ROYAL COLLEGE OF SURGEONS IN IRELAND
COLÁISTE RÍOGA NA MÁINLEÁ IN ÉIRINN

SPHeRE
Structured Population and Health-services Research Education

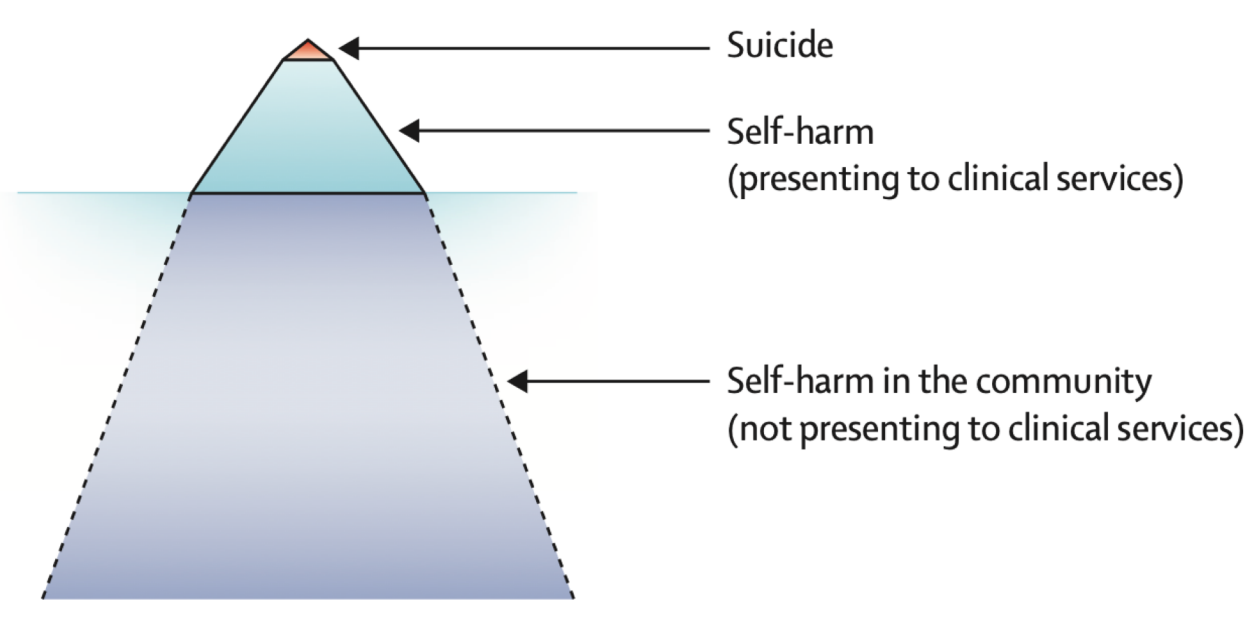
Fás Aníos in Éirinn
Growing Up in Ireland

David McEvoy, Ross Brannigan, Cathal Walsh, Ella Arensman, Mary Clarke

Identifying high-risk subgroups for self-harm in adolescents and young adults: a longitudinal latent class analysis of risk markers

Self-harm in adolescents and young adults

- Suicide is the fourth leading cause of death in 15-29 year olds globally (World Health Organization).
- For each death by suicide, there are many more suicide attempts (World Health Organization).
- Patients who present to EDs with self-harm are **50 times more likely** to die by suicide.
- Adolescents engaging in self-harm behaviour may later transition into exhibiting suicidal self-injury.



(Source: *Hawton, Saunders and O'Connor 2012*)

Figure 1: Suicide rate per 100,000 for males and females, 2010 (1)

