

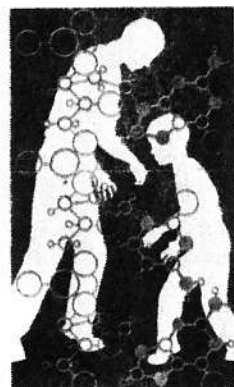
By SHARON BEGLEY
(Wall St. Journal)

Genes, Not Experience, Explain Why the Lives Of Some Take Bad Turn

DEFENDERS OF cigarettes aren't known for cutting-edge science, but give them credit for one insight.

When the link between smoking and lung cancer was emerging, smoking apologists asked whether some unknown biological factor (call it X) might have two effects, causing people to smoke *and* causing them to develop cancer. In that case, although the higher rate of illness among smokers might seem to implicate smoking, in fact X would be the cause of both smoking and cancer. Smoking would be an innocent bystander.

That turned out to be hogwash, of course. But the premise isn't crazy. Indeed, it has returned to center stage in studies of how life experiences increase a child's risk for depression, behavior problems and other bad outcomes.



Paul Watson

The approach is called genetically informed research. The idea is to not be fooled into believing that a certain experience leads to a certain outcome but to probe whether a genetic predisposition (the X factor in the smoking analogy) leads to the experience *and* the outcome.

Take the conventional wisdom that their parents' divorce increases the risk that children will develop depression. "It turns out that the increased risk of depression in these children reflects a common genetic liability in the parents and kids," says Brian D'Onofrio of Indiana University, Bloomington. Since depressed people have more trouble getting and staying married, this genetic risk of depression raises their risk of divorce, he finds in a study submitted for publication. Parents pass that risk of depression to kids through DNA, not failed marriage.

"The same genetic risk that makes the parents more likely to divorce also makes the kids more likely to develop depression," he says.

IN STUDIES like this, scientists don't identify actual genes. Instead, they compare identical twins to fraternal twins to full siblings, half-sibs and step-sibs, who have varying degrees of genetic relatedness. If identicals are more affected by an experience than step-sibs, the experience may not have the causal power it seemed to. In the case of parental divorce, children of identical twins who suffered from depression also had increased depression, regardless of whether their parents were divorced, suggesting that parents' broken marriage is not at fault.

Children whose mother smoked during pregnancy have a higher risk of conduct and behavior problems, even criminality. This led to the hunch that nicotine exposure might change the fetal brain in a way that leads to greater impulsivity or risk-taking, says Prof. D'Onofrio. But might the kids' problems arise from inheriting genetic X factors that also led mom to smoke while pregnant?

"When we used a genetically informed approach, we found no association between maternal smoking and children's conduct problems," says Prof. D'Onofrio, who presented his results to the annual meeting of the Association for Psychological Science. Instead, likely culprits include X factors such as lower intelligence, impulsivity and aggression, which are partly genetic.

Teen motherhood is widely viewed as raising a girl's risk for dropping out of school and falling into poverty. "But who becomes a teen mother isn't random," says Sara Jaffee of the University of Pennsylvania. "Pre-existing differences might explain the different outcomes."

That is what she and colleagues found. Low IQ, conduct problems and antisocial behavior lead to both pregnancy and dropping out. Since the culprit is not pregnancy per se, efforts to help young women finish school would do well to focus not on pregnancy prevention but on learning, impulse control and conduct. All are only partly genetic and can be affected by intervention.

IN THE CASES of divorcing parents, smoking moms and pregnant teens, genetically sophisticated studies show that what was thought to be the causal factor isn't. Instead, something inherent in the children affected by divorce, smoking or pregnancy is at work.

Other studies using a genetically smart approach, however, put the onus squarely on the bad experience. Abused children are more likely to develop antisocial behavior and even criminality, for instance. Something genetic might make parents more likely to abuse their children, and the kids—who inherit that—more likely to become antisocial (lying, stealing, and being aggressive, noncompliant and delinquent). But in this case, scientists led by Prof. Jaffee found, it is the abuse itself—not some hypothetical genetic X factor—that "plays a causal role in the development of children's antisocial behavior."

That suggests that preventing abuse can prevent its tragic consequences. Nothing inherent in abused children dooms them.

Living with a father who steals, brawls and can't hold a job raises a child's risk of similar behavior. But children also inherit genes from dad. In principle, either the experience or the genes might push them to follow in his antisocial footsteps. In this case, Prof. Jaffee finds a clear effect of environment: The longer a child lives with such a father, the greater the risk of a similar fate. That suggests that keeping families intact is not always in a child's best interest.

