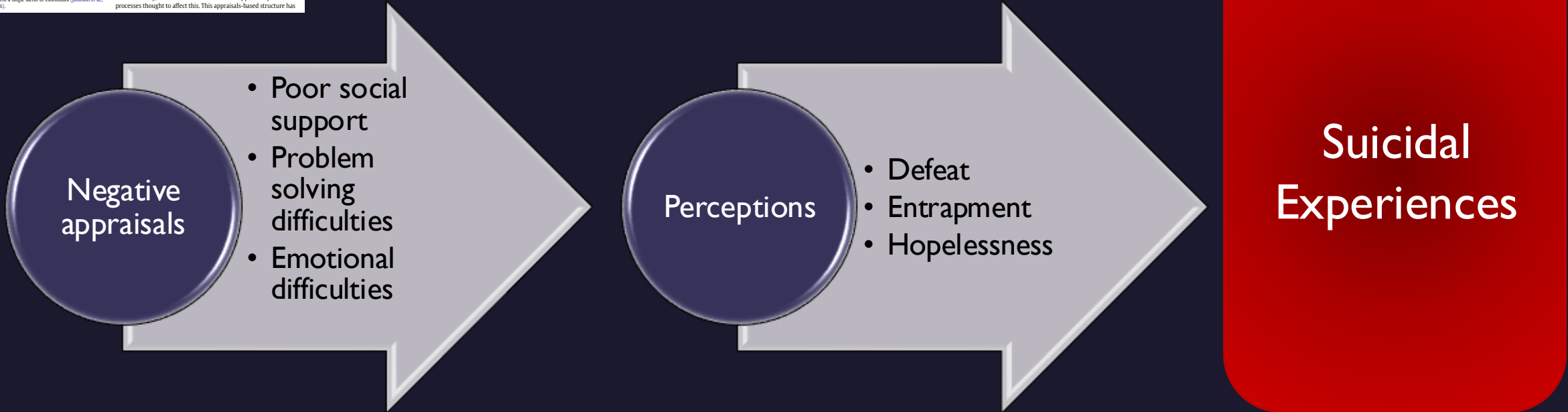
models of suicide aim to explain (Johnson, Gooding, & Tarrier, 2008; Williams, 1997) and which clinical interventions usually target (Tarrier & Gooding, 2007). A recent framework, the Schematic Appraisals Model of Suicide (SAMS; Johnson et al., 2008), suggests that positive self-appraisals may be important for buffering individuals against suicidality, and may thus represent a key source of resilience. This study aimed to examine whether positive self-appraisals could buffer the effect that negative life events have on suicidality in a group of young adults.

There is a wide literature showing that the way in which individuals appraise situations and events can affect levels of stress and depression (Birchwood, Iqbal, & Upthegrove, 2005; Gross & John, 2003; Lazarus & Folkman, 1984; Rooke & Birchwood, 1998). Despite this, few studies have directly investigated the way in which negative appraisals affect suicidality (Esposito & Clum, 2002; Rudd, Rajab, & Dahm, 1994) and even fewer have examined the role of positive appraisals (Clum & Febraro, 1994; Esposito & Clum, 2002). One possible reason for this is that socio-cognitive models of suicide, understandably, tend to focus on maladaptive psychological processes (Schotte & Clum, 1987; Williams, 1997). However, a recently proposed theoretical framework, the Schematic Appraisals Model of Suicide (SAMS; Johnson et al., 2008) has taken a somewhat divergent approach. Instead of describing the pathway into suicidality, it focuses on the individual's appraisal system and processes thought to affect this. This appraisals-based structure has

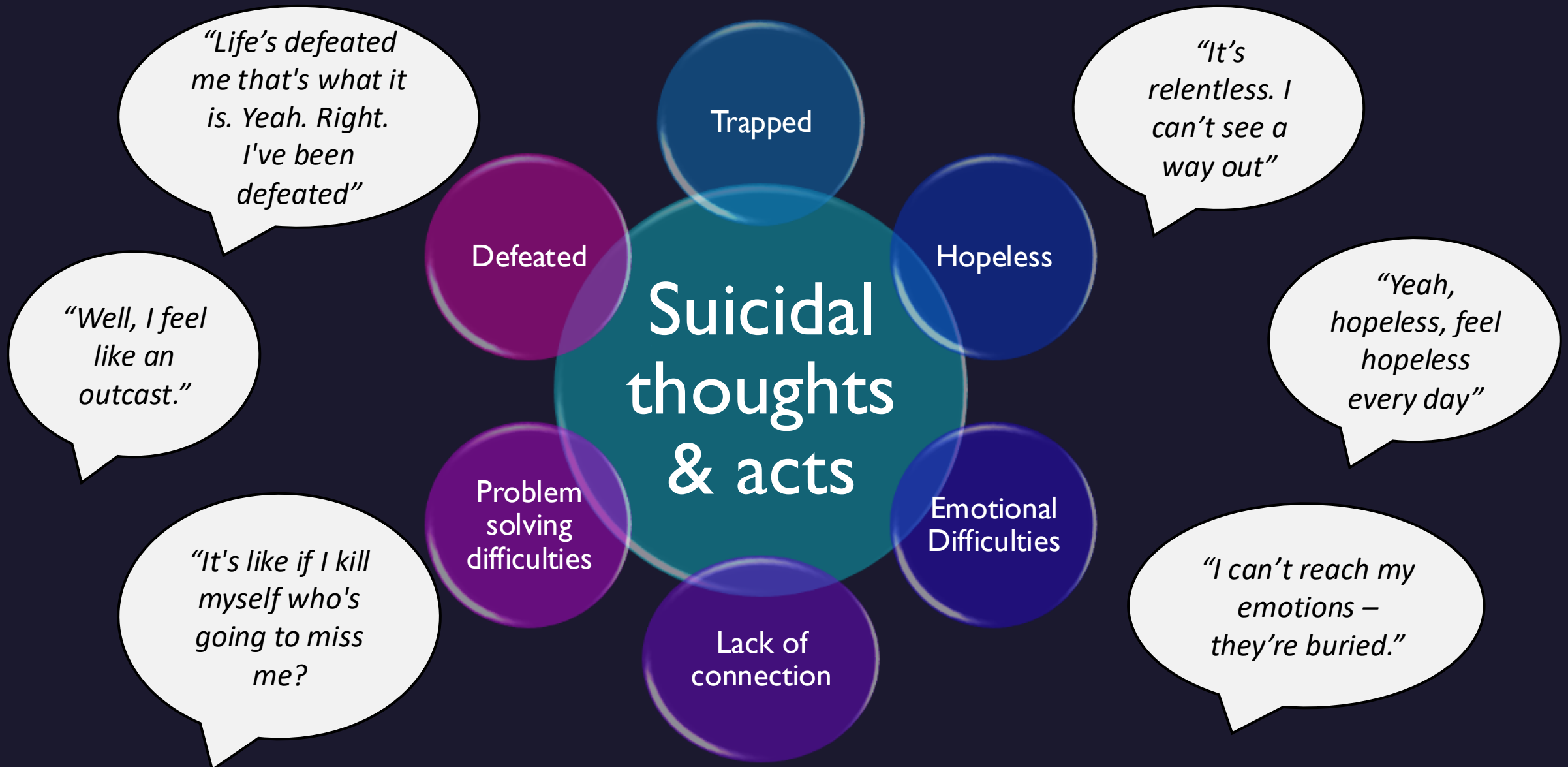
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E-mail addresses: judith.johnson@postgrad.manchester.ac.uk (J. Johnson), peter.a.gooding@manchester.ac.uk (P.A. Gooding), alice.wood@manchester.ac.uk (A.M. Wood), nicholas.tarrier@manchester.ac.uk (N. Tarrier).
¹ It must be noted that the estimation of suicide rates is difficult due to the interpretation of deaths by coroners and the potential classification of unexplained accidents as suicides. Furthermore, the quantification of the impact of suicide amongst young people partly reflects low mortality rates in young people.
² Under some circumstances these may be dissociated (Kessler, Berglund, Borges, Nock, & Wang, 2005), but research suggests that they tend to covary and cluster together (Hawton et al., 1988; Orona et al., 2001) with suicidal thoughts putting individuals at risk for later suicide attempt and completed suicide (Funahashi et al., 2000; Mann, Waterman, Haas, & Malone, 1999). This supports the view that suicidal thoughts and behaviours form a single factor or continuum (Johnson et al., 2008; Smith, Callans, & Keane, 2006).

