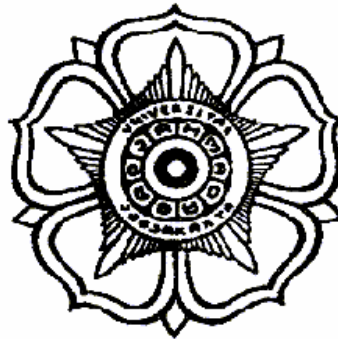


**PENGARUH PENERANGAN UMUM DAN PENERANGAN  
LOKAL TERHADAP KELELAHAN KERJA  
PADA TENAGA KERJA *ASMAD ART*  
*GALERY* DI CILACAP**

**TESIS**

untuk memenuhi sebagian persyaratan  
mencapai derajat Sarjana S-2

Program Studi Ilmu Kesehatan kerja  
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## INTISARI

Penerangan yang memadai akan meningkatkan produktivitas kerja, sedangkan penerangan yang kurang akan mengakibatkan kecenderungan kelelahan kerja, kecelakaan kerja, penyakit akibat kerja, penurunan produktivitas dan kesalahan kerja. Kelelahan kerja merupakan permasalahan yang kompleks karena kelelahan kerja yang terjadi akan menurunkan tingkat produktivitas kerja bahkan kesehatan tenaga kerja.

Penelitian eksperimen pengaruh penerangan umum dan lokal terhadap kelelahan kerja umum mengambil sampel tenaga kerja seni di *Asmad Art Galery* Kabupaten Cilacap. Sampel berjumlah 50 orang, dibagi menjadi dua kelompok eksperimen, kelompok I menggunakan penerangan umum dan kelompok II menggunakan penerangan umum dan lokal.

Hasil penelitian menunjukan bahwa intensitas penerangan umum 30 lux dan 100 % tenaga kerja mengalami kelelahan umum; 80 % kelelahan ringan dan 20 % kelelahan sedang. Terdapat perbedaan yang signifikan antara tenaga kerja yang menggunakan penerangan umum dengan tenaga kerja yang menggunakan penerangan umum dan lokal. Pengaruh intensitas penerangan umum terhadap penurunan kelelahan kerja signifikan, besarnya nilai  $R^2 = 55.8 \%$  dan untuk pengaruh intensitas penerangan umum dan lokal, besar nilai  $R^2 = 82,1 \%$ . Jadi terdapat pengaruh yang signifikan. Diperlukan penambahan intensitas penerangan agar penerangan di lingkungan kerja *Asmad Art Galery* memenuhi syarat minimal 200 lux. Diperlukan penelitian lanjutan tentang pengaruh penerangan terhadap produktivitas kerja dan penelitian yang sama namun dilaksanakan pada pekerjaan yang berbeda.

Keyword; kelelahan, penerangan umum, penerangan lokal.

## ABSTRACT

Large studies shows that office worker productivity will increase with good lighting, but poor lighting will result in a workers fatigue, decrease of productivity, accident, work related disease and error. Fatigue is problem of workers, because fatigue results in a decreasing productivity and health.

The aim of this paper was to investigate the effect of quality of lighting on the fatigue worker in *Asmad Art Galery* Regency of Cilacap. The study was conducted as a comparative study in two variant of workplace: general lighting workplace and combination of general lighting and local lighting. There were 50 subjects participated in this study. They were randomly divided into two groups. One group was exposed to general lighting and the other was exposed to the combination of general lighting and local lighting.

The study showed that at the general lighting condition which used 30 lux, there were almost 100% of workers suffered from fatigue, with proportion 80% suffered from low fatigue and the rest suffered from medium fatigue. There was also a significant difference between the workers who were subjected to general lighting and the workers who were subjected to the combination of local and general lighting. The effect of the intensity of general lighting with the decline of work performance can be formulated by  $R^2 = 55.8 \%$ , while the effect of the intensity of the combination of local and general lighting with the decline of work performance can be formulated by  $R^2 = 82,1 \%$ . This study would also recommend that supplementary lighting should be adjustable and fitted with the minimum requirement needed (200 lux). Further research in the same topic is being carried out at a different work is needed.

Keyword; General lighting, Local lighting, Fatigue