## **SIENCE NEVS** of the week

## Navy Recruits Report Abusive Legacy

About 5 years ago, a rash of sexual assaults on female recruits by U.S. Navy drill instructors led Navy officials to initiate a mandatory education program to deter such activity. Soon thereafter, many women complained to classroom instructors that the program stirred up disturbing reminders of childhood sexual abuse and later incidents of sexual assault.

Concerned by those reports, Navy officials commissioned an unprecedented survey of prior physical and sexual abuse in their new male and female recruits. Initial results portray the Navy, and perhaps the other military services also, as saturated with people who have either endured or committed such acts.

The findings suggest that physical and sexual violence will continue to occur at higher rates among Navy personnel than in the population at large, according to the team of researchers who presented the results at the annual meeting of the American Psychological Association in Chicago last week.

"These are pretty powerful findings," says psychologist Stephen A. Thornton of the Bureau of Naval Personnel in Washington, D.C., who did not participate in the data analysis. "We need to ask whether we're attracting an unusually large number of abuse victims and perpetrators [to the Navy].

In 1994, researchers surveyed a total of 1,891 women and 1,885 men entering the Navy's Recruit Training Command in Orlando, Fla. Recruits, who averaged 20 years of age, completed questionnaires on their parents' child-rearing styles, childhood sexual experiences, dealings with romantic partners, and experiences with sexual aggression.

A second study in 1996 surveyed 1,522 female and 1,530 male recruits.

Overall, the 1994 data indicate that 41 percent of the women and 39 percent of the men had sustained by age 18 at least one instance of slapping, punching, or other parental physical violence beyond

spanking. Childhood sexual abuse was reported by about 28 percent of women and 8 percent of men.

More than 40 percent of both sexes said that a romantic partner had physically attacked or harmed them, according to team member Jacquelyn W. White of the University of North Carolina at Greensboro. About half of the women and one-third of the men reported having acted violently toward an adult partner. Women may be more willing than men to admit to this behavior or may rank a larger class of behaviors as violent, White notes.

Around 36 percent of the female recruits indicated that they had been raped after age 14, and another 9 percent reported attempted rapes. Most of these incidents involved physical threats or the use of force by perpetrators.

More than half of the women reporting childhood sexual abuse cited a subsequent rape, compared to one in five of those reporting no early sexual abuse. The reasons for the "scary" inflation of rape rates among those who had suffered sexual abuse are unclear, remarks co-investigator Steven R. Gold of Northern Illinois University in DeKalb.

Of male recruits, 11 percent acknowledged having committed a rape after age 14, and nearly 4 percent more said they had attempted rape. Rape perpetrators often used physical threats or force and also tried to get victims drunk.

Proportions of female rape victims and male rape perpetrators in the Navy recruits substantially exceed rates among college students, working women, and community samples in the United States and Canada, says team member Mary P. Koss of the University of Arizona Health Sciences Center in Tucson.

Of further concern are reports of past alcohol abuse in two-thirds of the female and three-quarters of the male Navy recruits, remarks Lex L. Merrill of the Naval Research Center in San Diego, who helped to instigate the surveys.

The 1996 survey yielded similar findings, adds John Briere of the University of Southern California in Los Angeles.

The phenomenon of youth with troubled backgrounds enlisting in the military has long been known, remarks project coordinator Sandra G. Rosswork of the Bureau of Naval Personnel. The new surveys begin to illuminate those troubles, she says.

Researchers plan to track the surveyed recruits throughout their Navy stints. The effectiveness of new sexual assault prevention programs for recruits —B. Bower will also be assessed.

## Invasive Argentine ant is no picnic

Ant problems are the number one reason people call in pest controllers, and the most troublesome ants are exotic species that have hitchhiked into and around the United States. For other insects, exotic ants are more than a pest. Native ants commonly disappear when the aggressive, competitive newcomers move in.

Researchers are now documenting the effects of the invading ants higher up the food chain. At last week's meeting of the Ecological Society of America in Albuquerque, Andrew Suarez reported that the Argentine ant is forcing a dramatic change in the diet of the horned lizard, once common but now declining in Southern California.

In its natural habitat, the horned lizard feeds almost exclusively on native harvester ants. Suarez and Ted Case, biologists at the University of California, San Diego in La Jolla, set out to see whether the Argentine ant's steady expansion from urban lots and farms into natural areas is affecting the lizard. Since its arrival in New Orleans at the turn of the century, the ant (Linepithema humile) has traveled to points east, west, and beyond (SN: 11/7/92, p. 314).

The researchers studied lizards both in the lab and in the field. They offered caged lizards a choice of native or Argentine ants. From three field sites, they collected droppings for evidence of what the lizards were eating.



Ant attack: The tiny Argentine ant, posed here on a penny, wields a big ecological

The Argentine ants are either unappetizing or too small to be worth much effort. "We've never found horned lizards eating them in the wild," says Suarez, "and in laboratory conditions, horned lizards always prefer native ants over

In areas where Argentine ants have displaced natives, the lizards eat mainly beetles. Suarez says that switch probably contributes to the decline of the lizard, which is also losing ground to development. "When diet changes that drastically, it has to have a negative effect.

Ecologist Allison Alberts of the San Diego Zoo agrees. Understanding such "cascade effects" helps in the management of remaining natural areas and is "extremely important," she says—though the findings are usually grim.

'Working with invasion biology is very depressing," says Suarez. "That's why we have so many happy hours."

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