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Population Stereotype Production, User Factors, and Icon Design for Underserved Communities of Rural India

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Abstract : This study investigates the influence of user factors and referent characteristics on representation types generated using the stereotype production method for designing icons. Sixty-eight participants of farming communities were asked to draw images based on sixteen feature referents. Significant statistical differences were found between the types of representations generated for contextual and context-independent referents. Strong correlations were observed between years of formal education and total number of abstract representations produced for both contextual and context-independent referents. However, representation characteristics were not influenced by other user factors such as participants' experience with mobile phone and years of farming experience. A statistically significant tendency of making concrete representations was observed for both contextual and context-independent referents. These findings provide insights on community members' involvement in icon design and suggest a consolidated icon design strategy based on population stereotype, particularly for under-served rural communities of India.

Keywords: abstract representation, concrete representation, participatory design, population stereotype

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