



LAD Study: Ergonomics Yields Fewer Injuries, Increased Productivity

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The Safety Department at LAD initiated a study to determine whether the use of ergonomic equipment would resolve reported complaints of discomfort in the Management Publications Department. The complaints (sore shoulders, arms, and wrist; backaches; and eye strain), expressed by employees using computers, seemed to stem mostly from repetitive motion. As a result of these ailments, employee morale appeared to be diminished.

This work area was thought to be an ideal one for an ergonomics study, since workstations are shared by individuals performing a variety of tasks, including text processors, artists, and editors. It was hypothesized that the use of ergonomic equipment would lessen complaints, increase productivity, and boost morale.

STUDY METHOD

Before any ergonomic equipment was brought in, the area lead observed this group of employees to collect baseline data (number of complaints of soreness associated with work tasks, number of sick days, frequency and length of rest periods, morale, and volume of work completed). This information was collected for approximately six weeks.

Next, three sets of ergonomic equipment were brought into the area. This included chairs, desks, ergo arms (mobile armrests), and keyboard hub (home) keys. Employees were given personal instructions by the safety engineer on how to use and adjust the equipment, and all saw a 30-minute instructional film. A week was allowed for employees to become acclimated to the new arrangement. Employees were then observed for eight weeks to record the same type of data collected during the baseline assessment.

FINDINGS

At the end of the eight-week period, study participants completed a questionnaire. Results revealed the employees thought that ergonomic equipment minimized or alleviated their discomfort associated with work tasks. The "before" complaint rate was approximately seven complaints per day of sore wrists, arms, backs, shoulders, eyes, and neck. The "after" complaint rate was zero complaints per day. The questionnaire also asked employees to rate their morale after using the ergonomic equipment. All study participants ranked their morale in the high or very high categories.

Employees were asked to estimate the percentage of increase in productivity as a result of using the equipment. All felt that they had increased their productivity by approximately 10 percent or more. This increase was difficult to measure

because of fluctuating deadlines and varying workloads. Findings of increased productivity were validated by data that reflected fewer sick days and rest periods taken and few complaints about work discomfort. Turnaround time per project also improved by 2 percent.

Taking all these factors into consideration, total productivity increase was estimated at 12 percent. This is a conservative figure; a study performed by the Internal Revenue Service demonstrated an 8 percent in productivity from using the ergonomic chair alone. At LAD the highest ranked piece of equipment for improving comfort and job performance was the ergonomic chair.

RECOMMENDATIONS

This study showed that the use of ergonomic equipment increased employee productivity, improved morale, and decreased complaints of physical discomfort. The Safety Department has recommended that LAD provide ergonomic chairs employees who must sit at desks to perform their work, such as data entry operators, artists, editors, secretaries, programmers, and accountants. The Safety Department suggested that adjustable desks be offered in areas where several employees must share same computer station. Ergo arms, hub keys, footrests, paper holders, and task lighting would be offered on a case-by-case basis. It was recommended that LAD offer ergonomic equipment to employees in categories other than those mentioned above who have complaints attributable to repetitive motion injuries, or for other medical reasons.

CONCLUSION

Lockheed stands to gain a great deal by initiating an ergonomic computer workstation program. In addition to complying with ergonomic regulations proposed by the Occupational Safety & Health Administration (OSHA), LAD also would be taking a proactive stance to prevent repetitive motion injuries. This would reduce or prevent worker's compensation claims and ameliorate health insurance claims. In addition, it would increase employee morale and productivity. These all add up to division cost savings and make good business sense.

The chairs used in this study were manufactured by ErgoGenesis, LLC; this summary article has been reprinted from the ESH Reporter.