

# The Relationship between victimization, depressive symptoms and self concept in children aged 9 years

Mary Elizabeth BOLLARD

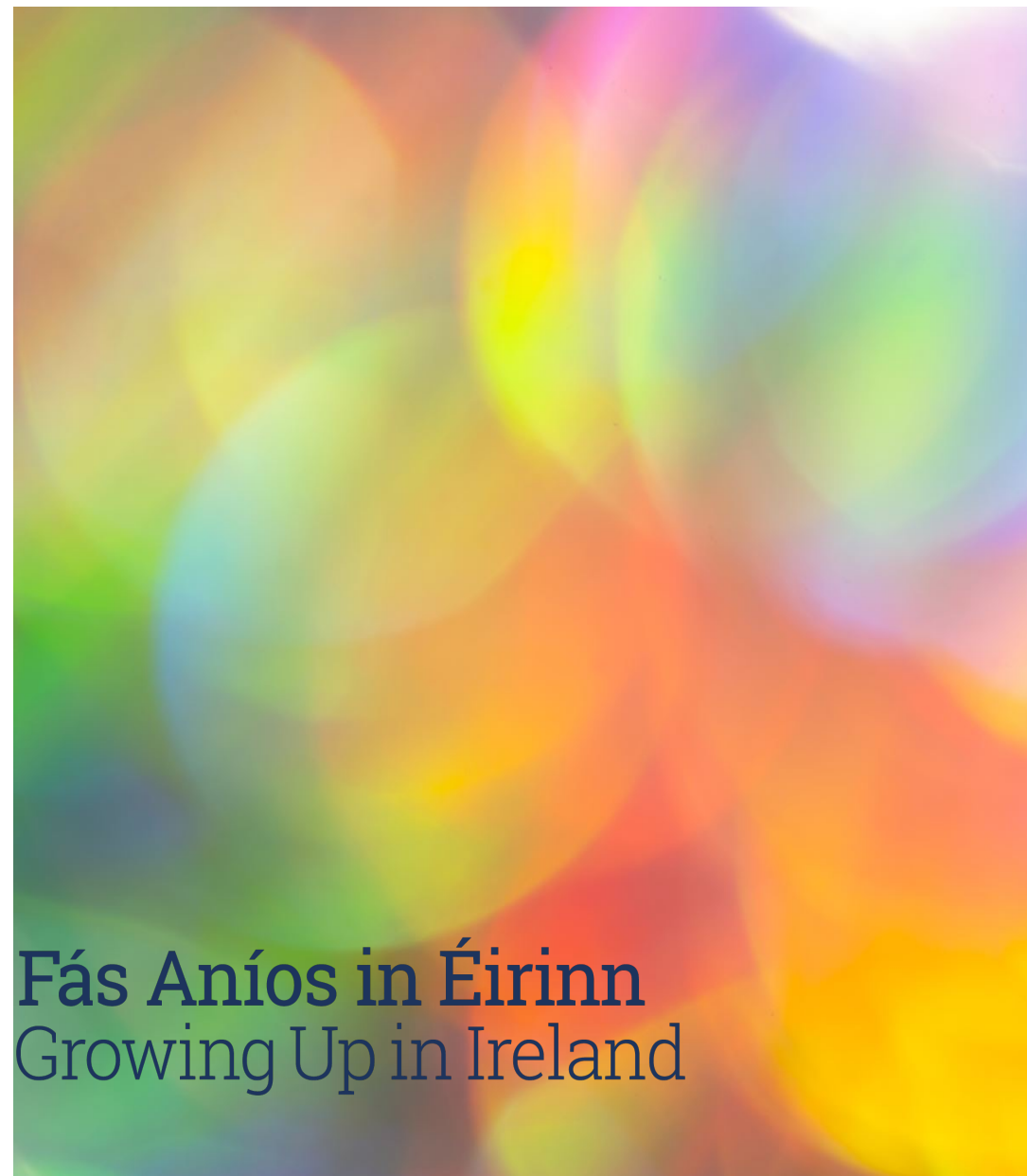
Munster Technological University

Northumbria University

email:mary.bollard@mtu.ie



**Fás Aníos in Éirinn**  
Growing Up in Ireland





## OUTLINE

Rationale & predictions

Method

Findings

Conclusions

# Rationale

- Being Bullied is a common experience for children and adolescents
- Children who are bullied earlier in life are at increased risk of developing poor mental health later in life
- But what is the mechanism by which being bullied leads to poorer mental health?