The Schematic Appraisals Model of Suicide: SAMS

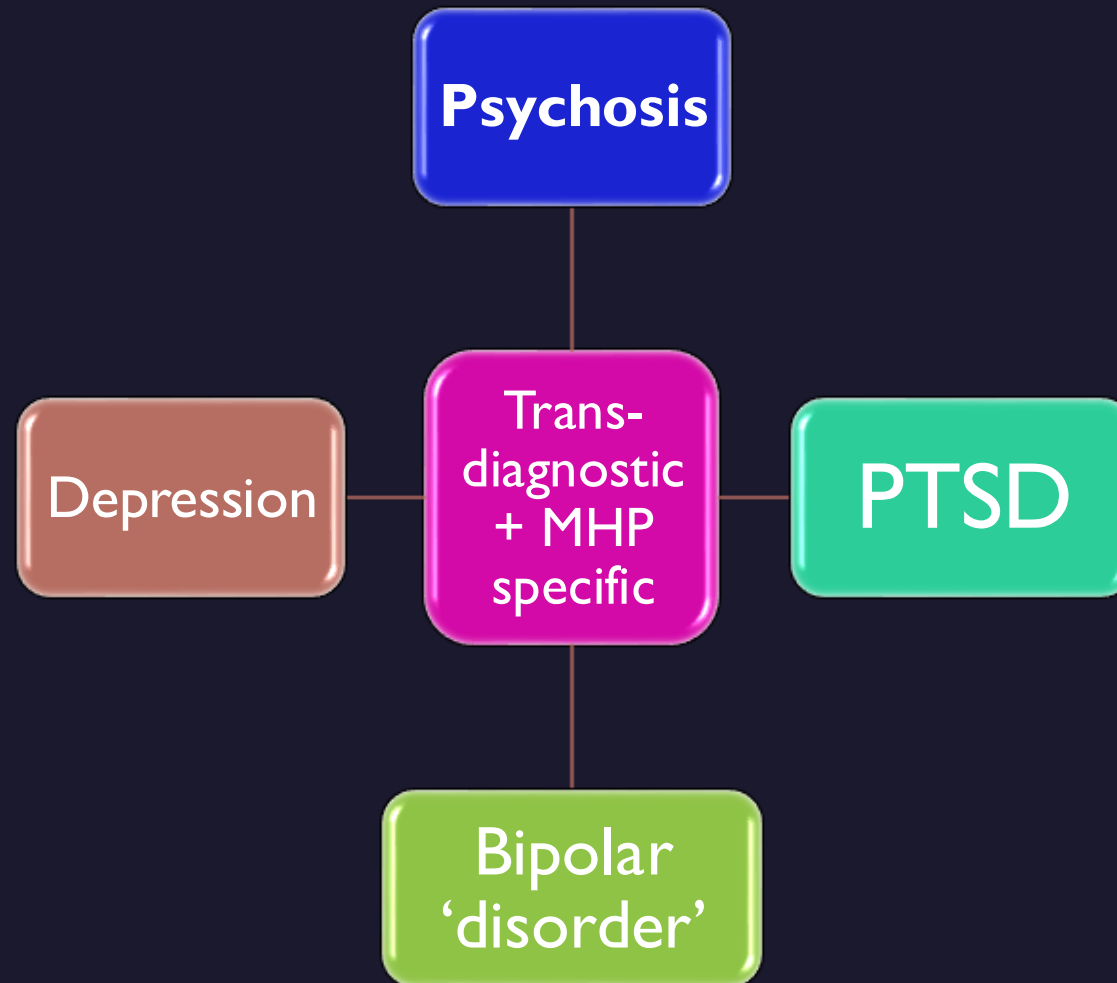
(Johnson, Gooding & Tarrier, 2008)



The Schematic Appraisals Model of Suicide: Appraisals System



Evidence for the SAMS



Severe mental health problems: rates of death by suicide 2012-2022 (UK) in people with mental health problems

- 18,670 'patients' died by suicide
- 1,697 deaths per year
- 26% of all suicide deaths



Prof. Nav Kapur

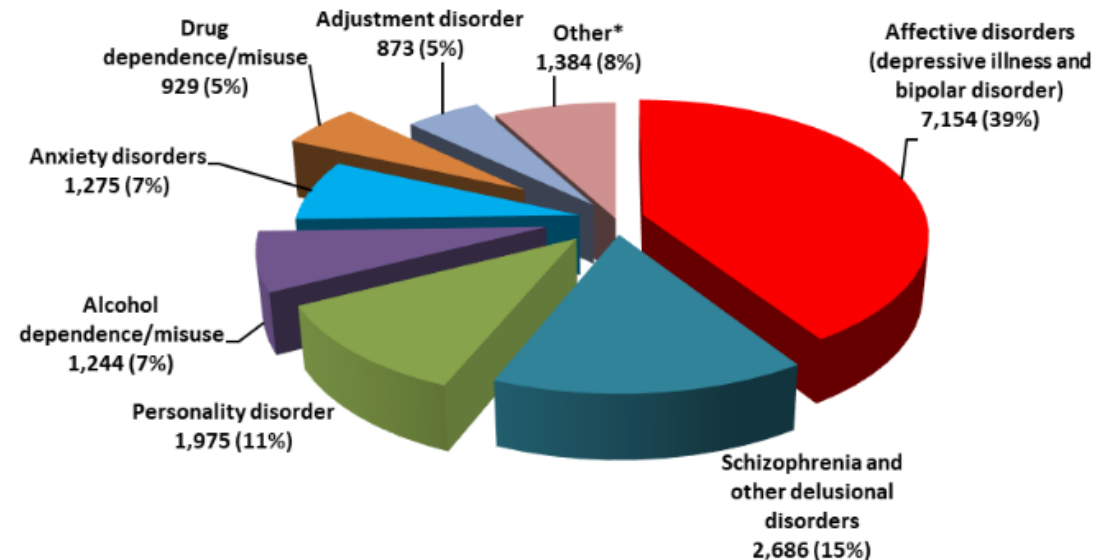
Confidential Inquiry

into Suicide and Safety
in Mental Health

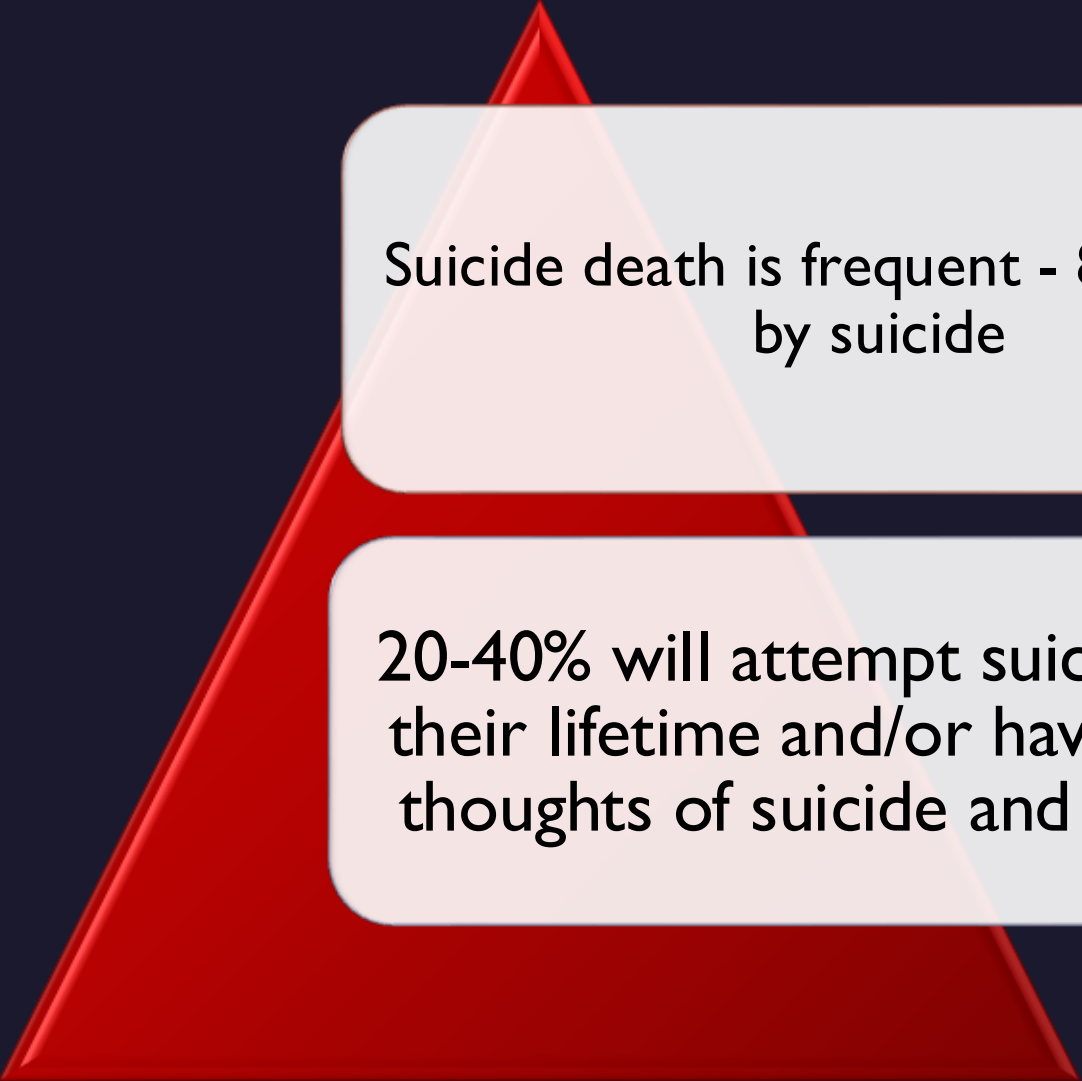
Annual Report 2025:

UK patient and general population data 2012-2022*

Primary diagnoses of mental health patients who died by suicide (UK and Jersey, 2012-2022)



