

Associated Effects of Shiftwork on Health and Productivity Among Outbound Call Center Agents

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Abstract

The study investigated the associated effects of individual attributes (age and gender) and shift work options (shift type, shift length, shift time-in sequence, work-rest day ratio) on the productivity and health of a sample size of fifty-six (56) outbound call center agents in the Philippines with ages between 21 to 28 years old. Survey results showed that sixty percent (60%) of the subjects reported at least one type of health complaint (e.g., stress, headache, back pain, visual discomfort and gastro-intestinal disorder). Also, eighty-five percent (85%) of the subjects reported 6 days a week or a work-ratio of 6:1. Their job involved making outbound calls to various local and international locations which required them to be on rotating shift schedules for an average length of nearly ten (10) hours per day. Productivity reports expressed in terms of success rate of calls from the call center database and personnel records formed the backbone of computational analyses made.

Regression models indicated that shift type and shift length were predictors of productivity and that the increase in shift length reduced the agent's success rate of calls made. The assignment of an agent in the afternoon shift, and more so in the evening shift, indicated a significant decline in the success rate of calls. On the other hand, shift length and work-rest ratio were predictors of at least one type of pre-identified health complaints. Further analysis showed that stress and headache were the significant predictors of the number of absences per week.

In the light of the findings presented, the unfavorable effects of shift work options, as management decisions, can be minimized by developing a more suitable work scheduling guideline that will give due consideration to shift type, shift length and work-rest day ratio as criteria. The adoption of a shorter shift length per day (from the current average of 10 hours) is expected to increase the probability of a productive success ratio and a decrease in the probability of the associated health risks. Studies to further validate the findings, including the analysis of inbound call center operations, is recommended.