

# E-Risk Study Concept Paper Form

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## 1. Collaborating researchers

**Please note:**

Once approved, a formal data use agreement will be required between King's College London and the university or research organisation that employs any collaborator having access to the data if they are not a member of staff, a student or affiliate of King's College London. This needs to be signed by both universities/organisations before data access can be granted.

For projects carried out by a student (e.g., MSc/MA, MPhil/PhD, clinical doctorate), the lead applicant should be the student's supervisor at the same university, and the student should be named as the student collaborator requiring access to the data.

If you have additional collaborators, please name them below and indicate whether they need to have access to the data. It would be common, for instance, for other researchers to see summary results of analyses and act as co-authors on your paper without having access to the data. You will not be permitted to share the dataset except with those indicated in the table as requiring access.

Applicable?	Category	Name	Email address	University/organisation	Needs access to data for analysis?
	<b>Applicant (lead researcher)</b>	Antonella Trotta	antonella.a.trotta@kcl.ac.uk	King's College London/University of Essex	<input checked="" type="radio"/> Yes <input type="radio"/> No
<input checked="" type="radio"/> Applicable <input type="radio"/> Not applicable	<b>Student collaborator (if data is for their dissertation/thesis)</b>	Chloe Scott	cs23774@essex.ac.uk	University of Essex	<input checked="" type="radio"/> Yes <input type="radio"/> No
<input checked="" type="radio"/> Applicable <input type="radio"/> Not applicable	<b>E-Risk Sponsor (if applicant is not an E-Risk investigator)</b>	Helen Fisher	helen.2.fisher@kcl.ac.uk	King's College London	<input type="radio"/> Yes <input checked="" type="radio"/> No

Are there additional collaborators to add?	<input checked="" type="radio"/> Yes <input type="radio"/> No
If yes, how many additional collaborators would you like to add?	1 <input type="button" value="▼"/>

Category	Name	Email address	University/organisation	Needs access to data for analysis?
<b>Other collaborator #1</b>	Anne-Kathrin Fett	Anne-kathrin.fett@citystgeorges.ac.uk Anne.fett@kcl.ac.uk	City St George's University of London, King's College London	<input type="radio"/> Yes <input checked="" type="radio"/> No

Applicants: If you would like to continue your application later, please press the "Save and return later" button below. Please copy or write down the Return code provided.

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## 2. The project proposal

**Note:** Please provide sufficient detail to enable the committee to review your proposal. Please be as specific as possible about the project aims and analysis methods as once approved this concept paper will be posted publicly and thus will act as a form of pre-registration of your project. Expand boxes as required.

