

Maltreatment and Physical Health Problems among Adolescents and Young Adults: Indirect Effects of Attachment and Affect Regulation



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BACKGROUND

- Extensive research has examined the impact of childhood maltreatment on physical health; however, research examining the specific effects of different types of maltreatment on health outcomes has produced equivocal results and most studies have been retrospective or cross-sectional.^{1,2}
- Compared with other forms of maltreatment (e.g., physical, sexual), less is known about the impact of emotional abuse on later-life mental and physical health outcomes.^{3,4}
- Beyond its effect on mental and physical health, childhood maltreatment disrupts the development of core regulatory processes, including the attachment system and affect regulation.⁵
- Further, studies on attachment and maltreatment during adolescence are limited compared to research examining these factors in infancy, childhood, and adulthood.⁶

RESEARCH QUESTIONS

- Do all forms of maltreatment experiences (i.e., emotional and physical maltreatment, neglect, interparental violence, and the cumulative number of different maltreatment experiences) in adolescence predict physical health problems five years later?
- Does attachment security and affect regulation mediate the relationship between each type of maltreatment experience and physical health controlling for neighborhood violence?
- Does each type of maltreatment experience contribute uniquely to physical health?

METHOD

Participants

- 179 adolescents (46.4% female) recruited from a youth forensic center (53%), a provincial mental health facility (45%), and probation offices (2%). Measures in the current study were first completed at enrollment (Time 1 [T1]) when youth were on average 15.34 years ($SD = 1.53$) and again at five years follow up (Time 2 [T2]) when youth were on average 19.93 years ($SD = 1.59$).

Measures

- Covariates:** age, sex, and neighborhood violence (Community Violence Measure⁷).
- Maltreatment Experiences (T1):** Family Background Questionnaire.⁸

- Attachment Security (T1):** Comprehensive Adolescent – Parent Attachment Inventory.⁹
- Affect Regulation (T1 & T2):** Affect Regulation Checklist.¹⁰
- Physical Health (T2):** Child Health and Illness Profile – Adolescent Edition.¹¹

Statistical Analyses

- Missing data estimated using multiple imputation.¹²
- Multiple mediation regression analyses were conducted with model 6 of the PROCESS macro version 2.16.3. using 10,000 bootstrapped samples.¹³
- Indirect effects are considered significant if the 95% confidence intervals (CI) do not include a 0 value.

CONCLUSION

- Findings add to the mounting evidence that emotional abuse has deleterious health consequences that remain significant even after controlling for other forms of maltreatment.^{3,4}
- Emotional maltreatment disrupts the adolescent-parent attachment relationship, compromising the availability of the caregiver to provide safe haven and secure base. The lack of a secure attachment with parents deprives children and adolescents of a 'regulating other' who not only provides soothing and promotes downregulation, but also facilitates the development of the child's capacity for self-regulation.
- Attachment insecurity and attenuated affect regulation may account for the relationship between different forms of parental perpetrated maltreatment and poor physical health, supporting equifinality¹⁴ (i.e., diverse paths leading to the same outcome) and informing developmental models of maltreatment.

RESULTS

- Emotional abuse was the most commonly experienced maltreatment (84.4% maternal; 84.9% paternal); followed by neglect (57.1% maternal; 72.2% paternal), and physical abuse (49.7% maternal; 53.6% paternal).
- Emotional maltreatment and the cumulative number of maltreatment experiences significantly predicted physical health problems, and there was indirect effects through insecure attachment (CI [.003, .014], [.009, .047]) and adolescent and adult dysregulated affect (CI [.001, .003], [.002, .012]; Figure 1 and 5).
- Physical maltreatment, neglect, and interparental violence did not predict physical health problems (Figures 2-4); however, the indirect pathways through insecure attachment (CI [.003, .025], [.003, .015], [.001, .017]) and adolescent and adult dysregulated affect were significant (CI [.001, .005], [.001, .003], [.001, .004]).
- When controlling for all other forms of maltreatment, the indirect pathways from emotional maltreatment through insecure attachment (CI [.004, .016]) and adolescent and adult dysregulated affect (CI [.001, .005]) to physical health problems remained significant. No other significant direct or indirect pathways emerged for the other forms of maltreatment.

