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A pilot study of Self-Determination, Online Media Credibility and Non-communicable Disease (NCDs) Prevention Behavior

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ABSTRACT
This pilot study aimed to investigate the reliability and validity of self-determination, online media credibility, and noncommunicable disease (NCD) preventative behavior among Malaysian public university students. A quantitative method was used, with an internet survey as the tool, and the questionnaire was created using existing research. This research focuses on a limited sample size (n = 52). A total of 52 people completed the survey, which included assessments of the independent variable, self-determination; the mediating variable, online media credibility; and the dependent variable, NCD preventative behavior. To confirm the instrument's quality, validity, reliability, and normality tests were performed through expert review and data analysis using SPSS software. The results showed that the instruments were dependable, and the data was regularly distributed. This exploratory research also found that university students had a favorable perception of self-determination, trust in online media, and engagement in NCD preventative behavior. According to these findings, the instruments are appropriate for use in the main study. However, more study with a bigger sample size is required to validate and reinforce these initial findings.

Keywords: Self-Determination, Online Media Credibility, Non-Communicable Diseases, Pilot Study, Reliability Analysis

INTRODUCTION

Non-communicable diseases (NCDs) are chronic illnesses not transmitted from person to person. They include cardiovascular diseases, diabetes, cancer, obesity, and other conditions often linked to unhealthy lifestyles. NCDs are the leading cause of death worldwide, and university students, particularly those with unhealthy habits, are considered a high-risk group (Rashidi et al., 2023). Establishing healthy behaviors during university life is crucial, as these habits can significantly impact long-term health outcomes (Akhmad et al., 2024; Al-Naggar et al., 2013; Anuar et al., 2024).

One of the key factors contributing to poor health among university students is their dietary habits. Studies have shown that stress leads students to consume more fast food and snacks while reducing their intake of fruits and vegetables (Kalnina et al., 2022; Lanuza et al., 2022). The university environment, with its academic pressures and lifestyle changes, plays a major role in shaping students' health behaviors. Research by Al Mamun et al., 2020 and Ndejjo et al., 2022), highlights how these factors influence students' daily routines, often leading to negative health habits. If left unaddressed, these behaviors may increase the risk of developing chronic diseases at an earlier stage in life (Zhuang & Jenatabadi, 2023).

Understanding the role of self-determination in shaping health behaviors can offer valuable insights for NCD prevention among university students in Malaysia. Encouraging self-determined motivation can help students make informed health choices and adopt healthier lifestyles (Basu, 2009; Gadeikienė et al., 2021). Additionally, public universities in Malaysia have a crucial role in fostering environments that promote self-determined and culturally responsive health habits (Ahmad & Bruno, 2021; Ihm et al., 2021). By integrating health awareness programs and supportive campus policies, universities can contribute to reducing the long-term health risks associated with NCDs.

PROBLEM STATEMENT

The increasing prevalence of non-communicable diseases (NCDs) among young adults highlights the urgent need for effective health interventions. Social media platforms have emerged as cost-effective tools for disseminating public health information, particularly in countries facing financial constraints in healthcare (Ayub, 2020; Mendoza-Herrera et al., 2020) . Online health campaigns have successfully promoted behavioral changes such as increased physical activity (Ashton et al., 2017; Memari et al., 2021), reduced sugar and fat intake (Fransen et al., 2017; Pinho et al., 2018) and greater motivation for health interventions (Davis et al., 2018; McCoy et al., 2022). However, the effectiveness of these digital health strategies largely depends on the credibility of online media sources (Lackaff & Cheong, 2008; Laursen, 2017; Metzger et al., 2010).

While credible online health information can positively influence behaviors and encourage evidence-based health decisions (Balaban & Mustătea, 2019; Melchior & Oliveira, 2022), the internet is also filled with misleading content. The spread of misinformation, fake news, and biased health narratives has raised concerns about the reliability of online health sources (Liu et al., 2023; Radwan, 2022). Studies have shown that exposure to inaccurate or deceptive health information can lead to confusion, scepticism toward medical professionals,

and poor health choices, ultimately undermining public health efforts (Vyas et al., 2021; World Health Organization, 2022) . Given the increasing reliance on digital platforms for health information, it is crucial to assess how university students perceive and evaluate the credibility of online health content.

