

Abstract: The current study examines the link between depressive symptoms during pregnancy and infant birth weight in a sample of incarcerated pregnant women (N=160, 50.9% African American, 11.3 % Married, 72.3% Completed High school). Comparisons are made between incarcerated women and non-incarcerated pregnant (N=42) and post-partum (N=74) women from the community. The results show that women enrolled in HB show a significant decrease in depression from intake to post-partum. Further, self-reported depression during pregnancy and birth weight was not significantly correlated for the incarcerated women but was for the community women. Possible implications for the findings are discussed.

Background Research & Hypotheses

Many incarcerated women suffer from severe mental health issues including depression (Warren, 2002). Depression during pregnancy is associated with poor health behaviors as well as prematurity and low birth weight (Alder, 2007). Rates of female admittance into jail increases by approximately 5% each year and of these women, approximately 6% are being identified as pregnant at the time of arrest (Harrison & Beck, 2004; Fearn & Parker, 2004). The current study examines the link between depressive symptoms during pregnancy and infant birth weight in a sample of incarcerated pregnant women. Comparisons are made between incarcerated women and non-incarcerated pregnant and post-partum women from the community.

The W&M HB Intervention: Nutritional Counseling

- Used as an intervention to encourage wiser decisions regarding diet during pregnancy and throughout life.
- Women receive a nutrition guide to fostering healthier eating patterns.
- Assist women with social services applications and refer to local agencies who specialize in assisting this population.

Participants and Measures

HB
Participants included 160 women identified as pregnant in midatlantic county jail facilities and 62 provided postpartum data.

- 50.9% African American
- 11.3 % Married
- 72.3% Completed High school
- 52.5% Carried health insurance in the last year

Community
Community ladies were recruited prenatally and after post-partum

- 42 provided prenatal data and 74 community women provided postpartum data
- 36.6% African American
- 96.7% Completed High School
- 64.5% Married
- 85.7% Carried health insurance in the last year

Participants rated their level of depression using the Center for Epidemiological Studies – Depression Scale (CES-D; Radloff, 1977)

Incarcerated pregnant women: Links between depression and infant birth weight.

Matthew Ernesto, Caroline Kelsey, Danielle Dallaire,
Catherine Forestell, Lauren Marshal, Veronica Junghahn