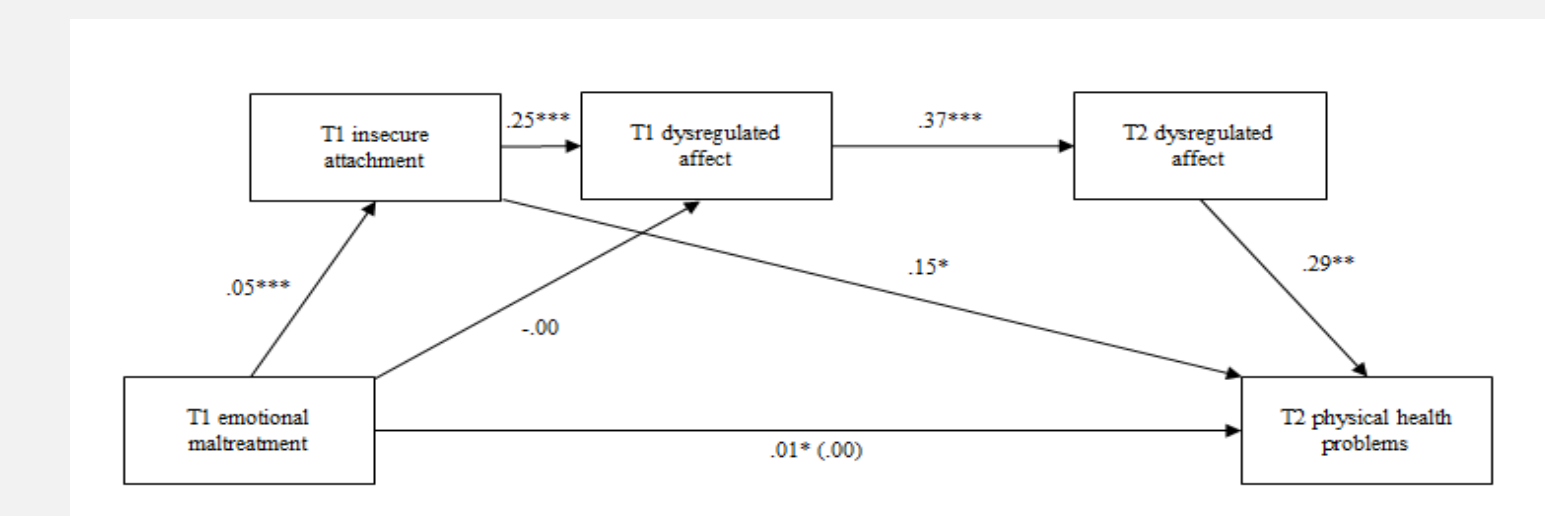


Figure 1. Emotional maltreatment. *** $p < .001$; ** $p < .01$; * $p < .05$.