<b>Title of project</b>	Exploring the role of maternal expressed emotion in post-traumatic stress outcomes following childhood victimisation.
<b>Background and rationale for project (approx. 300 - 1000 words)</b>	<p>On a global scale, it is estimated that 400 million children experience some form of childhood victimisation (UNICEF, 2024) and statistics show that at least 1 in 5 British children are subjected to abuse (Office for National Statistics, 2020). Childhood victimisation refers to any type of physical, sexual or emotional harm or mistreatment that impacts a child's health, wellbeing, development or dignity (World Health Organisation [WHO], 2024).</p> <p>Childhood victimisation is well established as a risk factor for child, adolescent and adult psychopathology, and has been consistently linked to elevated risk of Post-Traumatic Stress Disorder (PTSD) (Boumpa et al., 2022; Cruz et al., 2022; Hoeboer et al., 2020; IJzendoorn et al., 2020; Lansford et al., 2002; Lippard &amp; Nemeroff, 2020; Rameckers et al., 2021). This risk is heightened when children experience multiple traumatic events (Lewis et al., 2021; Lucia et al., 2025).</p> <p>PTSD can occur at any age and develops following exposure to a traumatic event or events. It is marked by re-experiencing the event, typically in the form of intrusive memories, nightmares or flashbacks; avoidance of reminders of the event, including people, locations, thoughts and memories; heightened perception of threat (WHO, 2019). PTSD is a chronic and debilitating disorder, with suboptimal treatment outcomes (Lancaster et al., 2016) and is economically costly (Montgomery-Marks et al., 2025). Whilst not all who are exposed to trauma develop PTSD (Lancaster et al., 2016), Lewis et al. (2019) found that within the ERisk cohort, trauma exposure was strongly associated with PTSD, with approximately 25% of trauma exposed individuals meeting criteria for PTSD by 18 years, making protective factors essential to identify to best manage and mitigate its development.</p>
<b>Project aims / objectives</b>	<p>Expressed emotion (EE) refers to the emotional attitude, quality and tone of caregiving relationships. EE can be understood as two distinct constructs: negativity, marked by criticism and hostility, and warmth, reflecting positive remarks and affectionate tone (Hooley, 1985). EE is often measured using the Five Minute Speech Sample, wherein a parent, typically mothers, speaks freely about their child for 5 minutes which is then coded for warmth and/or negativity (Wickersham et al., 2025).</p> <p>Studies have linked higher scores on criticism, hostility and emotional overinvolvement with poorer outcomes and relapse rates for many mental health conditions including schizophrenia, mood disorders and eating disorders (Butzlaff &amp; Hooley, 1998; Drosky et al., 2023). It has recently been suggested that EE may play a crucial role in the intergenerational transmission of mental health disorders and may help to explain why some children are more vulnerable to developing such disorders (Wickersham et al., 2025).</p> <p>Emerging evidence suggests that maternal warmth may act as a buffer against the impact of early childhood adversity, in terms of both physical (Chen et al., 2010) and psychological wellbeing. Moraes et al. (2018) reported that adolescents who experienced childhood abuse and neglect showed fewer symptoms of common mental health disorders, such as anxiety, depression and somatisation symptoms, when parental warmth was present. These findings highlight the importance of exploring EE as both a protective and risk factor.</p> <p>PTSD and the role of EE remains underexplored in literature. PTSD often involves both internalising (i.e. depression, anxiety) and externalising symptoms (i.e., aggression, substance misuse, risky sexual behaviours) (Nomamiukor et al., 2022). Maternal negativity has been associated with externalising symptomatology in adolescence (Wickersham et al., 2023). Studies also suggests that family climate, criticism and hostility in particular, may influence PTSD symptom severity and response to cognitive behavioural therapy in adults, the first-line intervention recommended for PTSD (Drosky et al., 2023; NICE, 2018; Tarıer et al., 1999). This suggests that EE has a potential role in shaping trauma trajectories across the lifespan. Not all victimised children go on to develop PTSD (Latham et al., 2019), therefore, exploring maternal warmth and negativity as possible moderators of this risk is essential for identifying pathways of resilience and vulnerability.</p>
<b>Brief statement of your hypothesis (approx. 100 - 500 words)</b>	<p>This study aims to investigate whether maternal EE (warmth and negativity), moderates the relationship between childhood victimisation and PTSD outcomes in early adulthood. The project seeks to explore how early caregiving environments shape vulnerability or resilience to PTSD following childhood trauma.</p> <p>This research is being completed as part of a Doctorate in Clinical Psychology at the University of Essex, supervised by Dr Antonella Trotta.</p>
<b>Data analysis methods to be used</b>	<p>Descriptive statistics will be produced prior to inferential analysis. Means and standard deviations will be reported for continuous variables (e.g., maternal warmth and negativity) and frequencies and percentages for categorical variables (e.g., PTSD diagnosis, victimisation exposure). Patterns of missing data will be examined and if appropriate, missing data will be addressed using established methods such as multiple imputation.</p>
	<p>Inferential analysis will aim to answer the following questions:</p> <ol style="list-style-type: none"> <li>What is the relationship between the number of childhood victimisations and PTSD in childhood and adolescence (by age 18)?</li> <li>To assess the relationship between poly-victimisation and PTSD during childhood and adolescence (lifetime PTSD diagnosis assessed at age 18).</li> </ol> <p>Binary logistic regression will be conducted to test associations between childhood victimisation (experienced between ages 5</p>

to 12) and lifetime PTSD outcomes at age 18.

2. To what extent does maternal expressed emotion moderate the relationship between childhood victimisation and PTSD in childhood and adolescence (by age 18)?