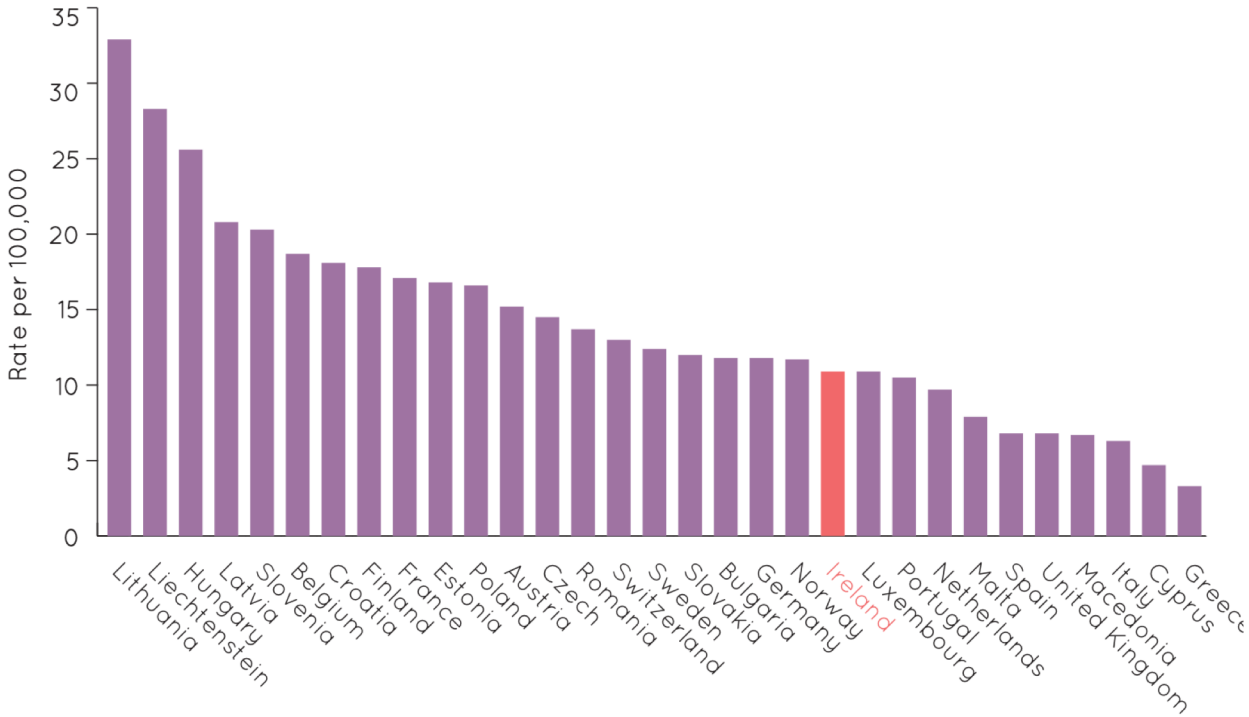
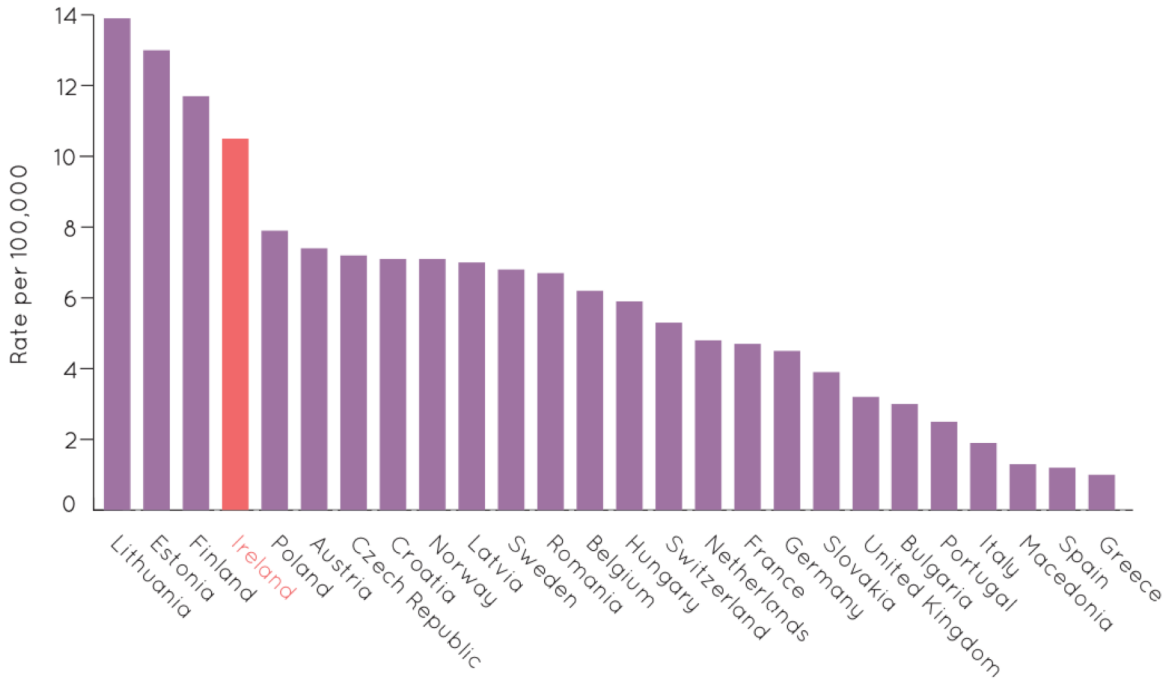


Figure 2: Suicide rate per 100,000 for males and females aged 15 to 19 years by geographic region, 2010 (2)