University students, as a key demographic in the transition to adulthood, are particularly vulnerable to unhealthy lifestyle habits. Factors such as academic stress, exposure to social media trends, and peer influence contribute to poor dietary choices, sedentary behavior, and substance use, increasing their risk of developing NCDs (Hanawi et al., n.d.; Ministry of Health Malaysia, 2022) . Since young adults represent a valuable resource for a country's future development (Sánchez-Miguel et al., 2020; Walensky et al., 2021) , addressing their health literacy and online media consumption is essential for promoting long-term well-being.

Despite the recognized influence of online media on young people's health behaviors, there is limited research on how university students in Malaysia assess the credibility of health-related information online and how it affects their decision-making regarding NCD prevention. Understanding their ability to navigate digital health content is essential for designing targeted interventions that enhance health literacy and encourage informed lifestyle choices. This study aims to bridge this gap by examining the role of self-determination and online media credibility in shaping health behaviors among university students, with a focus on reliability analysis and normality testing of key variables. The findings will contribute to a better understanding of how students engage with digital health information and offer insights for developing more effective health communication strategies.

LITERATURE REVIEW

Self-Determination and Health Behavior

Self-determination theory (SDT) is a psychological paradigm for studying the motivations behind human behavior, particularly health-related acts. According to self-determination theory, people are more likely to engage in and stick with health-promoting actions when they feel autonomous, competent, and connected (Bray, 2021; Ryan, 2009).

Based on previous research findings, behavioral change and behavioral modification through healthy lifestyle are believed able to reduce NCDs (Rodrigues & Macedo, 2021; Sun et al., 2023). According to health researchers, the self-determination approach is effective in maintaining a healthy lifestyle (Deci & Ryan, 2012; Nogg et al., 2021). The elements of self-determination factors, such as autonomous, competence, and relatedness would strengthen an individual's intrinsic motivation to practice healthy behavior (Glendinning, 2018; Legault, 2017). Moreover, the self-determination approach has the potential to assist young people in making healthier choices and managing their health more successfully (Patrick & Williams, 2012; Ryan et al., 2008; Ryan & Deci, 2020).

Several studies have found that self-determination can impact an individual's behavior to sustain quality of life and well-being (Ryan et al., 2008; Williams et al., 2002). This approach emphasizes the importance of autonomy, competence, and relatedness in cultivating

intrinsic motivation and personal commitment to health-promoting behaviors (Christina et al., 2015; R. M. Ryan et al., 2008, 2009).

According to Ryan and Deci (2000), self-determination is founded on psychological requirements that promote healthy actions. A lack of self-motivation will provide various hurdles to maintaining a healthy lifestyle. Individuals' self-determination influences their efforts to prevent hazardous behaviors (Gillison et al., 2019; Willmot, 2019) .The impact of self-determination on individual well-being is to enable people or groups with the ability and right to choose, decide, and control their own lives following their principles, goals, and interests. It is the belief that everyone has the freedom and autonomy to choose their life path (Allen, 2018; Morbée et al., 2020). Furthermore, earlier research findings indicated that self-determination is critical for sustaining a healthy lifestyle and preventing non-communicable diseases.

The elements of self-determination

According to self-determination theory (SDT), three key psychological components of self-determination are universally important for self-motivation and psychological well-being (Garrin, 2014; Mcnelis, 2008). Autonomy, competence, and relatedness are some of the elements. These three fundamentals are both natural and universal (Caffrey, 2020; Markland et al., 2005; Ntoumanis et al., 2021).

Perceived autonomous is an important psychological element in individuals' ability to control their actions and choices. The existence of these elements provides individuals the strong beliefs that influence their attitudes and behaviors (Allen, 2018; McNelis, 2008). The element of autonomous in an individual is presented when he or she perceives his or her decision as self-generated and freely selected. The motivation of behavior is not influenced by external factors (Gettens, 2015; Ng et al., 2012; Ryan & Deci, 1985).

Perceived competence is defined as an individual's belief in their capacity to carry out specified health-promoting actions (McNelis, 2008; Ng et al., 2012; Wicker, 2020). A perceived sense of competence has a major impact on health-related decisions and behaviors.

The third element of self-determination theory is relatedness. Relatedness is a fundamental psychological need that drives people to seek intimate connections with others (Caffrey, 2020; Glendinning, 2018; Ng et al., 2012). Recent studies have shown that obtaining needs assistance from "important others" (such as close friends and family members) is a better and more reliable predictor of dietary change outcomes than receiving needed support from healthcare practitioners (Afshar & Shabestari, 2021; Mohebi et al., 2018).

