## RaisingMatureKids.com © 2012 James Lavin

## Chapter X: Fatherhood

"Researchers... tested whether parents are happier overall than their childless peers, if parents feel better moment-to-moment than nonparents, and whether parents experience more positive feelings when taking care of children than during their other daily activities.... Fathers in particular expressed greater levels of happiness, positive emotion and meaning in life than their childless peers." ${ }^{1}$

Mothers are generally more involved parents than fathers. (Rising male unemployment and a growing number of "Mr. Mom"s are shrinking this gender imbalance.) But the quotation above shows that fathers typically derive greater satisfaction from parenthood than mothers, though, as I argued in "The Parenting Decision," this may reflect fathers’ tendency to do fewer parenting-related chores and more of the fun playing-with-kids stuff. Most dads feel being a dad is both rewarding and fun!

And researchers have repeatedly found that dad plays a huge - and distinct - role in his children's development, even when his overall time involvement is less than mom's. Having a dad who supervises you in a nurturing way is a huge asset, according to a study begun in 1940 that has tracked 456 disadvantaged teen males throughout their lives:
[A] strong father-son relationship was associated with better outcomes for the boys in terms of earning better grades, repeating fewer grade levels, demonstrating fewer problem behaviors, and being less likely to smoke cigarettes. This finding held up even after we controlled statistically for the mother-son relationship and socioeconomic status, two other factors known to influence these outcomes. In fact, the father-son relationship was more strongly related to these outcomes than the mother-son relationship.

In addition, we found that a strong father-son relationship was associated with lower likelihood of having emotional problems as well as behavioral problems, even after controlling for the motherson relationship and socioeconomic status. Again, the father-son relationship was more strongly related than the mother-son relationship to these outcomes.
...[S]upervision was more important than affection for predicting behavioral outcomes. In fact, the amount of father supervision was a significant predictor even when we controlled statistically for the frequency of contact and the level of affection. This finding held up for the emotional outcomes as well. ${ }^{2}$

Fathers who care about what their children are doing, set clear expectations, monitor progress, and respond appropriately improve their children's future.

The value of an involved father is measurable very early. A study of 192 families found a positive

## RAISING MATURE KIDS © 2012 James Lavin

relationship between the quality of infant-father interactions at 3 months of age and infant outcomes at one year of age: "Children whose fathers were more engaged in the interactions had better outcomes, with fewer subsequent behavioural problems. At the other end of the scale, children tended to have greater behavioural problems when their fathers were more remote and lost in their own thoughts or when their fathers interacted less with them."3

Persistence is an essential life skill. Confronting challenges with determination, not surrender, is far more important to long-term success than intelligence - and scientists say dads play a huge role in helping children develop persistence: "dads are in a unique position to help their adolescent children develop persistence. BYU professors Laura Padilla-Walker and Randal Day arrived at these findings after following 325 families over several years. And over time, the persistence gained through fathers lead to higher engagement in school and lower rates of delinquency."4

When we think of children, we think of mothers before fathers. In many species, fathers never know - let alone help raise - their children. We'll see in this chapter that human parenting is special because:

- Human babies are born with large brains, and those brains grow dramatically in the years after birth. (Brain size at birth is limited by the need to squeeze through the birth canal.) Using those big brains effectively requires training.
- Childhood extends approximately 18 years (when girls' pelvises reach full size). Most of this time, children are learning but producing little of economic value. Our chimp cousins are full grown by age 12. Extended childhood may even have helped us outcompete our Neanderthal and other now-extinct hominid brothers and sisters whom scientists believe reached physical maturity at 12 or $14 .{ }^{5}$ Many species have life expectancies shorter than human childhood.
- Humans don't rely on physical attributes, like speed, sharp teeth and claws, to overwhelm prey. Humans rely on knowledge, communication and collaboration. So a child's future depends critically on teaching/learning, language acquisition, cultural transmission of ideas, and practice interacting with others in a complex society.
- Children with involved fathers who supervise them do much better in virtually every aspect of life.
- Human fathers are biologically adapted to be engaged dads.


## RaisingMatureKids.com © 2012 James Lavin

## Human Males Are Biologically Adapted for Fatherhood

The conventional "deadbeat dad" story claims men want sex but not babies. But unmarried fathers are actually unhappier than married fathers: "the majority of the continuously unmarried fathers in this study probably never shared a coresidential relationship with their child. Nonetheless, they are more depressed than their married counterparts after becoming a parent and may feel a strong psychological loss, perhaps by not having much contact with their new offspring." ${ }^{6}$

I once attended a lecture for dads by the former head of one of America's most prestigious private schools. He has been an educator for decades and is quite interested in and well read on issues of genetics, nurture (family \& parenting), and culture (social influences) as they relate to child development. But I recoiled at his premise: parenting is biologically anathema to fathers, but we can and must use our rational brains to overcome our biological predisposition to abandon our children and instead seek sex with other - usually younger - women.

