

Human Performance faculty study experimental cold-weather face mask

The SCSU Human Performance Lab is helping fight against cold Minnesota winters by conducting various cold-weather studies.

Two years ago John Seifert, director of the Human Performance Lab, was asked to lead a research project sponsored by Polar Wrap Inc. The project tested the effects of a special facemask made to be worn over the mouth. It has copper netting inside a fleece-like lining which traps warm air and moisture, two important elements lost by the body in cold climates.

Seifert first oversaw a study of non-asthmatic people who wore the Polar Wrap mask in cold climates of -5° to -10° . The study found that there was an improvement in the body's respiratory functions when the mask was used and that blood

pressure was lower in those wearing the mask.

The next study focused on those with asthma. Both the respiratory functions and the blood pressure were again measured. The participants' measurements were equal to those taken at rest when the mask was used. Without the mask, respiratory function decreased approximately 12 percent and blood pressure increased approximately 15 percent.

The next study planned will focus on the cardiovascular benefits of the mask. Volunteers with high blood pressure will be tested to find out how using the mask affects their blood pressure.

