Buffering Against Depressive Symptoms in Response to Community Violence

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INTRODUCTION

- Children growing up in neighborhoods with high rates of community violence are at risk for higher rates of depression and other mental illness.[1]
- Studies examining this phenomenon frequently use self-report measures of violence exposure; however, these data can be impacted by information bias.[2,3]
- We aimed to explore the relationship between mother's report of community violence and documented crime rates and hypothesized that mothers who report less community violence than the documented rates would be associated with lower depressive symptoms in her child.

METHODS

- We recruited 122 mothers and their children (50% female) between the ages of 8-12 from an inner-city hospital in Atlanta, Georgia as a part of a larger study.
- The Children's Report of Exposure to Violence (CREV) was administered to the mothers as a self-report measure of their child's violence exposure. A map of violence exposure by ZIP code can be seen in **Figure 1**.[4]
- The Behavioral Assessment System for Children (BASC-2) was administered to mothers as a self-report measure of their child's depressive symptoms. A map of depressive symptoms by ZIP code can be seen in **Figure 3**.[5]
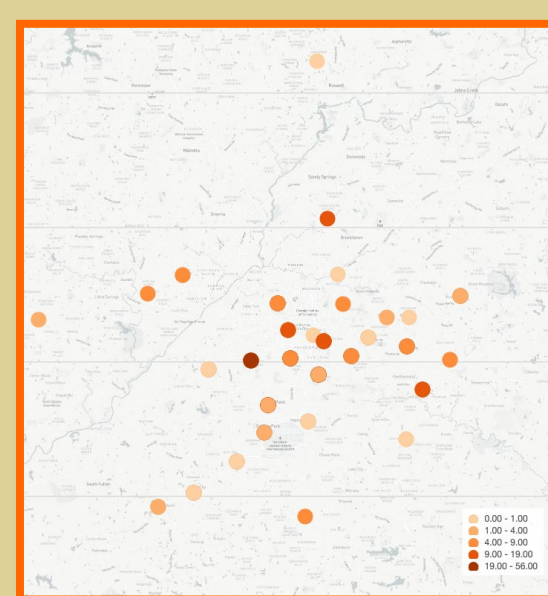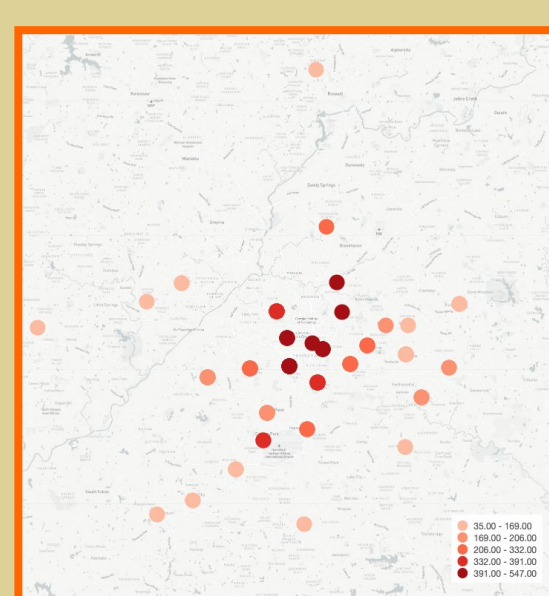

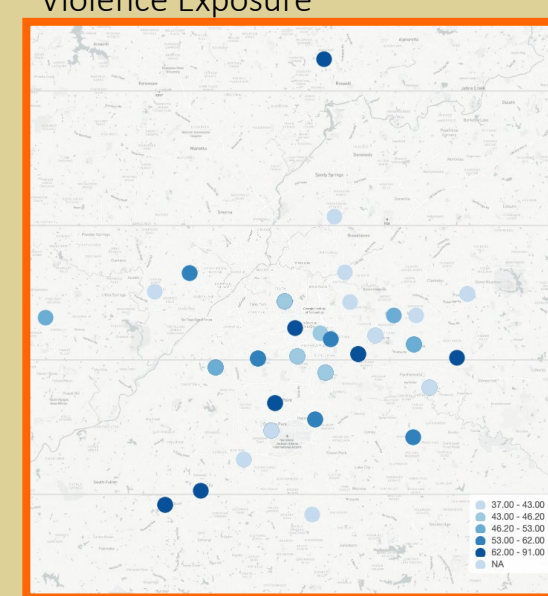Figure 1. Children's Report of Violence Exposure

