## Elton mayo - hawthorne effect essay



The Hawthorne Effect – Mayo Studies in Employee Motivation The Hawthorne Effect In essence, the Hawthorne Effect, as it applies to the workplace, can be summarized as "Employees are more productive because the employees know they are being studied." Elton Mayo's experiments showed an increase in worker productivity was produced by the psychological stimulus of being singled out, involved, and made to feel important. Additionally, the act of measurement, itself, impacts the results of the measurement.

Just as dipping a thermometer into a vial of liquid can affect the temperature of the liquid being measured, the act of collecting data, where none was collected before creates a situation that didn't exist before, thereby affecting the results. Elton Mayo's studies grew out of preliminary experiments at the Hawthorne plant from 1924 to 1927 on the effect of light on productivity. Those experiments showed no clear connection between productivity and the amount of illumination but researchers began to wonder what kind of changes would influence output.

Specifically, Elton Mayo wanted to find out what effect fatigue and monotony had on job productivity and how to control them through such variables as rest breaks, work hours, temperature and humidity. In the process, he stumbled upon a principle of human motivation that would help to revolutionize the theory and practice of management. Elton Mayo selected two women, and had those two select an additional four from the assembly line, segregated them from the rest of the factory and put them under the eye of a supervisor who was more a friendly observer than disciplinarian.

Mayo made frequent changes in their working conditions, always discussing and explaining the changes in advance. The group was employed in assembling telephone relays – a relay being a small but intricate mechanism composed of about forty separate parts which had to be assembled by the girls seated at a lone bench and dropped into a chute when completed. The relays were mechanically counted as they slipped down the chute. The intent was to measure the basic rate of production before making any environmental changes.

Then, as changes were introduced, the impact to effectiveness would be measured by increased or decreased production of the relays. Throughout the series of experiments, an observer sat with the girls in the workshop noting all that went on, keeping the girls informed about the experiment, asking for advice or information, and listening to their complaints. The experiment began by introducing various changes, each of which was continued for a test period of four to twelve weeks. The results of these changes are as follows:

Work Conditions and Productivity Results Under normal conditions with a forty-eight hour week, including Saturdays, and no rest pauses. The girls produced 2, 400 relays a week each. 1. They were then put on piecework for eight weeks. Output increased 2. They were given two five-minute breaks, one in the morning, and one in the afternoon, for a period of five weeks. Output increased, yet again 3. The breaks were each lengthened to ten minutes. Output rose sharply 4. Six five-minute breaks were introduced.

The girls complained that their work rhythm was broken by the frequent pauses Output fell only slightly 5. The original two breaks were reinstated, this time, with a complimentary hot meal provided during the morning break. Output increased further still 6. The workday was shortened to end at 4. 30 p. m. instead of 5. 00 p. m. Output increased 7. The workday was shortened to end at 4. 00 p. m. Output leveled off 8. Finally, all the improvements were taken away, and the original conditions before the experiment were reinstated.

They were monitored in this state for 12 more weeks. Output was the highest ever recorded – averaging 3000 relays a week Elton Mayo came to the following conclusions as a result of the study: The aptitudes of individuals are imperfect predictors of job performance. Although they give some indication of the physical and mental potential of the individual, the amount produced is strongly influenced by social factors. Informal organization affects productivity.

The researchers discovered a group life among the workers. The studies also showed that the relations that supervisors develop with workers tend to influence the manner in which the workers carry out directives. Work-group norms affect productivity. The Hawthorne researchers were not the first to recognize that work groups tend to arrive at norms of what is "a fair day's work." However, they provided the best systematic description and interpretation of this phenomenon. The workplace is a social system.

The researchers came to view the workplace as a social system made up of interdependent parts. The worker is a person whose attitudes and

effectiveness are conditioned by social demands from both inside and outside the work plant. Informal group within the work plant exercise strong social controls over the work habits and attitudes of the individual worker. The need for recognition, security and sense of belonging is more important in determining workers' morale and productivity than the physical conditions under which he works.

The major finding of the study was that almost regardless of the experimental manipulation, worker production seemed to continually improve. One reasonable conclusion is that the workers were happy to receive attention from the researchers who expressed an interest in them. Originally, the study was expected to last one year, but since the findings were inexplicable when the researchers tried to relate the worker's efficiency to manipulated physical conditions, the project was incrementally extended to five years.