Perceived religiosity is another element that influences individuals' motivation in health behavior. Religiosity is a psychological system composed of behaviors, community, beliefs, and self-determination (Aksoy et al., 2022; Braam & Koenig, 2019). Adopting a religion can lead to positive outcomes such as life satisfaction, subjective well-being, and happiness (Alanazi, 2016; Garssen et al., 2021; Stroope et al., 2020). People who value their faith are more likely to engage in health-promoting practices and avoid bad habits. Religious

beliefs and practices can have a major impact on a person's healthcare decisions (Aksoy et al., 2022; Braam & Koenig, 2019; Dein et al., 2020).

METHODOLOGY

This study employs a quantitative research design to examine the reliability and normality of the research instrument measuring self-determination, online media credibility, and healthy behaviors among university students. The research uses probability sampling, ensuring that every student in the target population has an equal chance of being selected, enhancing the representativeness of the sample (Zainudin Awang, 2012).

Measurement

Research instruments are essential in quantitative research because they facilitate systematic data collection and measurement. The instruments will ensure that the data acquired is accurate, dependable, and capable of efficiently answering research questions or testing hypotheses. Aithal & Aithal, 2020; Sarmah & Bora Hazarika, 2012). They argued and proclaimed that using poorly constructed research instruments in quantitative studies can have serious effects to compromise the validity and dependability of study findings. Such devices can cause bias in data collection, leading to incorrect findings that can influence policy decisions and public health consequences (Dash & Paul, 2021; Mellinger & Hanson, 2020).

The questionnaire consists of four sections with a total of 80 items. Each section has a specific focus. Section A consists of the respondent's demographic background with a single multiple-choice question. Section B relates to self-determination elements; Section C consists of non-communicable disease prevention; and Section D contains online media credibility items. Furthermore, all questions in sections B, C, and D are in the form of matrix point rating questions with a four-point scale ("strongly disagree", "disagree", "agree", and "strongly agree").

Table 1: Distributions of instruments and number of items

Sections	Questions	Factors/Elements	Items
A	Demographic background and mandatory questions about current lifestyle and health status, health behavior, source of health information, and type of health information searched.	Section A: Demographic Background	15
B	Self-determination (Independent Variable- (Perceived Autonomous, Perceived Competence, Relatedness, and Perceived Religiosity)	4	30
C	NCD Prevention (Dependent Variable- (Information, Motivation, Behavioral Skills)	3	20
D	Online Media Credibility (Mediating Variable- (Trustworthiness and Expertise)	2	15
	Total	**9**	**80**

Section A is the demographic background questionnaire consisting of fifteen questions. There is sex, age, name of university, program of study, year of study, field of study, current place of residence, household income category, race, religion, health status, current health behavior, alcohol consumption, source of online information, and types of health information searched.

In section B, 30 items measure four elements of self-determination known as perceived autonomous, perceived competence, relatedness, and perceived religiosity. Meanwhile, in Section C, 20 items measure information, motivation, and behavioral skills towards non-communicable disease prevention. The last section consists of items that measure online media credibility based on the trustworthiness and expertise of online health information.

Table 2: Sources of the Instruments

Variables		**No of items**	**Sources**
Self-Determination	Perceived Autonomous	6	Levesque et al., 2007; Mallett et al., 2007; Reethesh et al., 2019; Sport et al., 2021.
	Perceived competence	7	Levesque et al., 2007; Reethesh et al, 2019; Sofyan et al.2021; Schwarzer et al., 2007,, Reethesh et al, 2019.
	Relatedness	11	Sallis et al., 1987, Sofyan et al.2021.
	Perceived Religiosity	6	Aksoy et al., 2022; Boswell et al., 2006; Garssen et al., 2021; Svensson et al., 2020.
Non-communicable disease prevention	Information	8	Cardoso et al., 2020; Reethesh et al., 2019b .
	Motivation	5	Brownell, 2009; Mallett et al., 2007.
	Behavioral Skills	7	Sofyan et al.,2021;Reethesh et., al. 2019;Levesque et al.,2007.
Online Media Credibility	Trustworthiness	8	Flanagin & Metzger, 2000; Melnyk et al., 2021
	Expertise	7	Andrew et al., 2000; Kelly et al., 2015.

