Assessment of body image perceptions using a computer program

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Due to the proliferation of eating disorders and people's overconcern with weight reduction and thinness, individuals' estimations of body sizes have received increased attention. Two techniques recently designed to assess an individual's body perception are having the person choose a figure that most closely reflects the individual's body size from nine drawings ranging from very thin to very heavy (Stunkard, Sorenson, & Schulzinger, 1980), and estimating the size of various body parts by adjusting light beams (Ruff & Barrios, 1986; Thompson, 1985). Although use of these techniques is presumed to realistically indicate body perceptions, the vague stimuli lack sensitivity and may be difficult to visualize.

The present technique uses a computer program designed to enable a more sensitive and "realistic" assessment of body image perceptions. The program, *Body Build*, is useful for determining how an individual views his/her current and ideal body and the discrepancy between the two.

Description. *Body Build* runs on an IBM PC using a graphics adaptor and color display. It allows an individual to interactively manipulate a body image until he/she is satisfied with the figure's appearance. The participant is asked to draw three figures: the ideal body for the opposite sex (used to familiarize them with the program), his/her own ideal body, and a personal perception of his/her current body. Instructions are given by the computer before the participant draws each figure: thus no individual verbal instructions are required. For each drawing, the participant is presented with a same-gender front and side image on which he/she can selectively manipulate the size of nine body parts by entering a number from 1 to 9 (See Figures 1 and 2). The figure is redrawn after numbers for all nine body parts have been entered, and the user can continue to alter the drawing until satisfied with it.

Body Build is written in Turbo Pascal. The number the user selects for a particular body part fixes the arc size used to draw the part relative to each other body part number. For example, a 5 waist looks different depending on the parameters chosen for the other eight body parts. In

Figure 1. Computer image of a male figure.

addition to writing the user's final figure parameters to disk, the program tabulates the number of plotter points required to draw each body part in the final displayed image. The latter should be used in data analyses, since it correlates best with what the user sees on the screen.

Data files for each individual can be printed using standard print routines from DOS. A printed file contains the subject ID code, time, date, all values that the subject entered as data, and the transformed data (number of plot-

Figure 2. Computer image of a female figure.

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ter points used). For ease in data analysis, more complicated programs can be written to format the data in a variety of ways.

Because this program includes extensive user directions, the individual can easily complete the tasks in 30 min. The introduction of faster microcomputers, such as the PC-AT, can significantly reduce this time. Body Build can also be easily converted to other computers.

Availability. A disk copy of the program and instruction manual may be obtained for \$50 from the first author.

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