

Attitudes toward Noise, Perceived Hearing Symptoms, and Reported Use of Hearing Protection among College Students: Influence of Youth Culture

Jo Anne G. Balanay, PhD, CIH¹ and Gregory D. Kearney, MPH, DrPH²

¹Environmental Health Sciences Program, Department of Health Education and Promotion, College of Health and Human Performance, East Carolina University

²Department of Public Health, Brody School of Medicine, East Carolina University

Background

- Young adults are involved in noisy activities, increasing their risk of developing noise-induced hearing loss (NIHL) and other hearing symptoms.
- NIHL and other hearing symptoms are increasing in the younger population in the U.S. and abroad.

Purpose of the Study

- To assess the attitude toward noise, perceived hearing symptoms, noisy activities that were participated in, and factors associated with hearing protection use among college students

- **Goal:** To understand the risk factors influencing the behavior of college students related to noise exposure to effectively promote and implement hearing conservation programs for them



Methodology

- A 44-item online survey was administered to students enrolled in a personal health course (HLTH 1000) through Qualtrics.
- 2,151 college students participated (92.3% participation rate)
- Survey instrument includes:
 - Demographic items
 - Youth attitudes to noise scale (YANS)
 - Hearing symptom description (HSD)
 - Noise exposure and hearing protection use (AAH)

Characteristics		n	%
Gender	Female	1,390	64.6
	Male	750	34.9
Age	18 years	621	28.9
	19 years	928	43.1
	20 years	133	6.2
Race	White	1,448	67.3
	Black	415	19.3
	Hispanic/ Latino	124	5.8

