# Depression and Thinking About the Future

**Maternal Depression’s Association with Optimism and Vividness of Prospection**

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## Background

Although thinking about the future may seem second nature, it actually has evolutionary benefits and practical implications. Prospection, or thinking about the future, allows one to reflect and plan for future events, which is a key element of being able to function and thrive. Some of the key cognitive processes involved in prospection are episodic memory, semantic memory, self-referential processing, and executive functioning.

Optimism and vividness of prospection have both been negatively associated with depression. However, there has not been extensive research regarding the effect of maternal depression on the offspring's prospection. What research that has been done with prospection has indicated less maternal care, which is often related to maternal depression on the offspring's prospection. What research that has been done with prospection has indicated less maternal care, which is often related to maternal depression on the offspring's prospection.

## Method

Mothers were recruited along with their two children and measured at five different time periods after the initial meeting. The mothers’ lifetime diagnoses were determined using diagnostic tests at time 1 and time 3. For the purposes of this study, the focus will be on the fifth time period (T5 when the child participants were approximately 22 years old) because this is the time period when the data on prospection was collected. At T5, the young adult offspring completed an addendum interview that asked questions regarding their thoughts about the future. Additionally, they completed the Beck Depression Inventory. These data were analyzed using two raters that scored the interviews using a five-point Likert scale of optimism, counting the number of events and details described, and using the LIIWC test analysis for positive emotion and certainty.

## Results

### Optimism of Prospection and Maternal Lifetime Diagnosis

![Graph showing the relationship between Optimism of Prospection and Maternal Lifetime Diagnosis](image)

### Vividness and Maternal Lifetime Diagnosis

![Graph showing the relationship between Vividness and Maternal Lifetime Diagnosis](image)

## Conclusions

Our hypothesis was that children of mothers with unipolar and bipolar depression would exhibit lower levels of optimism and vividness of prospection. Based on the insignificant findings, our hypothesis was not supported. Although the study did not support the initial hypothesis that children of mothers with unipolar and bipolar depression would exhibit lower levels of optimism of prospection, further research needs to be done with more reliable measures. This research could lead to intervention strategies for the children of depressed mothers, which could decrease the rates at which the children experience later in life depression. Overall, this research could lead to decreased likelihood in heritability of unipolar and bipolar depression.

## Hypothesis

We predict that offspring with depressed mothers will exhibit lower levels of optimism and vividness of prospection than their non-depressed counterparts.

## Future Research

Likely, the results of this experiment were caused at least partially by a lack of reliability in the measures, specifically the optimism and vividness measures. These results might become significant if tests, such as the Life Orientation Test Revised and the Prospective Imagery Test, were used instead of the rater system (Stober, 2008). This would decrease issues with interrater reliability, which would increase the overall reliability of the study.

Another avenue of research that could further outline the role of depression in children and mothers in regard to prospection would be to study children and mothers that experience MDD. This would allow for a study that focuses on if there is a main effect between these factors. In short, would having a mother diagnosed with MDD and the child having a diagnosis of MDD create even lower levels of prospection than just a mother with MDD?

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References available upon request.