

Cadet Researches New Area in Psychology

BY MARY PRICE

A 1st Class cadet at VMI may soon have an honor that very few undergraduates can claim: having research published in a professional journal.

Nicole Harding '14 completed a Summer Undergraduate Research Institute project testing a relatively new theory of suicide causation. The title of Harding's project was, "The Acquired Capability for Suicide and Driving Related Suicidal Ideation in ROTC Cadets."

Supervising Harding's research was Maj. Glenn Sullivan, assistant professor of psychology. He explained that before Harding began her work, the suicide susceptibility scale she employed had never been used with a non-clinical population – that is, those not diagnosed with a psychiatric illness.

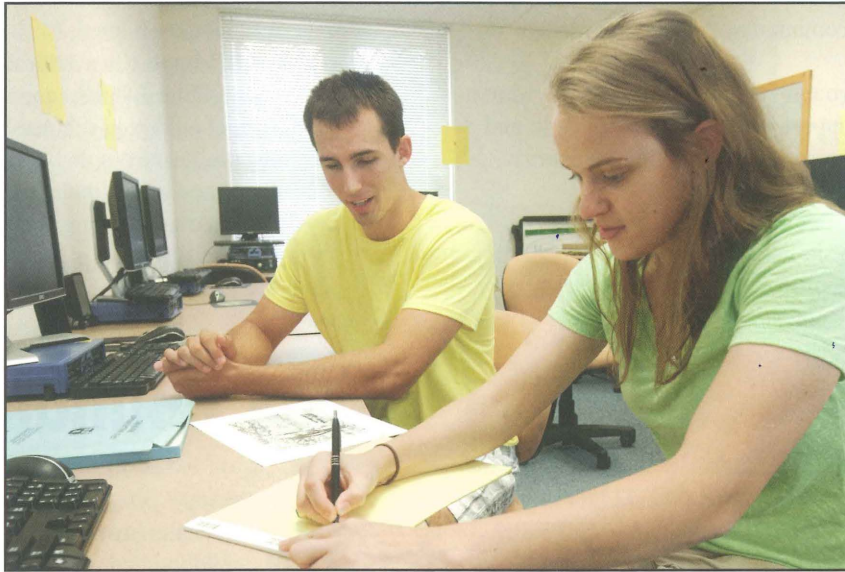
"Nicole is one of the first people from outside the original developers to actually test this scale," Sullivan noted. "This is all new, fresh, hot stuff. She's working in a field where it's not settled. ... There are a lot of questions that are unanswered."

Harding's subjects were 54 VMI cadets on post this summer for summer school. Half of the group was induced into a positive mood using what Harding described as "happy" music, while the other half was induced into a negative mood, also by using music.

For a negative mood, Harding used "Russia Under the Mongolian Yoke," from the 1938 film, *Alexander Nevsky*, while for a positive outlook, she chose Franz Joseph Haydn's *Toy Symphony*. She admitted that after a while, she found that the *Toy Symphony* grated on her nerves. "We wound up using headphones so I didn't have to listen to it," she said.

Harding's subjects were then given sentence completion tests and pictures to interpret, before being asked to complete an interpersonal needs questionnaire and an acquired capability for suicide scale. Lastly, they were asked to rate on a scale of 1 to 100 the deadliness and pain of six methods of suicide: gunshot, hanging, car accidents, stabbing, poisoning, and drowning.

Both the interpersonal needs questionnaire and the acquired capability for Suicide Scale were developed in 2010 by Dr. Thomas Joiner, a professor of psychology at Florida State University.



Nicole Harding administers the Thematic Apperception Test to Elliot Matthews '14. – VMI Photo by H. Lockwood McLaughlin.

Joiner's theory of suicide includes three factors that he believes must come together to make a successful suicide attempt: perceived burdensomeness, thwarted belongingness, and acquired capability for suicide. Harding explained that the first two factors are measured by Joiner's interpersonal needs questionnaire, while the latter is measured by the Acquired Capability for Suicide Scale, or ACSS. The ACSS asks questions about fear of dying and tolerance for pain, among

other items.

Those with higher ACSS scores are more likely to kill themselves – and according to Joiner, once an individual has the acquired capability for suicide, he or she will always have it, independent of day-to-day mood. Veterans with post-traumatic stress disorder tend to have elevated scores on the ACSS scale, Harding noted.

In her research, Harding set out to determine if mood determined a subject's rating on the ACSS scale. Just as Joiner's theory predicted, there was little difference in the acquired capability for suicide among the two mood groups.

Harding also found that those with higher ACSS scores thought gunshots and car accidents to be deadlier than those with lower ACSS scores.

"The idea is that they are more accepting of the possibility of their own death," said Sullivan.

As the SURI session drew to a close, at the end of July, Harding noted that she'd definitely felt the freshness of breaking new ground, and working solo as a researcher.

"It's cool to see all of the pieces come together," she said. "Except when I met with Maj. Sullivan, I was on my own doing my own thing. It was almost like the first time I had the chance to do exactly what I wanted."

Once Harding has put the finishing touches on her research, she and Sullivan plan to submit her findings to the journal *Psychological Science*.

"In psychology, undergraduates very, very rarely ever get published," said Sullivan. "I think she has a chance."