The present paper presents a novel apparatus that permits the simultaneous assessment of sexual (penile plethysmographic) arousal in groups of male subjects. The apparatus, referred to as the Group Research Observation Instrument for large Numbers (GROIN), is described and illustrated. Its utility for clinical research, particularly for large-scale investigations of arousal is proposed. Limitations of the apparatus, more apparent than real, are also discussed.

Research on the treatment of sexual dysfunctions has increased greatly in the last decade. Many of the gains have resulted from advances in assessment, particularly the psychophysiological measurement of sexual arousal. Among the alternative assessment procedures, penile plethysmography has been especially useful. Despite the advances, there are limitations in the usual assessment procedures. The primary limitation is that subjects must be tested individually. The reasons for testing subjects individually are numerous, such as the concern for privacy on the part of the subjects, the fragility of the equipment, the need to rule out measurement artifact, and others.

There is a need for a plethysmograph that permits the assessment of groups of subjects rather than individuals. If several persons can be assessed simultaneously, large-scale group research becomes feasible. And, it would be possible to provide rapid answers to long-standing questions. For example, one could obtain answers to the question of the effects of alcohol on sexual arousal in groups or the effects of eating oysters and drinking small pools of murky sea-water held in concave containers.

In our laboratory, we have developed a state-of-the-art apparatus and procedure to meet the above need. The present report illustrates the apparatus and discusses its use for clinical research.

**APPARATUS**

The apparatus we have pioneered is referred to as the Group Research Observation Instrument for large Numbers (GROIN). The apparatus en-
Fig. 1. The Group Research Observation Instrument for large Numbers (GROIN) is a group penile plethysmograph. The device permits simultaneous assessment of physiological arousal of 8 clients. Each connector tube is attached to a different subject. The bucket contains a saline solution for cleaning the connectors between running groups of subjects. The device has a place for the experimenter to sit to monitor subjects.

ables one to assess the penile plethysmographic responses of several persons simultaneously. In the current version, eight subjects can be assessed simultaneously. Individual plethysmographs are connected by tube to the central apparatus. The tube houses the electrical circuitry to obtain the usual (and also unusual) arousal data. At the center of the apparatus is a place for the experimenter to be seated. Fig. 1 shows the apparatus with the experimenter (first author) seated. The experimenter can monitor all subjects simultaneously. And, if desired, the experimenter can also conduct direct observations to supplement psychophysiological measurement or can instantaneously analyze the results through visual inspection. A bucket is placed on the apparatus and is filled with saline
solution (or cocoa). Between running groups of subjects, the eight individual plethysmographs can be quickly (and simultaneously) dipped and cleaned in the solution.

**DISCUSSION**

We have run 812 subjects in only 102 sessions with the apparatus. The quantitative results and methods of analyses have been detailed elsewhere (Kazrin, Durac, & Agteros, 1979). Admittedly, a few minor problems have emerged to which researchers should be sensitive. First, one client became distracted with the assessment procedure and quickly got up and ran out of the room before disconnecting himself from the apparatus. This jerked the apparatus and the experimenter and spilled the bucket. The consequences were somewhat more serious for the client but these cannot be discussed until litigation is resolved.

On another occasion, the apparatus developed a pronounced wobble and the testing session had to be terminated. The problem never recurred and we attributed it to the influence of a moderator variable in the form of a rather small, hairy subject with shifty red eyes. (The color was subsequently confirmed by his MMPI eye-color profile.)

Second, for a small percentage of subjects (743 of 812), the procedure was slightly reactive. Even with current sexual mores, there is still some reticence toward plethysmography in the context of a group. (This has not been a problem among the exhibitionist samples we have run.) To reduce discomfort, we have developed several novel procedures such as turning out the lights, purchasing attractive pink silk blindfolds, or using a myopic experimenter. For extremely anxious subjects, we have developed a game to reduce this initial discomfort with the apparatus. The game is similar to musical chairs, substituting in place of chairs, connectors to the GROIN. Solemn music is introduced by means of a 4-channel, alternating impedance gismo, with jumbo woofers. The subjects change positions until the music stops or the equipment begins to whimper, which ever comes second.

In general, we believe that the apparatus has several advantages. First, it provides the opportunity to conduct large-scale group studies. Psychophysiological assessment of groups has not been frequently reported in clinical research settings for arousal or any other types of responses to our knowledge (or in response to anyone else's knowledge for that matter). Second, the apparatus provides new opportunities to study reactivity of assessment. There is something more reactive about group plethysmography than self-report inventories, but we have yet to put our finger on it. Third, and not to be underestimated in importance, we have found some experimenters obtain unusual gratification from their participation.

The apparatus has its limitations. First, it is bright green in color and is plagued by a continuous hum, somewhat reminiscent of the Anvil Chorus sung through damp socks. Second, the apparatus is not portable. This raises problems in dealing with agoraphobics with sexual dysfunction. To the apparatus pictured in Fig. 1, we intend to add a steering device,
wheels, and a motor so it can be driven into the community. We have heretofore avoided this innovation with the firm belief that such a device will be viewed by some as auto-erotic. Yet, we are confident that the apparatus, thus motorized, will make the customary contribution to community psychology.

REFERENCES

RECEIVED: May 16, 1983
FINAL ACCEPTANCE: June 6, 1983