Father-daughter relationship crucial to when girls enter puberty

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A young girl's relationship with her family, especially with her father, may influence at what age she enters puberty, according to Vanderbilt University researchers.

Girls with close, supportive relationships with their parents tend to develop later, while girls with cold or distant relationships with their parents develop at an earlier age.

The research is published in the most recent edition of the Journal of Personality and Social Psychology. The research was conducted by Bruce Ellis, a postdoctoral fellow at Vanderbilt (now at the University of Canterbury in New Zealand); Stephen McFadyen-Ketchum, adjunct assistant professor of psychology at Vanderbilt; Kenneth Dodge, professor of psychology and psychiatry at Vanderbilt (now at Duke University); Gregory Pettit of Auburn University; and John E. Bates of Indiana University.

The study looked at 173 girls and their families from Nashville and Knoxville, Tenn. and Bloomington, Ind. from the time the girls were in pre-kindergarten until they were in the seventh grade.

Girls who had close, positive relationships with their parents during the first five years of life tended to experience relatively late puberty, compared to girls who had more distant relationships with their parents. More specifically, the researchers found that the quality of fathers' involvement with daughters was the most important feature of the early family environment in relation to the timing of the daughters' puberty.

Girls who enter puberty later generally had fathers who were active participants in care-giving; had fathers who were supportive to the girls' mothers; and had positive relationships with their mothers. But it's the fathers' involvement, rather than the mothers', which seems to be paramount to the age of the girls' development. The researchers believe that girls have evolved to experience early socialization, with their "antennae" tuned to the fathers' role in the family (both in terms of father-daughter and father-mother relationships) and that girls may unconsciously adjust their timing of puberty based on their fathers' behavior.

The researchers found that girls raised in father-absent homes or dysfunctional father-present homes experienced relatively early pubertal timing.

They present several theories as to why this occurs. One biological explanation is that girls whose fathers are not present in the home may be exposed to other adult males—stepfathers or their mothers' boyfriends—and that exposure to pheromones produced by unrelated adult males accelerates female pubertal development. The flip side of that theory is that girls who live with
their biological fathers in a positive environment are exposed to his pheromones and are inhibited from puberty, perhaps as a natural incest avoidance mechanism.

Girls who live with their fathers but have a cold or distant relationship with them would not be exposed to their fathers' pheromones as much as girls who have more interaction with their fathers, therefore causing the girls in the distant relationship to reach puberty earlier, the researchers hypothesize.

Perhaps most notable, the researchers say, is the important role fathers seem to play in their daughters' development, given that the quality of mothering is generally more closely associated with how children turn out than is the quality of fathering.

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