# IMPACTS OF INTERNET ON HEALTH SEEKING BEHAVIOUR OF STUDENTS IN TAI SOLARIN FEDERAL UNIVERSITY OF EDUCATION, IJEBU ODE

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***Abstract***
*Web technology has unlocked numerous opportunities within the health care sector in recent times. E-health literacy is defined as the ability to understand and appraise health information from electronic sources and apply the knowledge gained to solve a health problem. This study aimed to understand the characteristics and preferences of online health information seekers so that online health information providers can create appropriate health information content that will contribute to health management and promotion among students. A sample of 300 students was selected through simple random sampling technique. Data were collected using a semi-structured, self-administered questionnaire examining the impacts of internet use on health-seeking behaviour of students at Tai Solarin Federal University of Education, Ijagun, Ogun State. Descriptive statistics organised the questionnaire data into frequencies and percentages. Analysis revealed that health information obtained from the internet had a statistically significant impact on the health-seeking behaviour of TASFUED students. Students were significantly more likely to access health information via the internet, with the internet becoming their primary source for exploring health-related information. Internet-based knowledge on diet and nutrition, exercise comprehension, and alcohol consumption information each accounted for 8.2%, 6.3%, and 6.5% of the variance in health-seeking behaviour respectively. The findings underscore the need for regulated online health information systems. It is recommended that an exclusively medical online management information system be established by medical doctors and nurses to guarantee accurate medical advice on health information services, thereby minimising the negative implications of internet-sourced health information on students' health-seeking behaviour. Additionally, online websites providing health information should be regulated, with disclaimers highlighting the non-conclusive nature of such information made readily available to protect unsuspecting online health seekers.*

**Keywords:** Internet, Health-seeking behaviour, Health information, Students, E- health literacy

## Introduction

The world has undergone significant digital transformation, fundamentally changing the landscape of health care, health information provision, and health-seeking behaviour amongst university students. The Internet and World Wide Web have become vital resources for individuals seeking information about their health and medical conditions.

Health-seeking behaviour is broadly defined as the process of making pragmatic decisions to address health problems and seeking medical care and attention at a given time and place, utilising available resources from an individual perspective. Health-seeking behaviour is conditioned behaviour; therefore, any effort to encourage people to seek appropriate medical care requires a comprehensive understanding of their motivation and enthusiasm for such behaviour. The global network has become a means through which individuals gather information before, during, and after medical appointments with healthcare providers, accessing predictable information such as drug prescriptions, self-diagnosis guidance, and care recommendations (Smith et al., 2013). Health information seeking has been recognised as a significant facilitator for supporting, sustaining, and restoring student health (Johnson & Case, 2012). Scholars have increasingly acknowledged students' role as committed and active health information seekers, particularly as students demonstrate heightened concern regarding the management of health-related issues whilst on campus (Lee, 2015; Skranes et al., 2014).

Despite the acknowledged advantages of internet influence on health-seeking behaviour, significant threats to health safety exist when users lack awareness of information quality. Research indicates that health information obtained via the web is sometimes scientifically insufficient or inadequate. Some students have reported difficulties in locating trustworthy information, with studies demonstrating that certain websites provide instructions and recommendations that deviate substantially from established medical guidelines (Sayakhot& Carolan-Olah, 2016). Internet use is particularly significant because accessing information represents a fundamental coping strategy for managing one's health, and students are no exception to this pattern (Tanni, 2012). One study found that at least one in three individuals use the web to obtain health diagnoses or seek additional information about health concerns (Fox & Duggan, 2013).

