

## Assessing the Influence of the COVID-19 Pandemic on the Purchasing Intention of Vitamins in Kuwait using the Theory of Planned Behavior

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### ABSTRACT

Using the Theory of Planned Behavior model developed by Ajzen in 1985, the authors assessed the influence of attitude (ATT) toward vitamins, health awareness (HA), perceived behavioral control (PBC), subjective norms (SN), and knowledge of COVID-19 (KN) on the purchasing intention (PI) of vitamins in Kuwait during the COVID-19 pandemic. A total of 587 adults living in Kuwait completed the online survey, which was available in both Arabic and English. The measured variables included health awareness, attitude, knowledge about COVID-19, purchasing intention, perceived behavioral control, and subjective norms. The findings indicate that HA has a significant impact on ATT. Furthermore, the results revealed that HA significantly influences ATT, ATT has a significant influence on PI, KN has a significant influence on ATT, KN has a significant influence on PI, PBC positively influences PI, SN has a significant influence over PI, and SN positively influences PI.

**Keywords:** COVID-19, Kuwait, Vitamins, Theory of Planned Behavior.

### INTRODUCTION

The coronavirus disease of 2019 (COVID-19) is a highly contagious respiratory disease caused by a novel coronavirus that was initially discovered in Wuhan, China, in December 2019. Some common symptoms of the disease include fever, dry cough, tiredness, myalgia, and dyspnea. Approximately 18.5% of Chinese patients progressed to the severe stage, where they developed acute respiratory distress syndrome, septic shock, difficult-to-treat metabolic acidosis, and bleeding and coagulation abnormalities <sup>(1)</sup>. It has been established that the pandemic's impacts extend beyond the psychological effects and high mortality rates of affected individuals. Mental health and lifestyle have also been affected <sup>(2)</sup>.

Indeed, the fatality rate of COVID-19 was 2.3% in China, which is much lower than those of Severe Acute Respiratory Syndrome (SARS) (9.5%), Middle East Respiratory Syndrome (34.4%), and Avian influenza A (39.0%). The COVID-19 epidemic spread very rapidly. By February 15, 2020, the COVID-19 virus had reached 26 countries in total, resulting in 51,857 laboratory-confirmed infections and 1,669 deaths, with nearly all infections and deaths occurring in China. Consequently, the World Health Organization (WHO) declared COVID-19 a public health emergency of international concern and called for collaborative efforts from all countries to prevent the rapid spread of COVID-19 <sup>(3)</sup>. The World Health Organization (WHO) classified COVID-19 as a pandemic on March 11, 2020 <sup>(4)</sup>.

Kuwait recorded its first five confirmed COVID-19 cases imported from Iran on February 24, 2020. Kuwait has reported approximately 650,000 confirmed cases and approximately 2,500 deaths (source: Kuwait COVID -

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Coronavirus Statistics - Worldometer) <sup>(5)</sup>.

In research, behavioral theories are considered influential frameworks used to assess health-related behaviors. Human behavior has always been an intriguing question for researchers, leading many to explore factors influencing behavior and propose theories to explain it.

One of these theories is the Theory of Reasoned Action (TRA), developed by Fishbein & Ajzen in 1975. It is a social cognitive model that focuses on behavior intentions and behavior itself. This theory assumes that the behavior in question is under volitional control, meaning people believe they can execute the behavior whenever they decide to do so <sup>(6)</sup>. TRA takes into consideration individual motivational factors as determinants of the likelihood of carrying out specific behaviors. Initially, TRA was developed to investigate the connections between attitudes, intentions, and behaviors <sup>(7)</sup>. According to TRA, the attitude towards a behavior is considered a better predictor of the behavior than the attitude towards an object <sup>(8)</sup>. Furthermore, the Theory of Reasoned Action posits that behavioral intention is the most significant predictor of behavior. Both the attitude towards performing the behavior and the subjective norm associated with the behavior are factors that determine behavioral intentions <sup>(9)</sup>. The TRA theory is built on the following components:

1. Attitudes are defined as the positive or negative feelings resulting from the achievement of an objective. An attitude is influenced by behavioral beliefs, which are an individual's beliefs about the outcomes or attributes of performing a behavior in relation to evaluated outcomes and beliefs. For example, an individual with a strong belief and a positive valuation of the outcome will possess a positive attitude towards the behavior.

