





#CAMHScampfire No.4

Cognitive predictors of post-traumatic stress

Evidence from a prospective cohort study of young people in out-of-home care







The research question

"In young people in (foster) care, do cognitive processes predict PTSD and/or Complex PTSD symptoms?"

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A longitudinal study of cognitive predictors of (complex) post-traumatic stress in young people in out-of-home care

Rachel M. Hiller, 1 D Richard Meiser-Stedman, 2 D Elizabeth Elliott, 1 Rosie Banting, 1 and Sarah L. Halligan 1,3 D

¹Department of Psychology, University of Bath, Bath, UK; ²Department of Clinical Psychology, Norwich Medical School, University of East Anglia, Norwich, UK; ³Department of Psychiatry and Mental Health, University of Cape Town, Cape Town, South Africa







Study methods

Participants were recruited from three local authorities in England

Around half of those invited took part

The researchers assessed:

- Trauma and maltreatment history
- PTSD symptoms, including complex features
- Cognitive processes (maladaptive appraisals, coping and memory quality)

Followed up after 1 year







Critical appraisal

Question	Yes	Can't tell	No
1. Did the study address a clearly focused issue?	Χ		
2. Was the cohort recruited in an acceptable way?		Χ	
3. Was the exposure accurately measured to minimise bias?	Х		
4. Was the outcome accurately measured to minimise bias?	Х		
5. (a) Have the authors identified all important confounding factors?		Х	
5. (b) Have they taken account of the confounding factors in the design and/or analysis?	Х		
6. (a) Was the follow up of subjects complete enough?	Х		
6. (b) Was the follow up of subjects long enough?	Х		
7. What are the results of this study?			
8. How precise are the results?			
9. Do you believe the results?	Χ		
10. Can the results be applied to the local population?		Х	
11. Do the results of this study fit with other available evidence?	Х		
12. What are the implications of this study for practice?		-	







Critical appraisal

- Limits of observational design re confounders
 - Efforts were made to investigate known confounders
 - Potential for "false positive" associations
- Potential for selection bias
 - "Avoidance" behaviours may contribute to nonparticipation
- Attrition bias
 - Drop-out rate was relatively low, missing data was imputed
- Potential for ascertainment bias
 - Self reports were compared against carer reports
- Broadly consistent with other evidence







Study findings

120 young people took part:

- 86% were in foster care
- About one-third had probable PTSD

PTSD symptoms and complex features were strongly correlated with each other.

Baseline cognitive processes were associated with PTSD symptoms and complex features

- Maladaptive appraisals were particularly important, and were associated with symptoms at 12 months after controlling for baseline PTSD symptoms
- SW report of maltreatment severity was not associated with symptom severity
- Child and carer reports had poor agreement

There was no significant change in symptoms over 12 months

Table 3 Results of linear regressions for cognitive processes predicting child-reported baseline and 12-month PTSD symptoms and complex features

	Model 1. Controlling for sex			Model 2. Controlling for baseline PTSD symptoms		
	$R^2\Delta$	$F\Delta$	β	$R^2\Delta$	$F\Delta$	β
Baseline PTSI) symp	otoms				
Appraisals Coping	.59	58.15*	.47*			
Memory			.15+			
12-month PTS	D syn	ptoms				
Appraisals	.29	12.53*	.36*	.07	2.76**	.30
Coping			.16			.14
Memory			.10			.09
Baseline CF						
Appraisals	.62	58.31*	.70*	.09	9.30*	.45
Coping			.22**			.16
Memory 12-month CF			09			14
Appraisals	.23	7.90*	.41*	.10	3.36**	.45
Coping			.08			.10
Memory			.04			.05

Sex controlled for in Step 1 of each regression. Three cognitive processes entered in Step 2.

^{*}p < .01; **p < .05, *p < .10.







Implications

Existing cognitive models of PTSD are relevant to YP in care.

These same cognitive processes may drive both PTSD symptoms and complex features.

- Established treatments that target these processes, e.g. trauma-focussed CBT, should be considered firstline treatment for YP in care with high PTSD symptoms
- These established treatments may improve both PTSD symptoms and complex features.