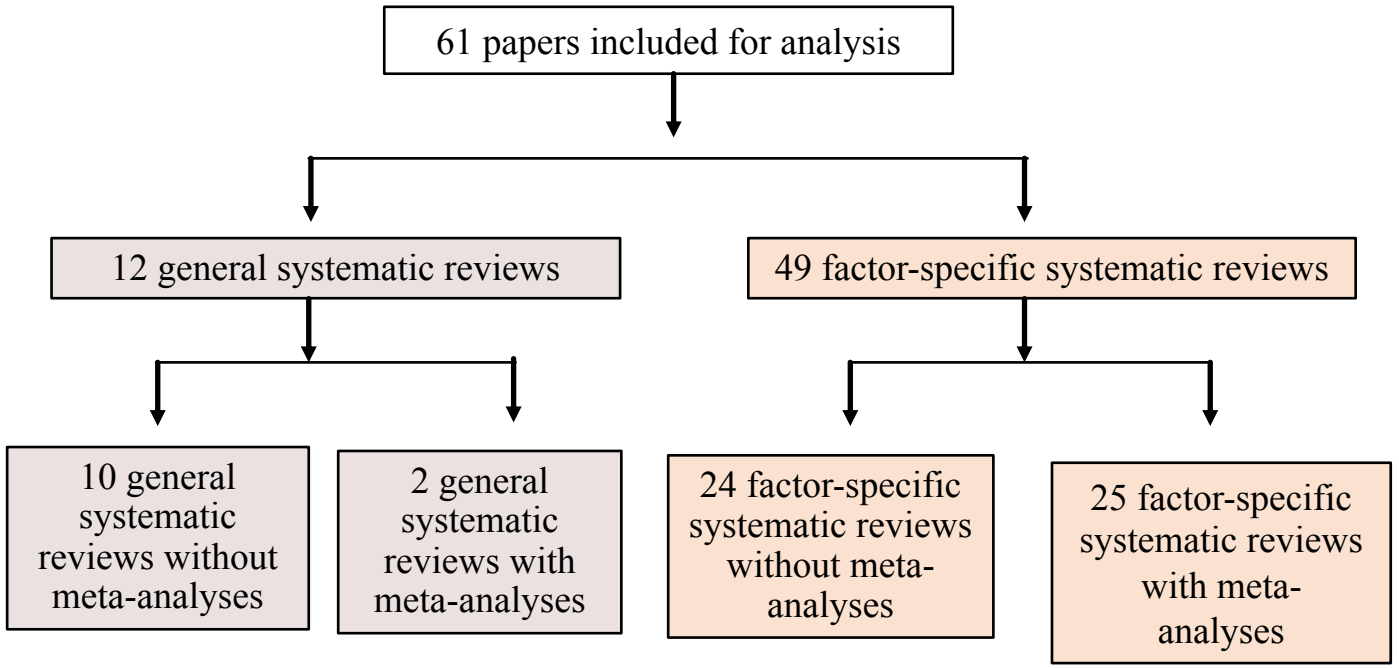


(Source: National Office for Suicide Prevention 2015) [4]

"Self-harm (and suicide) in adolescents are the end-products of a complex interplay between genetic, biological, psychiatric, psychological, social, and cultural factors"

(*Hawton, Saunders and O'Connor 2012*)

Risk and protective factors for self-harm in adolescents and young adults: an umbrella review of systematic reviews.



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Risk and protective factors for self-harm in adolescents and young adults: An umbrella review of systematic reviews

