UNIVERSITI TEKNOLOGI MARA

RECOGNISABILITY OF PICTOGRAPHS ON ELECTRICAL PRODUCT SURFACE AMONGST MALAYSIAN CONSUMERS

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ABSTRACT

The increasing technical complexity of electrical products resulted in the creation of a substantial amount of pictographs to allow visual interactions between consumers and the products. Nevertheless, the emergence of these large amounts of different pictographs with the same intended meaning has led to a potentially confusing situation. This event has led to doubts on the effectiveness of pictographs on electrical equipments towards the consumers in Malaysia. This research is aimed to find out the ability to recognize pictographs depicted on electrical appliances and the factors contributing to it. Eighteen selected pictographs which represent six meanings (reference) were tested on four hundred and thirteen respondents purposively. Generally, the data obtained from an identifiability test justifies that most of the pictographs are poorly recognize. This test also ensures that the researcher was able suggest six pictographs to be chosen as a single pictograph to represent six references. The usage of a single pictograph is expected to increase the probability for it to be seen frequently which will then avoid confusion among the consumers. Furthermore, this research is attempt to investigate the relationship between personal factors of the consumers and the ability to recognize pictographs correctly, whereas the consumers' response will be tested by using Chi-square test. The researcher uncovers that 'gender' and 'occupation' has a significant relationship towards the ability to recognize the pictographs correctly. This study also determines the respondents' assessments towards the twin viewpoints of graphic integrity and conceptual meaningfulness. The researcher has established a guideline that suggests the follow up study should be done to determine how both of the layout factors can influence the effectiveness of the pictograph.

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CHAPTER ONE
INTRODUCTION

1.1 RESEARCH BACKGROUND

According to Lang (1987), people and social milieu communicate by speech, writing, and design forms. In general, consumers have no access to the designer of products they interact with. Thus, consumers interact with products through its physical attributes or external visual references (Crilly, 2004). Physical properties on good products always helped the consumers to decipher information and obtained accurate operational instructions.

According to Chen & Lee (2008), information on a certain product can be interacted in three ways which are through; (1) Behavioural Information (BI); (2) Assemblage Information (AI); and (3) Conventional Information (CI). BI is the physical properties of the product parts which serve as information that is directly perceived and operated on by users with their body parts, while AI is the physical properties which indicate the assembly-ability of two individual parts and help users to understand how to operate the object properly. Both deliver the meaning through the shape and physical attributes of a certain product. Although it is able to deliver information, not all situations are practical with this method especially when it involves intricate and complex information and the product has a simple shape. Owing to that, conventional information such as text and pictograph are still the main priority on a product because it can deliver information faster, cheaper, and explicit even though it involves complex information.

Conventional information (CI) can exist in a situation whether it is printed, engraved, or moulded on the product surface (Chen & Lee, 2008). Pictograph has a place in product interaction especially in instrumental interaction (Desmet, 2007). Due to the fact that text usage is limited by factors such as language and space, the use of pictograph is a better choice and is considered the most efficient amongst designers in delivering fast and effective messages (Meredith, 2002). Over the years, pictograph has become a