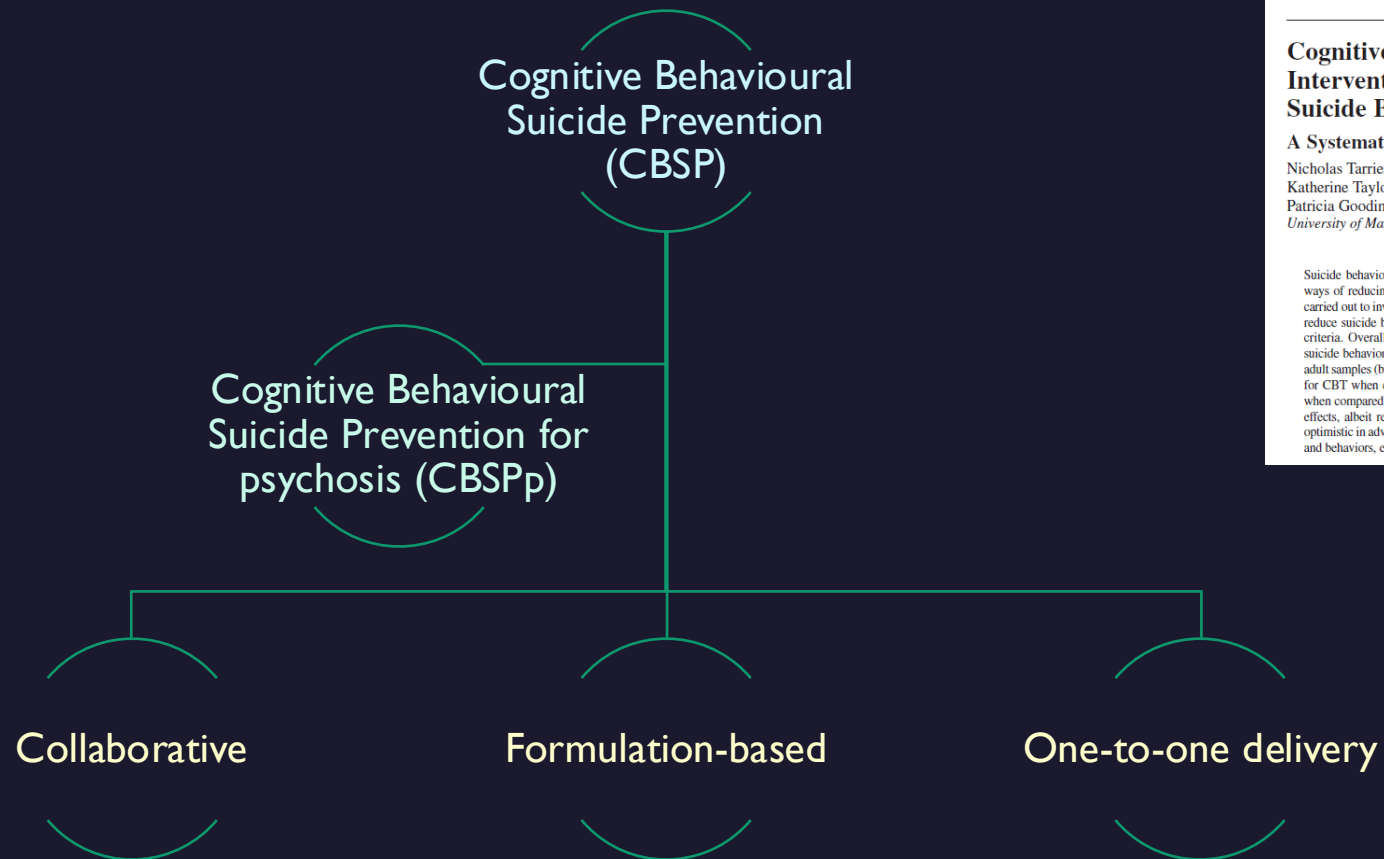
Suicide attempts and deaths in people with non-affective psychosis



Suicide death is frequent - 8%-10% die by suicide

20-40% will attempt suicide during their lifetime and/or have ongoing thoughts of suicide and self harm

A suicide-focused psychological 'talking' therapy



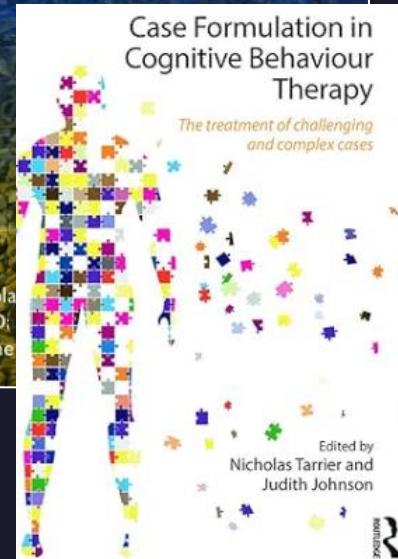
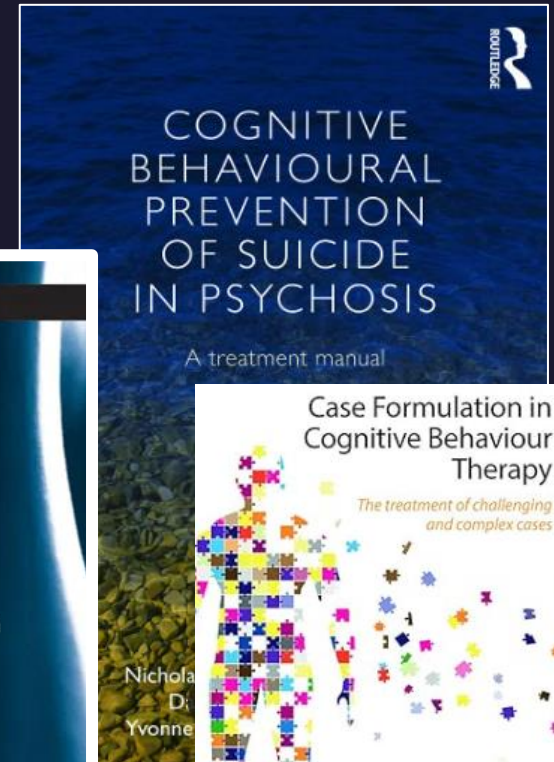
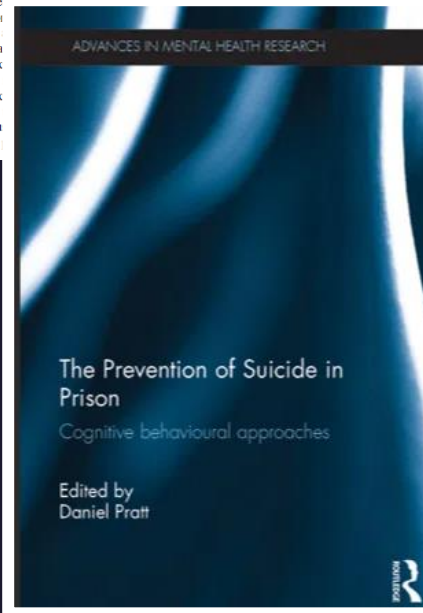
Cognitive-Behavioral Interventions to Reduce Suicide Behavior

A Systematic Review and Meta-Analysis

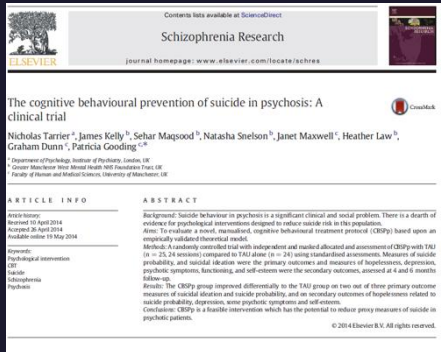
Nicholas Tarrier
Katherine Taylor
Patricia Gooding
University of Manchester, United Kingdom

Suicide behavior is a serious clinical problem worldwide, and understanding ways of reducing it is a priority. A systematic review and meta-analysis were carried out to investigate ways to reduce suicide behavior. From criteria. Overall, there was suicide behavior. Subgroup a adult samples (but not adolees for CBT when compared to when compared to another as effects, albeit reduced, over optimistic in advocating the u and behaviors, evidence of a

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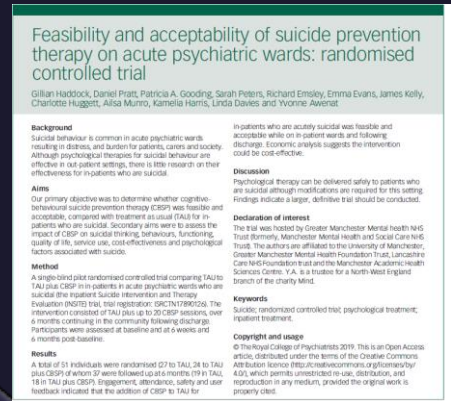
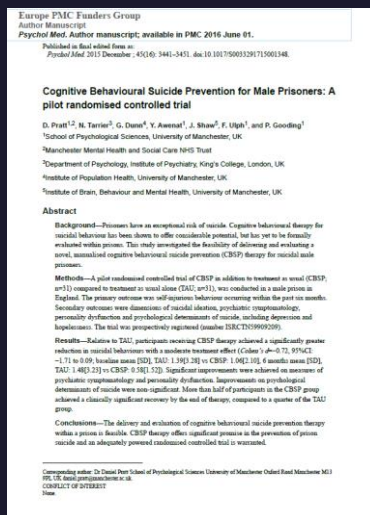
Key pilot work with our suicide-focused therapy



People with psychosis in the community

People incarcerated in a prison for men

People on psychiatric inpatient wards



The CARMS project: Cognitive AppRoaches to coMbatting suicidality



Efficacy
tested with an
RCT



Mechanisms
tested with
Mediation
models

Qualitative
work
streams



CARMS

CARMS:Aims

Experts-By-Experience involved in every stage of the CARMS project
Self-named “The CARMers”