# Does self-concept play a role?

- One possibility is that the effect being bullied has on self concept, is the mechanism by which bullying leads to poorer mental health
- Some evidence of this from work in polder children /adolescents and young adults.
- But what about younger children aged 9?
- Testing whether individual differences in self concept mediate the association between being bullied and poorer mental health was the primary aim of this study, with reference to specific subtypes and frequency of victimization.



# Why research mediating candidates in victimisation & Depression in younger children?

- Children bullied earlier in life have more adverse outcomes in adulthood than those bullied later (Kaplow & Widom, 2007)
- Developmental cascade theory - many adverse childhood experiences occurring before adolescence shape adolescent and adult mental health poor outcomes. (Masten & Cicchetti, 2010),
- Early stressful life events between 2 and 5 years lead to disruption inhibitory control at 7 to 8 years, leading to further problem behaviour at ages 9 and 10, culminating in substance abuse in adolescence at 14 years (Otten et al., 2018)
- Early rejection by peers is associated with declining classroom participation and school avoidance, chronic peer exclusion mediates the link between peer rejection and classroom participation (Buhs et al., 2006)
- Children refine their self-concept in middle childhood, and negative experiences with peers may shape their evaluations of self, mirroring the attitudes they experience from others (Mead., 1934) determining less successful pathways in adolescence and adulthood.
- critical developmental period for social competence and foundational for the later development of romantic relationships and close friendships (Masten & Coatsworth, 1998; Obradovic et al., 2010)
- Resulting deficits in the Structural Brain





## Victimization- depressive symptoms & self concept

This study explored the relationships between frequency of victimisation, global self- concept and depressive symptoms, and physical, verbal, cyber, written and exclusion bullying, with global self- concept in a mediating role





# PREDICTIONS

## Hypotheses: 1

There would be significant correlations between:

- 1(a) self -concept and the frequency of victimization, with more frequent victimization associated with lower level of self-concept level.
- 1(b) depression and self-concept, with lower levels of self-concept associated with higher levels of depression symptoms.
- 1(c) depression and victimization frequency, with more frequent victimization associated with higher levels of depression.

## Hypothesis 2

- 2. Controlling for parental depression and socio- economic status associated with depression in the data set, in regression analysis the following variables will be significant independent predictors of depression scores (outcome variable)
  - a) frequency of victimization,
  - Each of the subtypes -physical, verbal, written cyber & exclusion
  - self -concept level

## Hypothesis 3

A significant indirect effect of frequency of victimization, and subtypes on depression via self concept.



# Method

Study used Growing Up in Ireland Data from

Wave 5 of the 2008 infant cohort -

8032 mixed gender children aged 9 (2017)