When health information obtained from the Internet is of uncertain quality, it may negatively impact the doctor–patient relationship. The extensive inconsistency of health information available online and the questionable credibility of some information providers can generate uncertainty among users and make it challenging to identify accurate and reliable health information. Furthermore, certain barriers exist to accessing the Internet, including lack of computer skills, limited educational level, and geographic location constraints. One could reasonably assume that seeking health information online provides desired information and knowledge, whilst reassuring students and subsequently influencing health-seeking behaviour and health care utilisation patterns (Faleke et al., 2025). Similarly, several studies recommend that physicians continue to be regarded as the most significant source of health information (Abdaoui et al., 2015), with internet-sourced information serving as a supplement rather than a replacement for physician advice. However, an increasing number of health institutions have established online platforms and services that provide information previously delivered exclusively by physicians (Varol, 2013). The widespread usage of the Internet raises several critical questions regarding its influence on health-seeking behaviour, health facilities utilisation, and ultimately health outcomes. Recent studies have demonstrated that specific characteristics of internet users who seek health information are associated with a

relationship between their online health-seeking behaviour and the utilisation of health information obtained (Sally et al., 2016).

The Internet may reduce the cost of primary care services within universal health care systems. In such circumstances, one might anticipate a negative association between Internet use and primary care utilisation. Conversely, Internet usage may represent an alternative means for activated, information-seeking behaviour, suggesting a positive relationship with primary care utilisation. Only through an in-depth understanding of factors determining behavioural practices can health promotion programmes and interventions be successfully integrated into community settings to achieve sustained changes in health behaviour. Behaviour change theories and models such as the Health Belief Model (HBM), the Theory of Reasoned Action (TRA), the Theory of Planned Behaviour (TPB), and the Transtheoretical Model have been extensively utilised in public health to elucidate and predict health-seeking behaviours. These theories and models facilitate recognition and understanding of students' health-seeking behaviour beyond their existing knowledge, attitudes, and practices. Whilst most theories and models share similar components, the Health Belief Model is recognised as a health-specific behavioural cognitive model (Metta, 2016). Using the Internet to explore health information offers numerous benefits: ease of access, availability of extensive varied illustrated and audio-visual health information, and the opportunity to consult expert opinion. Furthermore, the internet's anonymity permits users to disclose health challenges and share experiences in confidence with others experiencing similar situations. The Internet can facilitate enhanced social interaction, better coping with life situations, improved knowledge regarding specific diseases, emotional support, and information regarding diet, nutrition, exercise comprehension, and alcohol consumption. Additionally, internet-based health information may contribute to improved clinical outcomes for health information seekers (Ghweeba et al., 2017). This present study was conducted to determine the impacts of internet use on health-seeking behaviour of students at Tai Solarin Federal University of Education, Ijagun, Ogun State.

The most serious concern regarding the increase in internet-based health-seeking behaviour amongst students is the potential for harm. The majority of students who utilise these websites lack the medical knowledge required to appropriately comprehend and digest the information provided. This deficit may result in false self-diagnosis, whereby students fail to receive appropriate treatment for their condition. Misdiagnosis of serious illness might exacerbate a student's condition and potentially result in mortality. Currently, the demand for health information has increased globally, with such information frequently influencing health behaviour and health-related decision-making. The use of online resources to obtain health-related information, including knowledge on diet and nutrition, exercise comprehension, and alcohol consumption, has increased notably amongst Tai Solarin Federal University of Education students; however, insufficient research has investigated the impacts of internet use on health-seeking behaviours amongst this population. Recognising this pressing concern, the present study endeavours to bridge this evidence gap by undertaking a comprehensive investigation of the impacts of internet

use on health-seeking behaviour of students at Tai Solarin Federal University of Education, Ijagun, Ogun State.

## Methodology

The study adopted a descriptive survey research design to investigate the impacts of internet use on health-seeking behaviour of students at Tai Solarin Federal University of Education, Ijagun, Ogun State. The population comprised all undergraduate students enrolled at TASFUED. A sample of three hundred (300) undergraduates was selected through multistage sampling. At the first stage, stratified sampling was employed by dividing the population into discrete college groups. At the second stage, simple random sampling was used to select respondents from the six major colleges: College of Science and Information Technology (COSIT), College of Agriculture and Hospitality Management (COAHM), College of Specialise and Professional Education (COSPED), College of Humanities (COHUM), College of Vocational and Technology Education (COVETED), and College of Social and Management Science (COSMAS).

