

Pengaruh Metode *Fault Tree Analysis* (Fta) Terhadap Pengetahuan Dan Sikap Pekerja Dalam Mencegah Kecelakaan Kerja Di Industri Furniture X.

The Effect Of *The Fault Tree Analysis* (Fta) Method On Knowledge And Attitudes Of Workers In Preventing Work Accidents In The Furniture Industry X.
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ABSTRAK

Keselamatan dan kesehatan kerja (K3) merupakan aspek penting untuk meningkatkan efisiensi dan produktivitas kerja. *Fault Tree Analysis* merupakan salah satu pendekatan pengendalian kualitas yang digunakan untuk menelusuri kecacatan pada *top-down approach* dengan menganalisis kesalahan sistem dari kumpulan objek-objek yang saling berinteraksi. Meskipun industri furniture di Yogyakarta berkontribusi signifikan terhadap angka kecelakaan kerja masih tinggi, yang menunjukkan perlunya peningkatan pengetahuan dan sikap pekerja terhadap K3. Tujuan penelitian untuk mengetahui pengaruh metode *Fault Tree Analysis* (FTA) terhadap pengetahuan dan sikap pekerja dalam mencegah kecelakaan kerja di industri furnitur X. Metode penelitian menggunakan eksperimen semu (Quasi Experiment Design) Sampel penelitian ini diambil dari 3 industri yaitu industri X dengan jumlah 30 responden pada kelompok eksperimen dan industri Y dan Z dengan masing jumlah responden 15 responden maka seluruh responden yaitu 30 responden pada kelompok kontrol. Teknik sampling yang digunakan dalam penelitian ini adalah Total sampling. Hasil penelitian mengetahui bahwa penerapan metode FTA secara signifikan meningkatkan pengetahuan dan sikap pekerja dalam mencegah kecelakaan kerja. berpengaruh meningkatkan pengetahuan pekerja mengenai keselamatan kerja. penerapan FTA juga berpengaruh positif terhadap sikap pekerja Hasil uji statistik pada kelompok eksperimen dan kelompok kontrol pre-test dan post-test diberikan metode fault tree analysis diperoleh nilai $p < 0,000$ sehingga $p < 0,05$ yang artinya berpengaruh terhadap peningkatan pengetahuan pekerja tentang metode *Fault Tree Analysis* Data menunjukkan bahwa kelompok. Terdapat pengaruh signifikan perubahan sikap antara kelompok eksperimen dan kelompok kontrol. Kesimpulan Terdapat pengaruh nilai pre-test dan post-test yang menunjukkan peningkatan pengetahuan dan sikap yang signifikan dalam pencegahan kecelakaan kerja di industri furniture X dengan menggunakan metode *Fault Tree Analysis* (FTA). Terdapat pengaruh bahwa penerapan metode *Fault Tree Analysis* (FTA) yang signifikan dalam meningkatkan pengetahuan dan sikap pekerja antara kelompok eksperimen dan kelompok kontrol.

Kata Kunci: *Fault Tree Analysis* (FTA), kecelakaan kerja, pengetahuan, sikap.

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ABSTRACT

Occupational safety and health (K3) is an important aspect to improve work efficiency and productivity. *Fault Tree Analysis* is one of the quality control approaches used to trace defects in the *top-down approach* to analyze the errors of the stem of a collection of interacting objects. Although the furniture industry in Yogyakarta contributes significantly to the high number of work accidents, which shows the need to increase workers' knowledge and attitudes towards K3. The purpose of the study is to find out the influence of *the Fault Tree Analysis* (FTA) method on workers' knowledge and attitudes in preventing work accidents in the furniture industry X. Research method using quasi-experimental design. The sample of this study was taken from 3 industries, namely industry X with a total of 30 respondents in the experimental group and industry Y and Z with 15 respondents each, then all respondents, namely 30 respondents in the control group. The sampling technique used in this study is Total sampling. The results of the study found that the application of the FTA method significantly increased workers' knowledge and attitudes in preventing work accidents. The application of FTA also had a positive effect on workers' attitudes. The results of statistical tests in the experimental group and the pre-test and post-test control groups were given the fault tree analysis method obtained a value of $p < 0.000$ so $p < 0.05$ which means that it has an effect to increase workers' knowledge about *the Fault Tree Analysis* Data method shows that the group. There was a significant effect of attitude changes between the experimental group and the control group. Conclusion There is an influence of pre-test and post-test scores that show a significant increase in knowledge and attitude in the prevention of work accidents in the furniture X industry using the Fault Tree Analysis (FTA) method.

There was an influence that the application of the Fault Tree Analysis (FTA) method was significant in improving the knowledge and attitude of workers between the experimental group and the control group.

Keywords : *Fault Tree Analysis* (FTA), work accidents, knowledge, attitudes.