

Manifestations of user personality in website choice and behaviour on online social networks

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Abstract Individual differences in personality affect users' online activities as much as they do in the offline world. This work, based on a sample of over a third of a million users, examines how users' behaviour in the online environment, captured by their website choices and Facebook profile features, relates to their personality, as measured by the standard Five Factor Model personality questionnaire. Results show that there are psychologically meaningful links between users' personalities, their website preferences and Facebook profile features. We show how website audiences differ in terms of their personality, present the relationships between personality and Facebook profile features, and show how an individual's personality can be predicted from Facebook profile features. We conclude that predicting a user's personality profile can be applied to personalize content, optimize search results, and improve online advertising.

Keywords Personality · Individual differences · Social networks · Facebook · Personalization · Web search · Online advertising · Machine learning

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