The Learning Curves of Workers with Different Visual Abilities: Sewing Industry Case Study

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Abstract: The 2010 U.S. Census statistics show that 21.8% of the U.S. population with disabilities was employed in contrast to 64.2% of individuals without disabilities, which are a significant group of potential workers for many industries. This work aims to understand the differences in the learning curves of manual sewing tasks of varying difficulty, for workers with different visual abilities by applying the learning curve log-linear model. Preliminary results suggest that blind and sighted workers had similar performance in tasks with low difficulty and legally blind participants outperformed the blind and sighted workers in all difficulty categories. Future work will be conducted to develop a knowledge base for the manufacturing industry that will support training policies and labor force expectations that are more attractive and competitive; providing objective data to support the differences in the learning curves of workers with different visual abilities.

Keywords: Learning Curves, Manufacturing, Sewing Industry, Visual Ability