While I admired his motivation, I disagreed with his premise, saying that what I have read suggests his claim is correct for many species but that humans, though not monogamous, are far closer to monogamy than most animals, including our nearest relatives (chimps, bonobos and gorillas), and that this is likely true because human parents must care for and teach our children for many years and have evolved pair-bonding precisely to help our children (and grandchildren) thrive and pass their genes into the future.

Though many species' males are absentee fathers, this is no hard biological law: "California mice pair up for life with males providing extensive parental care, helping deliver the pups, lick them clean, and keep them warm during their first few weeks of life. Experienced fathers are so paternal that they'll even take care of pups that aren't theirs. 'If we place a male California mouse in a test cage and present it with an unknown pup, experienced fathers will quickly start to lick and huddle with it.'"7

I argued that humans males possess an evolved love of and concern for their children. Many are faithful husbands, and even many who have been unfaithful remain - or want to remain - involved fathers. (Unfortunately for all involved, many legitimately angry mothers seek to punish cheating fathers by denying them fatherhood.) Actively involved human fathers, I said, make evolutionary sense, given the importance of fathers to children's lives: keeping them alive with resources and protection, providing love and knowledge, serving as male role models, helping them develop into someone who can attract a quality spouse, helping raise grandchildren, etc.

I love fatherhood. I’ve eagerly read many books that have helped me be a better father. I enjoy reading with my kids, admiring their art, playing games with them, and trying to answer their (endless stream of) questions. I'm proud watching them grow up to be sharing, cheerful, responsible, engaged young people. And I'm hardly alone.

Coincidentally, just a few days after our debate, New York Times writer Nicholas Wade wrote "New View of How Humans Moved Away From Apes", based on fresh research on this exact question:

The [study of 32 living hunter-gatherer peoples] corroborates an influential new view of early human origins advanced by Bernard Chapais, a primatologist at the University of Montreal, in his book "Primeval Kinship" (2008). Dr. Chapais showed how a simple development, the emergence of a pair bond between male and female, would have allowed people to recognize their relatives, something chimps can do only to a limited extent. When family members dispersed to other bands, they would be recognized and neighboring bands would cooperate instead of fighting to the death as chimp groups do...
"If you take the promiscuity that is the main feature of chimp society, and replace it with pair bonding, you get many of the most important features of human society," [Dr. Chapais] said. ${ }^{8}$

Apparently, Wade finds the subject as fascinating as I do because he wrote a follow-up article that dug deeper into this theory. I summarize Wade's synopsis as: Bipedalism (walking on our feet) $\rightarrow$ ability to hold things in our hands $\rightarrow$ weapons $\rightarrow$ lesser importance of physical size and strength $\rightarrow$ greater social equality $\rightarrow$ monogamy $\rightarrow$ fatherhood $\rightarrow$ extended childhood $\rightarrow$ larger brains $\rightarrow$ increased importance of parenting. (Though I’ve written this as a linear process, in reality, larger brains, monogamy, fatherhood, extended childhood, and more active parenting reinforced one another and evolved together.) In many ape societies, a physically dominant male can hoarde females. Once weapons came along and males and females began pairing up, males knew - for the first time - which children were (probably) theirs. This kicked off a cycle of larger brains and longer childhoods, with greater parental involvement, especially by fathers, who could - for the first time - be dads, rather than just sperm donors:
having two parents around allowed the infants to be dependent for longer, a requirement for continued brain growth after birth. Through this archway, natural selection was able to drive up the volume of the human brain until it eventually reached three times that of a chimpanzee.

On the social level, the presence of both parents revealed the genealogical structure of the family, which is at least half hidden in chimp societies. A chimp knows who its mother and siblings are, because it grows up with them, but not its father or father's relatives. So the neighboring bands to which female chimps disperse at puberty, avoiding incest, are perceived as full of strange males and treated with unremitting hostility.

## RaisingMatureKids.com © 2012 James Lavin

In the incipient hominid line, males could recognize their sisters and daughters in neighboring bands. They could also figure out that the daughter's or sister's mate shared a common genetic interest in the welfare of the woman's children. The neighboring males were no longer foes to be killed in sight - they were the in-laws.

