Practice Noticing Happy Faces Lowers Aggression in Teens

Fights among young men and women often start with a comment or a look. Looks in particular are frequently interpreted as hostile by some youth – "He's just looking for a fight." In fact research has demonstrated that violent young men are more likely than other people to read hostility in the faces of their peers. Recently a group of researchers in Great Britain decided to see if they could train aggressive adolescents to recognize positive facial expressions and then see what effect such training might have on their behavior around their peers.

In their first experiment the researchers generated a series of young adult male faces on a computer so that the same face slowly morphed left to right from a happy expression to an angry expression. Then they paid volunteers ages 18 to 30 at the University of Bristol in England to look at each set of faces and judge each one as either happy or angry along the continuum. For each participant they designated a "balancing point" where a happy face switched to angry. They then presented the same set of faces to each participant again, but some of the participants received verbal feedback, (e.g. "That's a happy face") which moved the happy designation one face farther along the continuum so that a face the participant thought was angry before was now called happy by the researcher. After several presentations of faces, both groups of participants were again asked to rate the faces along the continuum. **Results.** Those who had received feedback saw more happy faces than those who hadn't, and they also scored lower on an anger scale than the other group.

In the next experiment 46 juvenile delinquents (including 13 girls) ages 11 to 16 underwent the same training with the same sets of faces. After obtaining the balancing points for happy/angry faces from each participant, they were divided into two groups. One group received feedback that shifted the happy label one face toward angry, and the other group received feedback shifting one angry face toward happy. The teens also kept diaries over several days of training, and staff rated their aggressiveness during the study and for another two weeks afterward. **Results.** Not only did the teens in the "pro happy" condition shift their ratings toward happy faces, their behavior over the next two weeks was less aggressive than that of the other group, as rated by themselves and the staff!

In their last experiment, these clever researchers once again solicited volunteers from a college campus and ran some of them through the same training, but this time without verbal feedback. Instead they assigned one group to a working memory task where each participant was presented with a face that had been designated angry and asked whether the face (always an angry face) was the same as that presented two faces earlier (always a happy face). This procedure required paying more attention to the happy faces. Then they were shown the entire set of faces again and the happy/angry balance point was recalculated. **Results.** Just paying attention to the previous happy face shifted the balance point toward happy, and the participants rated themselves lower on an anger scale than the other group.

Together these results support the notion that hostile reactions to other people begin with how we interpret cues from those people, in this case facial expressions. If you are primed to see anger, you are more likely to see it, even if it's not there. The good news is that such priming effects can be modified, either by getting feedback from others about ambiguous facial expressions, or by simply paying closer attention to the other person's face. Maybe such training should be added to the treatment programs for juvenile delinquents.

Penton-Voak, I.S.; Thomas, J.; Gage, S. H.; McMurran, M.; McDonald, S.; Munafo, M.R. 2013. Increasing recognition of happiness in ambiguous facial expressions reduces anger and aggressive behavior. *Psychological Science,* Vol. 24, Pages 688-697