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1. Introduction

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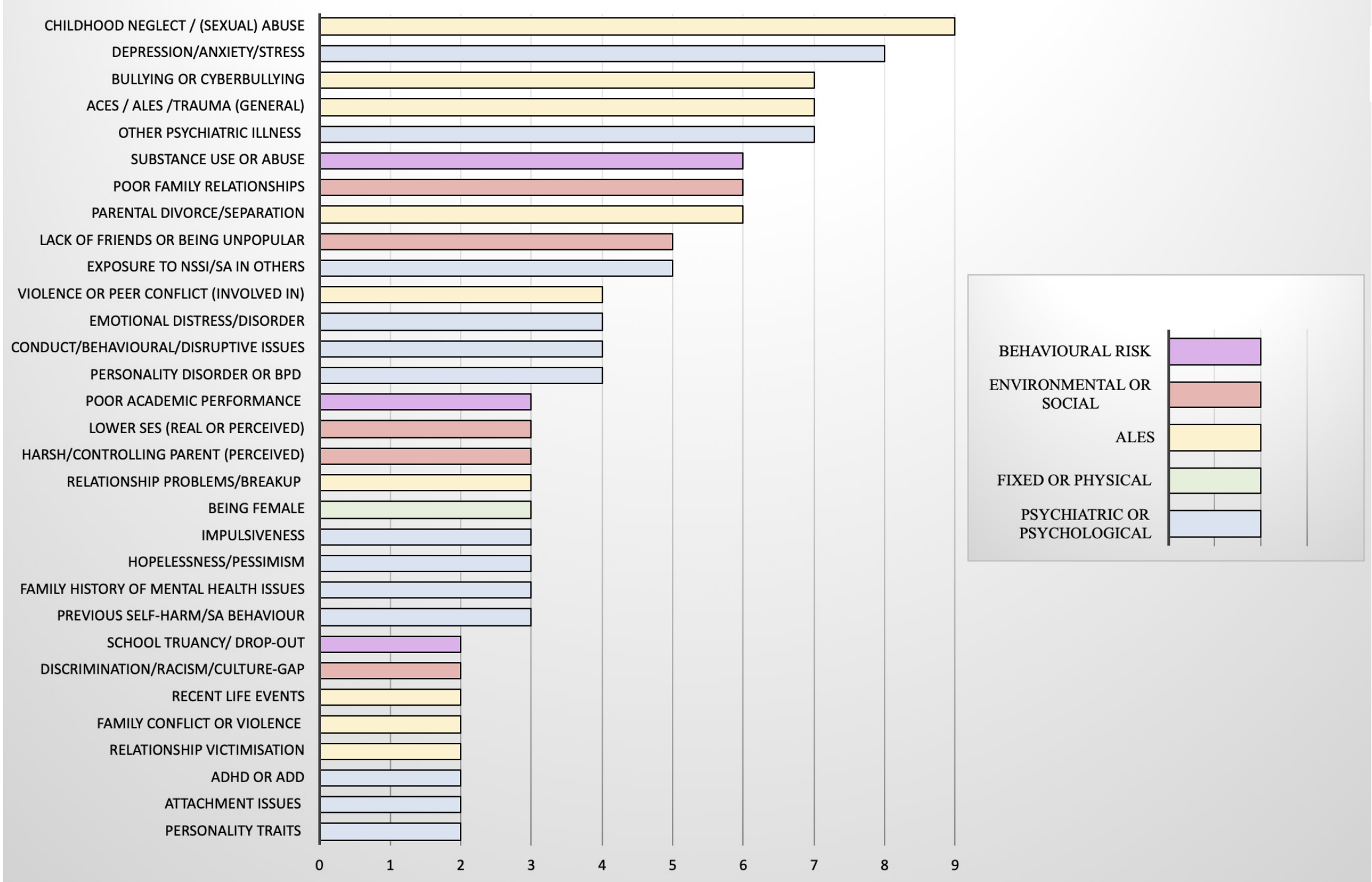
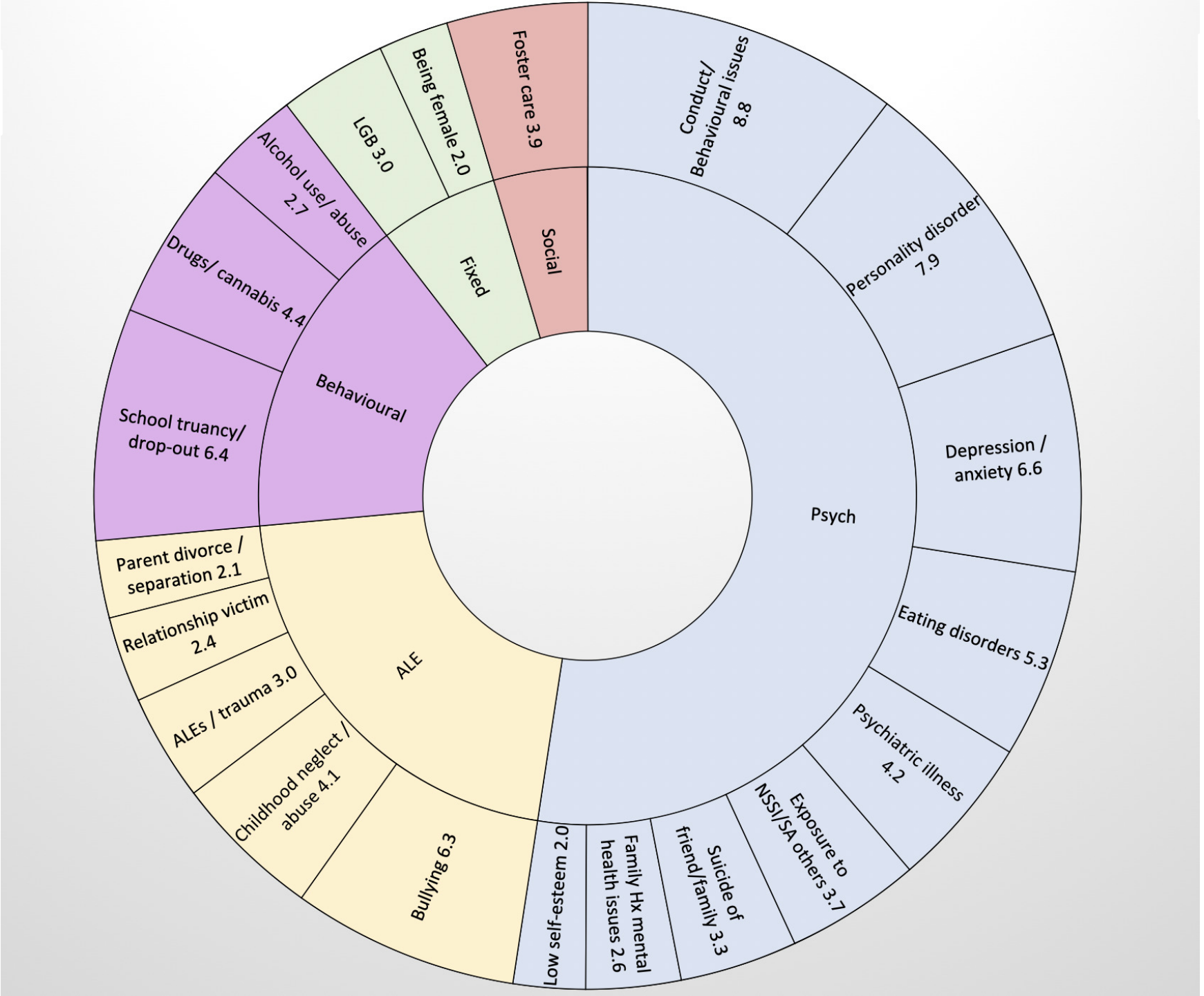