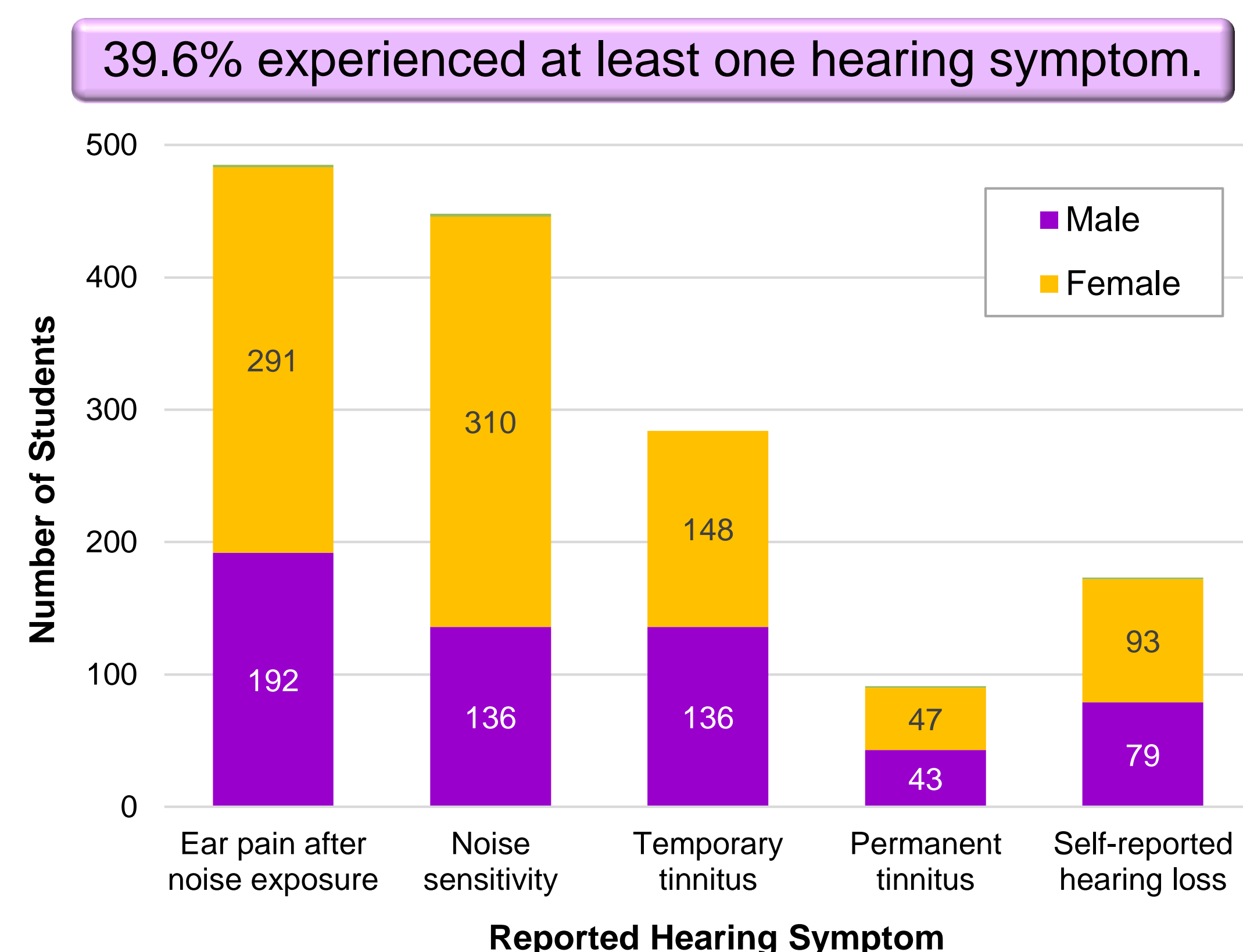


Figure 2. Reported Hearing Symptoms by Gender

- The reported use of hearing protection is associated with:
 - Having at least one hearing symptom
 - Anti-noise attitudes, particularly in youth social events

