

The Male Disadvantage Hypothesis Reconsidered: Is There Really a Weaker Sex? An Analysis of Gender Differences in Newborn Somatometrics and Vital Parameters

Sylvia Kirchengast¹ and Beda Hartmann²

1. Department of Anthropology, University of Vienna, Vienna, Austria

2. Department of Gynecology and Obstetrics; Landeskrankenhaus Neunkirchen

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ABSTRACT The male disadvantage hypothesis was tested based on a data set containing 3518 singleton term births, which took place at a German Clinic for Gynecology and Obstetrics. Gender differences in birth weight, birth length, and head circumference as well as apgar scores were documented and their association patterns with maternal stress parameters were analyzed. As maternal stress the following parameters were defined: nicotine consumption during pregnancy, maternal age younger than 18 years and older than 35 years, maternal prepregnancy weight status (underweight or obese) and pregnancy weight gain of less than 9kg or above 15kg. It could be shown that all maternal stress factors with the exception of low or high pregnancy weight gain reduced the gender differences in newborn somatometrics significantly. Gender differences in the apgar scores were not significantly influenced by maternal stress factors. The results of the present study plead for an increased male vulnerability against stress factors even in utero.