Adaptive tutoring system user preferences:

Does gender matter?

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Abstract— **The adaptive tutoring system is one of the applications in teaching and learning processes, providing worldwide accessibility and all-day availability. Apparently, studies on user preference across gender for adaptive tutoring systems remain scarce among university users in Malaysia. With the aim of describing the differences between genders in user preferences for the method of gaining information, online games, online movies, online music, pictures, as well as colors of the adaptive tutoring system, this paper used quantitative methods through data gathering for finding the results of this study. Sixty-eight respondents were chosen from among academicians, administrative staff and students of a public university in Malaysia. Descriptive analysis of the data shows that there exists a pattern of different preferences for adaptive tutoring systems across gender. This paper provides data supporting the need to design different interfaces for male and female users.**

Keywords— adaptive tutoring system; user preferences; gender in user model

I. INTRODUCTION

An adaptive tutoring system involves adaptation decisions of the adaptive system based on users' characteristics such as their interests and individual traits [1]. Besides individual characteristics, an adaptive system considers users' environment, which refers to all aspects of users' environment that are unrelated to the users themselves [2].

There is an increasing number of female students in universities, as reported by MOHE [3]. However, most universities tend to design their tutoring systems in a way that suits male users [4]. A number of studies [5] have shown that gender differences affect Internet usage and task preference [6] as well as learning style [7]–[10].

This study aims to describe user preference data for different platforms and whether they prefer using the Internet and online searching, whether they aware of available online resources and authentication software or systems for the resources, and whether they know how to identify relevant resources.

This study also aims to identify preferences by gender and discuss any significant differences in preferences among users in a university. Specifically, this paper describes the differences between genders in user preferences for the method of gaining information, online games, online movies, online music, pictures, as well as colors of the adaptive tutoring system.

II. RELATED RESEARCH

A. Adaptive Tutoring System

Adaptive tutoring systems have been used in various fields. Table 1 shows previous research that has been done based on user preferences. Studies [11] to [13] are based on knowledge level whereas studies [14] to [16] are based on learning style. However, none of these studies used gender as an attribute to be considered in developing a user model.

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