2. Subjective norms refer to normative beliefs held by individuals regarding their ability to achieve specific goals, influenced by the perceptions of their significant others, such as family members or spouses. Normative beliefs are weighted by the motivation to comply with

these referents <sup>(9)</sup>.

The Theory of Reasoned Action (TRA) highlights the idea that behaviors are under the total control of individuals who choose whether or not to execute them. However, this theory has limitations, as some behaviors are not under an individual's control <sup>(10)</sup>. The Theory of Planned Behavior (PB) is an extension of the TRA theory, suggesting that not all behaviors are entirely within an individual's control. Consequently, this extension of the TRA theory takes into consideration the level of control an individual has over their behaviors <sup>(11)</sup>. Additionally, the PB theory introduces perceived behavioral control as a fourth determinant of behavioral intentions. Perceived behavioral control relates to an individual's perception of the degree of control they have over performing a behavior. It is assessed by items that gauge an individual's confidence in engaging in the behavior and whether the execution of a behavior depends on the individual. Furthermore, the PB theory suggests that perceived behavioral control could have a direct influence on behavior <sup>(12)</sup>. The PB theory has been applied in various academic and research disciplines, including psychology, marketing, public relations, healthcare, sport management, and sustainability.

People who prioritize their health and well-being are often referred to as "health-conscious" individuals. These individuals proactively establish healthy routines and maintain awareness of their physical and mental health. They are driven to enhance and sustain their overall well-being and quality of life, with the additional goal of preventing illness <sup>(13,14)</sup>.

Health-consciousness implies possessing a positive attitude toward healthy behaviors <sup>(15)</sup> and endorsing healthy choices <sup>(16)</sup>. Typically, individuals with high health-consciousness are more likely to purchase dietary supplements <sup>(17)</sup> and have a greater inclination to engage in healthy behaviors to preserve their health <sup>(13)</sup>. Attitude, encompassing an individual's range of emotions toward someone or something, has been demonstrated to influence

purchasing behavior. Research suggests that the stronger an individual's attitude toward dietary supplements, the more likely they are to intend to purchase these supplements, particularly among younger generations<sup>(18)</sup>. Moreover, the study indicates that individuals with health concerns are inclined to take preventive measures, such as regular exercise and dietary supplement consumption, more frequently than those without such concerns<sup>(18)</sup>. Dietary supplements are consumed by approximately 50% of adolescents in developed countries, with notably high usage rates in the United States of America (USA) and the United Kingdom (UK)<sup>(19)</sup>. Approximately 54% of American adults use dietary supplements, including multivitamins and minerals<sup>(20)</sup>. Several studies have consistently identified attitude as one of the primary factors influencing behavior<sup>(21)</sup>. Furthermore, it has been suggested that individuals who develop a more positive attitude toward a behavior are more likely to engage in it<sup>(22)</sup>. Additionally, Basha and colleagues have established a positive relationship between attitude and the intention to purchase dietary supplements, with attitude influencing purchasing intention<sup>(23)</sup>. Kim and Chung (2011) and Newsom et al. (2005) found that health-conscious consumers exhibit a heightened awareness of their health and express genuine concern for it. Consequently, they actively engage in health-promoting behaviors and consistently strive to maintain and enhance their overall health and quality of life<sup>(24,25)</sup>. Gould (1988) identified a positive association between health consciousness and dietary patterns, particularly in terms of vitamin consumption<sup>(13)</sup>.

According to a study that assessed individuals' dedication to maintaining their health behaviors, health-conscious consumers and athletes are increasingly turning to dietary supplements to enhance athletic performance and improve their overall health. This trend is driven by the growing demand for dietary supplements<sup>(26)</sup>. Additionally, it has been observed that individuals engaged in preventive behaviors, such as mask-wearing

and practicing social distancing, during the COVID-19 pandemic. Social risk perception is positively linked to attitudes, perceived norms, and self-efficacy for these behaviors. However, personal risk perception is negatively associated with attitudes toward mask-wearing, as well as perceived norms and self-efficacy for both preventive behaviors<sup>(27)</sup>.