CHILDHOOD NEGLECT / (SEXUAL) ABUSE
DEPRESSION/ANXIETY/STRESS
BULLYING OR CYBERBULLYING
ACES / ALES /TRAUMA (GENERAL)
OTHER PSYCHIATRIC ILLNESS
SUBSTANCE USE OR ABUSE
POOR FAMILY RELATIONSHIPS
PARENTAL DIVORCE/SEPARATION
LACK OF FRIENDS OR BEING UNPOPULAR
EXPOSURE TO NSSI/SA IN OTHERS
VIOLENCE OR PEER CONFLICT (INVOLVED IN)
EMOTIONAL DISTRESS/DISORDER
CONDUCT/BEHAVIOURAL/DISRUPTIVE ISSUES
PERSONALITY DISORDER OR BPD
POOR ACADEMIC PERFORMANCE
LOWER SES (REAL OR PERCEIVED)
HARSH/CONTROLLING PARENT (PERCEIVED)
RELATIONSHIP PROBLEMS/BREAKUP
BEING FEMALE
IMPULSIVENESS
HOPELESSNESS/PESSIMISM
FAMILY HISTORY OF MENTAL HEALTH ISSUES
PREVIOUS SELF-HARM/SA BEHAVIOUR
SCHOOL TRUANCY/ DROP-OUT
DISCRIMINATION/RACISM/CULTURE-GAP
RECENT LIFE EVENTS
FAMILY CONFLICT OR VIOLENCE
RELATIONSHIP VICTIMISATION
ADHD OR ADD
ATTACHMENT ISSUES
PERSONALITY TRAITS
0
1
2
3
4
5
6
7
8
9
BEHAVIOURAL RISK
ENVIRONMENTAL OR SOCIAL
ALES
FIXED OR PHYSICAL
PSYCHIATRIC OR PSYCHOLOGICAL


Psych
Behavioural
ALE
Fixed
Social
Conduct/ Behavioural issues 8.8
Personality disorder 7.9
Depression / anxiety 6.6
Eating disorders 5.3
Psychiatric illness 4.2
Exposure to NSSI/SA others 3.7
Suicide of friend/family 3.3
Family Hx mental health issues 2.6
Low self-esteem 2.0
Bullying 6.3
Childhood neglect / abuse 4.1
ALEs / trauma 3.0
Relationship victim 2.4
Parent divorce / separation 2.1
School truancy/ drop-out 6.4
Drugs/ cannabis 4.4
Alcohol use/ abuse 2.7
LGB 3.0
Being female 2.0
Foster care 3.9

Growing Up In Ireland (GUI)

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Age 9
(n=8,568)

