Investigating Factors Influencing Behavioral Intention Toward Green Computing Practices Among Undergraduates in Sri Lankan Universities

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Green computing refers to the ecologically responsible and environmentally friendly use of computers and their resources. The primary goal of green computing is to reduce the carbon footprint caused by businesses and industries involved in information technology and systems. To go with green computing, various sorts of practices emerged at both the organizational and individual levels. When adopting green computing methods at the individual or organizational level, behavioral intention toward green computing has been highlighted as a key component. The primary goal of this study is to examine the relationship between factors and behavioral intention toward green computing practices among Sri Lankan undergraduates and then to present a validated model and make recommendations based on the findings. The conceptual framework was created using the theory of planned behavior and the norm activation model. A total of 165 samples were obtained by online questionnaire from undergraduates around twelve different universities, including both private and public universities. The collected data was analyzed using the PLS-SEM method, and the moderation effect of gender, respondent sector, and Sri Lanka's economic crisis was examined. The personal norm's mediation effect was investigated. The findings revealed that cost savings and personal norms had a substantial impact on behavioral intention. None of the moderators discovered a moderation effect, and it was discovered that there is a partial mediation from the personal norm. In conclusion, the study revealed that Sri Lankan institutions should focus more on providing a supportive social environment and making green computing techniques simple and easy to access for undergraduates.

Keywords: *green computing, green information technology, behavioral intention, green information and communication technology, green information systems*