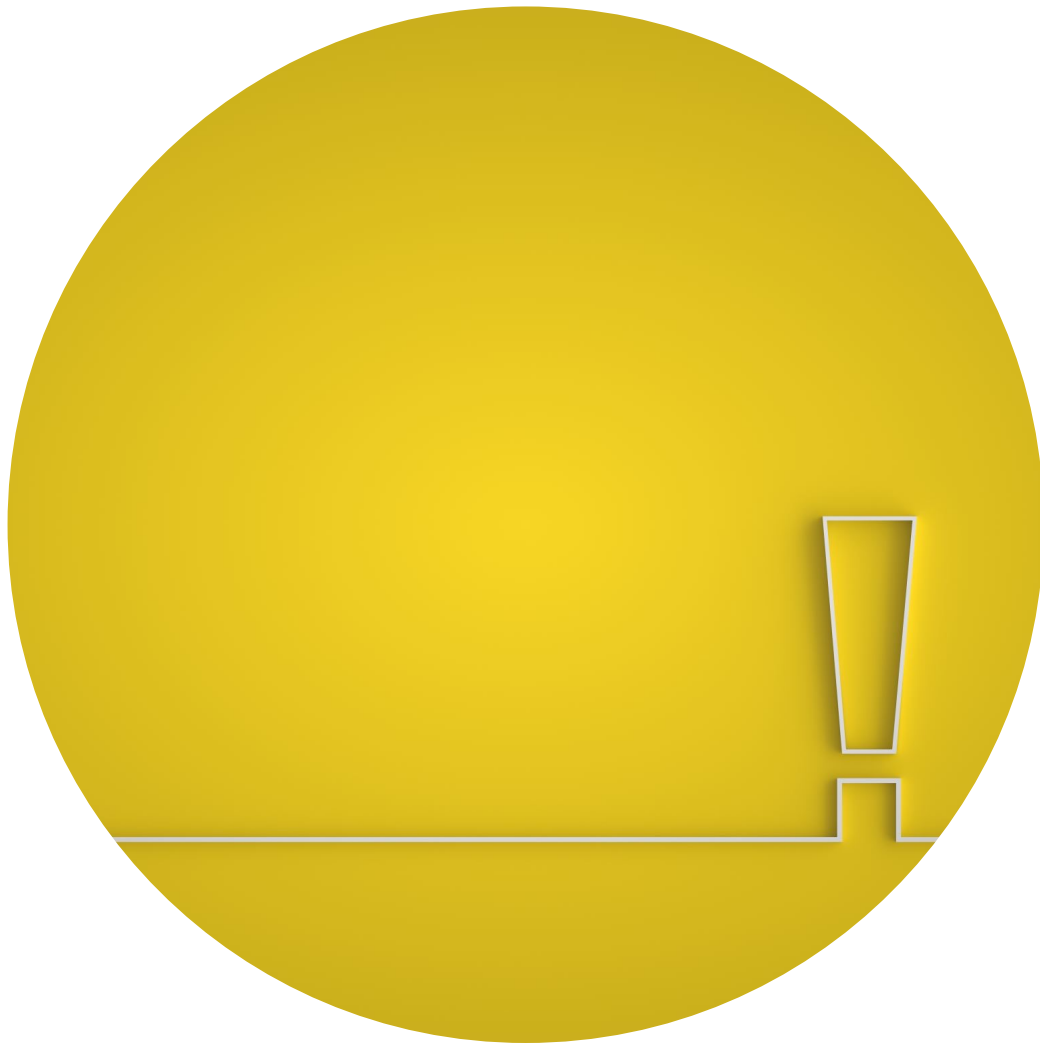
Statistical Analysis : IBM -SPSS

Descriptive, correlational, hierarchical regression analyses & mediation processes

# Measures

- Emotional Subscale of The Strengths & Difficulties Questionnaire (Goodman., R. 1997)
- The Growing Up in Ireland Team’s Bullying questionnaire
- The Piers Harris Self Concept Scale(2<sup>nd</sup> Edition)  
(Piers, E. V., & Herzberg, D. S. 2002).





## Emotional Subscale of Strengths & Difficulties Questionnaire(SADQ) (Goodman., R. 1997)

Measure of depressive  
symptoms/negative mood

Scale 1-10

Robust measure in discriminating Major  
depressive disorder MDD from General  
Anxiety Disorder and other anxiety  
disorders (Armitage et al.,2023)

Cut off point : 3 and above

# GUI Victimization questionnaire

- Physical
- Verbal
- Cyber
- Written
- Exclusion
  
- Frequency





# The Piers Harris Self Concept Scale

- Behavioral adjustment
- Intellectual & school status,
- Physical appearance & attributes,  
•
- Freedom from anxiety,
- Popularity  
•
- Happiness and satisfaction.



# Exploratory Data Analysis –Victimization - frequency & subtype

( N = 8032) –reports over the previous year

- 42% picked on once or twice
- 35% reporting now and again,
- 12% weekly
- 11% almost every day.
- 57% exclusion,
- 56% verbal,
- 41 % physical,
- 9% by written methods and
- 5% cyber.

