



Department of Student Health and Wellness

Biofeedback Services within a University Health & Wellness Center

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Introduction

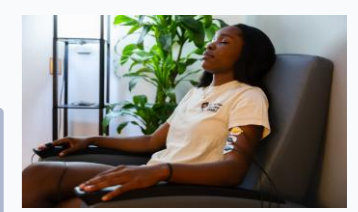
BIOFEEDBACK is an evidence-based therapeutic approach that enables students to gain real-time awareness of the physical impact of stress. Students observe how thoughts and feelings impact their autonomic nervous systems and train to regulate psychophysiological stress responses.

A **BIOFEEDBACK SERVICE** within a University health center supports the well-being of students who may prefer an alternative to talk therapy or medication for stress related challenges.

Equipment & Training

- **Sensors** for heart rate (BVP), respiration (band), finger temperature (thermistor), skin conductance (SC/GSR) and muscle tension (EMG)
- An **encoder** that translates the physiological information into **software**, allowing students to engage with visual and auditory feedback
- A **relaxing room** with reclining chairs and a **TV/monitor** sets a helpful tone
- **Certified provider(s)** in Biofeedback or Heart Rate Variability Biofeedback

The Space



Program Design

Students are referred by Counseling, Medical, Care Management, Disabilities Services and Health Promotion.

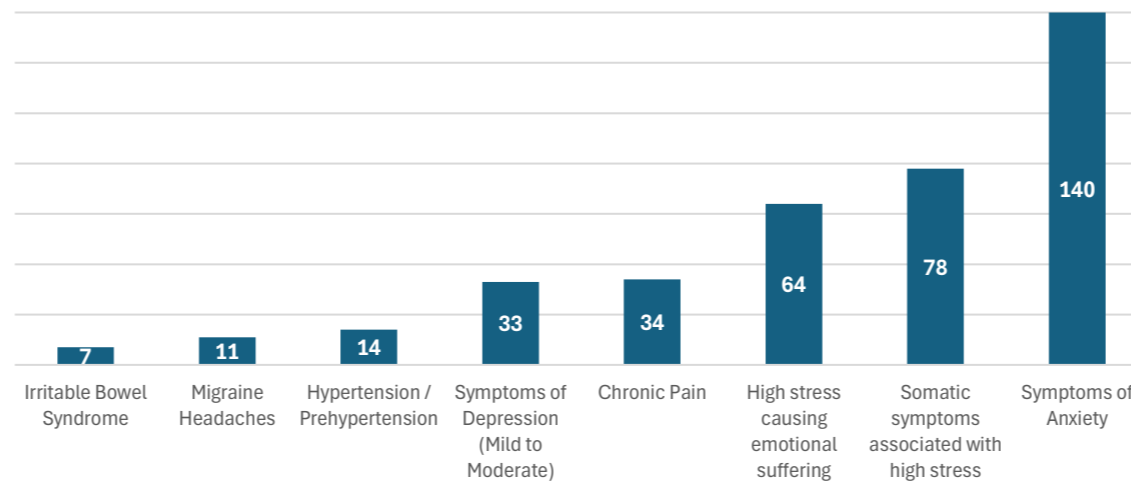
Students engage in intakes targeted to assess mental and physical stress responses, as well as learn about the equipment and processes. Sensors and evidence-based techniques are collaboratively chosen.

Training begins with daily practice encouraged. Tools are given for practice including no-cost apps, videos and recordings based on techniques learned. Sessions continue weekly or biweekly for approximately 4-8 meetings.

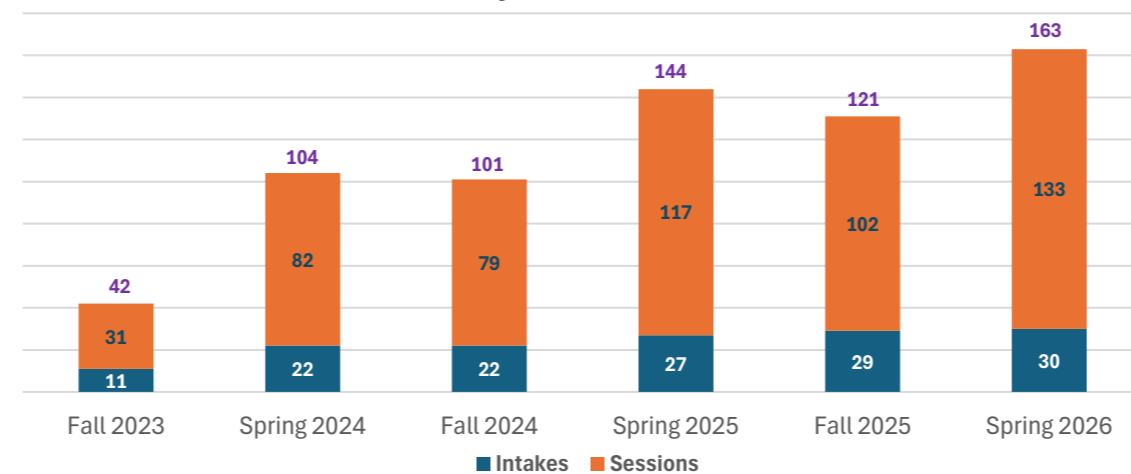
Progress is tracked with attention to reduced symptoms and increased sensitivity to internal experiences. Biofeedback is reduced as student relies more on self-awareness and newly developed skills.

Findings

Referral Reasons - 2023-2026



Utilization by Semester - 2023-2026



Discussion & Future Directions

- Utilization increased for fall and spring semesters – year over year resulting in **381 unique referrals** and **684 student sessions** during the study period.
- There is high collaboration between CAPS clinicians and the Biofeedback Service with simple referral processes and continual coordination.
- The service is appreciated by staff for supporting students' somatic concerns more directly and for students for whom talk therapy is less desirable.
- Biofeedback at Student Health & Wellness serves as complementary psychotherapeutic or somatic support, or a stand-alone intervention for students with specific psychophysiological needs.

Future Directions

- While there were no reported adverse events or student complaints, student satisfaction with the Biofeedback Service warrants further study.
- Evaluation of outcomes will help determine the value of the service.
- Assessment of efficiencies that include potential time offsets related to therapy and medical services (i.e., do students who use biofeedback attend fewer therapy or medical appointments).
- Outreach/marketing is needed to reach students who are less responsive or interested in talk therapies.
- Further exploration of opportunities to scale and improve services through use of wearables, remote technologies, and group-based offerings may enhance student wellness and connection.

Students Likely to Benefit

- Students less likely to respond to talk therapies, those with mental health stigma concerns, and neurodiverse students
- Students enduring more physiological stress responses such as headaches, gastrointestinal distress, panic episodes, chronic soreness
- Students preferring experiential skills rather than talk therapy
- Students who favor "seeing what's happening" in response to stress
- Students responding to physiological data rather than emotions
- Students whose psychophysiological challenges markedly impact major life functions – academic, social, mental, physical