Therefore, this article aims to investigate how the COVID-19 pandemic has influenced knowledge, attitudes, and practices, particularly concerning vitamin consumption. Furthermore, this article seeks to explore whether the Theory of Planned Behavior is applicable in the context of vitamin purchases during the COVID-19 pandemic.

#### **Research aim:**

Given the absence of related published research in Kuwait, the authors have undertaken to examine the impact of attitude (ATT) toward vitamins, health awareness (HA), perceived behavioral control (PBC), subjective norms (SN), and knowledge of COVID-19 (KN) on the intention to purchase vitamins (PI) in Kuwait during the COVID-19 pandemic.

#### **1.MATERIALS AND METHODS**

To analyze our extended theoretical model, we employed structural equation modeling (SEM), a well-established method widely utilized in various fields of research<sup>(28)</sup>. SEM is a technique that elucidates the interrelationships among multiple variables<sup>(29)</sup>. It encompasses various multivariate analysis techniques that enable the examination of systematic relationships between a set of predictors and dependent variables<sup>(30)</sup>. SEM can be applied through either the covariance-based approach (CB-SEM) or the variance-based approach (PLS-SEM)<sup>(31)</sup>. PLS-SEM is adept at handling modeling challenges that frequently arise, such as unconventional data characteristics and highly complex models<sup>(31)</sup>. In this study, we utilized PLS-SEM, leveraging SmartPLS 3 due to the small sample size<sup>(31)</sup>. Anderson and Gerbing, 1988

recommended using two-stage analytical procedures, by firstly evaluating the measurement model and then assessing the structural model, to test the hypothesized relationship<sup>(32)</sup>. To determine the significance of the path coefficients, we employed a bootstrapping method<sup>(31)</sup>.

### **1.1 Participants**

The study was based on data collected online via a survey distributed from November 30, 2021, to January 1, 2022. The target population included residents of Kuwait who were both Arabic and English speakers. The study sample comprised 587 Kuwaiti adult residents currently residing in Kuwait ( $n = 587$ ). Researchers employed a non-probability sampling method, specifically a convenience sampling method, to collect data from these 587 respondents. The questionnaire was distributed through online channels such as Facebook, WhatsApp, and Instagram to facilitate participation. This approach allowed researchers to efficiently and effectively gather a substantial amount of primary source data for the study.

### **1.2 Data collection techniques**

The data were collected online using a structured questionnaire developed after a comprehensive review of the relevant literature. The questionnaire comprised items related to the study's highlighted variables, including health awareness, knowledge of COVID-19, attitude toward vitamins, subjective norms, perceived behavioral control, and the intention to purchase vitamins. Multiple-item scales were designed following the recommendations of Ajzen and Fishbein to measure these variables. A five-point Likert scale was employed to gauge the extent to

which participants agreed or disagreed with a set of statements assessing the variables in the study (1= strongly disagree to 5= strongly agree). Statements from prior research were adapted to measure the constructs in the current study. The accuracy, clarity, content validity, relevance, and conciseness of the questionnaire items were assessed by three academics and researchers in the field of pharmacy in Jordan (Associate Prof. Yazun Jarrar, Prof. Amal Akour, Ph.D., and Ph. Ruba Balasmeh). Recommended revisions were deliberated and incorporated before finalizing the questionnaire. Table 1 presents the survey statements included in the questionnaire. A pilot study involving 50 participants was conducted to assess the questionnaire's validity and reliability. Consequently, the number of statements was reduced, and some statements were rephrased to enhance understanding among the target population. Furthermore, Cronbach's alpha indicated good to excellent reliability, ranging from 0.827 to 1 (Table 1).

The questionnaire was distributed in two versions: one in Arabic and one in English. A professional certified translator fluent in English, German, and Arabic (Deena Moghrabi) translated the questionnaire into Arabic. After minor revisions and adjustments, the two versions were aligned for consistency. The English version had 164 respondents, while the Arabic version had 385 respondents. Given that most participants were more proficient in Arabic than in English, having both versions of the questionnaire were deemed necessary.