Results

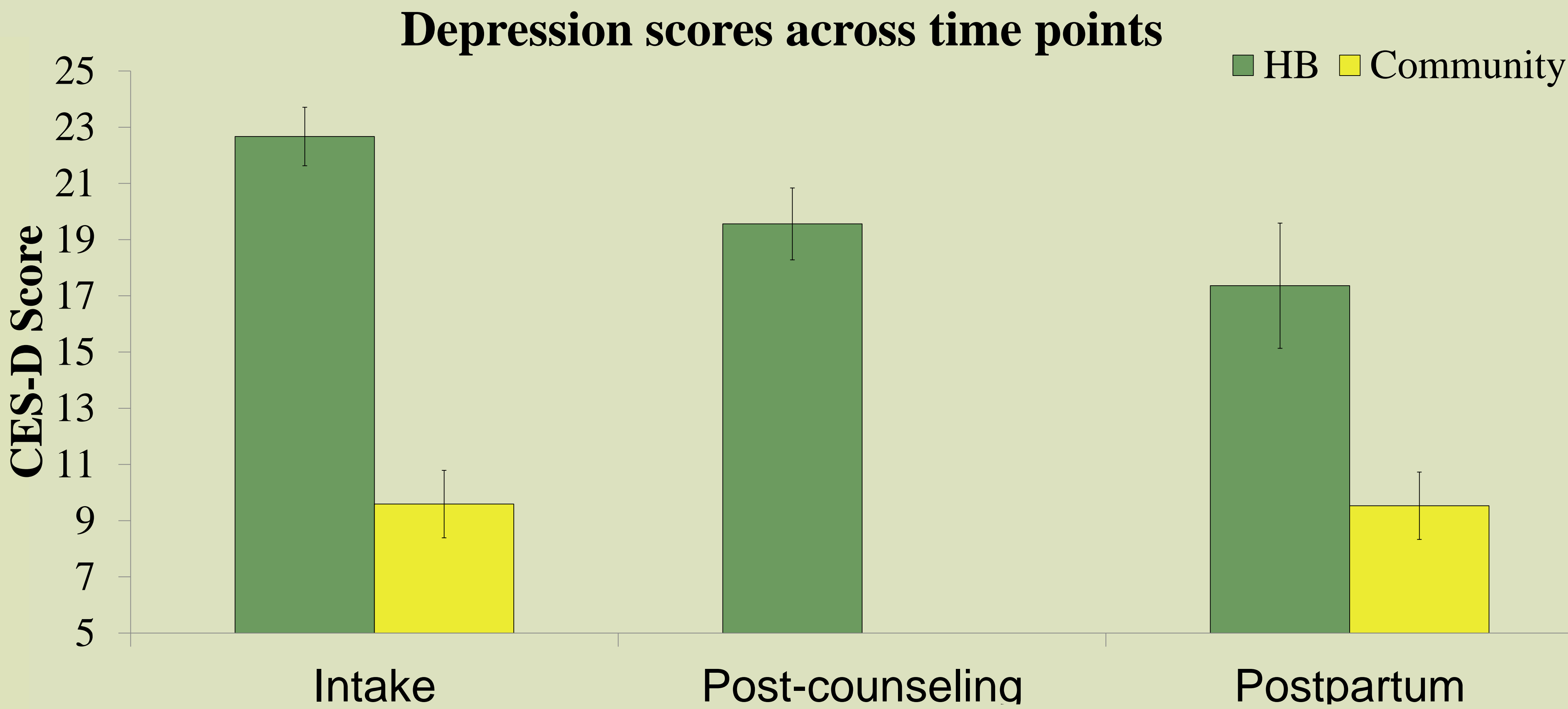


Figure 1
HB participants show marked declines in depression from intake to post-counseling, paired sample *t*-test (86) = 3.11, *p* = .003, and from intake to post-partum, *t* (38) = 4.06, *p* < .001. Community depression scores did not change significantly *t* (16) = 1.32, *p* = .90.

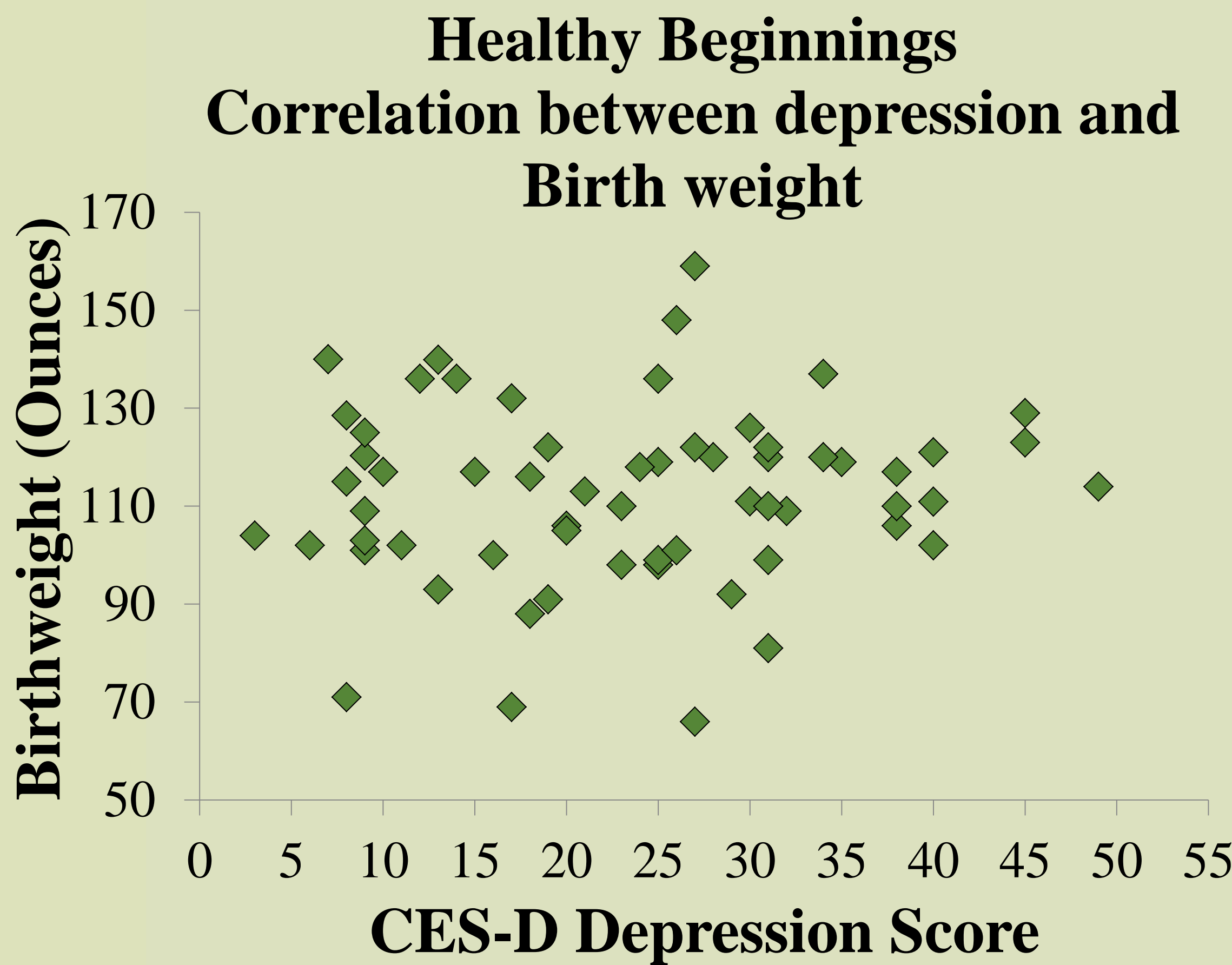
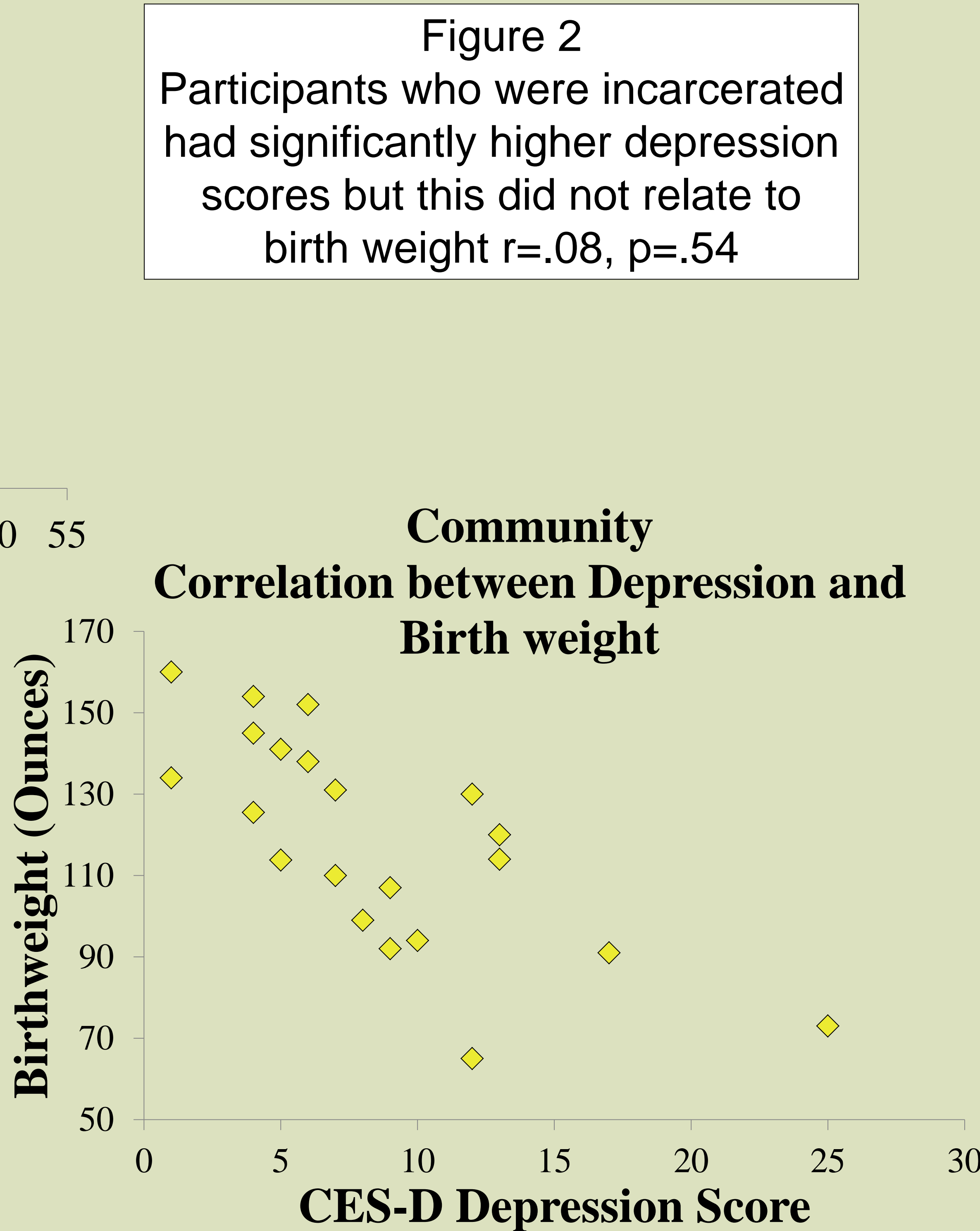


Figure 3
Participants who were in the community had significantly lower depression scores and this did significantly relate to birth weight *r* = -.72, *p* < .001



Further Support

- When comparing individuals with clinical and non-clinical levels of depression a similar finding emerges. Weeks gestation is not significantly different between depression statuses in HB *t* (59) = .79, *p* = .43.
- However, weeks gestation is significantly different between clinically and non-clinically depressed women in the community sample *t* (19) = 3.21, *p* = .005.

Implications & Future Research Directions

- This research has important implications for differentiating between situational and clinical depression. Future research should see if this finding holds across other temporary depression inducing situations (e.g., living in a war or having a close relative pass away during pregnancy).
- This research has implications for how self-reported depression levels should be interpreted during pregnancy.

Conclusion

- Depression during pregnancy is a serious issue and can affect the health of the mother and the child.
- This research supports that depression's effect on birth weight may differ by the cause of the depression.
- The high levels of depression reported by the HB women while incarcerated did not significantly relate to birth weight, whereas, the depression levels reported by women in the community was significantly related to birth weight of the child.
- Similarly, clinically high levels of depression in HB did not correlate with the weeks gestation of the child, but the relationship was significant for women in the community.

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