✓ Risk markers

Age 13
(n=7,525)

✓ Risk markers

✓ Self-harm data

Age 17
(n=6,216)

✓ Self-harm data

Age 20
(n=5,157)

Fás Aníos in Éirinn
Growing Up in Ireland

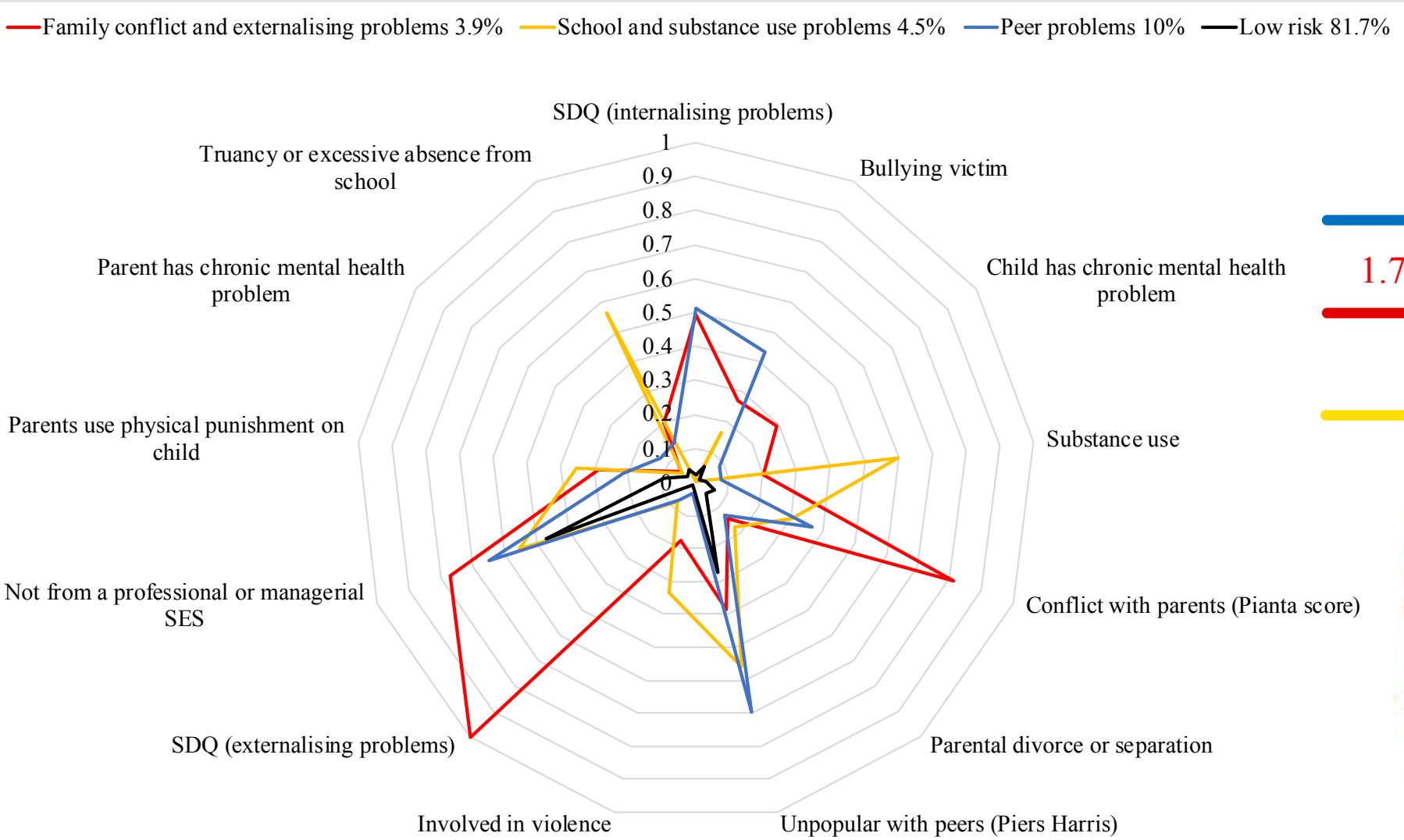
✓ Risk markers	✓ Risk markers ✓ Self-harm data	✓ Risk markers ✓ Self-harm data
		
Age 13 (n=7,525)	Age 17 (n=6,216)	Age 20 (n=5,157)