Data Collection

A pilot test of 52 students from Universiti Teknologi MARA (UiTM) Melaka was done for this research. This pilot study assessed the accuracy and consistency of the measuring procedures employed. Although the scale had already been created, a pre-test was performed to guarantee its dependability when translated into Malay and used in the local context. The participants from UiTM Melaka were chosen because they are like the main study's target respondents, who are university students from Malaysian public universities. This

commonality assures that the pilot study's findings are relevant and usable in the actual research situation.

Validity, Reliability, and Normality Test

Before conducting research, it is necessary to conduct a test to determine the validity of the data. The questionnaire must first undergo validity and reliability testing. A preliminary test should be conducted to determine the error rate of the questionnaire. According to Sekaran and Bougie (2013), validity is a test to prove the accuracy of an instrument, in this case, a questionnaire, techniques, and processes used in research, regardless of whether they are following a previously established concept. In this instance, to determine the validity of the instruments, the researcher will use SPSS software.

In contrast, a reliability test is designed to evaluate the consistency and stability of a measuring instrument or tool (Sekaran and Bougie, 2013). According to Sekaran and Bougie (2013), the reliability of a measurement indicates the extent to which it is unbiased (error-free) and therefore ensures consistent measurement across time and all items in the instrument. For the testing of reliability, the researcher employed Cronbach's Alpha, the most accurate method.

Content and Face Validity

The draft of the instrument was reviewed by four experts (two subject matter experts, two statisticians, and one language expert) as well as typical responders for content and face validity. The experts were chosen based on their expertise, qualifications, and position in the university or education field to qualify them for providing input on the instrument development. Following that, various changes and additions were made to the item's questionnaire based on feedback gathered before conducting the pilot test. Adjustments were made following their comments on the questionnaire. This is to clarify and eliminate unclear wording in the instructions and questions. In addition, during the pilot test, each question was assessed for clarity and relevance to the objective of the study, resulting in some changes to the questions (Hair et al., 2021; Ismail et al., 2017).

Reliability Test

A reliability analysis was conducted to check the internal validity and consistency of the instruments used for each variable. Based on the Rule of Thumb by Hair et al. (2019), the value or reliability can be interpreted. Hair et al. (2019) recommended Cronbach's alpha values of 0.6 to 0.7 as the lower limit of acceptable in instrument tests. If the alpha is greater than 0.7, the items are homogeneous and measure the same constant. Table 3.19 shows the range of strengths of association determination.

Cronbach's alpha coefficient is a frequent indicator used in quantitative studies to assess the construct's internal consistency. It is a critical step for a researcher to choose an instrument or explore developing a new one to meet the study goal and maintain the instrument's quality (Natalya, 2018; Reethesh et al., 2019b).

Cronbach's alpha coefficient is a number that runs between 0.00 and 1.00. If the correlation is strong, it means the questions are measuring the same underlying construct, signaling that the scale is reliable. The results of the reliability analysis are presented in Table 3 to show the reliability test for self-determination, non-communicable disease prevention, and online media credibility. Table 3 below shows the reliability analysis showing the Cronbach's Alpha.

Table 3: Cronbach's Alpha

Variables		**Cronbach Alpha Coefficient Value**		
		No of items	**No of Items Discarded**	**Pilot Study (n=52)**
Self-Determination	Perceived autonomous	6	None	.842
	Perceived competence	7	None	.828
	Relatedness	11	None	.807
	Perceived religiosity	6	None	.892
NCD Prevention	Information	8	None	.934
	Motivation	5	None	.887
	Behavioral Skills	7	None	.894
Online Media Credibility	Trustworthiness	8	None	.868
	Expertise	7	None	.833

Normality Test (Skewness and Kurtosis)

Data normality is frequently examined using skewness, kurtosis, and statistical tests like the Shapiro-Wilk or Kolmogorov-Smirnov tests. Before conducting any statistical analysis of the data, it is imperative to verify or confirm this assumption (Rani Das, 2016). Scientific literature frequently contains statistical errors, and roughly 50 percent of the publications that are published contain at least one error. Numerous statistical techniques, such as correlation, regression, t-tests, and analysis of variance, also known as parametric tests, are predicated on the supposition that the data have a normal distribution or a Gaussian distribution (named after Johann Karl Gauss, 1777–1855). Meaning that the populations from which the samples are drawn are assumed to have a normal distribution (Ghasemi & Zahediasl, 2014).