**Table 1. Questionnaire statements**

Construct	Cronbach alpha coefficient	Statements	Source
<b>Health awareness</b>	0.827	I reflect on my health a lot I am very self-conscious about my health I am alerted to changes in my health I take responsibility for the state of my health	(Michaelidou & Hassan, 2008) (Gould, 1988)
<b>Knowledge of Covid-19</b>	1.000	Boosting immunity by consuming vitamins helps in the prevention from Covid-19	(Chi, 2021) (Pop et al., 2020)
<b>Attitude</b>	0.850	I think money spent on vitamins is worthwhile It is important to take vitamins It is useful to take vitamins	(Ajzen, 1991) (Pop et al., 2020)
<b>Purchasing intention</b>	0.928	I want to purchase vitamins within the next two weeks I intend to purchase vitamins within the next two weeks	(Ajzen, 1991)
<b>Perceived behavioral control</b>	1.000	If I wanted, it would be easy for me to buy vitamins	
<b>Subjective norm</b>	0.898	Most people who are important to me think I should purchase vitamins People whose opinions I value would prefer me to purchase vitamins	

### 1.3 Model structure

The initial structural model comprises one dependent variable (the intention to purchase vitamins) and five independent variables (attitude toward vitamins, health awareness, perceived behavioral control, subjective norm, and knowledge of COVID-19), all of which are considered latent constructs.

This study employed a range of observed variables to measure these latent variables. Questionnaire statements previously used in related research and studies were adapted to the current research context.

The questionnaire is divided into two sections. The first section includes several questions concerning respondents' demographic information, while the second section comprises indicator items for each construct. Health

awareness was assessed using four questions, knowledge of COVID-19 was assessed using one question, attitude was assessed using three questions, purchase intention was assessed using three questions, perceived behavioral control was assessed using one question, and subjective norms were assessed using two questions. All questionnaire statements are detailed in Table 1.

## 2. RESULTS

### 2.1 Profile of respondents

Table 1 provides an overview of the sample used in this study. Of the respondents, 63.2% were female, 35.3% were male, and 1.5% chose not to disclose their gender. Regarding educational attainment, 50% of respondents were pursuing a bachelor's degree, 38.2% were pursuing a

master's degree, and 11.8% were pursuing a Ph.D. degree. It's worth noting that this research does not investigate the potential mediating influence of socioeconomic and

demographic factors on the research variables; therefore, additional demographic data were not collected.

**Table 2. Demographic characteristics of respondents**

Sample characteristics	Respondents (n=204)	Frequency (%)
<b>Gender</b>		
Female	434	74.06 %
Male	152	25.93 %
<b>Educational level</b>		
Bachelor	422	72.01 %
Master	117	19.96 %
PhD	47	8.02 %

**2.2 Assessment of the measurement model:**

**Table 2. Loadings, Reliability, and Validity**

	Loadings	Cronbach's Alpha	Composite reliability	AVE
<b>ATT1</b>	0.835	0.850	0.909	0.770
<b>ATT2</b>	0.915			
<b>ATT3</b>	0.879			
<b>HA1</b>	0.787	0.827	0.885	0.659
<b>HA2</b>	0.839			
<b>HA3</b>	0.860			
<b>HA4</b>	0.756			
<b>PI1</b>	0.965	0.928	0.965	0.933
<b>PI2</b>	0.967			
<b>KN1</b>	1.000	1.000	1.000	1.000
<b>PBC1</b>	1.000	1.000	1.000	1.000
<b>SN1</b>	0.948	0.898	0.951	0.907
<b>SN2</b>	0.957			

Remark: ATT1= attitude question 1, ATT2= attitude question 2, ATT3= attitude question 3, HA1= health awareness question 1, HA2= health awareness 2, HA3= health awareness 3, HA4= health awareness question 4, PI1= Purchase intention question 1, PI2= purchase intention question 2, KN1= Knowledge question 1, PBC1= perceived behavioral control question 1, SN1= subjective norms question 1, SN2= subjective norms question 2.