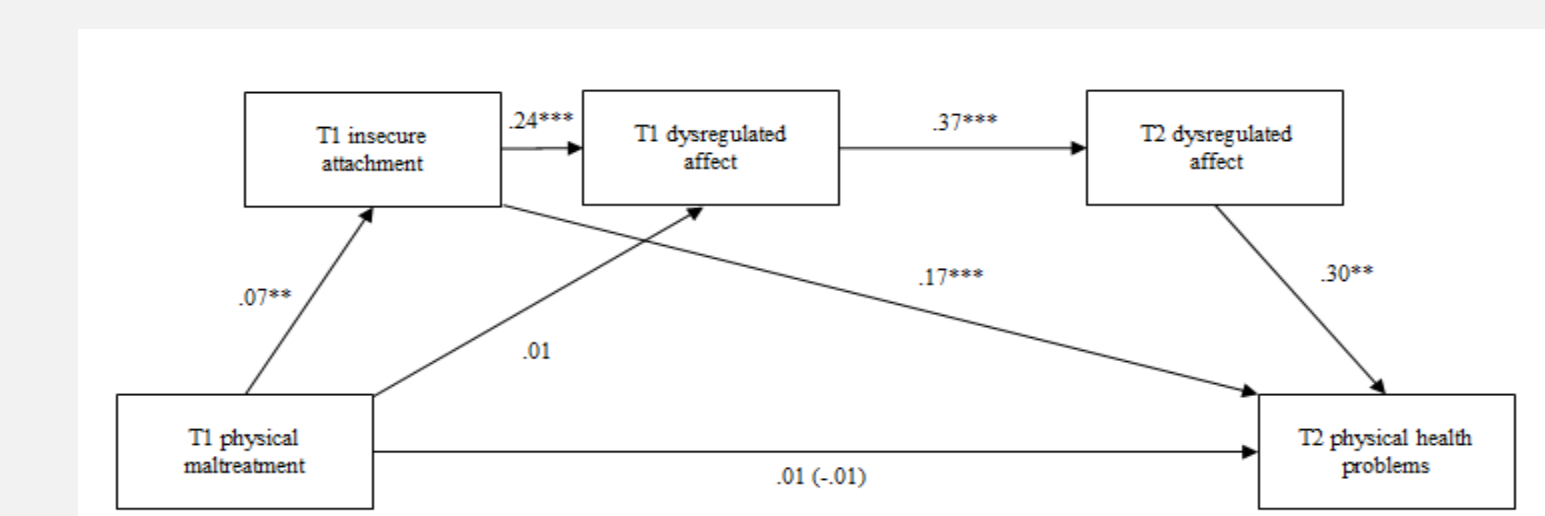


Figure 2. Physical maltreatment. *** $p < .001$; ** $p < .01$; * $p < .05$.

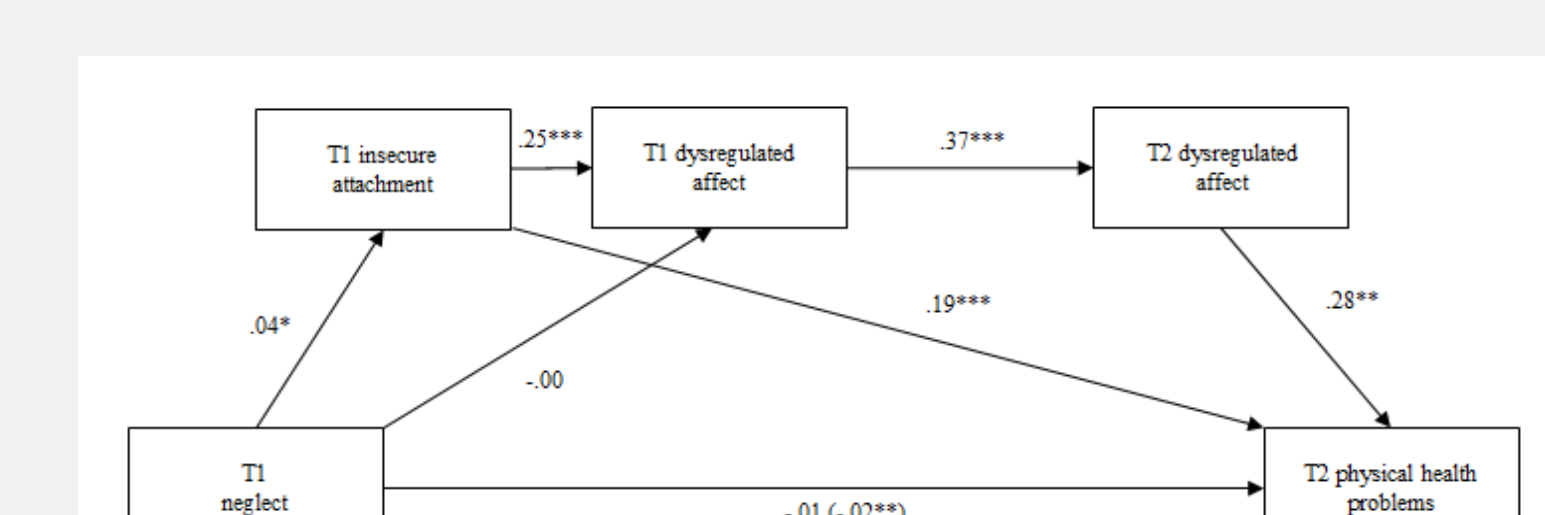


Figure 3. Neglect. *** $p < .001$; ** $p < .01$; * $p < .05$.

