

THE STUDY OF PSYCHOLOGICAL ASPECTS OF HUMAN CENTRIC LIGHTING

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ABSTRACT

Engineering Psychology is a singular discipline which is however extremely alluring. It is a field of psychology which focuses on the intricate relationship between man and machine, the psychological and human centric aspect behind every innovation and the vitality and exuberance of bridging the gulf between any engineering contraption and its influence on all social animals. This paper is an archetype of a study conducted in this discipline which aims at bringing to light the budding technology of Human Centric Lighting (HCL), its benefits, the psychology involved and its applications in various sectors. In reality, social causes are the driving force for the tech sector innovations and HCL is one of its kind.

Keywords: Human Circadian Rhythm, Suprachiasmatic Nucleus, Smart Light Source, LED, IoT

INTRODUCTION

Light is a symbol of brightness and prosperity. It is a source of energy that aids our vision. However light is something more than what we see. Good light not only ensures better vision and facilitates better recognition but also does things that are much beyond the visual aspects [2]. In short it can be stated that light has considerable amount of biological effects on human body. It has the ability to influence our emotions, impact our alertness, attention and enhance our concentration, therefore technocrats have tried their hand in mimicking the natural day light in pursuit of enhancing human performance and contribute for better health and wellbeing of human kind. On the whole Human Centric Lighting, abbreviated as HCL aims at providing a holistic approach of lighting exclusively for the wellbeing of human kind [1].

PERCEPTION OF LIGHT AND ITS INFLUENCE ON BEHAVIOUR

The Psychology of light:

From a psychological perspective, light plunges into the depths of one's psyche while dealing with the possibilities and limitations of the perceptive skills. It is also said to be the natural equipment of the human psychophysical apparatus which influences one's health and wellbeing throughout life. Light when being analyzed beyond a perspective view point is found to act as a driver of cognitive, behavioral and emotional responses for any perceiver in different experimental contexts of day to day life. Therefore light can be called as a cognitive map that

AUTISM AND SOCIAL ROBOTS – AN ATYPICAL STUDY

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ABSTRACT:

Technology races taking Chetah's steps and is pacing forward into the era of Artificial Intelligence, where Robots have become a part and parcel of many of our day today activities, where they act as our peers, facilitators and helpers. Days when the terminology 'ROBOT' was synonymous to those pertaining to industrial applications are bygone and Time has come when humanoids have become more like a friend. Robots have ventured into almost every domain. As it is believed that Robots are capable of performing those tasks that are beyond the imagination of humankind, not used in terms of handling hazardous equipments rather taking up roles in the genre of patient care and child care.

INTRODUCTION:

Autism Spectrum Disorder is a broad term used to describe a group of neuro developmental disorder. These disorders are characterized by problems with communication and social interaction. People with ASD often demonstrate restricted, repetitive and stereotyped interests or patterns of behavior. The Diagnostic and Statistical Manual of Mental Disorders (DSM), published by the American Psychiatric Association (APA) is used universally to diagnose and classify Psychiatric disorders. The DSM-5 currently recognizes 5 different ASD subtypes or specifiers. They are:

1. With or Without accompanying intellectual impairment
2. With or Without accompanying language impairment
3. Associated with a known medical or genetic condition or environmental factor
4. Associated with another neuro developmental, mental or behavioral condition
5. With catatoria

Someone can be diagnosed with one or more specifiers. Children with autism have trouble communicating. They have trouble understanding what other people think and feel. This makes it very hard for them to express themselves either with words or through gestures, facial expressions and touch. This is where the social Robots would facilitate, and make their life smooth and easy.

THE CLINICAL PICTURE OF AUTISM DISORDER:

Autistic children show varying degrees of impairments and capabilities. A cardinal and typical sign is that a child seems apart or aloof from others, even in the earliest stages of life.

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Autistic children show varying degrees of impairments and capabilities. A cardinal and typical sign is that a child seems apart or aloof from others, even in the earliest stages of life. Mothers often remember such babies as never being cuddly, never reaching out when being picked up, never smiling or looking at them when being fed and never appearing to notice the movements of other people around them.