Primary caregiver scoring over previous 6 months (M = 1.9; SD = 1.9)

32% at 3 and above,

---

11.5% above 5, (3.4% of these between 7 and 10).

---

There were twelve outliers, three participants at maximum 10, three at 9, and a further 4 at 8.

---

\*\*\*Scores at three and higher on this scale suggest poor mental wellbeing indicating the possibility of Major Depressive Disorder (MDD), (Armitage et al., 2023).

EDA – SDQ-  
Emotional  
Scale (1-10)

## Pier Harris Self Concept Variable

- *Piers Harris Self Concept Scale (PHSCS) 'How I feel about myself' Total Score*
- (N = 7998) (M = 27; SD =4 .0) range of scores 28,
- negatively skewed (-1.6),
- 80% of children scored 25 and above,
- 18% scoring between 16 and 24,
- 2% scoring below 15.
- 27 outliers at the bottom end of the scale ranging between 2 and 15.

Higher scores on this scale indicate high level of positive self-regard.

# Mann Whitney Analysis

---

Mann Whitney Tests(non- parametric)  
comparing groups

---

mean ranks of victimised children by each of  
the subtypes, presented lower on the Piers  
Harris self- concept scale than non-victimised

---

Exclusion bullying presented as the most  
detrimental to self –concept levels, followed  
by verbal and written, physical and cyber

---

Exclusion and physical bullying subtypes  
showed significant effects on scores on the  
SDQ-E

Mann Whitney –  
 Comparing those  
 victimized, and  
 not - ranks on  
 SDQ-E & PHSCS

Victimisation Subtype	Subtype	N	Mean Rank	Mean	
<b>Exclusion</b>					
SDQ-E	Yes	1621	1452	1.9	
	No	1212	1369	1.9	
PHSCS	Yes	1524	1210	27	
	No	1144	1499	27	
<b>Written Notes</b>					
SDQ-E	Yes	251	1424	1.9	
	No	2516	1379	1.9	
PHSCS	Yes	239	1027	27	
	No	2372	1334	27	
<b>Verbal</b>					
SDQ-E	Yes	1585	1415	1.9	
	No	1250	1420	1.9	
PHSCS	Yes	1497	1250	27	
	No	1174	1444	27	
<b>Physical</b>					
SDQ-E	Yes	1148	1401	1.9	
	No	1167	1412	1.9	
PHSCS	Yes	1072	1225	27	
	No	1584	1397	27	
<b>Cyber</b>					
SDQ-E	Yes	121	1347	1.9	
	No	2648	1386	1.9	
PHSCS	Yes	115	1053		
	No	2500	1319	27	

# Mann Whitney analysis 2 – comparing groups differences on SDQ-E and PHSCS scores

Victimization Subtype	SDQ-E	PHSCS
Exclusion Victimization.	$z = -2.78$ (1)	$z = -9.6$ (1)
	$p = .006$	$p < .001$
Written Victimization	$z = -.85$ (2)	$z = -6.02$ (3)
	$p = .39$	$p < .001$
Verbal Victimization	$z = -.15$ (5)	$z = -6.48$ (2)
	$p = .88$	$p < .001$
Physical Victimization	$z = -.37$ (4)	$z = -5.6$ (4)
	$p = .70$	$p < .001$
Cyber Victimization	$Z = -.54$ (3)	$z = -3.7$ (5)
	$P = .58$	$P < .001$

## Correlational Analyses Results

- A lower Piers Harris Self - concept score reporting, is linked with a higher SDQ emotional score, indicating that more negative self - concept indicates more feelings of a negative mood

$p(2654) = -.202, p < .001$

- Correlational analysis suggested a significant negative relationship between frequency of victimization and global self - concept level score,

$p(2824) = -.22, p = .001$

- a significant positive relationship between frequency of victimization and scores on the Strengths and Difficulties Emotional Subscale

$p(2821) = .07, p = .001$

Correlation strengths  
between the variables

Variable	Mean	SD	2	3
1. Frequency of Victimisation	1.6	0.98	.074	-.223
2. SDQ Emotional Subscale	1.9	1.9		-.202
3. Piers Harris Self- Concept	27	4		