Figure 2. Total Crime Index

Figure 3. Child's Depressive Symptoms

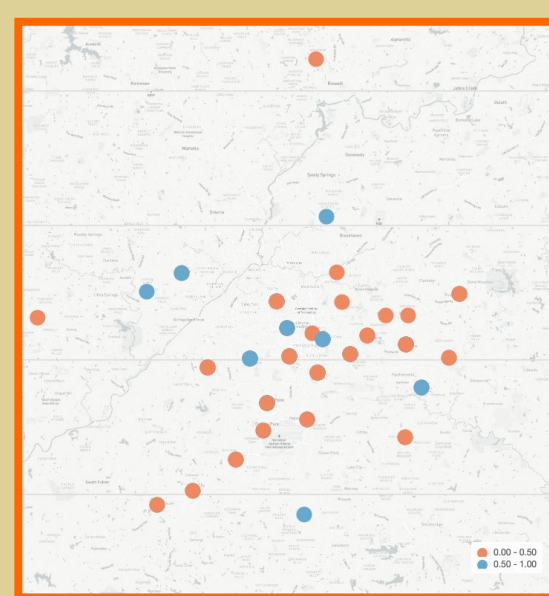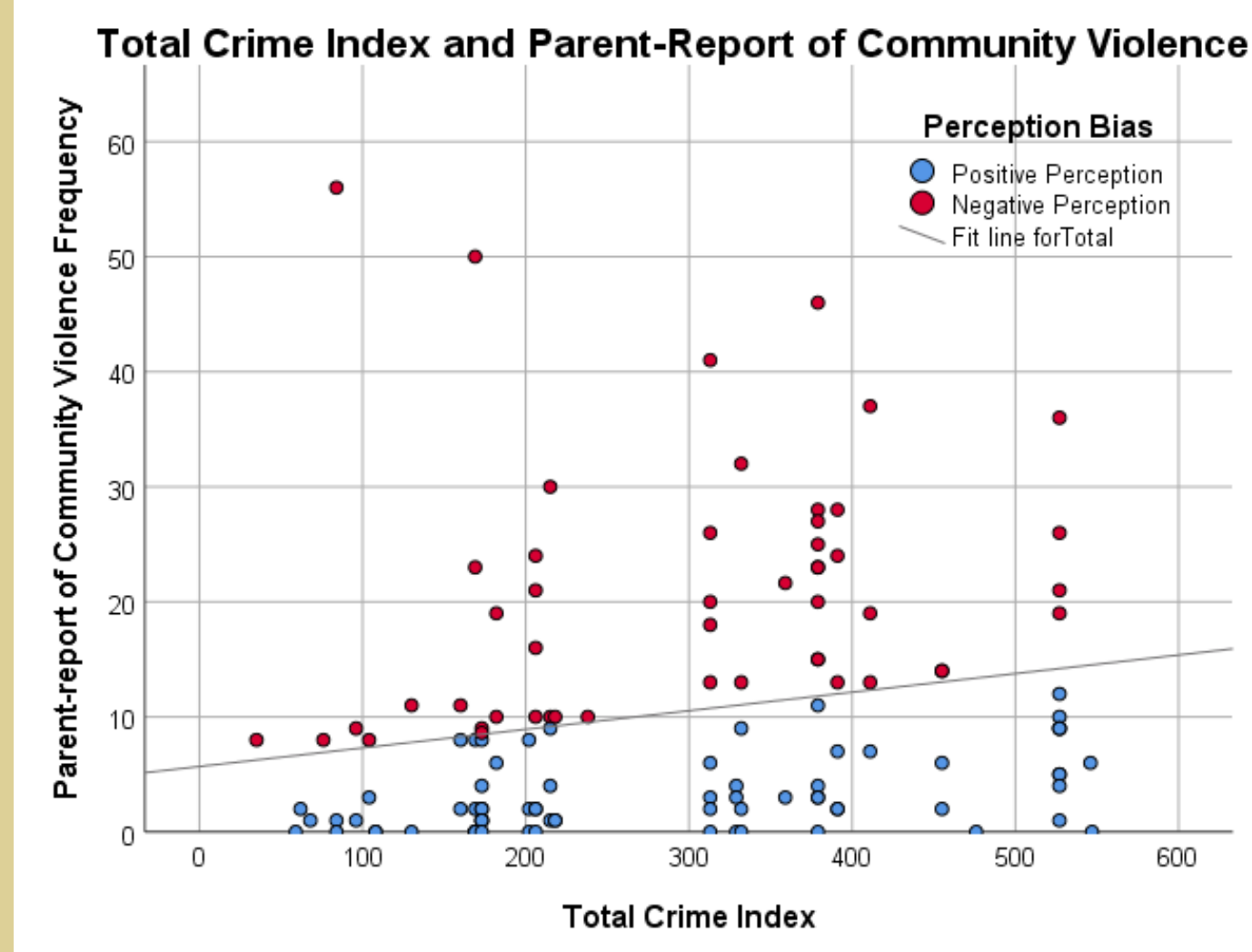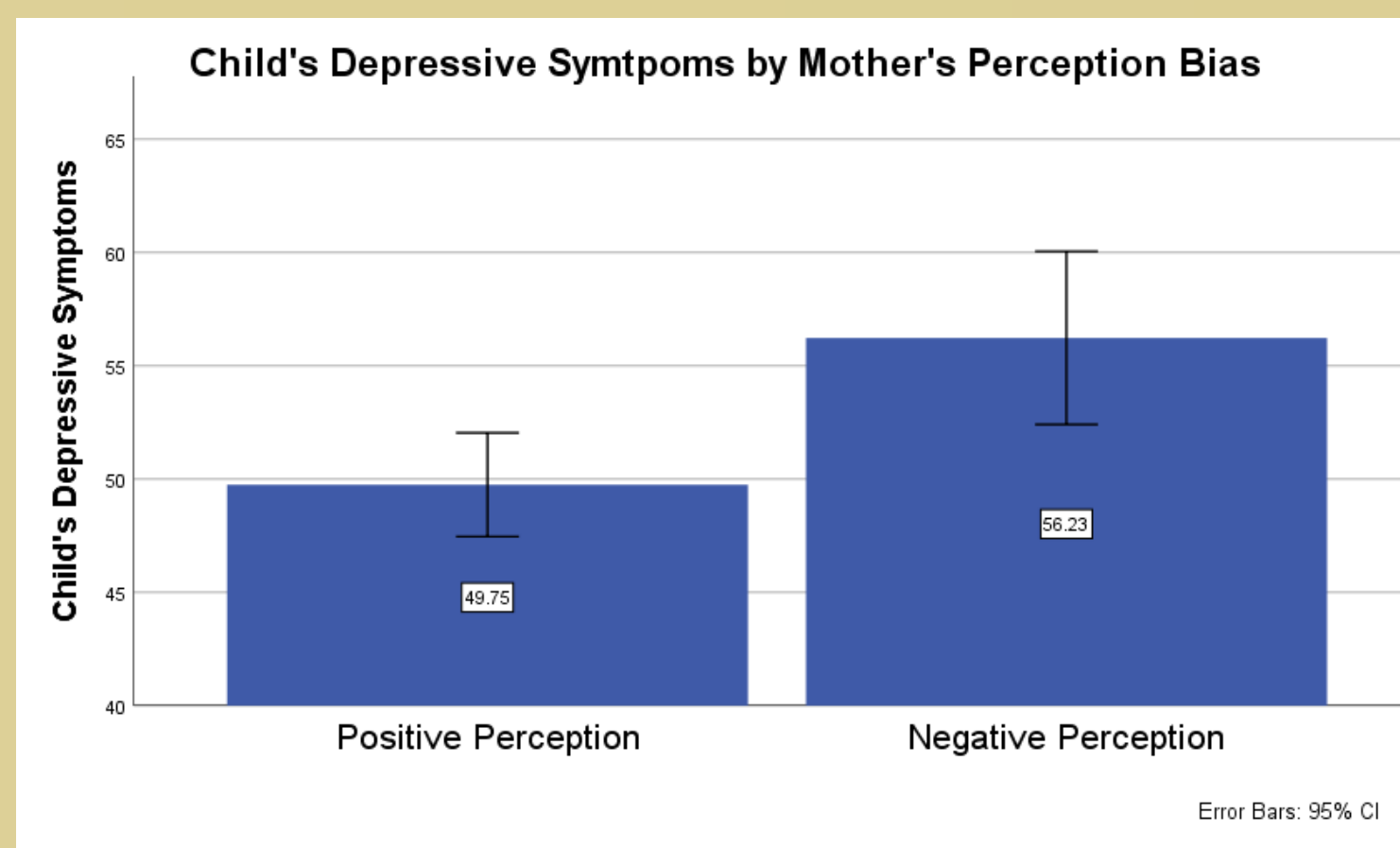Figure 4. Negative (blue) and Positive (orange)Perception Groups