The presence of female relatives in neighboring bands became for the first time a bridge between them. It also created a new and more complex social structure. The bands who exchanged women with each other learned to cooperate, forming a group or tribe that would protect its territory from other tribes. ${ }^{9}$

Shortly after our impromptu debate, new research proved my claim. It had long been known that fathers have lower testosterone levels than non-fathers, but it was not known why. A study of $624211 / 2-$ to-26-year-old males found that becoming a father - especially an active father - causes human male testosterone levels to fall substantially: "Christopher Kuzawa, co-author of the study, said, 'Raising human offspring is such an effort that it is cooperative by necessity, and our study shows that human fathers are biologically wired to help with the job. ${ }^{\prime \prime 10}$ In fact, high testosterone males were more likely to become fathers, but their testosterone levels plummeted after becoming fathers.

The more involved in child care a father becomes, the lower his testosterone level falls. ${ }^{11}$ And a recent scientific study - that gave some subjects testosterone and some a placebo - has proven that testosterone promotes selfishness, even when cooperation would benefit everyone:

Testosterone makes us overvalue our own opinions at the expense of cooperation... [P]eople given a boost of the hormone oxytocin tend to be cooperative. Now... researchers have shown that the hormone testosterone has the opposite effect - it makes people act less cooperatively and more egocentrically.
...[C]ooperation enabled the group to perform much better than the individuals alone when individuals had received only the placebo. But, when given a testosterone supplement, the benefit of cooperation was markedly reduced.
...[I]n chimpanzees, levels of testosterone rise ahead of a confrontation or a fight. In female prisoners, studies have found that higher levels of testosterone correlate with increased antisocial behaviour and higher aggression. Researchers believe that such findings reflect a more general role for testosterone in increasing the motivation to dominate others and increase egocentricity. ${ }^{12}$

Northwestern University anthropologist and study co-author Lee Gettler contextualizes this finding: "Humans give birth to incredibly dependent infants. Historically, the idea that men were out clubbing large animals and women were staying behind with babies has been largely discredited. The only way mothers could have highly needy offspring every couple of years is if they were getting help."13

When human males embrace fatherhood, their body chemistry changes in nurturing, pro-social
ways:
[One study] documented the very different parenting styles of men in two neighboring groups living around Lake Eyasi in northern Tanzania, the Hadza and the Datoga. Hadza men were ideal fathers in many ways... They carried, cleaned, fed and pacified their infants and slept around the same hearth as their children.

The Datoga, on the other hand, considered child-rearing to be women's work, so they rarely interacted with their infants and slept and ate separately from their wives.

Those opposing views of fatherhood were mirrored in the men's hormones. The Datoga fathers' testosterone levels were no different from those of their childless peers. Among the Hadza, however, fathers registered levels that were $30 \%$ lower in the morning and $47 \%$ lower in the evening than for men who weren't raising children. ${ }^{14}$

Why have human fathers evolved lower testosterone levels? Lower testosterone levels reduce selfishness, risk-taking and sex drive: "A dad with lower testosterone is maybe a little more sensitive to cues from his child, and maybe he's a little less sensitive to cues from a woman he meets at a restaurant. ${ }^{15}$ Dads become more risk averse, plausibly because dads have more to live for and less to gain from bold behavior. And encouraging monogamy strengthens family bonds. "Testosterone is a hormone associated with perceived hallmarks of masculinity such as libido, aggression and musculature. Those can be useful qualities when competing for a mate, but less so when raising a child — an endeavor that requires calm, attentiveness and an even temper." ${ }^{16}$

Fathers shouldn't fear "emasculation." Fathers' testosterone levels rise again over time, as children grow less dependent (perhaps explaining mid-life crises and trophy wives). And temporarily lower testosterone levels lower testicular cancer risk. Harvard University evolutionary biologist Peter Ellison says the findings simply prove "We've evolved to be good fathers": ${ }^{17}$

Ellison [said] "male parental care is important. It's important enough that it’s actually shaped the physiology of men.... My hope would be that this kind of research has an impact on the American male. It would make them realize that we're meant to be active fathers and participate in the care of our offspring."