24 sessions of therapy
Offered, i.e., 6 months

Test efficacy of a
suicide-focused
therapy

6 months -
CRITICAL

12 months

Test underlying
mechanisms

Pathways to
suicidal
experiences

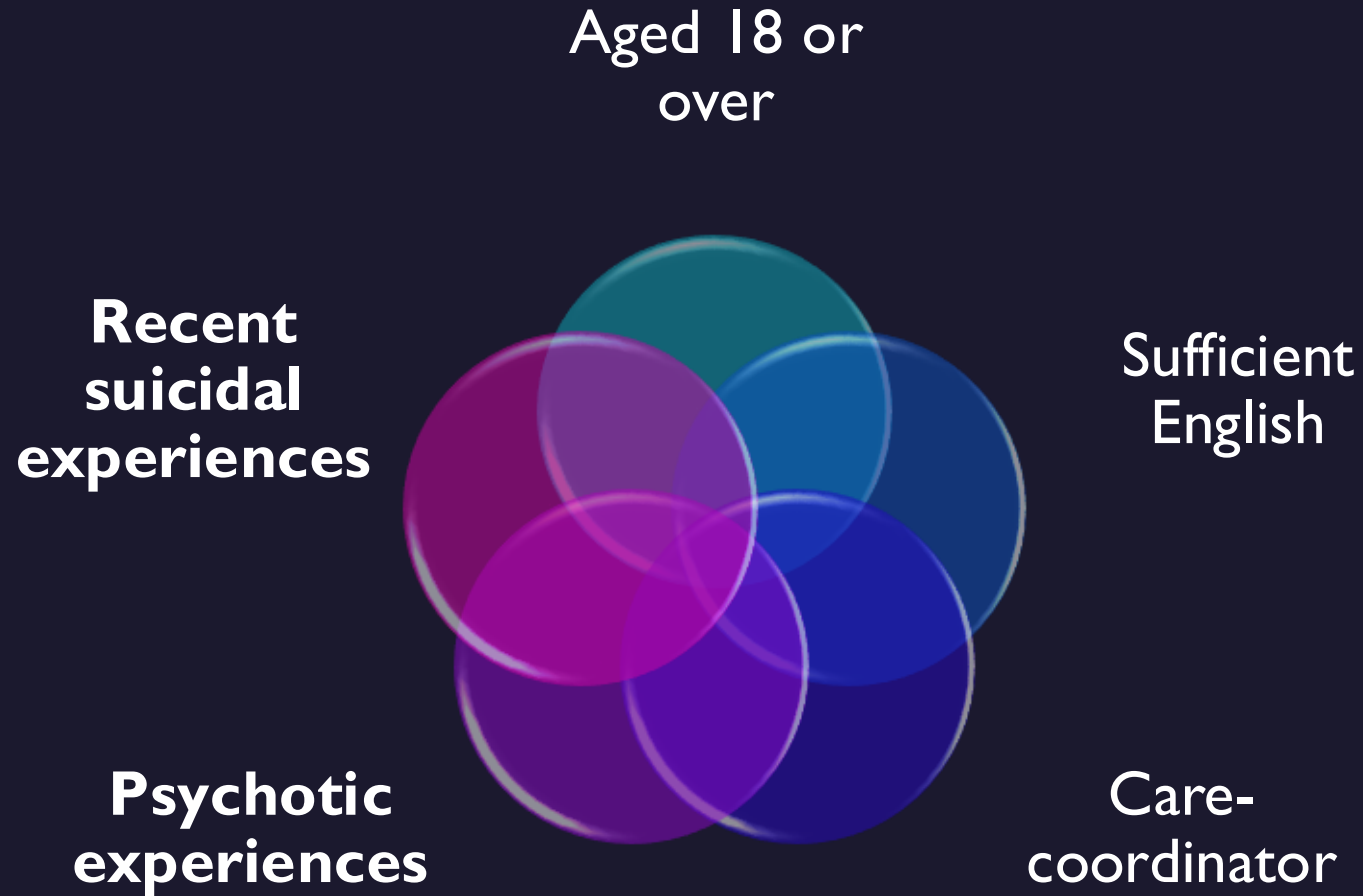
Treatment
effect

Determine
Implementability

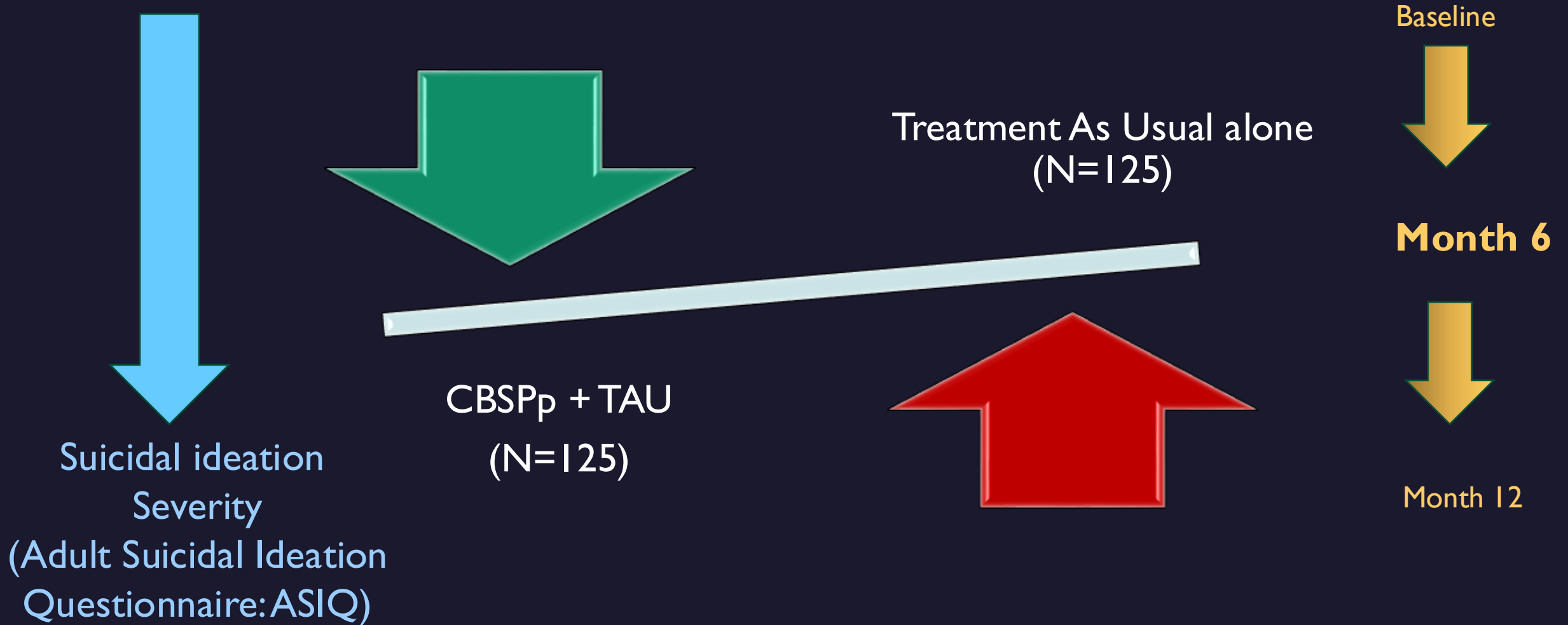
Acceptability

Feasibility

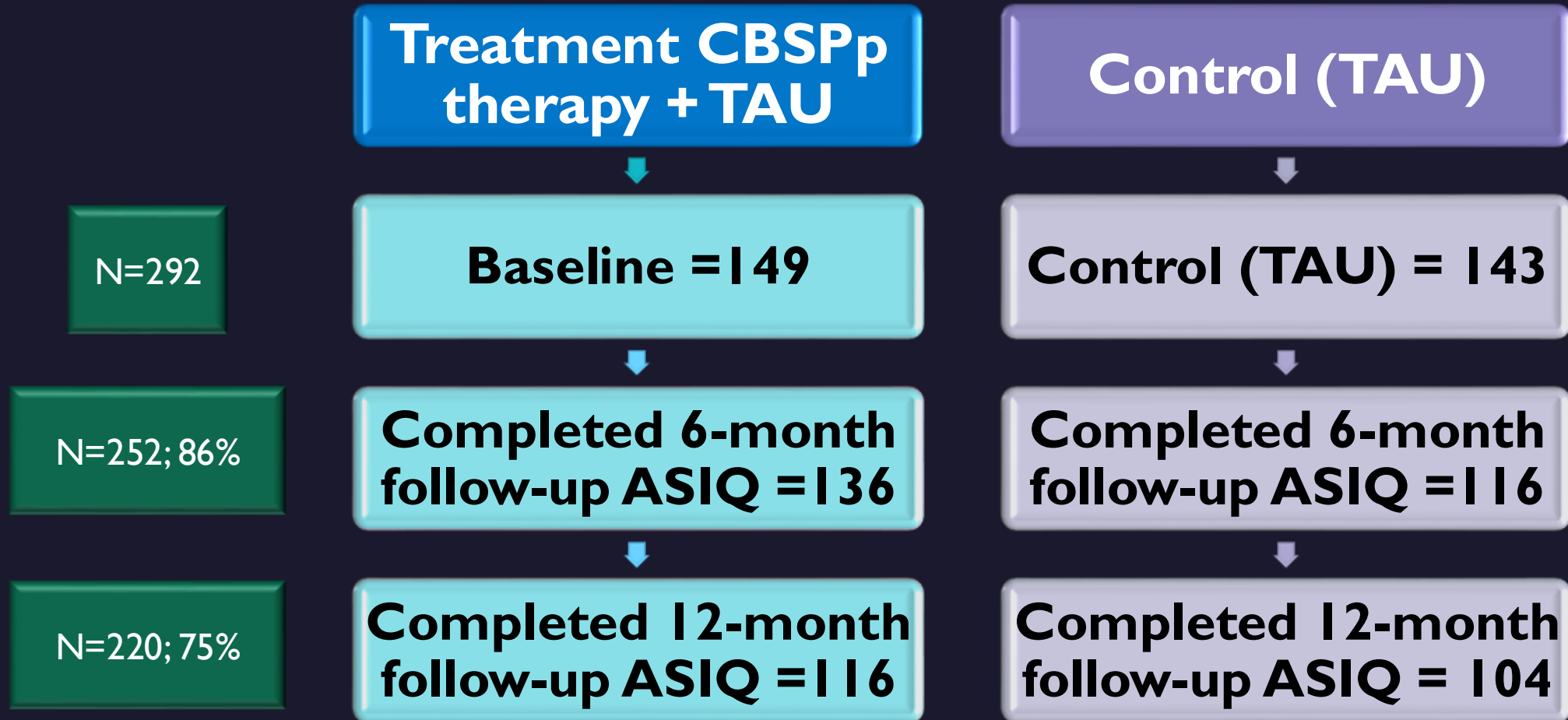
Participants in the CARMS project



CARMS RCT design



CARMS Participant flow



The effects of living with delusions and auditory hallucinations

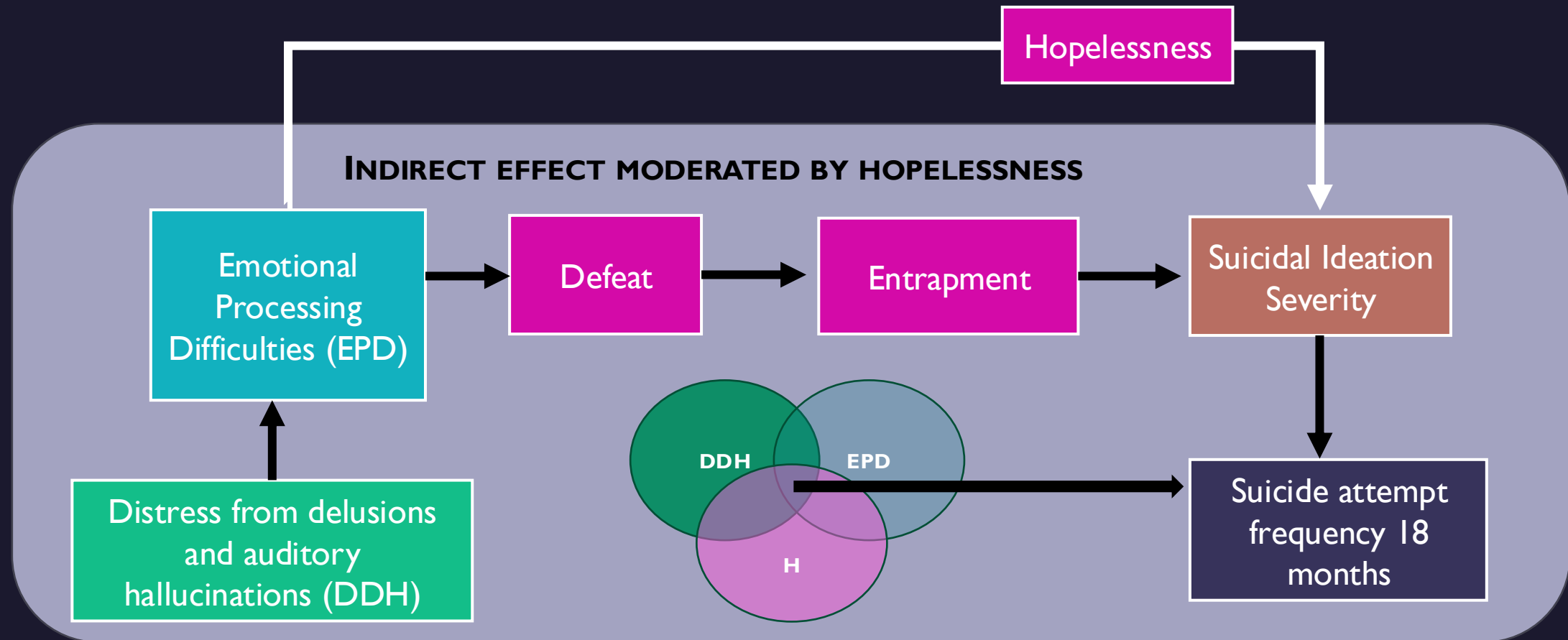
“Everybody was against me, I do get feelings that everybody is against me, the whole world hates me.”

“I had this idea that there was cameras and microphones everywhere, where I spent a year thinking people were out to get me, and that people were wanting to hurt me...”

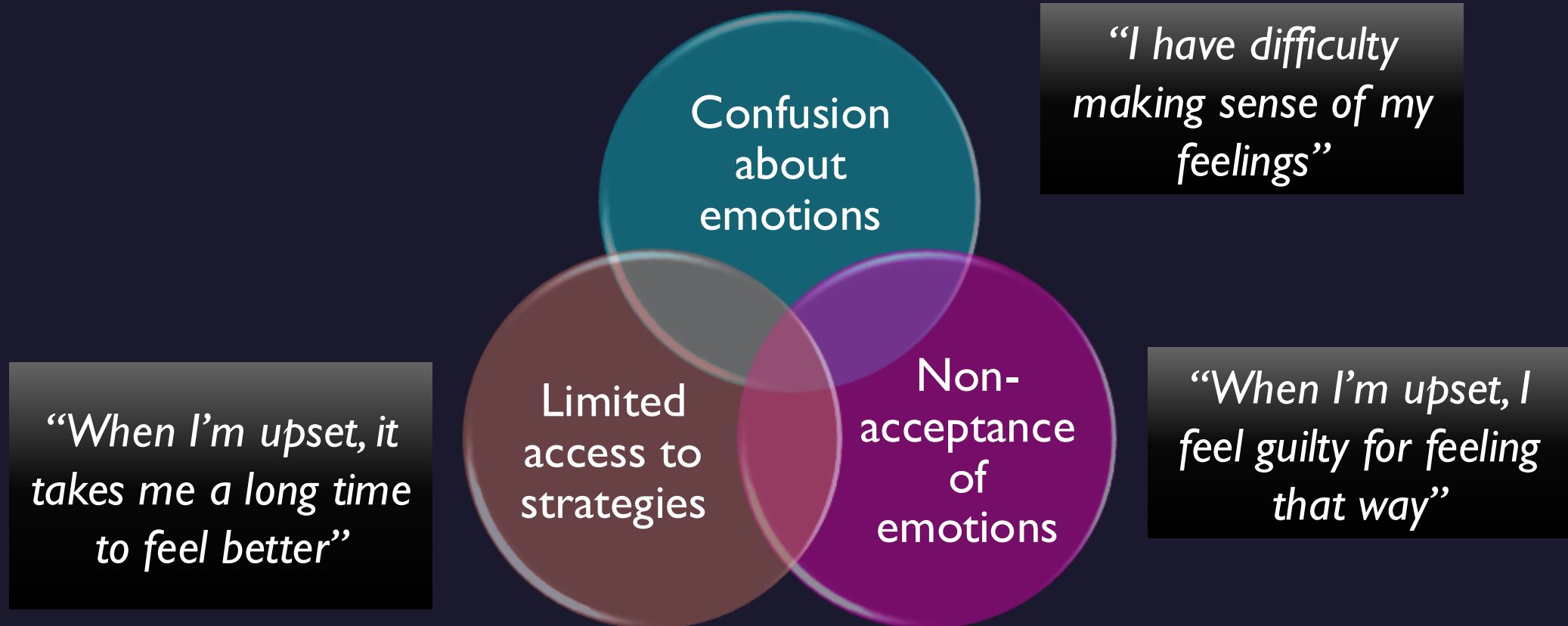
“It’s all... they [voices] feel so real”

“but if you can imagine taking your brain out and putting in a little person and then they shout. I’ve experienced that. I don’t like that because that’s very invasive, I don’t know, I’ve got no control over it”

Pathways to suicidal thoughts and attempts over time involving delusions and auditory hallucinations



Which aspects of emotional processing difficulties are important?



So, what did we find from the RCT?

Underlying mechanisms and efficacy of a suicide-focused psychological intervention for psychosis, the Cognitive Approaches to Combatting Suicidality (CARMS): a multicentre, assessor-masked, randomised controlled trial in the UK

Patricia Gooding*, Daniel Pratt, Danielle Edwards, Yvonne Awenat, Richard J Drake, Richard Emsley, Steven Jones, Navneet Kapur, Fiona Lobban, Sarah Peters, Bradley Boardman, Kamelia Harris, Charlotte Huggett, Gillian Haddock*

Summary

Background There is a need for theoretically grounded and testable suicide-focused psychological therapies, especially in people with severe mental health problems, specifically non-affective psychosis. We aimed to test both the underlying mechanisms and efficacy of a suicide-focused therapy, cognitive behavioural suicide prevention for psychosis (CBSPp).

