

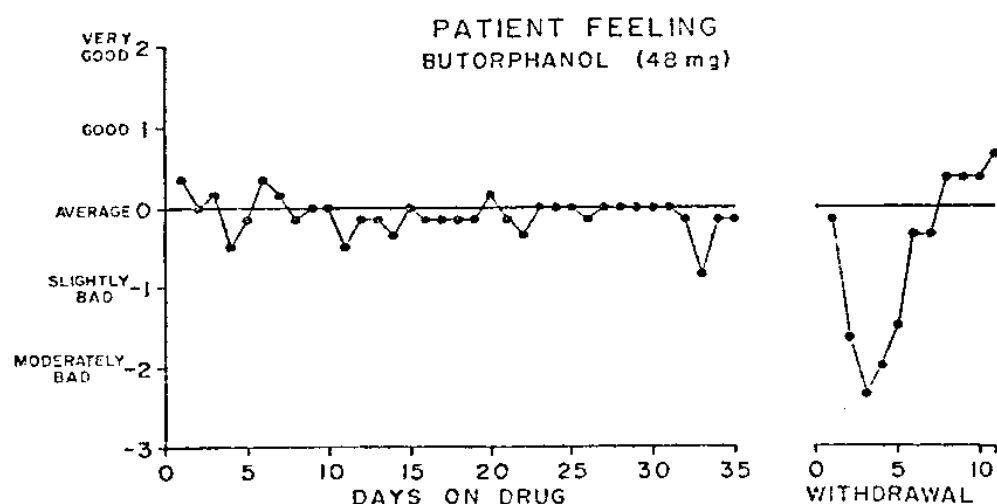


Figure 3. Mean daily responses by six subjects to the question "How do you feel?" during the chronic administration and withdrawal of butorphanol.

Significant Himmelsbach scores were obtained following butorphanol withdrawal reaching its peak on the 3rd day and subsiding (Fig. 4) with an intensity slightly greater than produced by pentazocine but less than morphine. Analysis of the sources of points in the Himmelsbach score indicated that butorphanol more closely resembled cyclazocine abstinence than morphine abstinence (Table 4).