Skewness and kurtosis, two statistical concepts related to normality, are strong and useful instruments. Skewness is a measure of a distribution's deviation from symmetry, where the mean, median, and mode are in a similar position. While kurtosis is a calculation of the peakedness or flatness of a data distribution, where the flat distribution is negative, and the peaked distribution is positive. Skewness and kurtosis are essential to be assessed in the investigative process because they specify a lack of variance in the responses, which may cause the data distribution to not be normal, thus creating difficulties in interpreting the outcomes of the analysis of the data (Hair et al., 2019).Table 3.22 below show normality test

of Populations according to Skewness and Kurtosis. Table 4 below shows the value of skewness and kurtosis is +1.0 and normality of skewness and kurtosis are assumed.

Table 4: Skewness and Kurtosis

Variables	N	Skewness	Kurtosis
Perceived Autonomous	52	-.102	-1.300
Perceived Competence	52	.084	-.212
Relatedness	52	.106	-.399
Perceived Religiosity	52	-.862	-.528
Information	52	-.502	-1.450
Motivation	52	-.620	-.646
Behavioral Skills	52	.061	-.859
Trustworthiness	52	.032	.895
Expertise	52	.303	-.519

Data normality was assessed using each variable's skewness and kurtosis values. The results show that all values are within an acceptable range of ±2, indicating no significant departures from normalcy. Skewness ratings varied from -0.862 to 0.303, indicating distributions that are largely symmetrical. A few factors, such as Perceived Religiosity (-0.862), Information (-0.502), and Motivation (-0.620), had modest negative skewness, but Expertise (0.303) was somewhat favorably skewed. Similarly, kurtosis values varied from -1.450 to 0.895. The majority of variables were slightly platykurtic, showing flatter distributions than a normal curve, except Trustworthiness (0.895), which showed a little peaked (leptokurtic) distribution. Overall, these findings support the assumption of normality, indicating that the dataset is suitable for subsequent parametric statistical analyses, including multiple regression and structural equation modeling (SEM).

DATA ANALYSIS AND FINDINGS

Demographic Information

This section begins with a description of the respondents' profiles, which are given in the table below. After that, the survey instrument's measures and data collection technique are described.

Table 5: Demographic Profile of Respondents

Variable	Frequency (52)	Percentage (%)

Sex		
Male	9	17.3
Female	43	82.6
Age		
18-20	51	98.0
21-23	1	1.92
24-26	0	
27-29	0	
Above 30	0	
Program of study		
Certificate	0	0
Diploma	47	90.3
Bachelor Degree	5	9.6
Master/PhD		
Year of Study		
Year 1 / Semester 1 &2	33	63.4
Year 2/ Semester 3 &4	3	5.7
Year 3/ Semester 5&6	15	28.9
Year 4/ Semester 7 &8	0	0
Year 5 and above	1	1.9
Field of study		
Social Sciences & Humanities	52	100
Science & Technology	0	
Medicine & Health Science	0	
Business & Economics	0	
Law & International Studies	0	
Architechture, Design &	0	
Applied Science & Social Work	0	
Tourism & Hospitality	0	
Agricultural & Natural	0	
Resources		
Others		
Current place of residence		
Urban	34	65.4
Suburban	9	17.3
Rural	9	17.3
Household income category		
B40	25	48.1
M40	19	36.5
T20	8	15.4

Race Malay Chinese Indian Others	 52 0 0	 100
Religion Islam Christian Buddhism Hinduism Others	 52 0 0 0	 100
Total	**52**	**100**

The demographic profile of the 52 respondents who participated in the pilot study reveals several key characteristics. In terms of gender, the majority were female (82.6%), while males made up 17.3% of the sample. Almost all respondents (98.0%) were between the ages of 18 and 20, reflecting a predominantly younger student population. In terms of educational background, the majority were diploma students (90.3%), with a small percentage (9.6%) pursuing a bachelor's degree. Most respondents were in their first year of study (63.4%), followed by those in their third year (28.9%), and a small group in their second year (5.7%). Regarding their field of study, all participants were from the Social Sciences and Humanities (100%), which aligns with the research focus. The majority resided in urban areas (65.4%), while the rest were evenly split between suburban and rural areas (17.3% each). In terms of household income, nearly half of the respondents (48.1%) came from the B40 income group, followed by 36.5% from the M40 group, and 15.4% from the T20 group. All participants identified as Malay (100%) and practiced Islam (100%), which reflects the demographic composition of the selected sample in this pilot phase. Overall, the sample represents a homogeneous group in terms of ethnicity and religion, with some diversity observed in income levels and place of residence.