Methods We did a multicentre, assessor-masked, randomised controlled trial conducted at four UK National Health Service (NHS) sites. Participants were eligible for enrolment if they were 18 years or older; met ICD-10 criteria for non-affective psychosis (F20–F29); had self-reported suicidal experiences in the 3 months before recruitment; were under the care of an NHS mental health services team; were not receiving a psychological therapy as part of a similar trial; had sufficient competency in the English language not to need an interpreter to participate; and were able to give informed consent. After screening for eligibility and completion of baseline assessments, participants were randomly allocated in a 1:1 ratio to either the treatment as usual group (control) or CBSPp therapy plus standard treatment group (treatment), with stratification by use of antidepressant medication and NHS site. Randomisation took place using an online Sealed Envelope randomisation procedure conducted and overseen by the Manchester Academic Health Sciences Centre Clinical Trials Unit (MCTU). This system was accessed only by specially allocated staff (eg, the CARMS Trial Manager or the MCTU Trial manager). When the system randomly allocated a participant, an unmasked email confirmation was sent to the unmasked coprincipal investigator and the CARMS Trial Manager (also unmasked). Assessors, the trial statistician, and one coprincipal investigator were masked to allocation group. Participants were informed of their randomised allocation group by an unmasked CARMS staff member. Experts-by-experience were involved in all stages of the research. For those in the treatment group, approximately 24 one-to-one therapy sessions were offered, usually weekly, for around 50 min per session. Assessments were conducted at baseline, month 6, and month 12. The primary outcome was suicide ideation severity measured by the 25-item Adult Suicide Ideation Questionnaire (ASIQ), assessed at month 6 relative to baseline. Outcome analyses used mixed models in the intention-to-treat population. Planned mediation indirect linear regression models examined appraisals of poor social support, emotional difficulties, interpersonal problem-solving difficulties, defeat, entrapment, and hopelessness as mediators at 6 months with allocation condition (treatment vs control) as the predictor variable and suicidal ideation severity (ASIQ) at 6 months as the outcome variable, whilst controlling for baseline levels of the mediator and outcome variables. The trial was registered before recruitment at ClinicalTrials.gov (NCT03114917) and ISRCTN (ISRCTN17776666) and is complete.