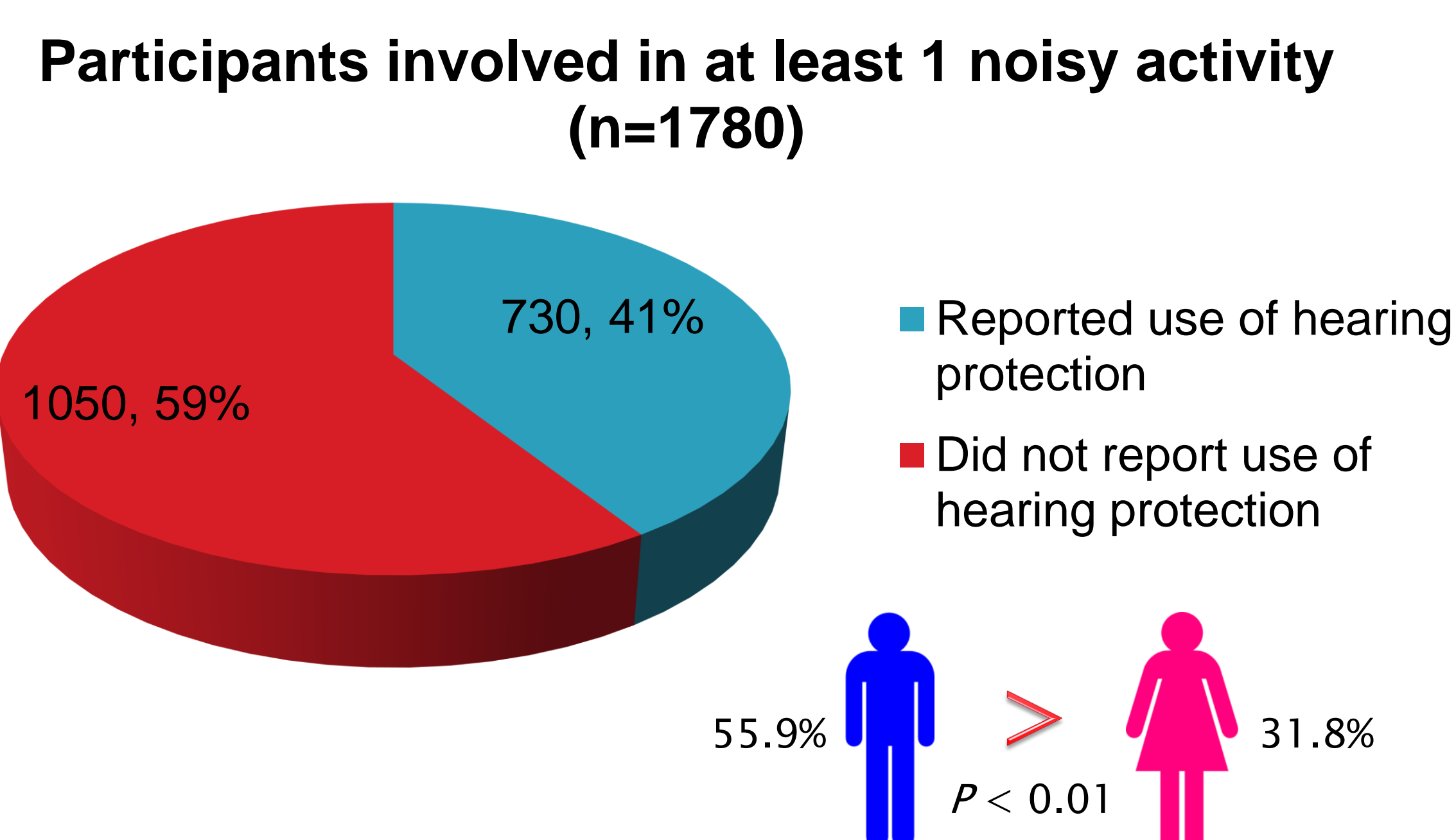


Figure 5. Hearing Protection Use Among Participants in Noisy Activities

Results

Anti-noise attitude has the highest % for all factors, except factor 1 (youth culture) where neutral is highest.