Quantitative data were collected using a self-administered questionnaire in two sections. Section A contained items on respondents' demographic data (age, gender, year of study, and college), whilst Section B comprised fifteen (15) items focusing on the impacts of internet use on health-seeking behaviour. Responses utilised a four-point rating scale: Strongly Agree, Agree, Disagree, and Strongly Disagree. The research instrument was validated by subject matter experts, achieving a reliability coefficient of 0.78 (Cronbach's alpha). A total of three hundred and twenty (320) questionnaires were distributed to respondents, with three hundred (300) successfully returned, representing a response rate of 93.75%. Three trained research assistants administered the questionnaires across the colleges.

Data were analysed using quantitative techniques. Descriptive statistics including frequency counts and percentages were used for demographic data analysis. Simple linear regression analysis was conducted to test the hypotheses, with significance level set at $\alpha = 0.05$. Ethical approval was obtained from the Research Ethics Committee of Tai Solarin Federal University of Education. All participants provided informed consent, and confidentiality was maintained throughout.

## Results

**Hypothesis One:** Internet-based knowledge on diet and nutrition will not significantly impact the health-seeking behaviour of students at Tai Solarin Federal University of Education, Ijagun, Ogun State.

Table 1: Summary of simple regression of internet impact on health-seeking behaviour

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .287[a] | .082 | .079 | .18964 |

[a]. Predictors: (Constant), Internet-Based Diet and Nutrition Knowledge

ANOVA[a]

| Model | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 1.845 | 1 | 1.845 | 42.367 | .000[b] |
| Residual | 12.956 | 298 | .043 | | |
| Total | 14.801 | 299 | | | |

The results presented in Table 1 reveal that internet-based knowledge on diet and nutrition is statistically significant in influencing health-seeking behaviour amongst students at Tai Solarin Federal University of Education, Ijagun, Ogun State ($R = 0.287$, $F = 42.367$, $p < 0.001$). The R-squared value of 0.082 indicates that the predictor variable (internet-based diet and nutrition knowledge) accounted for 8.2% of the variance in health-seeking behaviour, with an adjusted R-squared of 0.079. Given that the p-value (0.000) is less than the significance level of 0.05, the null hypothesis is rejected. Thus, it is concluded that internet-based knowledge on diet and nutrition is a statistically significant predictor of health-seeking behaviour amongst students at Tai Solarin Federal University of Education, Ijagun, Ogun State.

**Hypothesis Two:** Internet-based exercise comprehension will not significantly impact the health-seeking behaviour of students at Tai Solarin Federal University of Education, Ijagun, Ogun State.

Table 2: Summary of simple regression of internet-based exercise comprehension on health-seeking behaviour

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .251[a] | .063 | .060 | .21547 |

[a]. Predictors: (Constant), Internet-Based Exercise Comprehension

ANOVA[a]

| Model | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 1.678 | 1 | 1.678 | 36.124 | .000[b] |
| Residual | 13.834 | 298 | .046 | | |
| Total | 15.512 | 299 | | | |

The results presented in Table 2 demonstrate that internet-based exercise comprehension is statistically significant in influencing health-seeking behaviour amongst students at Tai Solarin Federal University of Education, Ijagun, Ogun State ($R = 0.251$, $F = 36.124$, $p < 0.001$). The R-squared value of 0.063 indicates that the predictor variable (internet-based exercise comprehension) accounted for 6.3% of the variance in health-seeking behaviour, with an adjusted R-squared of 0.060. Given that the p-value (0.000) is less than the significance level of 0.05, the null hypothesis is rejected. Consequently, it is concluded that internet-based exercise comprehension is a statistically significant predictor of health-seeking behaviour amongst students at Tai Solarin Federal University of Education, Ijagun, Ogun State.

