“Orchid Children” have Longer Childhoods when Home is Supportive

Supportive parents and a stable home life often delay puberty in biologically sensitive children.

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For many young children, a stable family life is one key factor to avoiding a number of serious health problems. In the latest edition of the journal Development and Psychopathology, Bruce Ellis, a professor of Family Studies and Human Development at the University of Arizona, and a group of colleagues found that children who grow up in supportive families are more likely to delay puberty—but only if they are biologically sensitive to context.

Ellis has coined a term for and written extensively about those children with higher biological reactivity to stress. “Orchid children,” as Ellis theorizes, are predisposed to be more susceptible to their environments, for better and for worse. Most children survive and even thrive in whatever circumstances they encounter, like dandelions. Nurtured with quality parenting and programs, orchid children can blossom spectacularly into society’s happiest, most productive people. Conversely, given poor parenting and sketchy surroundings, they are at greater risk to end up wrestling with depression, substance abuse issues and even jail.

In the current study, Ellis, the John and Doris Norton Endowed Chair in Fathers, Parenting and Families at the UA Norton School of Family and Consumer Sciences, predicted that puberty in orchid children, who display heightened biological responses to challenging events, would be especially sensitive to their family experiences while growing up. He found that orchid children who had higher quality parent-child relationships started puberty later and went through puberty more slowly. In contrast, lower quality parent-child relationships forecast the opposite pattern. What also emerged from the research was that there were no such effects demonstrated among less context-sensitive children.

“There is a great deal of interest and concern about early puberty because of its links to mental and physical health problems - eating disorders, depression, substance abuse, delinquency, obesity and teenage pregnancy,” Ellis said. More evidence implicates childhood stress as a factor that can induce early puberty, but not in everyone. “Understanding the causes of early puberty is critical for developing effective intervention and prevention strategies for high-risk youth.”
For more than a decade, Ellis’ research has investigated how children’s early experiences affect how they mature. Certain stressors in and around the family create conditions that speed puberty as well as sexual activity. These stressors include poverty, marital conflict, negativity and coercion in parent-child relationships, and lack of support between parents and children. Ellis contends that children adaptively adjust their sexual development in response to the conditions in which they live.

“This raises the question: For whom does stress matter? The answer, suggested by the current research, is that it matters for ‘orchid children.’ Orchid children start puberty the soonest and go through it the fastest when they experience low-quality parental care and involvement, the opposite when they experience high-quality parenting” Ellis said.

The current study followed 114 children (67 girls) in Wisconsin from preschool through 9th grade. It measured socioeconomic conditions, marital conflict, and supportive versus coercive parenting through interviews with mothers and fathers when the children were in preschool. Physiological responses to laboratory stressors were assessed in the 1st grade, and development of secondary sexual characteristics, such as breast budding in girls, voice changes boys, and the growth of body hair was measured from 3rd through 9th grades. Ellis said the data on puberty were obtained from “mother-and child-reports.”

“Essentially, the mothers and children were independently shown a series of diagrams depicting different levels of physical development and then selected the diagram that most closely resembled the child,” Ellis said.

Part of the funding for the study came from the National Institute of Mental Health. Ellis also received support from the Frances McClelland Institute for Children, Youth and Families, which is based at the Norton School and serves as a catalyst for the cross-disciplinary study of children, youth and families at the UA.