

National  
Organization of  
Mothers  
Of  
Twins  
Clubs, Inc.

**RESEARCH REPORT #95**

SUBJECT: **An Examination of Maternal-Fetal Attachment  
in Singleton and Twin Pregnancies**  
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**PURPOSE:** The purpose of the study was to identify and evaluate differences in the patterns of prenatal attachment between mothers of twin pregnancies and mothers of singleton pregnancies, and to examine various psychosocial factors to evaluate their influence on attachment in twin and singleton pregnancies.

**METHOD:** The target population for this study included a convenience sample of women currently pregnant with twins or a singleton during their third trimester of pregnancy, women who are able to read and write English, who are at least 18 years of age, and willing to participate in this study. The study was publicized through web-sites, newspapers/magazines, and mailings in various applicable organizations including the National Organization of Mothers of Twins, Inc. (NOMOTC). The researcher used two data collection tools: the *Mother's Information Demographic Questionnaire* (Domato, 2004) and the *Parental Attachment Inventory* (Müller, 1993).

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**BACKGROUND INFORMATION:**

The researcher hypothesized that there would be significant difference with prenatal attachment of mothers of twin pregnancies and mothers of singleton pregnancies, with the hypothesis that singleton mothers would have the higher prenatal attachment. Second, the researcher hypothesized that controlling for demographic variables, the experiences of specific prenatal psychosocial factors/contextual variables (i.e., current pregnancies' fetal count, gestational age, history of infertility treatment, perceived risk status, fetal movement/quickenings, planning of pregnancy) would explain a significant portion of the variance of prenatal attachment scores for both groups of women.

The sample consisted of a total of 168 women, 104 of which (61.9%) were pregnant with a single fetus, and 64 of which (38.1%) were pregnant with twin fetuses.

**RESULTS:**

Correlational results of variables demonstrated that women who were pregnant with twins: (a) had lower attachment scores; (b) had been pregnant fewer weeks; (c) were more likely to have needed medical treatment to get pregnant; and (d) were older than their non-twin counterparts. Attachment was higher for women: (a) who were younger; (b) who never had a previous live birth; and (c) who knew the gender of their fetus(es).

To test hypothesis 1, *t* tests for independent means revealed that the level of attachment among mothers of singletons ( $M = 3.18$ ) was significantly higher than for mothers of twins ( $M = 3.04$ ), providing support for the first hypothesis.

To test the second hypothesis, a two-step sequential regression model was developed. The first step of the model was statistically significant ( $p = .002$ ) and accounted for 11.1% of the variance in the women's level of attachment. Inspection of the independent variables found attachment to be higher for women who had not had a previous live birth ( $p = .04$ ) and for those who knew the gender of their fetus(es) ( $p = .002$ ). In step two, the seven additional predictors were added to the model. The combination of these seven added variables only added 2.2% explaining power to the variance of the model and none were significantly individually related to the women's level of attachment.

### CONCLUSIONS:

The current study aimed to add to what was already understood of the unique challenges of a twin pregnancy and how these challenges impact attachment behaviors. Its purpose was to identify and evaluate differences in the patterns of prenatal attachment between mothers of twin pregnancies and mothers of singleton pregnancies, and to examine various psychosocial factors to evaluate their influence on attachment in twin and singleton pregnancies. Although the study's findings supported the hypothesis that singleton mothers have higher prenatal attachment as assessed by the PAI, the study shed little light on why this may have been the case. Moreover, many of the variables shown to be significantly correlated with prenatal attachment among the literature were not shown to be part of the explained variance within the current study.