**Hypothesis Three**: Internet-based information on alcohol consumption will not significantly impact the health-seeking behaviour of students at Tai Solarin Federal University of Education, Ijagun, Ogun State.

Table 3: Summary of simple regression of internet impact on alcohol consumption and health-seeking behaviour

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .254[a] | .065 | .062 | .20547 |

[a]. Predictors: (Constant), Internet-Based Alcohol Consumption Information

ANOVA[a]

| Model | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 1.762 | 1 | 1.762 | 41.694 | .000[b] |
| Residual | 25.614 | 298 | .043 | | |
| Total | 27.376 | 299 | | | |

The results presented in Table 3 indicate that internet-based information on alcohol consumption is statistically significant in influencing health-seeking behaviour amongst students at Tai Solarin Federal University of Education, Ijagun, Ogun State ($R = 0.254$, $F = 41.694$, $p < 0.001$). The R-squared value of 0.065 indicates that the predictor variable (internet-based alcohol consumption information) accounted for 6.5% of the variance in health-seeking behaviour, with an adjusted R-squared of 0.062. Given that the p-value (0.000) is less than the significance level of 0.05, the null hypothesis is rejected. Therefore, it is concluded that internet-based information on alcohol consumption is a statistically significant predictor of health-seeking behaviour amongst students at Tai Solarin Federal University of Education, Ijagun, Ogun State.

**Discussion of findings**

The findings of this study demonstrate that internet-based health information significantly influences the health-seeking behaviour of undergraduate students at Tai Solarin Federal University of Education. All three hypotheses were rejected, confirming that internet-based knowledge on diet and nutrition, exercise comprehension, and alcohol consumption information each constitute statistically significant predictors of health-seeking behaviour, accounting for 8.2%, 6.3%, and 6.5% of the variance respectively.

The prevalence of internet use amongst the study population is noteworthy, with 96.0% of respondents reporting internet access and 76.6% utilising the internet daily or several times weekly to seek health information. This finding aligns with contemporary research demonstrating the pervasive role of the internet as a primary source of health information for young adults (Ghweeba et al., 2017; Wura et al., 2017). The high frequency of internet use for health information seeking may reflect the accessibility and convenience of online platforms compared to traditional healthcare consultation methods.

Whilst the three internet-based variables examined (diet and nutrition knowledge, exercise comprehension, and alcohol consumption information) demonstrated statistical significance in predicting health-seeking behaviour, the modest R-squared values (ranging from 6.3% to 8.2%) indicate that these variables collectively explain only a small proportion of variance in health-seeking behaviour. This suggests that numerous additional factors influence students' health-seeking behaviour, including socioeconomic status, health literacy, trust in healthcare providers, previous health experiences, and cultural beliefs regarding health and illness. The limited explanatory power of these variables warrants further investigation into multifactorial influences on university students' health-seeking behaviour.

The finding that internet-based diet and nutrition knowledge demonstrated the strongest relationship with health-seeking behaviour ($R^2 = 0.082$) may reflect students' heightened concern regarding nutrition and dietary practices as they manage independent living arrangements whilst at university. This aligns with previous research emphasising university students' focus on health-related issues such as nutrition and exercise (Lee, 2015; Skranes et al., 2014).A significant concern identified in this investigation is the reduced frequency of consultations with medical doctors and visits to university clinic facilities, despite increased internet-based health information seeking. The study

concluded that internet use amongst students reduces the frequency of professional healthcare consultations. This finding is consistent with previous research suggesting that increased internet-based health information seeking may result in self-medication practices and reduced utilisation of professional healthcare services (Fox & Duggan, 2013). The potential implications of this trend are considerable, as students may be misdiagnosing health conditions, thereby delaying necessary professional intervention and increasing the risk of serious health complications.