As Jenae Neiderhiser of George Washington University says, "the strength of genetically informed studies is that they are just as useful for identifying the effects of environment."

You can email me at sciencejournal@wsj.com.

We used to believe that family background was important. It is!

History shows that conformity cannot be imposed upon diversity. Rome learned that too late.

1 MAR 07. Hail Chad! It was great to receive your letter of 26 FEB 07, from your new residence. Your zoggies are arguing "nurture" over "nature." In other words, if one's environment is controlled, one's character, intelligence & behavior are products of that environment, & not in any way due to heredity. The article on genes refers.

T.E. Lawrence, who was fluent in Arabic & thoroughly acculturated in Arab society observed that he could never be an Arab, nor considered an Arab by Arabs, nor could he return to being a total Englishman. He was in cultural no man's land. A White could be immersed in Black culture, but he would never be accepted as a Black. I've seen such doings in Africa, so your zoggies haven't got a chance. I am fluent in Spanish & have lived & worked over 8 years in Mexico, Spain, Colombia, Peru & Central America. I know some of their customs, & I have worked with all classes & ethnic groups in those societies, but I remain a White, a Gringo, a foreigner. One time I was called a "damned Spaniard" in Mexico City, because I'd lost my Mexican accent in Spanish. I took that as a compliment, for that meant I'd lost my Gringo accent.

Psychologist Carl Jung, a student of the Jew, Freud, perceived "racial memory" in all societies. I experienced this phenomenon in Sweden, where my learning of Swedish was easy, & I was not so much learning as 'remembering'. Many Swedish words resembled old English words, & the culture was comfortable, an effortless fit for my tastes, unlike non-White cultures of Latin America, Southern Europe & Asia, as well as The Middle East, where I'd been before I lived in Central Africa, following my exile from the USA et al. In my sea travels around the world, I find the same familiarity, with no book-learning. I was raised as a landlubber, but I thoroughly enjoy sailboating & even storms at sea. Nor did I 'learn' to get seasick. Could this feeling for the sea & ships have anything to do with the fact that my ancestors were seafarers for centuries? I suspect so. I am usually a passenger, but I have been asked several times on several voyages to come to the bridge when the sea was heavy, & there was danger of capsizing. My advice was well-received, for I know the drill, which is, for me, common sense: keep the bow into the wind. Duh!

We can ask why, if all races are 'equal' & the 'same' that people would have different cultures. Obviously, environment requires changes in behavior. As people approach the Poles, seasons become distinct & extreme, unlike areas near the Equator, where one can pick one's climate by choosing one's altitude, all year 'round. In Cali, Colombia, the climate is perfect. One can wear fancy garb or nothing, & feel comfortable. One can build any type of house, & be comfortable without heating or air-conditioning. Crops can be grown all year 'round in the rich Cauca Valley.

Your zoggies seem ignorant of non-Whites' comprehension of racial differences. They also tend to believe that cultural differences are biological, that is, racial, just as our bodies differ. Ask any Black person if he thinks Whites can ever learn to play Black music properly, with 'soul', if Whites don't smoke marijuana. Ask similar questions of American Indians, Asians, Mexicans & other groups who are proud of their traditions & cultures. Then your zoggies might learn about true cultural diversity & its biological basis.

Our ZOG seems to think that sexuality is something 'learned', as well as race. Studies have been made in European societies of men raised as women, usually victims of extreme circumcision, a fiendish Jewish practice. When puberty occurs, the 'girls' tend to show male behavior, regardless of their female indoctrination. Again, Nature overrides Nurture.

Iranians have told me that their men are emotional & sentimental, whereas their women are strong, silent types. Europeans think that men & women should be vice versa. That is their culture & this is our culture. Yet, men are traditionally masters of women in Moslem societies, as well as in orthodox Jewish culture & some Christian cults. Our ZOG is taking years to 're-educate' its Moslem prisoners with all sorts of torture techniques, as in the concentration camp at Guantanamo, Cuba, but Moslem culture seems extremely hard to defeat, by ZOG! I guess the Gitmo zoggies are not succeeding because they continue to keep their Moslem victims captive. I do not get ZOG's 'progress reports', so I must rely on regular news sources. So what seems to be your zoggies' goal, to make everyone change his culture? It reminds me of "The Island of Dr. Moreau," a Jules Verne novel about a zoggie-type who uses a vaccine to turn animals into men & men into animals. A visitor says: "Just because it can be done does not mean it SHOULD be done." ZOG's version of The Roman Empire is doomed for the same reason that ancient Rome's diversity doomed its empire. If we did not learn from ancient Rome, will anybody learn from the decadent empire of "Usrael?" DOWZ! ORION! 88!

Eric