Findings We recruited participants from four NHS sites from June 21, 2017, to Nov 25, 2020, with the final 12-month assessment completed on Jan 10, 2022. 479 participants were screened for eligibility, and of these 329 (69%) provided consent and were enrolled. After 69 participants were lost to follow-up, 292 participants were randomly allocated to the treatment and control groups (149 [51%] and 143 [49%], respectively). At baseline, 161 (55%) participants were male and 130 (45%) were female; one participant (<1%) in the treatment group was missing gender data. Mean age was 35·1 years (SD 13·2; range 18–69), and 247 (85%) were White or Caucasian. Severity of suicidal ideation was not statistically different between the treatment (n=136) and the control groups (n=116) at 6 months ($p=0·07$; Cohen's $d = -0·20$ [95% CI $-0·42$ to $0·02$]). A significant indirect mediation effect ($-2·85$, $-7·00$ to $-0·23$) showed that therapy strengthened social support appraisals which, in turn, reduced suicidal ideation severity at 6 months more in the treatment group than in the control group. Suicide attempts were the most frequent severe adverse event (132 attempts in 26 participants in the treatment group vs 91 attempts in 30 participants in the control group). There were four deaths in the CARMS study, none of which were by suicide or considered related to treatment.

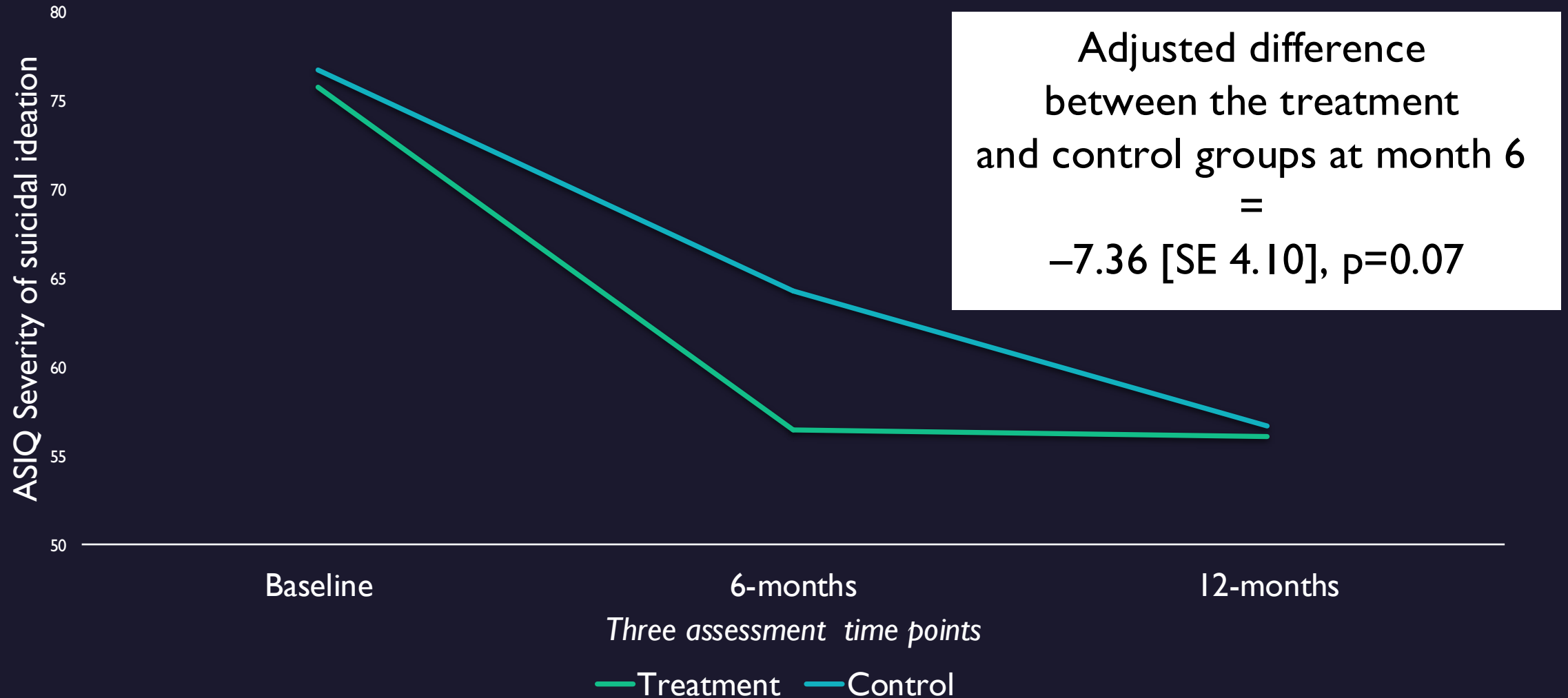


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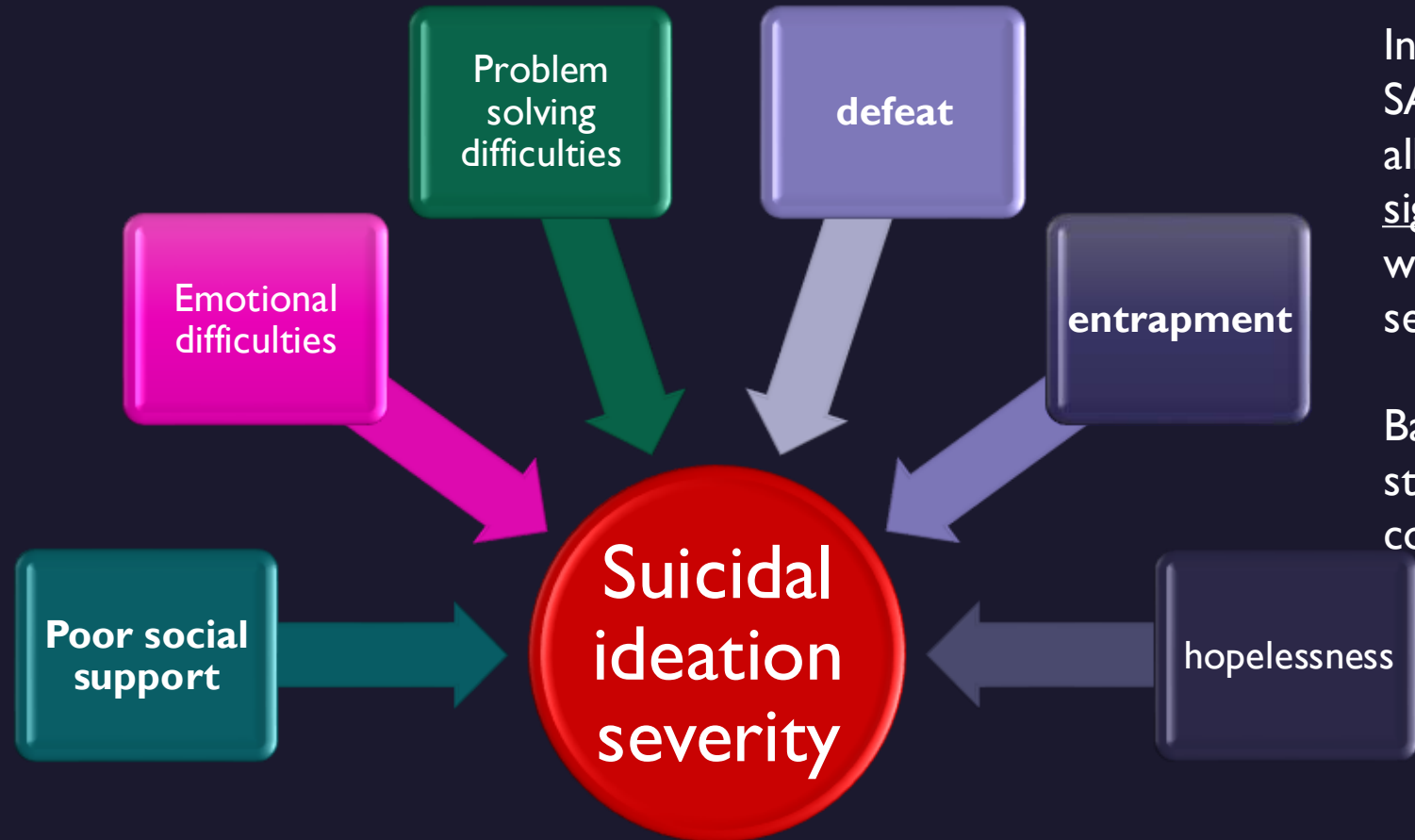
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[https://doi.org/10.1016/S2225-0366\(24\)00441-3](https://doi.org/10.1016/S2225-0366(24)00441-3)

*Coprincipal investigators
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CARMS: main treatment effect



