

written records had not been taken. Recording, as discussed, was initiated on the following day. In addition, two staff members were asked to submit an estimate of the frequency of crawling on the three days preceding training. During the remainder of the study, the teachers conducted the normal program; in addition, they recorded crawling when it occurred and conducted the training procedures listed below. Three children served as subjects, one with severe and two with only moderate walking impairment. The teachers did not provide edibles or any other contrived reinforcers for walking or crawling. The procedural sequence was: restraint and priming, then, post-training. For one of the children (JL), restraint alone followed post-training.

### RESULTS

Figure 1 presents the results of the structured study with RK, a child with severe impairment of walking. This child's crawling is presented as a percentage of the time she spent in locomotion (*i.e.*,  $\text{Time Crawling} / \text{Time Walking} + \text{Crawling} \times 100$ ). The mean difference per session between the two percentage scores for the two observers was only 2.5. Similarly, the reliability of the frequency of crawling between the two observers was 99.6% per session. During the initial no-training period, the child crawled more than 80% of the time she spent in locomotion. When restraint alone was introduced, all locomotion was by crawling. Not shown in the figure is that the absolute amount of time the child spent crawling during these three sessions was less than half of the amount of time spent crawling during the first three no-training sessions. When restraint and priming was introduced, locomotion by crawling immediately decreased to about 50%, and progressively decreased to nearly zero during these six sessions, totalling 60 min. It was noted during this period that the child was progressively becoming more proficient in attaining a walking posture using the chairs in the corners of the

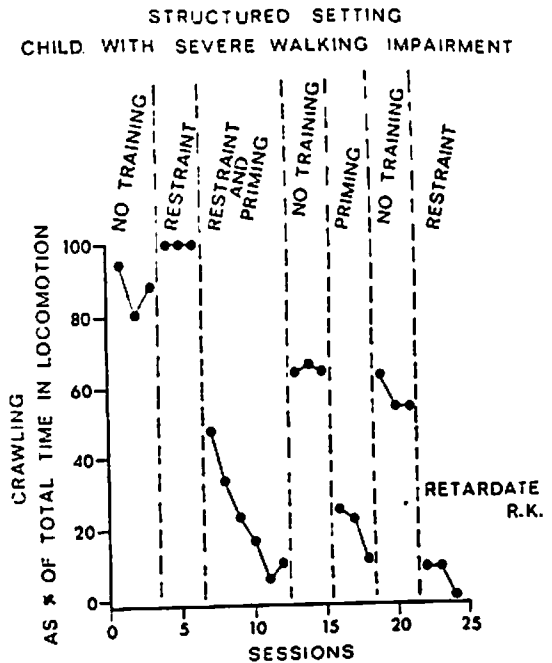


Fig. 1. The percentage of time in locomotion a profoundly retarded child with severe walking impairment spent by crawling. The percentage was calculated by dividing the time the child spent crawling by the time she spent walking and crawling (*i.e.*,  $\text{Crawling} / \text{Walking} + \text{Crawling}$ ) and multiplying by 100. Three 10-min sessions were scheduled daily. Restraint consisted of a teacher's restraining the child from crawling for 5 sec each time the child crawled. Priming consisted of raising the child to a walking posture each time the child crawled. Restraint and priming involved priming walking immediately after the 5-sec restraint.

room. The child also began to offer increasing assistance during priming in attaining a walking posture. When training was discontinued (no training), crawling immediately increased to about 60%, a level substantially lower than during the initial no-training sessions. When priming-alone was introduced, crawling decreased to about 25% and continued decreasing to about 10% during the three sessions. The return to the no-training condition resulted in about 50% of the child's locomotion occurring by crawling, a lower level than during either no-training period preceding it. When restraint alone was introduced again, crawling immediately decreased to about 10%, and by the last of the three sessions was zero. During this pe-