The study, experts say, suggests that men's bodies evolved hormonal systems that helped them commit to their families once children were born. It also suggests that men's behavior can affect hormonal signals their bodies send, not just that hormones influence behavior. And, experts say, it underscores that mothers were meant to have child care help.
"This is part of the guy being invested in the marriage," said Carol Worthman, an anthropologist at Emory University who also was not involved in the study. Lower testosterone, she said, is the father's way of saying, "'I'm here, I'm not looking around, I'm really toning things down so I can
have good relationships.' What's great about this study is it lays it on the table that more is not always better. Faster, bigger, stronger - no, not always." ${ }^{18}$

There's also evidence that non-parents who see photos of young children react in ways that suggest we're biologically adapted to protect and help children:

Behavioral studies demonstrate that infants' faces activate sensitive and attuned responses in adults through their gaze, face expression, voice, and gesture. In this study we aimed to identify brain responses that underlie adults' general propensity to respond to infant faces. We recorded fMRI during adults' (non-parents) processing of unfamiliar infant faces compared to carefully matched adult faces and infrahuman mammal infant and adult faces. Human infant faces activated several brain systems including the lateral premotor cortex, supplementary motor area, cingulate cortex, anterior insula and the thalamus. Activation of these brain circuits suggests adults' preparation for communicative behavior with infants as well as attachment and caregiving. The same brain regions preferentially responded to human infant faces when compared to animal infant faces, indicating species-specific adult brain responses. Moreover, results of support vector machine based classification analysis indicated that these regions allowed above chance-level prediction of brain state during perception of human infant faces. The complex of brain responses to human infant faces appears to include biological mechanisms that underlie responsiveness and a caring inclination toward young children which appear to transcend adult's biological relationship to the baby. ${ }^{19}$

## Good Dads Have a Huge Positive Impact on Kids

Children with involved fathers do better on virtually every measure imaginable. ${ }^{20}$ Children without an involved father are more likely - in many cases many times more likely - to use drugs/alcohol, have drug/alcohol problems, engage in teen sex, get pregnant as teens, seek/receive treatment for emotional problems, develop anxiety/depression, develop mental illness, have physical health problems, run away from home, be homeless, attempt suicide, succeed at suicide, be sexually abused, score poorly on intelligence tests, skip school, get bad grades, repeat a grade, drop out of school, have low educational aspirations, be unpopular with classmates, be withdrawn, be hostile/aggressive, not participate in extracurricular activities, have conduct and disciplinary problems, engage in antisocial behavior, get suspended or expelled from school, become a juvenile delinquent, behave worse while incarcerated for juvenile delinquency, not attend college, have a bad maternal relationship, receive less parental attention/help/supervision, achieve less, have poor impulse control, be unable to defer gratification, fail to distinguish right from wrong, display low empathy and compassion toward others (even as adults), have trouble finding and keeping a job, earn less, engage in criminal behavior, go to prison, murder someone, rape someone, and become an absent father (for boys). ${ }^{21}$

That's a powerful prima facie case for the value of fatherhood. But a correlation between a father's

## RAISING MATURE KIDS © 2012 James Lavin

involvement and the success of his children does not prove cause-and-effect.
Another issue with much of the statistics above is that they measure mostly older children. A metaanalysis of 13 recent research studies explored how fathers impact young children entering school or younger. It concluded, "Father involvement was positively associated with positive social-emotional abilities and negatively associated with behavior problems. In addition [socioeconomic status, race/ethnicity, and father residential status weren't] able to explain any of the variability in the relationship between father involvement and child outcomes." ${ }^{22}$ The author says his findings are consistent with...
the growing body of research that demonstrates that fathers uniquely contribute to their children's development as distinct from the contributions of mothers.... Father involvement across the development of a child has been linked to children's psychological adjustment (Flouri, 2008) fewer behavioral problems (Carlson, 2006), higher educational attainment (Flouri \& Buchanan, 2004), and overall mental health (Boyce et al., 2006; Dubowitz et al., 2001). ...Fathers help their children to develop positive self-concept, self-esteem, social competence, empathetic abilities, self-confidence, and emotion regulation (Amato, 1994; Biller, 1993; Culp, Schadle, Robinson, \& Culp, 2000; Downer \& Mendez, 2005; Fagan \& Iglesias, 2000). ${ }^{23}$

An active father protects against mental illness for high-reactivity children:
Early father involvement and children's biobehavioral sensitivity to context significantly and interactively predicted symptom severity. Among children experiencing low father involvement in infancy, behavioral, autonomic, and adrenocortical reactivity became risk factors for later mental health symptoms. The highest symptom severity scores were found for children with high autonomic reactivity that, as infants, had experienced low father involvement and mothers with symptoms of depression. ${ }^{24}$

Fatherhood feels natural to dads who embrace it. This happens, science has shown, because human males have evolved a biochemical response to fatherhood that helps us be better fathers. And a good father is an incredibly valuable asset to a child, in basically every measurable way.

To learn more about how to be a great dad, I encourage you to read the "Authoritative Parening" chapter.

