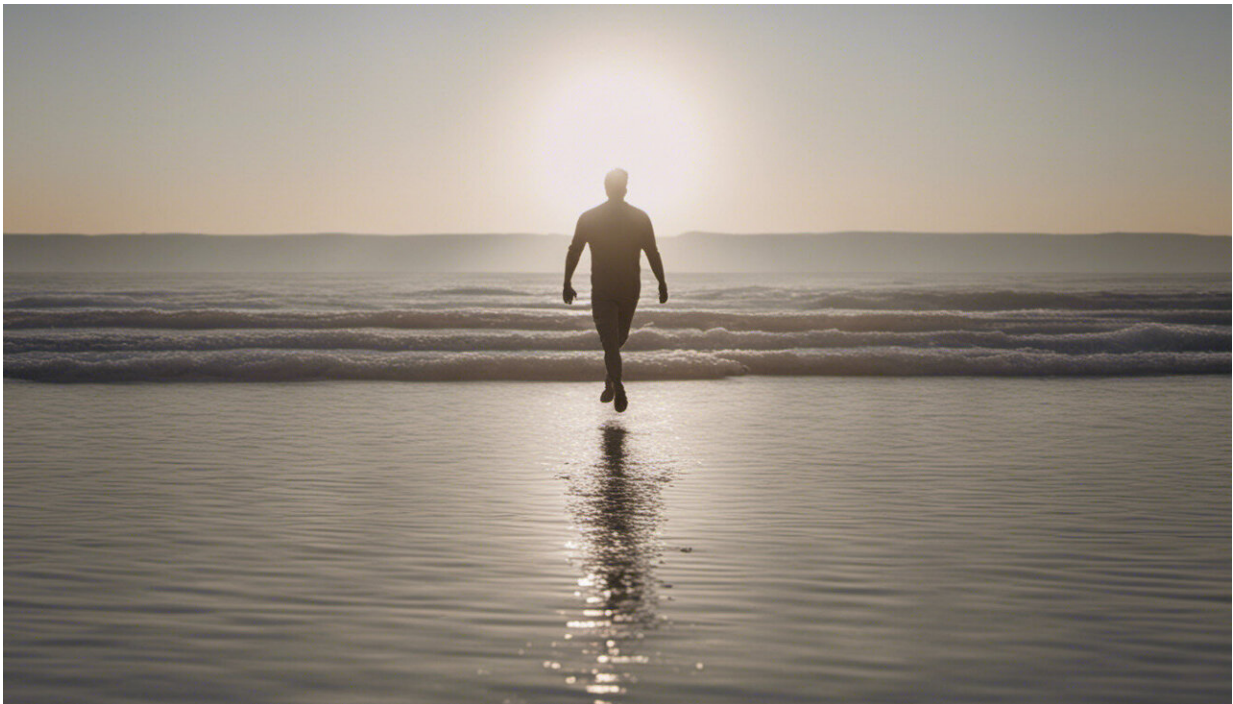


Low testosterone may make you a better father

June 20 2016, by Brenda Volling



Credit: AI-generated image ([disclaimer](#))

Many new parents know that a good night's sleep is tough to come by. What the new parents probably do not know is that a crying infant can trigger a testosterone dip in some men, which turns out to be a good thing. Less testosterone may make them more empathic and less aggressive, which may make them better fathers.

This new information on [hormonal changes](#) in men comes from a study I conducted with graduate student Patty Kuo at the [University of Michigan](#). It provides a window into men's parenting, and it may help them become more nurturing [fathers](#).

In both mothers and fathers, the sound of a crying baby can trigger a series of emotional responses, from empathy, to annoyance, to aggravation. The best response is empathy, as aggravation can lead to aggressive behaviors that put the child at risk.

We found that when the men saw their infants in distress and their testosterone declined, [they were more nurturing](#) and sensitive fathers when they had to interact with their infants.

We also found that when fathers described themselves as empathetic and when they reported having a loving relationship with the infant's mother, they were more sensitive fathers.

Looking for the hormonal link

Although men with children often have lower [testosterone levels](#) than men without children, earlier studies were not always successful in finding a link between fathers' direct involvement with their children and their testosterone levels.

We knew that men experienced a decline in testosterone and reported more sympathy to the infant when hearing infant cries. But we wondered whether fathers would have a similar response if they had to interact with their own distressed infants.

To do this, we used a common research paradigm in the field to assess the infant's attachment relationship with their parents, called the [Strange Situation](#). Fathers were separated from their infants for three-minute

intervals and then later reunited with them. Infants often became visibly upset during the brief separation and sought comfort from their father upon his return.