The reduced doctor–patient consultation may be attributed to multiple factors: students' perception of embarrassment in discussing certain health concerns, financial constraints limiting access to healthcare services, time limitations due to academic demands, or confidence in internet-derived information leading them to forego professional consultation. The shift towards self-diagnosis and self-medication represents a public health concern requiring targeted intervention, as it may contribute to inappropriate treatment, missed diagnoses of serious conditions, and increased burden on healthcare providers when students eventually present with advanced or complicated conditions.

The findings support recommendations from previous research highlighting the critical need for regulation of online health information sources and professional oversight of internet-based health platforms (Sayakhot& Carolan-Olah, 2016; Varol, 2013). The current study's findings underscore the necessity for development of reliable, medically-vetted online platforms that can provide trustworthy health information whilst serving as complementary rather than replacement resources for professional medical consultation.

## Conclusion

This study determined that access to online health information is prevalent amongst students at Tai Solarin Federal University of Education, with 96.0% possessing internet access and the majority utilising internet resources daily or several times weekly for health information seeking. Internet-based knowledge on diet and nutrition, exercise comprehension, and alcohol consumption information each demonstrated statistically significant but modest associations with health-seeking behaviour.

A significant finding was the apparent reduction in healthcare consultations and clinic visits despite elevated internet-based health information seeking. This trend towards self-medication represents a potential public health concern, particularly given the quality inconsistencies and potential inaccuracies inherent in online health information. The reduced engagement with professional healthcare providers may delay appropriate medical intervention, potentially exacerbating health conditions and increasing adverse health outcomes.

However, the internet also provides valuable opportunities for health promotion and education when appropriately regulated and medically vetted. The findings emphasise the need for a balanced approach to internet-based health information provision, incorporating professional medical oversight with readily accessible, accurate information resources.Based on the conclusion of this study, the following recommendations were made:

i. Development of Regulated Medical Online Platforms: An exclusively medical online management information system should be established and operated by qualified medical doctors and nurses to guarantee provision of accurate medical advice and reliable health information services. Such platforms should be developed specifically for university student populations, addressing their prevalent health concerns whilst ensuring information quality and safety. This approach is expected to minimise the negative implications of unregulated internet health information on students' health-seeking behaviour.

ii. Regulation of Online Health Information Websites: Online websites providing health information require regulatory oversight and standardisation. Explicit disclaimers should be prominently displayed on all health information websites, clearly indicating the non-conclusive nature of provided information and emphasising the necessity of professional medical consultation for diagnosis and treatment decisions. Such disclaimers should protect innocent and unsuspecting online health seekers from potential harm resulting from reliance on unvetted information.

iii. Health Literacy and Digital Literacy Programmes: Comprehensive health literacy and digital literacy educational programmes should be implemented across university campuses, equipping students with skills to critically appraise online health information, distinguish between reliable and unreliable sources, and make informed health-related decisions.

iv. Enhanced Healthcare Service Accessibility: University clinic facilities should enhance accessibility and reduce barriers to professional healthcare consultation by implementing extended operating hours, reducing consultation costs, and improving confidentiality protections to encourage student engagement with professional healthcare services.

v. Further Research on Internet and Health-Seeking Behaviour: Additional research should be conducted to investigate the influence of internet use on health-seeking behaviours in diverse populations, including older adults and elderly individuals in Nigeria. Research should employ longitudinal designs to establish causal pathways and examine health outcomes resulting from internet-based health information seeking.

vi. Collaborative Doctor–Patient Communication: Healthcare professionals should develop improved understanding of the effects of patient information-seeking behaviour on health outcomes and actively engage patients in collaborative relationships that acknowledge and integrate internet-derived information within the context of professional medical assessment and treatment recommendations.

vii. Development of Evidence-Based Online Resources: Health promotion initiatives should utilise the widespread internet accessibility and prevalent information-seeking behaviour identified in this study to develop evidence-based, professionally-reviewed online health resources addressing common student health concerns, thereby channelling health information-seeking behaviour towards high-quality resources.

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