
**Abstract**

Girls receiving lower quality paternal investment tend to engage in more risky sexual behavior (RSB) than peers. Whereas paternal investment theory posits that this effect is causal, it could arise from environmental or genetic confounds. To distinguish between these competing explanations, the current authors employed a genetically- and environmentally-controlled sibling design (N = 101 sister pairs; ages 18-36), which retrospectively examined the effects of differential sibling-exposure to family disruption/father absence and quality of fathering. Consistent with a causal explanation, differences between older and younger sisters in the effects of quality of fathering on RSB were greatest in biologically disrupted families when there was a large age gap between the sisters (thus maximizing differential exposure to fathers), with greater exposure within families to higher quality fathering serving as a protective factor against RSB. Further, variation around the lower end of fathering quality appeared to have the most influence on RSB. By contrast, differential sibling-exposure to family disruption/father absence (irrespective of quality of fathering) was not associated with RSB. The differential sibling-exposure design affords a new quasi-experimental method for evaluating the causal effects of fathers within families.