- Total Crime Index by ZIP code was collected from ATTOM Data Solutions and can be seen in **Figure 2**.[6]
- Mother's perception bias score was derived from the residual of the crime index of her address and her self-reported community violence exposure. The Positive Perception group, shown in orange in **Figure 4**, perceived their community to be more safe than the Crime Index suggested, resulting in a negative residual. The Negative Perception group, show in blue in **Figure 4**, perceived their community to be less safe, resulting in a positive residual.

RESULTS

Figure 5. The crime index was correlated with maternal report of community violence, r(122) = 0.20, p = 0.029. We conducted a hierarchical linear regression controlling for child age and sex, and found that mother's report of community violence significantly predicted child's depressive symptoms after controlling for the crime index, F-change (1, 115)= 6.32, p = .013.

Figure 6. Among the mothers, 59% had a positive perception, indicating that they perceived the neighborhood as less violent than the crime index. Children of mothers with a positive perception had significantly lower depressive symptoms compared to those of mothers with a negative perception, F(119) = 9.58, p=0.002.

DISCUSSION

- We found that more than half of the mothers reported living in a less dangerous neighborhood than the crime statistics indicated.

- The children of these mothers did not have clinically significant depressive symptoms; whereas the children of mothers with a positive perception bias had higher symptoms, in line with the levels of violence exposure.

- These results suggest that mother's perception bias towards less violence can protect against, or "buffer" her child's adverse mental health outcomes.

- These findings should not be interpreted to diminish the detrimental effects of community violence on children's mental health but highlight the importance of maternal relationships.[7]

- This potential mechanism could provide an avenue for short term solutions while long term interventions are put in place to reduce overall community violence.

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