# Hierarchical Multi Linear Regression Analysis

Variable	B.	SE.B	$\beta$	p-value
<b>Model 1</b>				
Socio-Economic Status	0.18	0.08	0.04	.03
Parent Depression	1.2	0.13	0.18	<.001
Frequency of Victimisation	0.19	0.04	0.08	<.001
<b>Model 2</b>				
Socio-Economic Status	0.18	0.09	0.17	<.001
Parent Depression Score	1.2	0.08	0.17	<.001
Frequency of Victimisation	0.08	0.04	0.08	.04
Piers Harris Global Self-Concept Score	-0.09	0.00	-0.20	<.001

# Independent ANOVA regression models

Bullying Subtype	B.	SE.B	$\beta$	p-value
<b>Model 1</b>				
Exclusion	-0.26	0.08	-0.3	.003
Physical	0.03	0.08	0.00	.72
Cyber	0.04	0.21	0.00	.83
Written	-0.13	0.15	-0.01	.38
Verbal	0.00	0.08	0.00	.96
<b>Model 2</b>				
Exclusion	-0.06	0.08	-0.01	.49
Physical	0.13	0.00	0.03	.12
Cyber	0.19	0.02	0.01	.35
Written	0.08	0.14	0.01	.58
Verbal	0.11	0.08	0.02	.16
Piers Harris Self-Concept	-0.10	0.00	-0.22	<.001

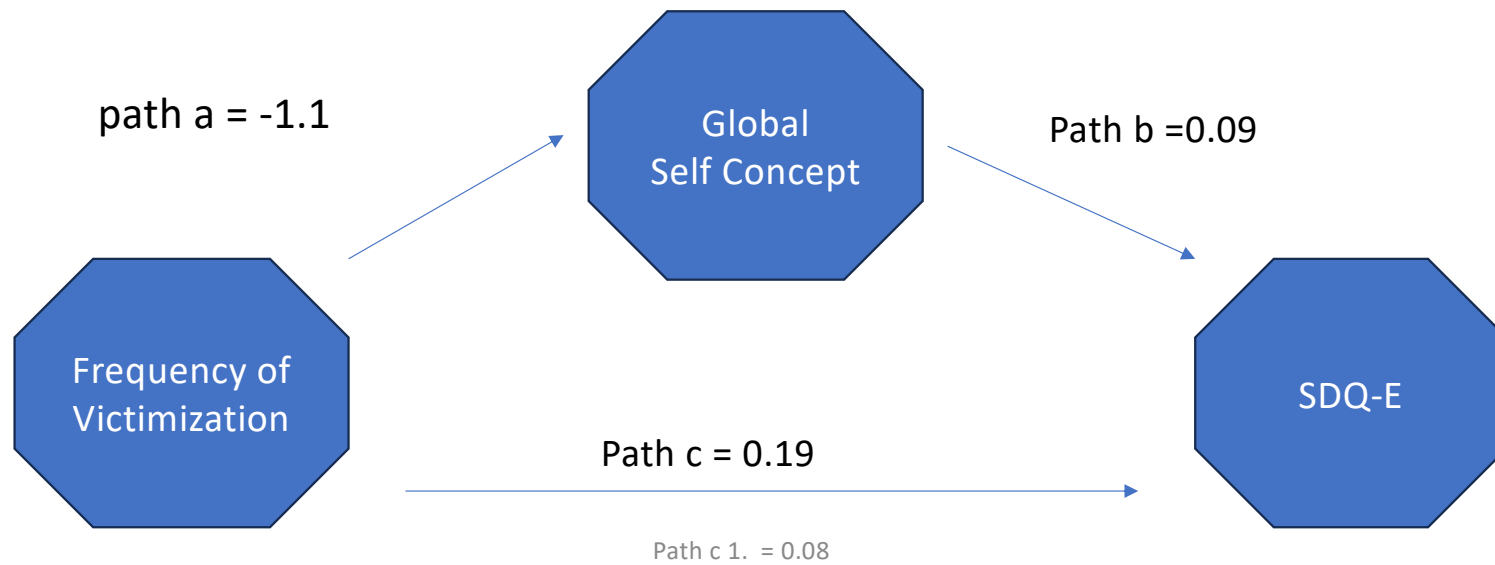
# Regression & Hierarchical Regression Analyses

- Exclusion bullying - the most detrimental predictor of mental well-being of all the subtypes accounting for 1% of the variance in SDQ-E scores
  - Frequency of incidences accounting for 1% of the variance in SDQ-E scores
- Five separate hierarchical regression analyses with self concept input negated exclusion bullying as a significant predictor of SDQ-E scores
- Implication of Self concept in a mediating role.