As part of evaluating the measurement model, no items were removed from the analysis because their factor loadings were higher than 0.600 (<0.600) (Gefen and Straub, 2005)<sup>(33)</sup>. To test the reliability of the constructs, the study used

Cronbach's alpha and composite reliability (CR). All the CRs were higher than the recommended value of 0.700<sup>(31)</sup>. Cronbach's alpha for each construct exceeded the 0.700 threshold. Convergent validity was acceptable because the

average variance extracted (AVE) was over 0.500. The results for reliability and validity, in addition to the factor loadings for the items, are presented in Table 2. Discriminant validity was assessed by the Fornell-Larcker criterion. The table shows that the square root of AVE for each construct was

greater than the inter-construct correlations (Table 3). Discriminant validity was also evaluated by the Heterotrait-Monotrait ratio of correlations <sup>(34)</sup>, with values below the threshold of 0.90. Consequently, discriminant validity is established (see Table 4).

**Table 3. Fornell-Larker Criterion**

	ATT	HA	KN	PBC	PI	SN
ATT	<b>0.877*</b>					
HA	0.247	<b>0.812*</b>				
KN	0.609	0.218	<b>1.000*</b>			
PBC	0.283	0.241	0.290	<b>1.000*</b>		
PI	0.580	0.241	0.471	0.310	<b>0.966*</b>	
SN	0.460	0.169	0.401	0.288	0.522	<b>0.953*</b>

Remark: ATT= attitude question, HA= health awareness, KN= Knowledge, PBC= perceived behavioral control, SN= subjective norms, \*= Square-root of AVE.

**Table 4. HTMT ratio**

	ATT	HA	KN	PBC	PI	SN
ATT						
HA	0.293					
KN	0.661	0.241				
PBC	0.307	0.265	0.290			
PI	0.652	0.274	0.490	0.322		
SN	0.525	0.197	0.422	0.304	0.571	

Remark: ATT= attitude, HA= health awareness, KN= Knowledge, PBC= perceived behavioral control, SN= subjective norms.

### 2.3 Assessment of the structural model

The structural model indicates the hypothesized paths in the research framework. The structural model is assessed based on R<sup>2</sup>, Q<sup>2</sup>, and the significance of paths. A 40.3% change in purchasing intention can be attributed to attitude towards vitamins, knowledge of Covid-19, subjective norms, and perceived behavioral control. A 29.1% change in the attitude towards vitamins is attributed to health awareness and knowledge of Covid-19. Both R<sup>2</sup> values are greater than 0.1 <sup>(35)</sup>. Consequently, the predictive capability is established. Q<sup>2</sup> for attitude towards vitamins and the purchasing intention of vitamins is higher than 0, which means that the model has

predictive relevance. The value of SRMR was 0.048, which is below the required value of 0.20, indicating an acceptable model fit <sup>(31)</sup>.

Further assessment of the goodness of fit, and hypotheses were tested to establish the significance of the relationships. H1 evaluates whether HA has a significant impact on ATT. The results revealed that HA does have a significant impact on ATT ( $\beta = .120, t = 3.503, p > .01$ ). Hence, H1 was accepted. H2 assesses whether ATT has a significant influence on PI. The results showed that ATT has a significant impact on PI ( $\beta = .352, t = 8.883, p < .01$ ). Consequently, H2 was accepted. H3 studies whether KN

has a significant influence on ATT. The results showed that KN has a significant influence on ATT ( $\beta = .583, t = 17.875, p < .01$ ). Therefore, H3 was accepted. H4 studies whether KN has a significant influence on the PI. The results demonstrated that KN has a positive influence on PI ( $\beta = .114, t = 3.099, p < .01$ ). Therefore, H4 was accepted. H5 assesses whether PBC has a significant impact on PI. The results demonstrated PBC has a positive influence on PI ( $\beta = .095, t = 2.676, p < .01$ ). Hence, H5

was accepted. H6 evaluates whether SN has a significant influence over PI. The results demonstrated that SN positively influences PI ( $\beta = .288, t = 6.761, p < .01$ ). Consequently, H6 was accepted.

The 5000 resamples of the study generated 95% confidence intervals as shown in Table 4. A confidence interval different from zero indicates a significant relationship. Hypothesis testing results are summarized in Table 5.

