

SLEEP, AGE & PERFORMANCE

The Relationship between Sleep, Age and Job Performance

Fatigue while working the night shift has been shown to negatively affect alertness, performance and increase accident and incident rates (Torsvall et al, 1985). Studies have shown that disruptions of circadian rhythms and loss of sleep are the main reasons for performance decrements (Monk and Folkard, 1985, Akerstedt, 1991, Gousheh et al, 1998).

With increasing age, shift workers may be even more prone to the negative effects of shift work due to the interactive influences of sleep and circadian disruption (Gousheh, 1999).

One study found that performance and the amount of sleep obtained per 24 hour period significantly dropped as a result of increasing age in shift workers (Gousheh, 1998). However, other variables changed with increasing age, including the impact of sleep, general health, and social-family responsibilities. This suggests that age alone was likely not responsible for the decreases in performance.

Another study found that in healthy individuals there is no negative relationship between age and performance (Tuomi et al, 1991).

It seems that performance decrements could better be explained in terms of sleep. Shift workers tend to suffer from the inability to obtain satisfactory quality sleep. Quality sleep is required to motivate and perform. The majority of shift workers, at all ages, believe that by sleeping longer they would obtain a "better sleep". It may be that "quality" is more beneficial than "quantity" and that the ability to get a "good sleep" seems to diminish with age.

Further research in this area is required to conclude how age, sleep and performance are related to shift work.