Binary logistic regression will be conducted to examine whether maternal expressed emotion (average scores will be generated from measures at age 5 and age 10 to create an overall "maternal warmth in childhood score" and "maternal negativity in childhood score") moderates the association between childhood victimisation (ages 5 to 12) and PTSD outcomes at age 18.

Victimisation will be examined as both poly-victimisation (exposure to multiple victimisation types) and as specific forms of victimisation (e.g., physical, emotional, sexual etc.). For each victimisation variable (poly-victimisation and individual type), two separate models will be run: one testing the moderation effects of maternal warmth and one testing the moderation effects of maternal negativity on the association between childhood victimisation and lifetime diagnosis of PTSD assessed at age 18.

All analyses will be corrected for the non-independence of twin observations using the Huber-White variance estimator. For all analyses, adjustments will be made for potential covariates and confounding variables, based on existing literature and E-Risk related studies. These include biological sex, family socioeconomic status, behavioural (i.e., aggression, delinquency) and emotional problems (i.e., withdrawal, depression, anxiety) at age 5 (to control for potential reverse causality) as proposed by Wickersham's concept paper investigating EE and adolescent psychopathology

<b>Significance for theory, research methods, or clinical practice</b>	<p>Theoretically, this study contributes to a deeper understanding of how maternal EE influences mental health outcomes for children who experience victimisation. It adds to the growing body of literature linking EE to adolescent mental health, while also offering insight into whether and how these early relational dynamics continue to affect individuals into early adulthood. In doing so, the study supports theoretical models that highlight the longstanding and critical role of caregiving relationships in shaping stress regulation and trauma responses across the lifespan.</p>
<b>References cited</b>	<p>Boumpa, V., Papatoukaki, A., Kourti, A., Mintzia, S., Panagouli, E., Bacopoulou, F., Psaltopoulou, T., Spiliopoulou, C., Tsolia, M., Sergentanis, T. N., &amp; Tsitsika, A. (2022). Sexual abuse and post-traumatic stress disorder in childhood, adolescence and young adulthood: a systematic review and meta-analysis. <i>European Child &amp; Adolescent Psychiatry</i>, 33. <a href="https://doi.org/10.1007/s00787-022-02015-5">https://doi.org/10.1007/s00787-022-02015-5</a></p> <p>Chen, E., Miller, G. E., Kobor, M. S., &amp; Cole, S. W. (2010). Maternal warmth buffers the effects of low early-life socioeconomic status on pro-inflammatory signaling in adulthood. <i>Molecular Psychiatry</i>, 16(7), 729-737. <a href="https://doi.org/10.1038/mp.2010.53">https://doi.org/10.1038/mp.2010.53</a></p> <p>Cruz, D., Lichten, M., Berg, K., &amp; George, P. (2022). Developmental trauma: Conceptual framework, associated risks and comorbidities, and evaluation and treatment. <i>Frontiers in Psychiatry</i>, 13(1), 1-14. <a href="https://doi.org/10.3389/fpsyg.2022.800687">https://doi.org/10.3389/fpsyg.2022.800687</a></p> <p>Drosky, S., Reddy, N., &amp; Espiridion, E. (2023). The Role of Expressed Emotion on Post-Traumatic Stress Disorder. <i>Transformative Medicine</i>, 2(2), 40-43. <a href="https://doi.org/10.54299/tmed/bcpm7888">https://doi.org/10.54299/tmed/bcpm7888</a></p> <p>Hoeboer, C., de Roos, C., van Son, G. E., Spinhoven, P., &amp; Elzinga, B. (2020). The effect of parental emotional abuse on the severity and treatment of PTSD symptoms in children