New research out of Queen’s University has shed light on how exercise and relaxation activities like progressive muscle relaxation can positively impact people.

Adam Heenan, a Ph.D. candidate in Clinical Psychology, has found that exercise and relaxation activities change the way people perceive the world, altering their perception so that they view the environment in a less threatening, less negative way.

For his research, Mr. Heenan used point-light displays, a depiction of a human that is comprised of a series of dots representing different parts of the body. Human point-light displays are depth-ambiguous and because of this, an observer looking at the display could perceive it as either facing towards them or facing away. Researchers have found people who are more socially anxious perceive these figures as facing towards them (i.e., the more threatening way) more often.

“We wanted to examine whether people would perceive their environment as less threatening after engaging in physical exercise or after progressive muscle relaxation,” Mr. Heenan explains. “We found that people who either walked or jogged on a treadmill for 10 minutes perceived these ambiguous figures as facing towards them (the observer) less often than those who simply stood on the treadmill. The same was true when people performed progressive muscle relaxation.”

Visit the BioMotion lab website to take see what these figures look like.

This is important because anxious people display a bias to focus on more threatening things in their environment. In fact, some researchers think that this is how some anxiety disorders are perpetuated: People who are anxious focus on anxiety-inducing things and thus become more anxious, in a continuous cycle.

“Our findings are interesting because they may provide another explanation as to why exercise and
relaxation techniques have been successful in treating anxiety disorders in the past,” says Mr. Heenan, who worked with supervisor Nikolaus Troje (Psychology), who supervises the Biomotion Lab at Queen's University.

This new research was published in PLOS one, an international, peer-reviewed publication featuring primary research from all scientific disciplines.

To see the original article on the Queen's News Centre, click here.

Also read about Adam in the Daily Mail online.