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**RESEARCHING THE EFFECTS OF CULTURE ON USABILITY**

by

GABRIELLE FORD

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SUPERVISOR: PROF P. KOTZÉ

JOINT-SUPERVISOR: MRS J H GELDERBLOM

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# SUMMARY

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An experiment was conducted to determine the effects of subjective culture on the usability of computerized systems. The results of the experiment did not provide sufficient evidence to conclude that any of the tested cultural dimensions affected the usability of the product. Analysis of the results indicated that the differences in scores could have been attributable to variables other than those tested and controlled for. This indicated a need to build a more detailed conceptual model of usability before empirical research of this nature can be effectively conducted.

Consequently, further work needed to be done to identify the variables that influence usability, and the strategies for controlling for these variables under experimental conditions. Through a literature investigation, the validity of some of the proposed variables was established, and some additional variables were identified. The valid variables were then incorporated into a conceptual model of usability for use in future research endeavors.

## **Key Words**

Human-computer interaction, culture, usability, cultural dimensions, conceptual model, context of use.

# ABSTRACT

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The user interface development process focuses on understanding users and their individual differences. These differences result from, inter alia, differences in culture. Although there is substantial theoretical evidence that subjective culture influences usability and the resultant performance of users, empirical evidence in this regard remains inconclusive.

This led to an experiment to determine the effects of subjective culture on the accuracy, speed and satisfaction levels of users of computerized systems. Contrary to the criticisms in the literature, theoretical evidence was found to support the use of Hofstede's [2001] cultural model as a basis for this experiment. The results of the experiment did not provide sufficient evidence to conclude that any of the tested cultural dimensions affected the usability of the product. Further analysis of the results indicated that the differences in scores could have been attributable to variables other than those tested and controlled for. This indicated a need to build a more detailed and robust conceptual model of usability before empirical research of this nature can be effectively conducted.

In order to develop such a model, further work needed to be done to identify the variables that influence usability, and the strategies for controlling for these variables under experimental conditions. An investigation into the literature was undertaken for this purpose. The validity of some of the proposed variables was established, and some additional variables were identified that need to be added to the set. The valid variables were then incorporated into a conceptual model of usability that can assist researchers to produce reliable and valid data on the relationship between culture and usability in future research endeavors.

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