and adolescents. <i>Child Abuse &amp; Neglect</i>, 111, 104775. <a href="https://doi.org/10.1016/j.chabu.2020.104775">https://doi.org/10.1016/j.chabu.2020.104775</a></p> <p>Hooley, J. M. (1985). Expressed emotion: A review of the critical literature. <i>Clinical Psychology Review</i>, 5(2), 119-139. <a href="https://doi.org/10.1016/0272-7358(85)90018-2">https://doi.org/10.1016/0272-7358(85)90018-2</a></p> <p>IJzendoorn, M. H., Bakermans-Kranenburg, M. J., Coughlan, B., &amp; Reijman, S. (2020). Annual Research Review: Umbrella synthesis of meta-analyses on child maltreatment antecedents and interventions: differential susceptibility perspective on risk and resilience. <i>Journal of Child Psychology and Psychiatry</i>, 61(3). <a href="https://doi.org/10.1111/jcpp.13147">https://doi.org/10.1111/jcpp.13147</a></p> <p>Lancaster, C., Teeters, J., Gros, D., &amp; Back, S. (2016). Posttraumatic Stress Disorder: Overview of Evidence-Based Assessment and Treatment. <i>Journal of Clinical Medicine</i>, 5(11), 105. <a href="https://doi.org/10.3390/jcm5110105">https://doi.org/10.3390/jcm5110105</a></p> <p>Lansford, J. E., Dodge, K. A., Pettit, G. S., Bates, J. E., Crozier, J., &amp; Kaplow, J. (2002). A 12-Year Prospective Study of the Long-term Effects of Early Child Physical Maltreatment on Psychological, Behavioral, and Academic Problems in Adolescence. <i>Archives of Pediatrics &amp; Adolescent Medicine</i>, 156(8), 824. <a href="https://doi.org/10.1001/archpedi.156.8.824">https://doi.org/10.1001/archpedi.156.8.824</a></p> <p>Latham, R. M., Meehan, A. J., Arseneault, L., Stahl, D., Danese, A., &amp; Fisher, H. L. (2019). Development of an individualized risk calculator for poor functioning in young people victimized during childhood: A longitudinal cohort study. <i>Child Abuse &amp; Neglect</i>, 98, 104188. <a href="https://doi.org/10.1016/j.chabu.2019.104188">https://doi.org/10.1016/j.chabu.2019.104188</a></p> <p>Lewis, S. J., Arseneault, L., Caspi, A., Fisher, H. L., Matthews, T., Moffitt, T. E., Odgers, C. L., Stahl, D., Teng, J. Y., &amp; Danese, A. (2019). The Epidemiology of Trauma and Post-Traumatic Stress Disorder in a Representative Cohort of Young People in England and Wales. <i>The Lancet Psychiatry</i>, 6(3), 247-256. <a href="https://doi.org/10.1016/s2215-0366(19)30031-8">https://doi.org/10.1016/s2215-0366(19)30031-8</a></p> <p>Lewis, S. J., Koenen, K. C., Ambler, A., Arseneault, L., Caspi, A., Fisher, H. L., Moffitt, T. E., &amp; Danese, A. (2021). Unravelling the contribution of complex trauma to psychopathology and cognitive deficits: a cohort study. <i>The British Journal of Psychiatry</i>, 219(2), 448-455. <a href="https://doi.org/10.1192/bjp.2021.57">https://doi.org/10.1192/bjp.2021.57</a></p> <p>Lippard, E., &amp; Nemeroff, C. (2020). The Devastating Clinical Consequences of Child Abuse and Neglect: Increased Disease Vulnerability and Poor Treatment Response in Mood Disorders. <i>American Journal of Psychiatry</i>, 177(1), 20-36. <a href="https://doi.org/10.1176/appi.ajp.2019.19010020">https://doi.org/10.1176/appi.ajp.2019.19010020</a></p> <p>Lucia, O., Heinrichs, N., Wagner, B., &amp; Maria. (2025). Poly-victimization and post-traumatic stress symptoms in care experienced youth: the mediating role of mentalizing. <i>PubMed</i>, 16(1), 2526301-2526301. <a href="https://doi.org/10.1080/20008066.2025.2526301">https://doi.org/10.1080/20008066.2025.2526301</a></p> <p>Matthews, T., Caspi, A., Danese, A., Fisher, H. L., Moffitt, T. E., &amp; Arseneault, L. (2020). A longitudinal twin study of victimization and loneliness from childhood to young adulthood. <i>Development and Psychopathology</i>, 34(1), 1-11.</p>

