## Lighting Can Affect Scores, Writer Says

light from ordinary incandescent bulbs commonly used in homes can cause stress and anxiety, but other colors can increase the IQ averages of children, science writer Lowell Ponte said Saturday.

Ponte, staff investigative science writer for Reader's Digest, said in an interview the color of light given off by household bulbs can cause changes in the brain and body.

'Unlike sunlight, the light from incandescent bulbs is mostly red in color," he said.

'We seldom notice this because our brains repaint the world in its 'true' colors despite the unnatural wave lengths of electric bulbs.

BOTH SOVIET and Japanese scientists agree that red light can alter normal electrical patterns of the brain," he said.

Ponte's article in the July issue of Reader's Digest deals with how color affects moods and health.

He said Soviet scientists have found that a red light environment suppresses the brain's alpha wave rhythms and causes stress and anxiety.

He said such an environment also seems to alter our sense of time.

"Studies in the United States, Great Britain and the Soviet Union all indicate that our biological clocks run faster under red light than under blue light," Ponte said.

"BUT THE studies also revealed that people made far more mistakes, which suggests some impairment caused by red light to the

By JAMES J. DOYLE brain or central nervous system."

United Press International Colors have significantly different LOS ANGELES - The mostly red effects on people, he said, and quoted from a test of children in Munich, Germany, in which intelligence scores differed widely under various color conditions.

When tested in rooms painted light blue, yellow, yellow-green, or orange, children scored 12 points above average on IQ tests. When tested in rooms painted white, black or brown, the average IQ fell by 14

The researchers at Munich's Society for Rational Psychology divided the children into groups for an 18month study period.

AT THE end of the study, children who played in rooms of blue, yellow, yellow-green and orange were found to test as much as 25 IQ points higher than children who played in rooms painted white, black or brown.

"For millions of years our ancestors lived under the light of the sun," Ponte said. "Our bodies are adapted to, and require, natural lisht for health. Now, many people spend many hours of their lives indoors under artificial electric light bulbs with energy spectrums quite different from sunlight."

He said people should try to get some natural sunshine every day, and "light bulb manufacturers should turn their skills to producing bulbs that duplicate the wave lengths found in sunlight."

He said sunlight-imitating light bulbs could help reduce stress and incidents of hypertension and other health problems.