Title: The Relationship between Maternal Sensitivity in Infancy, and Actual and Feared Separation in Childhood, on the Development of Adolescent Antisocial Behaviour

Author name and affiliation: Julia Salt
College of Life and Environmental Sciences
Washington Singer Laboratories
Perry Road
Exeter
EX4 4QG

Supervisors: Dr Julian Walker (Avon and Wiltshire Mental Health Partnership NHS Trust, affiliated with Bristol University)
Professor Glyn Lewis (Bristol University)

Target Journal: Journal of Adolescent Psychology and Psychiatry

Submission Date: 7th May 2013

Statement of academic probity and professional practice:
“I certify that all material in this assignment which is not my own work has been identified and properly attributed. I have conducted the work in line with the BPS DCP Professional Practice Guidelines.”

Submitted in partial fulfilment of requirements for the Doctorate Degree in Clinical Psychology, University of Exeter
ATTACHMENT AND ANTISOCIAL BEHAVIOUR

Abstract

**Background:** Research exploring the developmental of adolescent antisocial behaviour suggests that a secure attachment style is a protective factor against problem behaviour (Bowlby, 1969). It is theorised that disruptions in the attachment relationship can increase the likelihood of adjustment difficulties in adolescence, including antisocial behaviour (MacDonald, 1985). Such relationships have been inferred by cross-sectional research studies, but have yet to be tested in a longitudinal sample.

**Aims:** This research is a secondary data analysis, using data from the Avon Longitudinal Study of Parents and Children cohort study, to explore the relationship between attachment and adolescent antisocial behaviour at age 15.5 years. Attachment was measured using three component measures; maternal sensitivity in infancy (sample 1), separations from main caregiver in early childhood, age 3-5 years (sample 2) and the presence of separation anxiety in middle childhood, age 81 months, 6.75 years (sample 3).

**Results:** Logistic regression analyses were used to explore the relationships. Using available data, in sample 1 (n=456 complete cases) no evidence was found to support an association between non-positive maternal sensitivity in infancy and an increased incidence of adolescent antisocial behaviour (OR=0.79 [Cl=0.42-1.48], p=0.46). In sample two (n=3,961), the number of separations in infancy were not found to significantly increase the risk of adolescent antisocial behaviour (OR=1.26 [Cl=0.94-1.71], p=0.17). Separation anxiety in middle childhood was not found to have an effect on adolescent antisocial behaviour (OR=1.01 [Cl=0.80-1.26], p=0.96).

**Conclusions:** The findings suggest that although components of attachment, as measured in this study, were hypothesised to be associated with an increased risk of adolescent antisocial behaviour, this was not statistically supported in this study. In this study effects may be limited due to attrition, leading to the loss of antisocial adolescents from the study, creating a bias in the sample studied.
Keywords: Adolescent antisocial behaviour, Maternal sensitivity; Separation from caregiver; Separation Anxiety; ALSPAC; Longitudinal
# ATTACHMENT AND ANTISOCIAL BEHAVIOUR

## Table of Contents

**Title Page**  
1

**Literature Review**  
3

- **Cover Sheet**  
  1. Introduction  
  2. Method  
    - 2.1 Search Strategy  
    - 2.2 Results  
  3. Evaluation of the Literature  
    - 3.1 Antisocial Behaviour  
    - 3.2 Attachment and Antisocial Behaviour  
  4. Empirical Research  
    - 4.1 Research Exploring Maternal Sensitivity and Antisocial Behaviour  
    - 4.2 Research on Separation and Antisocial Behaviour  
    - 4.3 Research on Gender and Antisocial Behaviour  
    - 4.4 Review of Methodological Approaches  
  5. Review Conclusion  

**References**  
25

**Appendix**  
34

- Appendix A Search Strategy  
- Appendix B Instructions to Authors for Target Journal  

**Research Paper**  

- **Title page**  
- Abstract  
- Abbreviations  
- Introduction  
- Method  
- Results  
- Discussion  
- Key points  
- Acknowledgements  
- Dissemination Statement  

**References**  
88

**Appendixes**  
99

- Appendix A Instructions to Authors for Target Journal (Manuscript)  
- Appendix B B1 Exeter Ethical Approval  
  - B2 Bristol/ALSPAC Approval  
- Appendix C Antisocial Behaviour Measure  
- Appendix D Life Events Measure  
- Appendix E Separation Anxiety Measure  
- Appendix F Logistic Regression Analyses  
- Appendix G Distribution of Separation Data