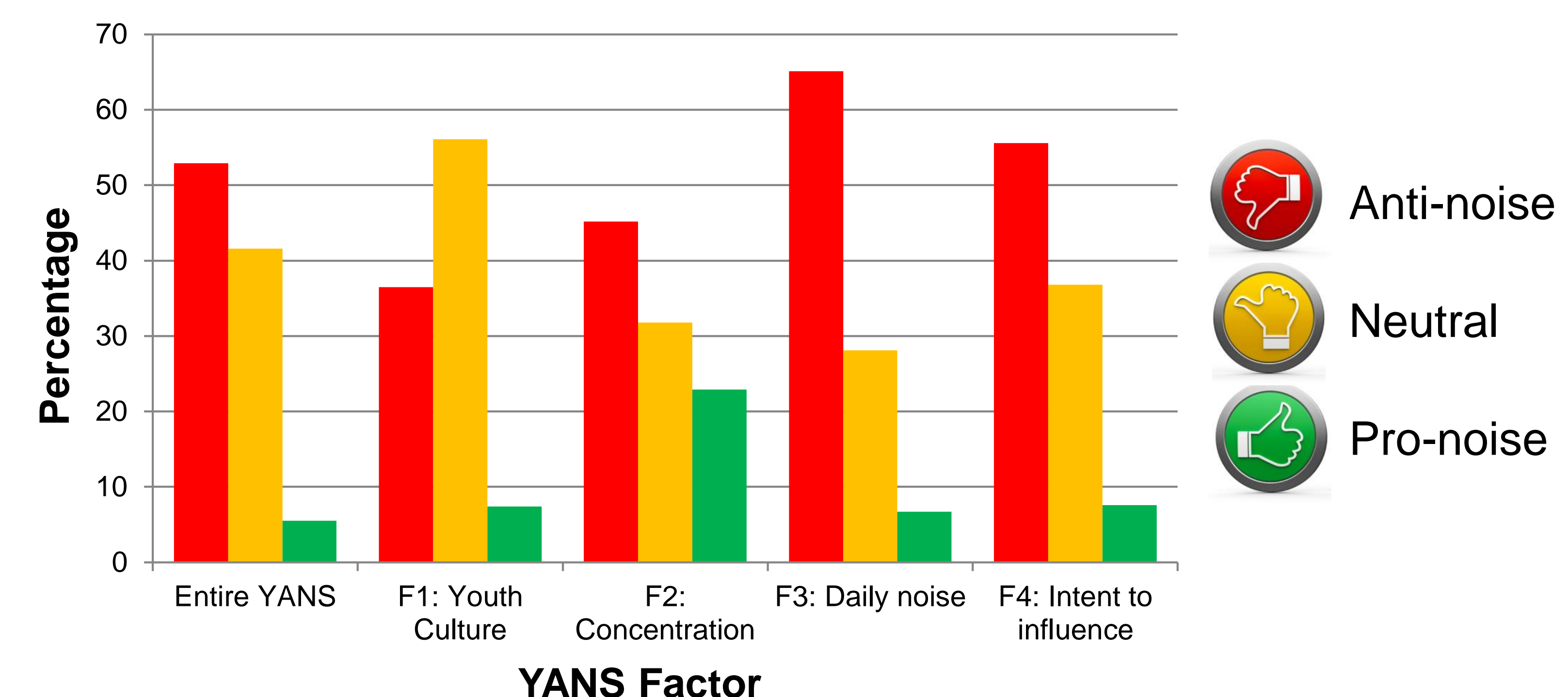


Figure 1. Noise Attitudes by YANS Factor

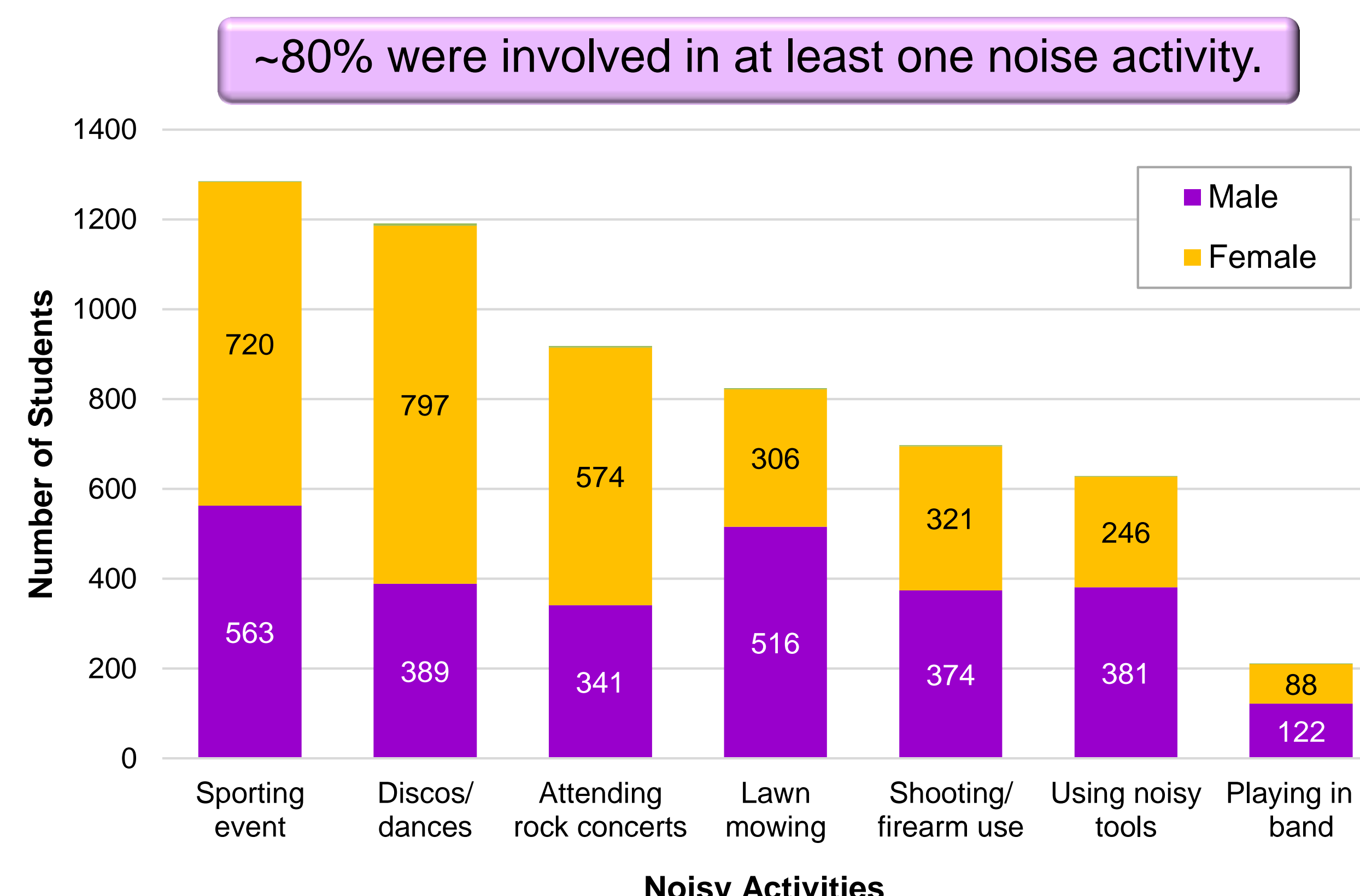


Figure 3. Reported Participation in Noisy Activities by Gender

Majority of those with ear pain, hearing loss, permanent tinnitus, and noise sensitivity was involved in attending a sporting event.

