DEVELOPMENT OF AN ERGONOMICALLY-DESIGNED HAIR WASH BASIN

Undergraduate Thesis
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ABSTRACT

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This study presents the procedures in order to obtain and apply the principles of ergonomics in the design of hair wash basin, concerning the welfare both of the customers and hairdressers when hair washing. It focuses on the ergonomics indicating the comfortability and efficiency of the product.

Specifically, the characteristics of the existing hair wash basin were evaluated in terms of functionality, aesthetics, safety, durability and discomfort being experienced by customers during washing. This was done through survey questionnaires and interviews with customers and hairdressers. In order to accomplish the study, the researchers conducted and collected the data gathered. The results obtained showed that the existing hair wash basin still requires an enhancement focusing on the head and neck part of customer when in lying position. This shows that the current hair wash basin lacks soft support for head and neck part letting the customers experience pain and discomfort. Researchers used the DMADV method in determining the important factors and procedures in the fulfillment of the study.

Thus, the researchers proposed an improvement to its current design with the availability of soft support in the head and neck part. In addition, the researchers also enhanced the product by including an adjustment at the bottom part of the hair wash basin (wood catching basin) and a flexible and steady hose for hairdressers. This improvement on the design of hair wash basin met the requirements, both of customers and hairdressers.

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