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TELESCOPING FAILURES IN INDUSTRIAL SEWING MACHINES

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ABSTRACT

The patterns of competitive advantage and hence the structure of exports and imports depend on stage of economic development of a country. The relatively advance countries lose competitive advantages in product groups intensive in unskilled labor and shift to products and processes, intensive in capital, skilled labor and innovation. Sri Lanka being a labour abundant country it is logical to demonstrate its competitive advantage in clothing manufacturing. However country is progressively losing the ultimate advantage they had on labor. Even by the mid 1990s labour cost in Sri Lanka were higher than in neighboring countries such as China, India Pakistan and Vietnam. In addition to increasing labour costs Sri Lankan apparel manufactures are to be' confronted with decreasing prices due to increasing competition and additional upward pressures are exerted on the manufacturers by high absenteeism and employee turnovers. Although high mechanization and better utilization of human resource are considered as counter moves to combat increasing manufacturing costs the former has limited practical value due to frequent style mix changes.

The selection of personnel who are physically and mentally qualified for maximum quality and quantity performance is the initial step in establishing better human resource utilization system.

This study investigates the possibility of using selected motor ability tests such as motor coordination, manual dexterity and finger dexterity as a tool of telescoping quality and quantity performance of one specific human resource in the apparel plant-the sewing machine operators.

Randomly selected fifty sewing machine operator trainees were tested on performance criteria based on the four work samples and motor ability tests based on Canadian Force General Aptitude Test Battery. Among the three motor abilities finger dexterity showed the highest correlation with sewing efficiency and motor coordination showed the strongest correlation with quality of workmanship. The results of the study suggest that significant efficiency improvements and quality of workmanship gains can be achieved by using motor ability tests with right selection-ratios.

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