Afterward, we asked fathers to interact with their infants for 15 minutes and teach their one-year-old how to do some difficult tasks. Then we observed how sensitive and intrusive they were while interacting with the child. We also collected saliva from men before the visit, after the separation episodes and after the teaching tasks to measure their testosterone levels so we could see how they changed over time.



Credit: Biova Nakou from Pexels

When fathers experienced a larger decline in their testosterone after the separations with their crying infant, they used more sensitive parenting in the teaching tasks. We looked at such things as whether fathers supported their infant's attempts to work on the tasks or stopped and responded to the infant if they were frustrated with the tasks.

In the process, we have uncovered another clue to promote good fathering, because previous research has shown that sensitive and responsive fathering is linked to young children's social, emotional and cognitive development. These findings have important implications for developing interventions to assist fathers in the care of their infants because we now know how to help fathers cope with infant distress.

Why? Increases in testosterone in response to a crying infant combined with a father's inability to soothe the baby can lead to aggravation and aggressive tendencies that place the infant at risk for maltreatment.

Based on our study, we believe the fathers' empathy and declining testosterone level shaped how they responded. For example, if fathers interpret infant crying as a means of communicating distress and empathize with the infant, they will experience a decline in testosterone. This, in turn, facilitates a nurturing response.

Alternatively, when fathers interpret their infant's crying as aggravating and feel they are unable to comfort the infant, they may experience increases in testosterone, which facilitates an intrusive or negative response. Intervention efforts can be directed at helping fathers comfort their crying infants in a calming manner.

When fathers soothe, they feel better, too

Another [study](#) conducted with my colleague Carolyn Dayton at Wayne State University showed that fathers often used fewer strategies to soothe their infants (cuddling, rocking) when they cried than mothers over the first year after the infant was born.

We don't know if this is because fathers are just less involved in the infant's care than are mothers, or if fathers just don't have as many strategies in their repertoire to use because they haven't learned what to do. This is where health care providers could offer assistance and teach both mothers and fathers effective soothing techniques.

When fathers were more involved and shared equally with their partners in soothing the infant, men felt more effective as fathers. Also, mothers were less upset by the infant's crying at one year. These findings suggest that involved fathers who are able to effectively soothe their infants contribute to the overall well-being of their families.



Credit: AI-generated image ([disclaimer](#))

Hormonal changes begin in pregnancy – for men

Women undergo a series of changes during pregnancy, including weight gain, unique food cravings and reduced energy. For men, however, the transition is more subtle, and previous research has shown that most changes occur after childbirth.

A [University of Michigan \(UM\) study](#) led by psychologist Robin Edelstein reveals that men experience hormonal changes even before they become fathers. These changes could be a function of psychological changes that men experience as they prepare to become fathers, changes in their romantic relationships or even physical changes they experience along with their pregnant partners.

Nevertheless, fathers' hormonal changes could have important implications for paternal behavior once their babies are born. As part of this study, UM researchers examined saliva samples from 29 couples that were expecting their first child. Researchers tested for four prenatal hormones, including testosterone, at four separate times (12, 20, 28 and 36 weeks) throughout the pregnancy to measure any possible changes.

Men who showed larger declines in testosterone reported less hostile behavior with their infant, and their partners reported that they helped around the house more often. Meanwhile, women showed large prenatal increases in all four hormones, which coincides with previous research on expectant mothers.

Men, however, began to experience a dip in testosterone months before they entered the delivery room, which could have important implications

for their infant's development after the birth.

As noted earlier, because testosterone is often associated with aggression, men having lower levels of this hormone after their child is born may be better equipped to cope with their new responsibilities as a parent and provide the nurturant and responsive care that contributes to healthy infant development.

We need more research to bear this out. Right now, however, findings from these various studies indicate that biological changes are already underway as men prepare for fatherhood. The findings also show that they are clearly able to soothe and care for their crying infants. In addition, they show that empathetic fathers in loving relationships with their partners who also experience declines in [testosterone](#) in response to their distressed infants, provide [infants](#) with the care that enhances children's social, emotional and cognitive development.

Women may still spend a greater number of hours involved in childcare than [men](#), but an accumulation of studies over the past 40 years has now clearly documented the role of fathers in children's health and development and the verdict is in.

Fathers are more involved now than in decades past in the care of their children, yet many research studies continue to see fathers as the secondary parent and optional in the lives of their children.

Fathers matter in their children's lives. Their caring and nurturing, instruction and teaching, as well as financial support, influence children's emotional health, social competence and cognitive development.

This article was originally published on [The Conversation](#). Read the [original article](#).

Source: The Conversation

Citation: Low testosterone may make you a better father (2016, June 20) retrieved 27 April 2024 from <https://medicalxpress.com/news/2016-06-testosterone-father.html>

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