Mechanism measures: appraisals at 6 months

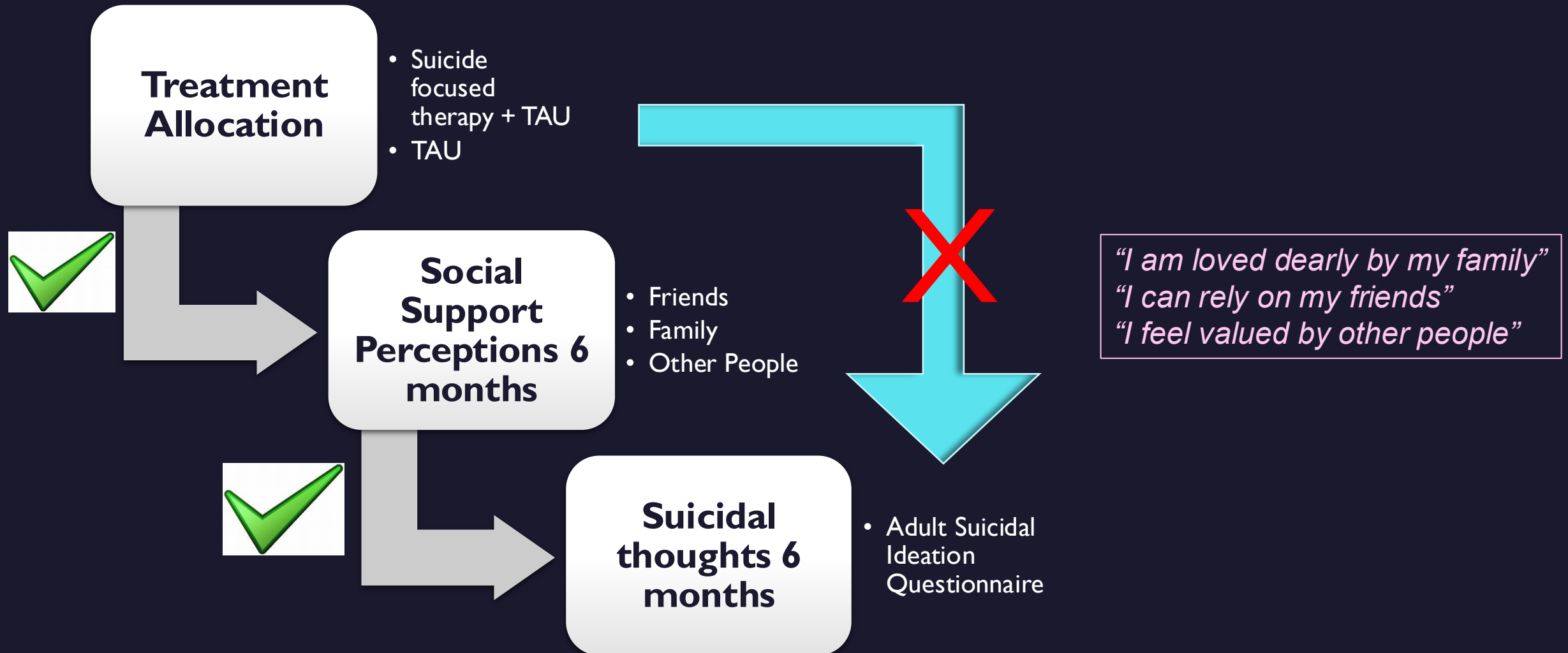


In accord with the SAMS, at month 6, all mechanism measures significantly associated with suicide ideation severity.

Baseline scores statistically controlled

Social support as a mediator:

Indirect effect significant, $p=.048$



Does the therapeutic alliance have an effect?

- **TOTAL** ✓
- Friends ✗
- Family ✗
- In general ✓

**Social Support Perceptions
Difference measure**

Baseline minus 6 months

“I am not important to others”
“I feel like I belong”

Working Alliance at end of therapy

- Client ✗
- Therapist ✓

**Suicidal thought severity
Difference Measure**

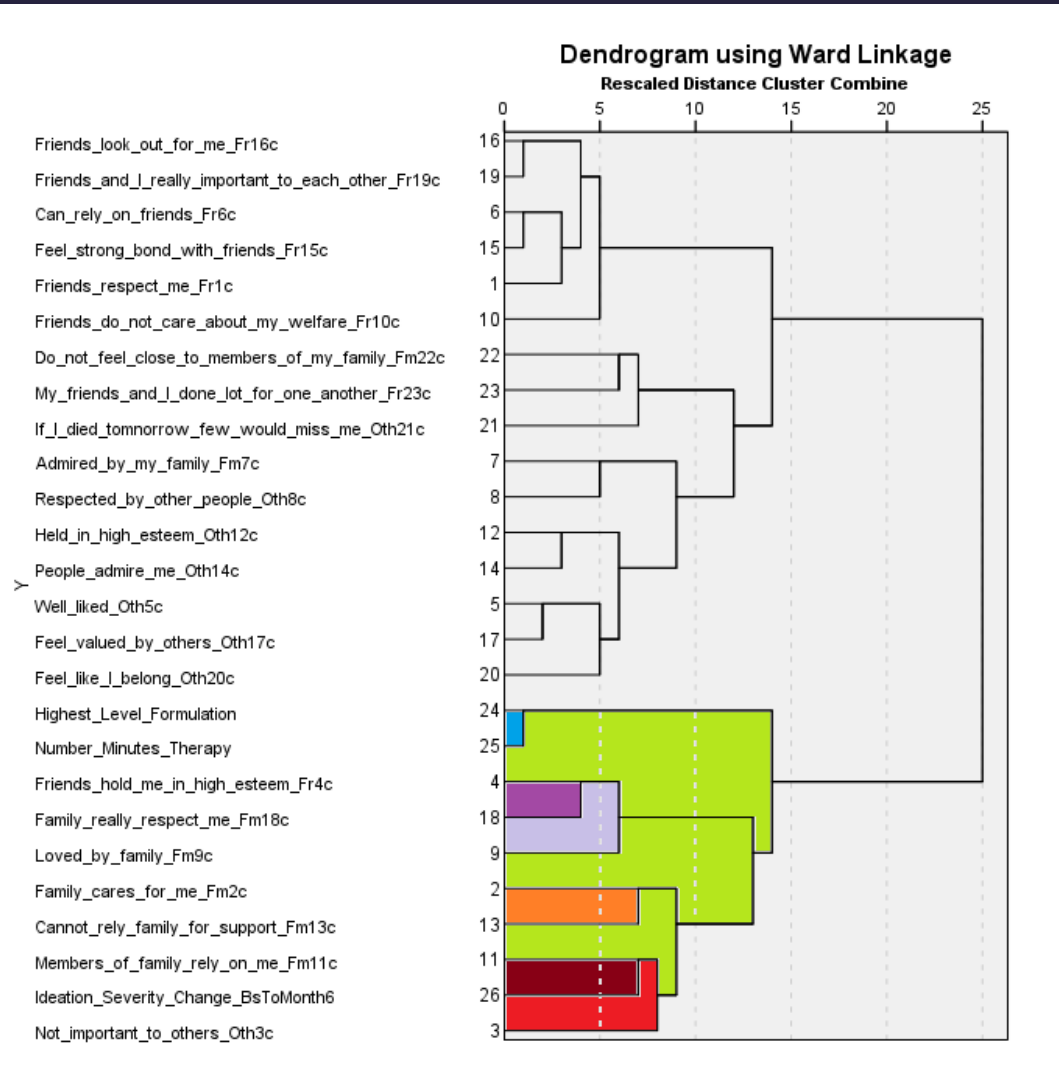
Baseline minus 6 months



- 90% CIs used ($p \leq 0.1$)
- $N = 67$
- Variance accounted for = 4% - 9%
- Therapists' ratings NOT clients'



Which aspects of social support and social connectedness are important: cluster analysis on change scores over 6 months?



Not important
to others



Family cannot
rely on me



Cannot rely on
family



Family does not
care about me

RESEARCH

Open Access

The interplay between suicidal experiences, psychotic experiences and interpersonal relationships: a qualitative study

Patricia Gooding^{1,2*}, Gillian Haddock^{1,2}, Kamelia Harris^{1,2}, Menita Asriah¹, Yvonne Awenat^{1,2}, Leanne Cook^{1,2}, Richard J. Drake^{1,2}, Richard Emsley³, Charlotte Huggett^{1,2}, Steven Jones^{4,5}, Fiona Lobban^{4,5}, Paul Marshall^{4,5}, Daniel Pratt^{1,2} and Sarah Peters^{1,2}

Abstract

Background Suicidal thoughts, acts, plans and deaths are considerably more prevalent in people with non-affective psychosis, including schizophrenia, compared to the general population. Social isolation and interpersonal difficulties have been implicated in pathways which underpin suicidal experiences in people with severe mental health problems. However, the interactions between psychotic experiences, such as hallucinations and paranoia, suicidal experiences, and the presence, and indeed, absence of interpersonal relationships is poorly understood and insufficiently explored. The current study sought to contribute to this understanding.

Methods An inductive thematic analysis was conducted on transcripts of 22, individual, semi-structured interviews with adult participants who had both non-affective psychosis and recent suicidal experiences. A purposive sampling strategy was used. Trustworthiness of the analysis was assured with researcher triangulation.

Results Participants relayed both positive and negative experiences of interpersonal relationships. A novel conceptual model is presented reflecting a highly complex interplay between a range of different suicidal experiences, psychosis, and aspects of interpersonal relationships. Three themes fed into this interplay, depicting dynamics between perceptions of i. not mattering and mattering, ii. becoming disconnected from other people, and iii. constraints versus freedom associated with sharing suicidal and psychotic experiences with others.

Conclusion This study revealed a detailed insight into ways in which interpersonal relationships are perceived to interact with psychotic and suicidal experiences in ways that can be both beneficial and challenging. This is important from scientific and clinical perspectives for understanding the complex pathways involved in suicidal experiences.

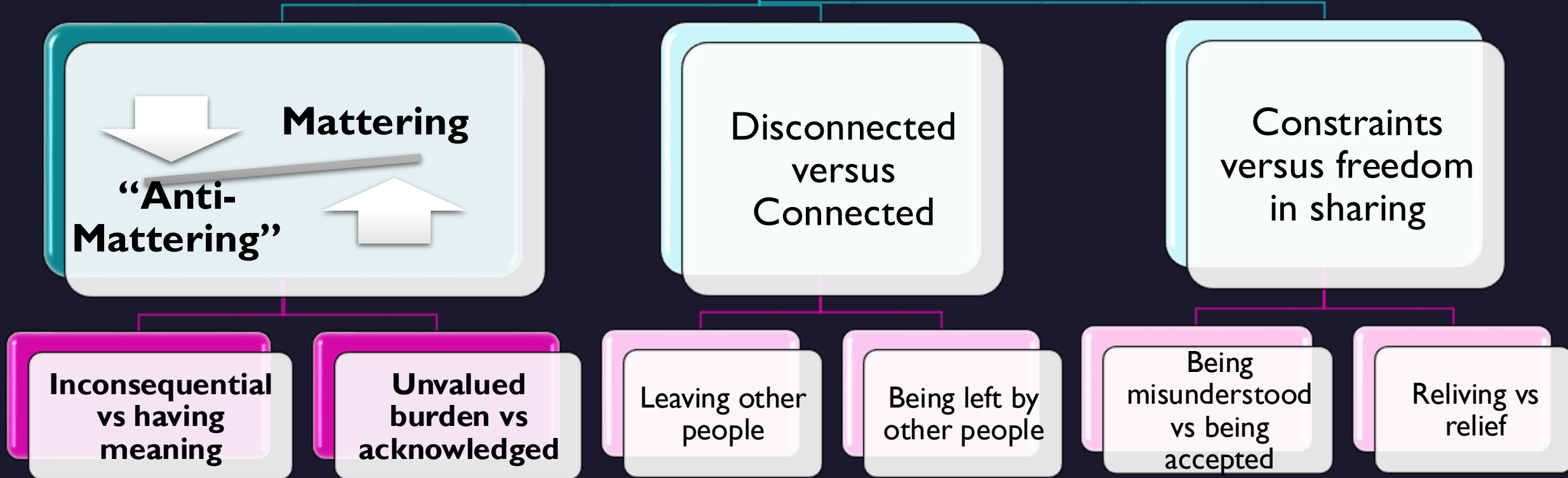
Trial registration ClinicalTrials.gov (NCT03114917), 14th April 2017. ISRCTN (reference [ISRCTN17776666](https://www.isrctn.com/17776666)); 5th June 2017). Registration was recorded prior to participant recruitment commencing.