Health Status

The health status of the 52 respondents provides important insight into their general well-being and lifestyle behaviors. Most participants (94.2%) reported no history of non-communicable diseases (NCDs), while a small number (5.8%) indicated having obesity. None of the respondents reported being diagnosed with type 2 diabetes, cardiovascular disease, cancer, or hypertension. In terms of smoking habits, all respondents reported that they had never smoked, indicating a positive trend in tobacco-free behavior among the sample. Similarly, regarding alcohol consumption, all participants stated that they had never consumed alcohol, reflecting healthy lifestyle choices or adherence to cultural and religious norms. Overall, the findings suggest that the respondents generally maintain a healthy lifestyle, with minimal presence of NCDs and no engagement in smoking or alcohol consumption. This information provides a useful context for understanding the role of self-

determination and media credibility in promoting NCD prevention behaviors among university students.

Table 6: Health Status, Smoking, and Alcohol Consumption Among Public University Students

Health Status	Frequency	Percentage
Health Status		
Type 2 diabetes	0	
Obesity	3	
Cardiovascular disease	0	
Cancer	0	
Hypertension	0	
None	49	
Smoking status		
Current smoker	0	3.4
Former smoker	0	5.9
Never smoked	52	90.6
Alcohol consumption		
Never	52	97.4
Occasionally	0	2.0
Regularly	0	0.5
Total	**52**	**100**

Descriptive

Table 7 shows the descriptive analysis of the key study variables reveal generally high mean scores, indicating positive perceptions and behaviors among the respondents. Among the constructs measured, *Perceived Religiosity* recorded the highest mean score (M = 3.6410, SD = 0.42701), followed closely by *Information* (M = 3.6010, SD = 0.43796) and *Motivation* (M = 3.5538, SD = 0.47464), suggesting that respondents highly value religious beliefs, have good access to health-related information, and are motivated about non-communicable disease (NCD) prevention. *Perceived Autonomous* also scored relatively high (M = 3.4368, SD = 0.43035), indicating a strong sense of personal control in making health-related decisions. Meanwhile, *Perceived Competence* (M = 3.1978, SD = 0.45717), *Relatedness* (M = 3.1486, SD = 0.40297), *Behavioral Skills* (M = 3.2115, SD = 0.56118), and *Expertise* (M = 3.2198, SD = 0.46697) recorded moderate mean scores, suggesting a generally positive but slightly varied perception in these areas. Notably, *Trustworthiness* had the lowest mean (M =

2.9111, SD = 0.47443), indicating that respondents were somewhat cautious or critical in evaluating the credibility of information sources. Overall, the results suggest a relatively high level of self-determination and access to credible health information among the sample, with some areas showing room for improvement, particularly in trust toward media sources.

Table 7: Descriptive Analysis

Variables	**Mean**	**Standard Deviation**
Perceived Autonomous	3.4368	.43035
Perceived Competence	3.1978	.45717
Relatedness	3.1486	.40297
Perceived Religiosity	3.6410	.42701
Information	3.6010	.43796
Motivation	3.5538	.47464
Behavioral Skills	3.2115	.56118
Trustworthiness	2.9111	.47443
Expertise	3.2198	.46697

CONCLUSION

The significance of ensuring both validity and reliability in a questionnaire cannot be overstated, as these elements are essential for producing accurate and meaningful data. In quantitative research, preliminary steps such as conducting a pilot study are crucial before moving on to the full-scale data collection phase. This process helps to confirm that the questionnaire items are clearly understood and appropriately designed, especially when working with respondents from diverse backgrounds. A high level of validity and reliability reflects the quality of the data collected and, ultimately, supports the production of rigorous and trustworthy research findings.

In the context of this pilot study, the instrument was tested on a small sample of 52 respondents and demonstrated acceptable levels of reliability and validity. However, to determine its full potential in assessing the influence of self-determination and online media credibility on non-communicable disease (NCD) prevention behaviors among public university students in Malaysia, a larger-scale study involving a broader sample is required.

To achieve the research objectives, further statistical analyses, including multiple regression analysis and structural equation modeling (SEM), will be employed. The findings of this pilot study are significant, as they validate the use of the research instrument and offer initial insights that may be useful for university administrators, policymakers, and future researchers exploring similar areas.

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