Abstract

Linear and non linear models explaining occupational safety. Empirical research on occupational accidents frequently analyzes counts data over a specific period of time. These variables are often treated as if they were continuous and are analyzed using a Linear Regression Model. When this model’s assumptions are violated, the usual solution is to transform the criteria variable. A third possibility, theoretically more sound because it assumes a Poisson distribution for the counts variable, would be to use Non Linear Poisson Regression Models. This paper compares the results obtained using the three aforementioned methodological approaches with a sample of 483 workers, and discusses the practical implications of these findings.