# Mediation Analysis

- **Global self -concept partially mediates victimisation frequency and depressive symptoms**

SELF -CONCEPT PARTIALLY MEDIATING FREQUENCY OF VICTIMISATION & SDQ-E score



# To Conclude

Multiple  
detrimental impacts  
of victimization &  
depression

Research Findings

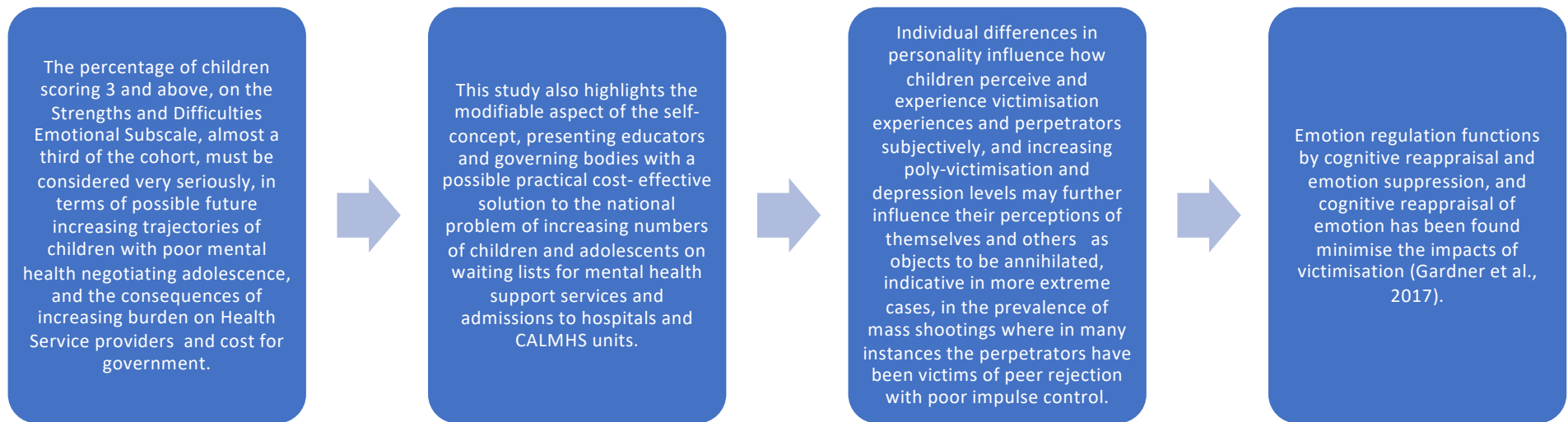
Self Concept

Limitations

Further Research-

How might this  
research inform  
policy

# How might these findings inform policy?



# An Urgent Need for evaluation, research & action

The environments in which children's personalities are firmly grounded, are constantly changing, due to the pressures of globalisation accelerating changes how, when and where children interact and form alliances.



The education system offers a stable common resource, accessible for all children, and an environment where the scaffolding of global self-concept of young children can be promoted by teachers. Research has shown that those with high levels of concept have a more positive self-regard, positive evaluation of own worth and levels of competence, which contribute to sense of well-being, and may serve to protect against depressive symptomatology simultaneously buffering within victimisation experiences.



The evidence suggests that provision of intervention and prevention strategies for victimisation at the earliest stage in childhood are imperative, in connection with screening for depressive symptomatology, due to possible resulting structural and functional damage to the brain and disruption of emotional regulation, directing subsequent mental well-being levels throughout the lifespan.