https://doi.org/10.1017/s0954579420001005  
Moraes, C. L. de, Sampaio, P. F., Reichenheim, M. E., & Veiga, G. V. da. (2018). The intertwined effect of lack of emotional warmth and child abuse and neglect on common mental disorders in adolescence. *Child Abuse & Neglect*, 83, 74-82.  
https://doi.org/10.1016/j.chabu.2018.07.008  
Montgomery-Marks, P., Bandyopadhyay, S., Weisman, C. B., & Bose, T. (2025). Economic burden of PTSD in the UK: a systematic review and economic analysis. *BMJ Open*, 15(7), e084394. https://doi.org/10.1136/bmjopen-2024-084394  
National Institute for Health and Care Excellence. (2018). Post-traumatic stress disorder NICE guideline.  
https://www.nice.org.uk/guidance/ng116/resources/posttraumatic-stress-disorder-pdf-66141601777861  
Nomamiukor, F. O., Suresky, R. E., May, C. L., & Wisco, B. E. (2022). Understanding internalizing and externalizing symptoms in trauma exposed community members. *Psychological Trauma: Theory, Research, Practice, and Policy*, 16(1).  
https://doi.org/10.1037/tra0001388  
Office for National Statistics. (2020, March 5). Child abuse in England and Wales: March 2020.  
https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletins/childabuseinenglandandwales/march2020  
Rameckers, S. A., van Emmerik, A. A. P., Bachrach, N., Lee, C. W., Morina, N., & Arntz, A. (2021). The impact of childhood maltreatment on the severity of childhood-related posttraumatic stress disorder in adults. *Child Abuse & Neglect*, 120, 105208.  
https://doi.org/10.1016/j.chabu.2021.105208  
Tarrier, N., Sommerfield, C., & Pilgrim, H. (1999). Relatives' expressed emotion (EE) and PTSD treatment outcome. *Psychological Medicine*, 29(4), 801-811. https://doi.org/10.1017/s0033291799008569  
UNICEF. (2024, June 11). Nearly 400 million young children worldwide regularly experience violent discipline at home - UNICEF.  
https://www.unicef.org/press-releases/nearly-400-million-young-children-worldwide-regularly-experience-violent-discipline  
Wickensham, A., Caspi, A., Arseneault, L., Moffitt, T. E., Downs, J., Ambler, A., Latham, R. M., Cummins, N., Firth, Z., Wertz, J., & Fisher, H. L. (2025). Maternal expressions of warmth and negativity and adolescent mental health: using longitudinal monozygotic twin-difference analyses to approach causal inference. *Journal of Child Psychology and Psychiatry*.  
https://doi.org/10.1111/jcpp.70020  
World Health Organization (2019). *International Statistical Classification of Diseases and Related Health Problems* (11th ed.).  
https://icd.who.int/  
World Health Organization. (2024, November 5). Child maltreatment. World Health Organization. https://www.who.int/news-room/fact-sheets/detail/child-maltreatment

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### 3. Expected project outcomes

#### Please note:

*The stated end date must be within 24 months of the date when this form is submitted. This end date will form part of the formal data use agreement and on this date you should delete the dataset. Therefore, it must be a realistic date for completion of the project including all analysis, writing a manuscript, review of the manuscript by all collaborators, submission, revisions, and acceptance of a paper for publication.*

*If you require an extension to the end date of the project, then you should contact Prof Fisher ([helen.2.fisher@kcl.ac.uk](mailto:helen.2.fisher@kcl.ac.uk)) to discuss this. If you have signed a formal data use agreement, you will need to complete a form to request a licence extension. In some cases, we may also ask you to complete a new concept paper form if there have been substantial changes to the project or a long period of time has elapsed (e.g., greater than a year since the end date of the original project).*

*If the objective of the project is not a journal publication, please suggest an end date within 12 months instead of 24 months, and state a measurable, concrete outcome. If the objective of the project is a student dissertation, then the expected end date should be the deadline for submission of the dissertation; dissertation projects will only be accepted on agreement that they are strictly not for publication.*

Date form submitted	07-11-2025	D-M-Y
	DD-MM-YYYY	
End date for the project	31-05-2027	D-M-Y
	DD-MM-YYYY	
Do you expect to publish your results in a journal?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
If no, please state the expected outcome if the project is successful (e.g., dissertation, thesis chapter, report)	<b>Completion of Doctorate in Clinical Psychology</b>	

Applicants: If you would like to continue your application later, please press the "Save and return later" button below. Please copy or write down the Return code provided.