Table: Self-harm descriptive data for age-17 years and age-20 years from the GUI Child Cohort '98

	n (%)
Age-17 self-harm outcomes	
Lifetime self-harm by age 17 (n=6,133)	
Yes	1,066 (17.5)
No	4,879 (79.5)
Prefer not to say	188 (3.0)
Self-harm at age 17 (n=5,915)	
Yes	681 (11.8)
No	5,234 (88.2)
Self-harm frequency at age 17 (n=1,036)	
None	355 (32.8)
Once	274 (27.2)
2-5 times	250 (23.7)
6-10 times	67 (6.4)
More than 10 times	90 (10.0)
Age-20 self-harm outcomes	
Self-harm at age 20 (n=5,147)	
Yes	341 (7.5)
No	4,711 (91.0)
Prefer not to say	62 (1.5)
Self-harm frequency at age 20 (n=341)	
Once	97 (30.2)
2-5 times	161 (49.2)
6-10 times	47 (12.2)
More than 10 times	36 (8.4)

Note: for n(%), n is unweighted whereas (%) is weighted

Age 13 latent class analysis



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2.3

1.7 (not significant)

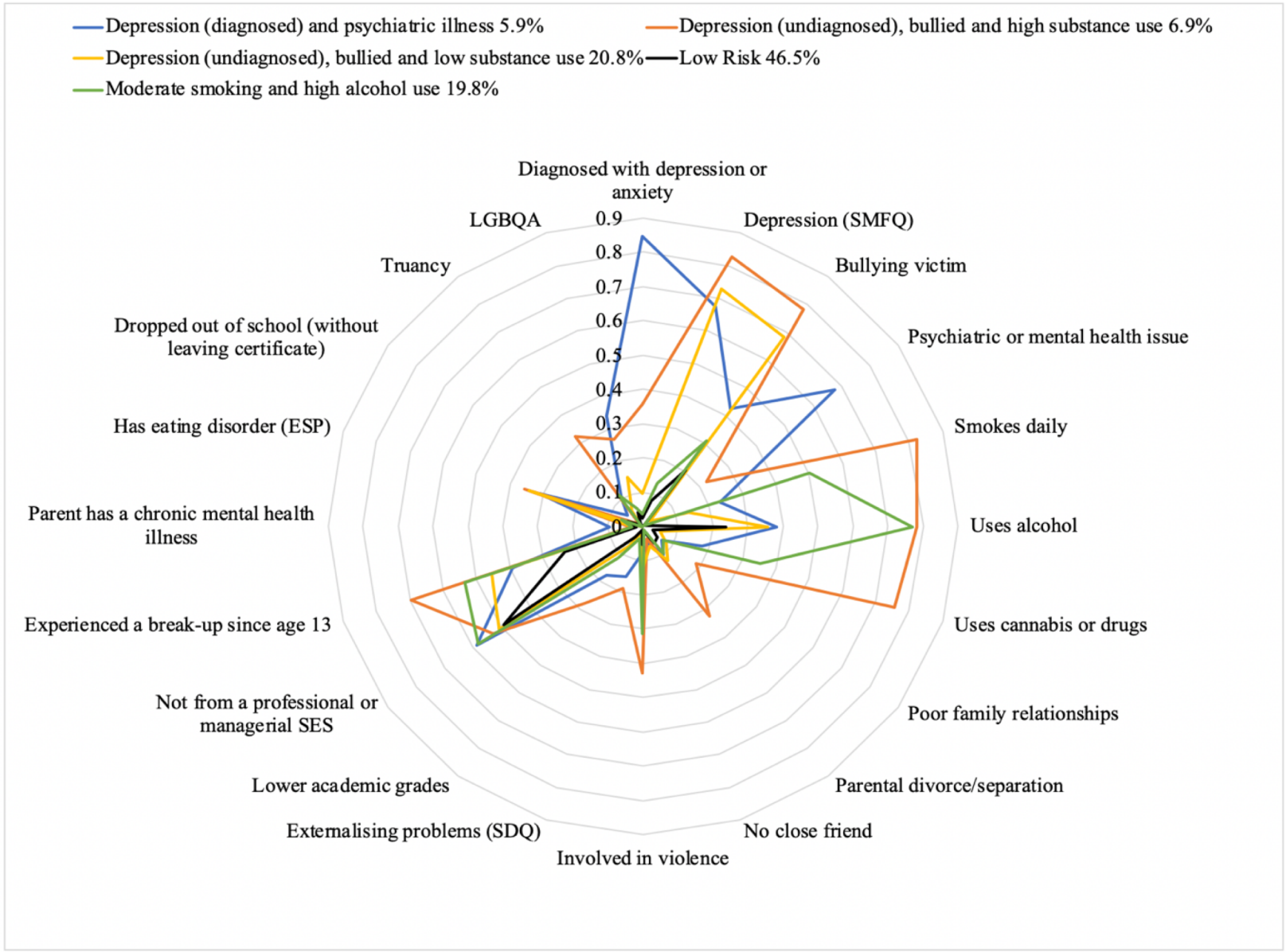
2.3

Self-harm at age 17

Age 13

Age 17

Age 17 latent class analysis



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3.9

13.9

9.4

7.4

Self-harm at age 20

Age 17

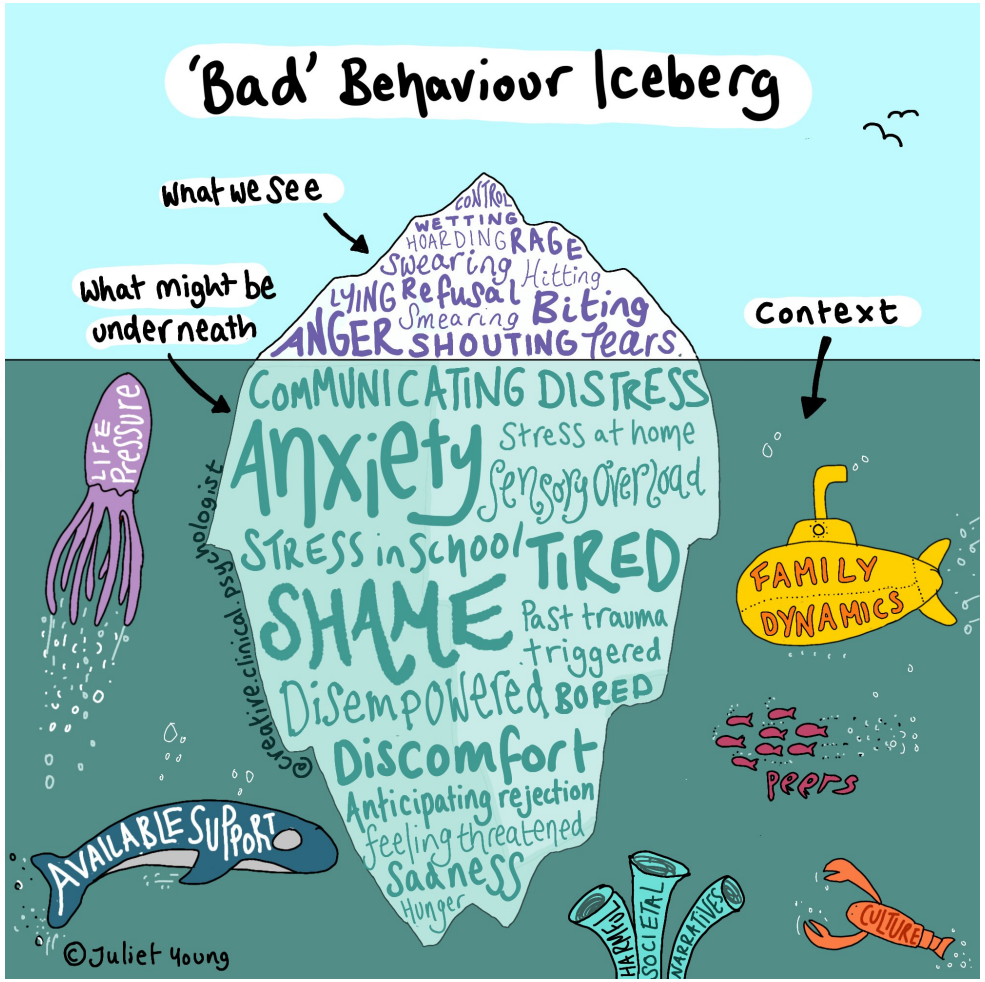
Age 20

CLINICAL IMPLICATIONS

(1)On a clinical level, we are not advocating that the use of the subgroups from this study would be used as a risk assessment tool for self-harm. According to the guidelines from the National Institute for Health and Care Excellence (NICE) in the United Kingdom, clinicians should not use risk assessment tools or scales to predict future suicide or repetition of self-harm.

(2)On the other hand, this research could be used to further complement clinicians' knowledge of self-harm risk markers in young people. In particular, clinicians could consider these subgroups as part of the risk formulation, advocated by the NICE guidelines to be undertaken as part of every psychosocial assessment, in which the clinician takes into account historical factors and experiences and more recent problems.

PUBLIC HEALTH IMPLICATIONS



CONCLUSION

- We have identified different subgroups of young people who are at higher risk of self-harm using well-established risk markers for self-harm.
- Knowledge of these groups can inform clinicians as well as other professionals who work with young people, such as teachers, university staff or social workers, in community settings.
- Mental health intervention strategies should be put in place to help to identify young people who engage in substance use, exhibit poor school behaviour, are victims of bullying or violence, or show signs of depression.

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THANK YOU

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