The highest reported hearing protection use was in the use of firearms, and the lowest in discos/dances.

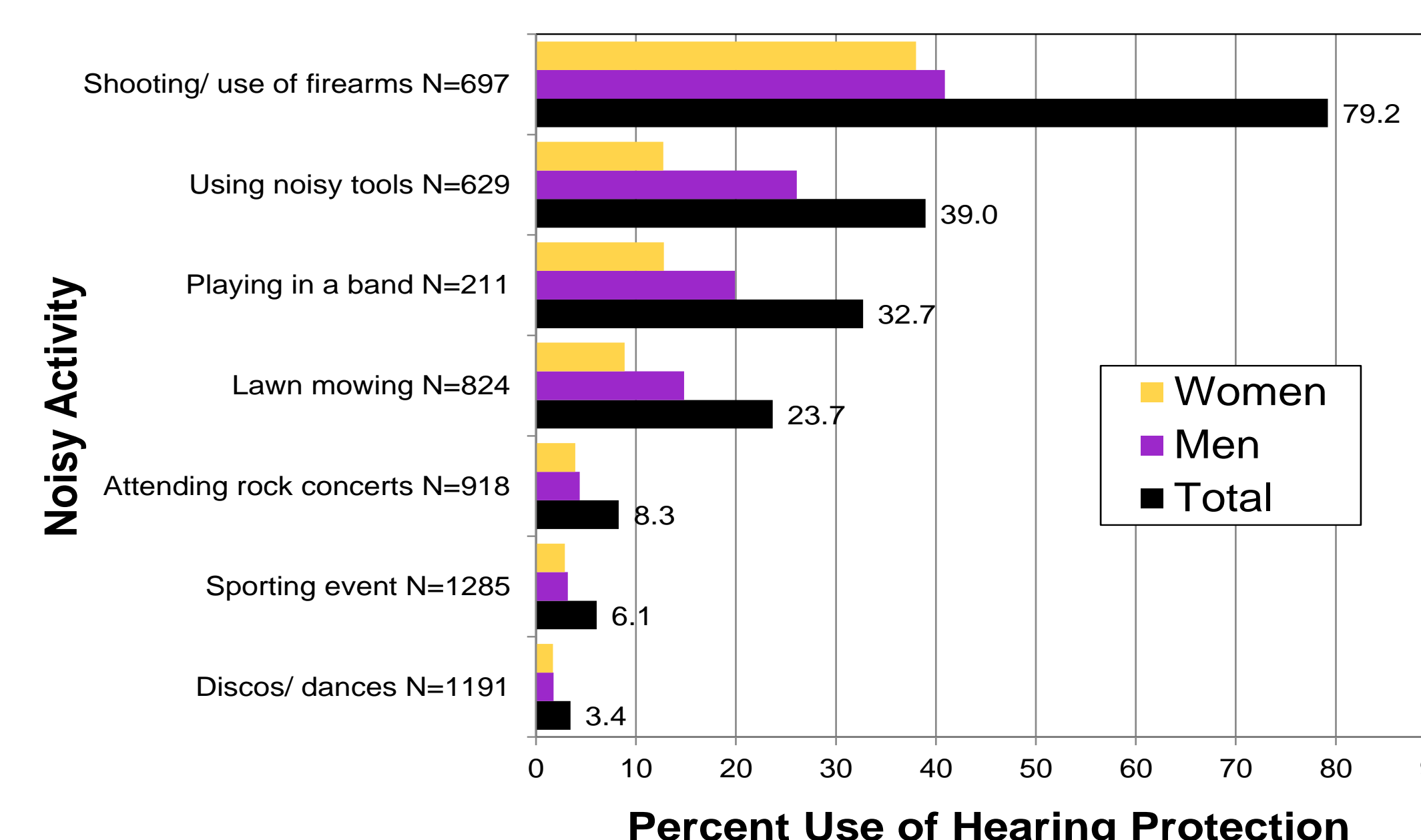


Figure 6. Hearing Protection Use by Noisy Activity and Gender

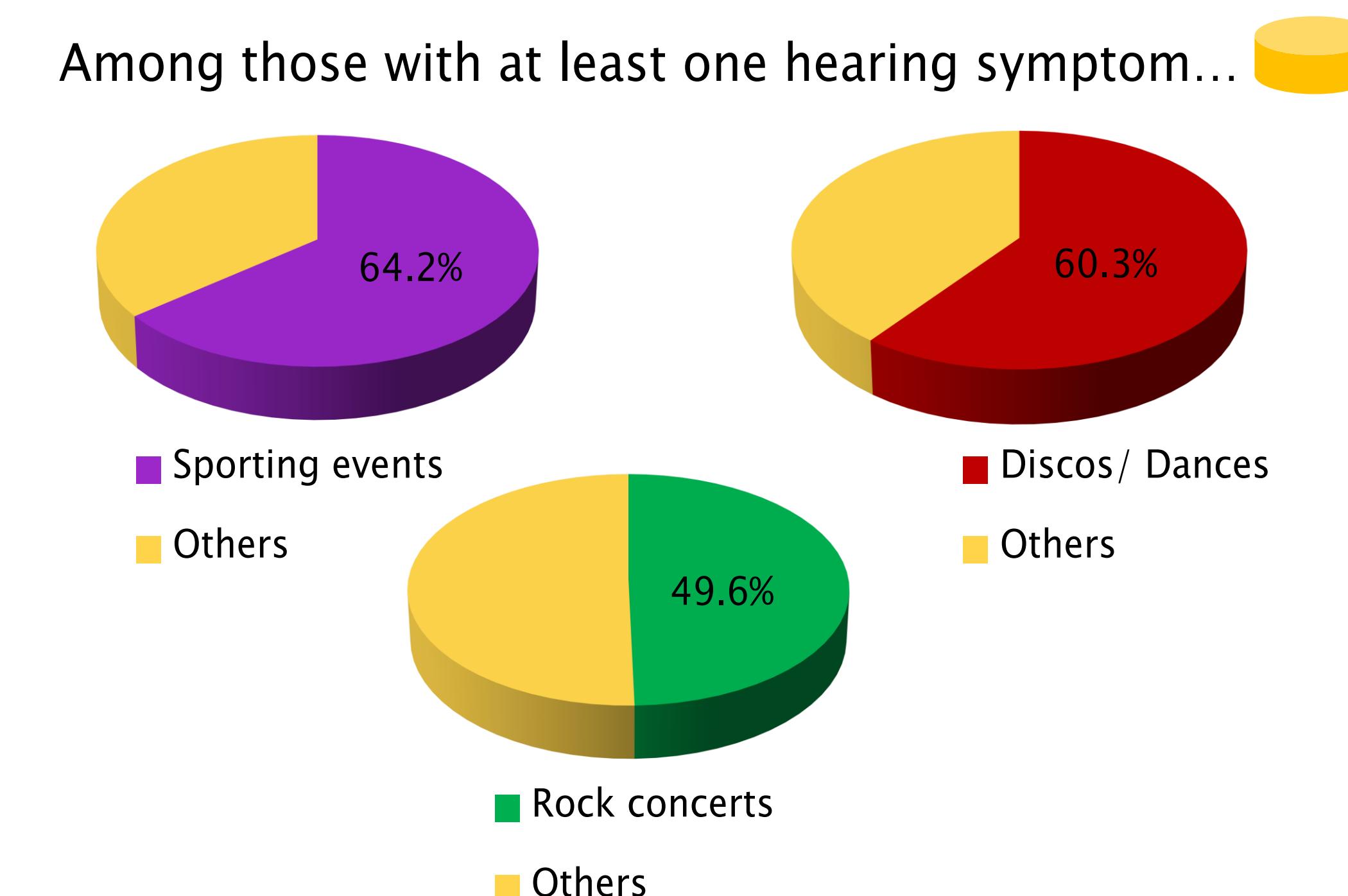


Figure 4. Percentage of Participants with Hearing Symptom by Noisy Activity

Conclusions

- Universities/ colleges have important roles in protecting young adults' hearing by:
 - Integrating hearing conservation topic in the college curriculum
 - Promoting hearing health by student health services
 - Involving student groups in NIHL awareness and prevention
 - Establishing noise level limitations for all on-campus events

Publication Source

Balanay JG, Kearney GD (2015). Attitudes toward noise, perceived hearing symptoms, and reported use of hearing protection among college students: Influence of youth culture. *Noise & Health* 17:394-405.