

Is Fear Deficit a Harbinger of Future Psychopaths?

May 19, 2011

Psychopaths are charming, but they often get themselves and others in big trouble; their willingness to break social norms and lack of remorse means they are often at risk for crimes and other irresponsible behaviors.

One hypothesis on how psychopathy works is that it has to do with a fear deficit. A new study, which will be published in an upcoming issue of *Psychological Science*, a journal of the Association for Psychological Science, finds that children with a particular risk factor for psychopathy don't register fear as quickly as healthy children.

The hypothesis that psychopaths don't feel or recognize fear dates back to the 1950s, says the study's primary author Patrick D. Sylvers, of the University of Washington. "What happens is you're born without that fear, so when your parents try to socialize you, you don't really respond appropriately because you're not scared." By the same token, if you hurt a peer and they give you a fearful look, "most of us would learn from that and back off," but a child with developing psychopathy would keep tormenting their classmate.

Some recent research has suggested that the problem is attention; that people with psychopathy just don't pay attention to fearful faces. That would mean you might be able to help troubled children recognize fear by training them to look into people's eyes, for example. Some studies have suggested that might help.

Sylvers and his coauthors, Patricia A. Brennan and Scott O. Lilienfeld of Emory University, wondered if something deeper was going on than a failure to pay attention. They recruited boys in the Atlanta area who got in a lot of trouble at home and school, and gave them and their parents a questionnaire about some aspects of psychopathy. For example, they asked the boys whether they felt guilty when they hurt other people. The researchers were most interested in "callous unemotionality" – a lack of regard for others' feelings. Children who rank high on callous unemotionality are at risk of developing psychopathy later.

In this experiment, each boy watched a screen that showed a different picture to each eye. One eye saw abstract shapes in constant motion.

In the other eye, a still image of a face was faded up extremely quickly – even before subjects could consciously attend to it – while the abstract shapes were faded out just as quickly. The brain is drawn to the moving shapes, while the face is harder to notice. Each face showed one of four expressions: fearful, disgusted, happy, or neutral. The child was supposed to push a button when he saw the face.

Healthy people notice a fearful face faster than they notice a neutral or happy face, but this was not the case in children who scored high on callous unemotionality. In fact, the higher the score, the slower they

were to react to a fearful face.

The important point here, Sylvers says, is that the children's reaction to the face was unconscious. Healthy people are "reacting to a threat even though they're not aware of it." That suggests that teaching children to pay attention to faces won't help solve the underlying problems of psychopathy, because the difference happens before attention comes into play. "I think it's just going to take a lot more research to figure out what you can do – whether it's parenting, psychological interventions, or pharmacological therapy. At this point, we just don't know," Sylvers says.

The researchers also found that children in the study tended to respond more slowly to faces showing disgust, another threatening emotion – in this case, one that suggests something is toxic or otherwise wrong. Sylvers says psychological scientists should consider that psychopathy may not be related just to fearlessness, but to a more general problem with processing threats.