Keywords Non-affective psychosis, Schizophrenia, Interpersonal relationships, Suicidal experiences, Suicidality, Suicidal thoughts, Suicidal behaviours, Qualitative methods, Interviews

Perceived interpersonal relationships

Qualitative interview data: 22 CARMS participants

Suicide, psychosis, and interpersonal relationships



Items from measures of mattering and anti-mattering

- People do not ignore me
- Often, people trust me with things that are important to them
- There are people who react to what happens to me in the same way they would if it happened to them
- Sometimes I feel almost as if I were invisible
- People do not care what happens to me
- When I have a problem, people usually don't want to hear about it

Inconsequential to having meaning



“One of the main things that was around killing myself, it's like if I kill myself who's going to miss me? Who's it going to affect? And the more you think about that actually, I've got my mum, I've got my dad, I've got my sister, I've got the animals. I've got all the people that I've met, all the people that I've spoken to. All the people that I've made a decent impact on. They don't really know me, but I've helped their life. And it's massive when you think about it like that, I think [...].” (P20).

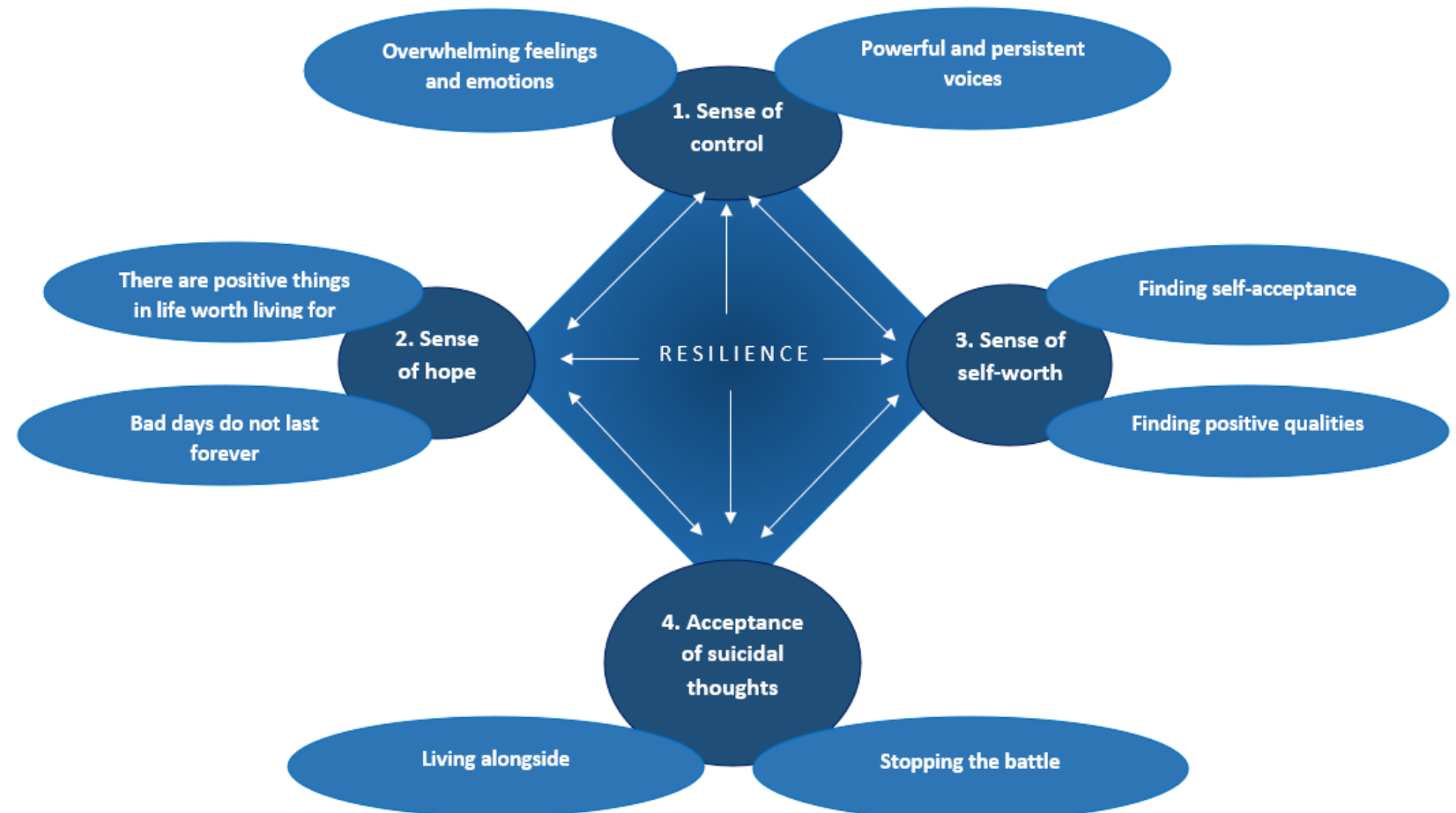
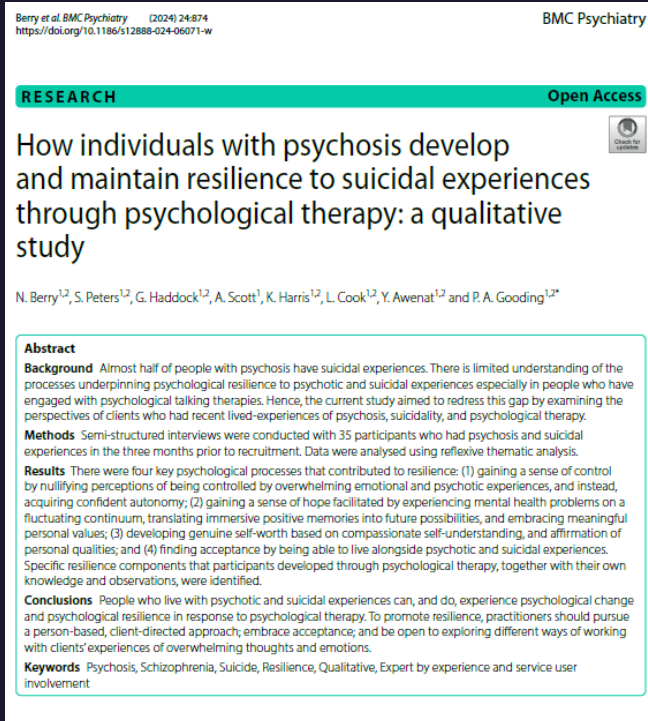


Broader sense of a 'transition': a future that holds promise

"Well, my outlook on death has changed. I've always said that if I died tomorrow, I'd be happy because I've done enough in my life and, you know, I've got no regrets. But since the engagement, I don't want to die now. I want to grow old with [Name 2] (talking about partner). So, it's funny how just a commitment has totally changed my outlook on my future. [...] if my time came, then that would be it ... and that I wouldn't bother, but now--, say like if I got cancer for example, it wouldn't scare me, death wouldn't have scared me, but if I got cancer now, then I don't want to live without [Name 2], you know, I want a future with him. Life's just starting again for me." (P26)



Resilience to suicide in people who had therapy as part of CARMS: a qualitative study (Berry, N. et al., 2024)



What helped

- “I **understood things** a bit more ... I found it got easier to sort of understand how I felt and, you know, why I’d maybe felt like that... and realised... **it’s okay to feel a certain way** and I shouldn’t feel bad”
- “he's [therapist] **helped me to understand** some of my behaviours, like when I took that overdose and everything... I understand why I did it. And then it makes me kind of **forgive myself a little bit**... I feel more confident that I can keep going”
- “I’ve got to **appreciate myself** as I am, in a simple sense [since therapy]... keep things simple and not to think about doing too much... I was caught between massive ambitions and just being young and happy... **just being myself** is more important than being like a guy who’s accomplished a lot in life”
- “I’m going to be like this for a while and then I’ll be better again, kind of. So, instead of trying to fight it, just stay with it ... **there’s no point in trying battle it**, just do whatever makes you happy. So, if I was happy lying there, then there’s no point in not lying there”

**Clinical
implications:
Need to
understand**

That connections are not just social – connect with nature, animals, places, buildings, ancestors

Interactions between **DISTRESS** from psychotic experiences and transdiagnostic psychological processes

Feeling ‘un-understandable’ - small things can show family and friends do understand, and more importantly WANT to understand

Different manifestations of ‘entrapment’ e.g., relentlessness, feeling overwhelmed

How to scaffold transitions from ‘ant-mattering’, disconnection, feeling discounted, invisible, dismissed, not having a role

Different kinds of emotional difficulties e.g., non-acceptance, emotional confusion, lack of ‘strategies’

The kinds of dynamic resilience that people can, and do, develop

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Participants

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Thank you!

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