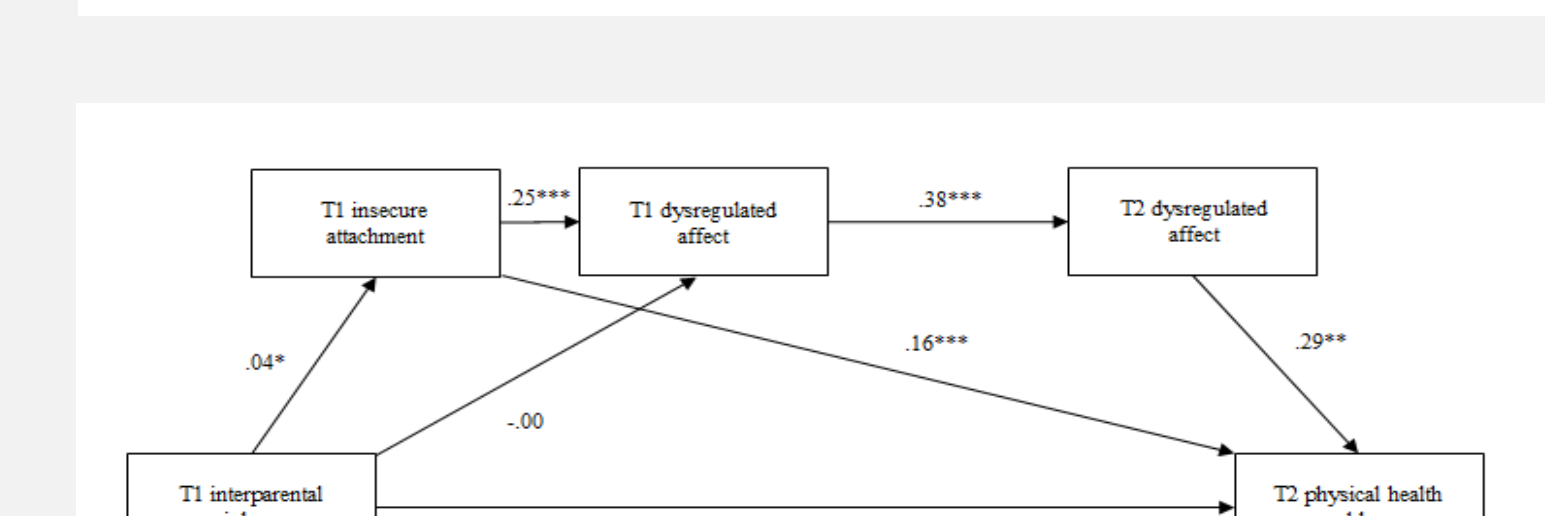


Figure 4. Interparental violence. *** $p < .001$; ** $p < .01$; * $p < .05$.

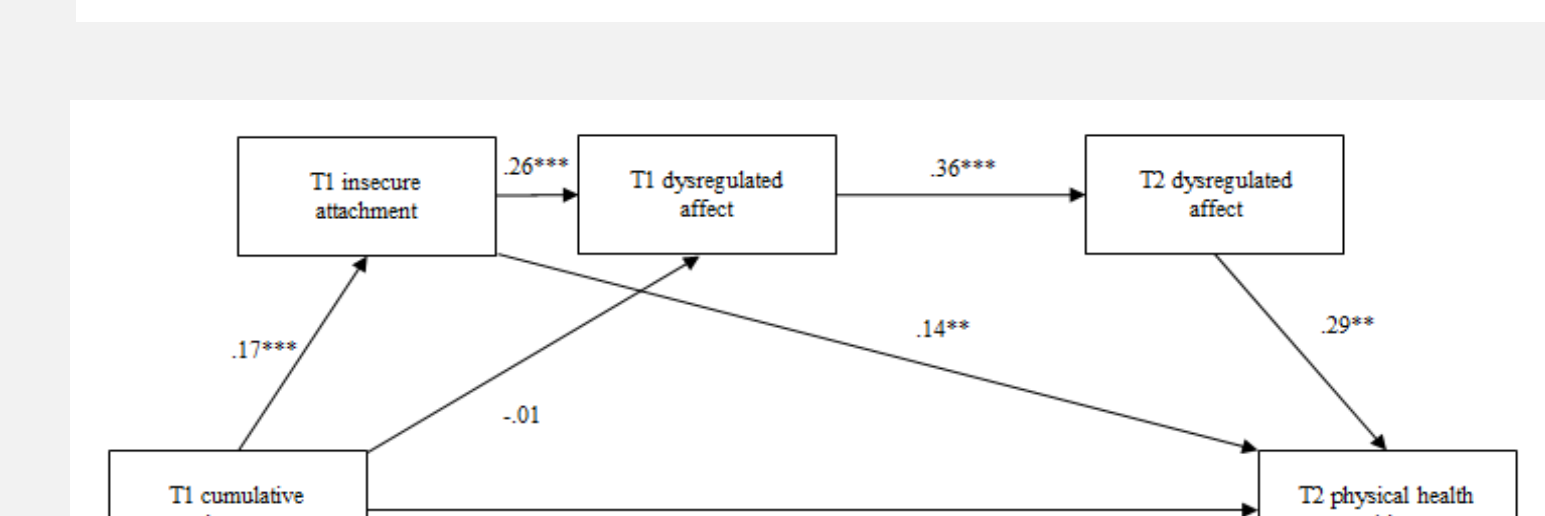


Figure 5. Cumulative number of maltreatment experiences. *** $p < .001$; ** $p < .01$; * $p < .05$.

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