**Table 5. Hypothesis testing results**

	<b>B</b>	<b>STDEV</b>	<b>T Statistics</b>	<b>P Values</b>	<b>2.5%</b>	<b>97.5%</b>
<b>ATT -&gt; PI</b>	0.352	0.040	8.883	0.000	0.276	0.426
<b>HA -&gt; ATT</b>	0.120	0.034	3.503	0.001	0.040	0.179
<b>KN -&gt; ATT</b>	0.583	0.033	17.875	0.000	0.520	0.645
<b>KN-&gt; PI</b>	0.114	0.037	3.099	0.002	0.044	0.186
<b>PBC-&gt; PI</b>	0.095	0.035	2.676	0.008	0.031	0.163
<b>SN-&gt; PI</b>	0.288	0.043	6.761	0.000	0.212	0.377
	R <sup>2</sup>	Q <sup>2</sup>				
<b>ATT</b>	0.385	0.291				
<b>PI</b>	0.438	0.403				

Remark: ATT= attitude, PI= purchase intention, HA= health awareness, KN= Knowledge, PBC= perceived behavioral control, SN= subjective norms.

**2.4 Mediation analysis**

Mediation analysis was conducted to assess the mediating role of attitude towards vitamins. The results (see Table 6) indicated a significant ( $p < 0.01$ ) mediating role of ATT ( $\beta = 0.205, t = 7.449, p = 0.002$ ) and ( $\beta = 0.042, t = 3.115, p =$

0.000). Hence, attitude towards vitamins successfully mediated the relationship between the knowledge of Covid-19 and purchasing intention and mediated the relationship between health awareness and the purchasing intention of vitamins. Thus, H7 and H8 were confirmed.

**Table 6. Mediation results**

	<b>Total Effect</b>	<b>T</b>	<b>Sig</b>	<b>Direct effect</b>	<b>Sig</b>		<b>Effect</b>	<b>T statistics</b>	<b>P value</b>
<b>KN-&gt;PI</b>	0.319	3.115	0.000	0.230	0.000	KN->ATT->PI	0.205	7.449	0.000
<b>HA-&gt;PI</b>	0.042	8.799	0.000	0.042	0.000	HA->ATT->PI	0.042	3.115	0.002

Remarks: KN= knowledge, PI= purchase intention, HA= health awareness

**3. DISCUSSION**

In accordance with the assumptions of the Theory of Planned Behavior (TPB), the findings of the present study reveal significant associations between the

attitude (ATT) toward vitamins, perceived behavioral control (PBC), and subjective norms (SN) on the purchasing intention (PI) of vitamins among Kuwaiti participants during the COVID-19 pandemic as



precautionary measures aimed at preventing infection from the virus in Kuwait. These findings align with the Theory of Planned Behavior (TPB). They are consistent with a cross-sectional study conducted by Liu et al. in 2021 in Wuhan, China, which demonstrated that attitudes, subjective norms, and perceived behavioral control positively influenced the intention to purchase dietary supplements<sup>(36)</sup>.

Another study applied the TPB to the use of multivitamins in a population of Caucasian female college students and found that attitude and perceived behavioral control had a statistically significant impact on the intention to use multivitamins<sup>(37)</sup>. A master's thesis conducted at Eastern Michigan University in the United States confirmed that subjects' attitudes and perceived behavioral control were associated with the intention to use multivitamins<sup>(38)</sup>.

The study findings are further consistent with Alami et al. (2019), as their results provided support for the effectiveness of TPB and its potential constructs in testing for the determinants of iron and vitamin D supplement intake among adolescents in Iran<sup>(39)</sup>. We found that knowledge, subjective norms, attitude, and PBC could be potential determinants to explain and predict female adolescents' intentions regarding vitamin D and iron consumption. PBC was the strongest construct of TPB at predicting people's intentions to use iron and vitamin.

Furthermore, the findings of the present study show that there are significant associations between health awareness (HA) and the knowledge of COVID-19 (KN) on the purchasing intention (PI) of vitamins among Kuwaiti participants during the COVID-19 pandemic as precautionary measures aimed at preventing infection from the virus. This demonstrates that Kuwaitis are well aware of the health guidance provided in the FAO report<sup>(40)</sup>. These findings are consistent with two other studies that demonstrated people's lifestyle behaviors changed in order to stay healthy during the influenza and cold season. They considered healthy nutrition,

such as eating vitamin-rich foods and taking complex vitamin supplements<sup>(41,42)</sup>. Furthermore, this intention of buying and consuming vitamins adopted by Kuwaiti participants during the COVID-19 pandemic reflects the extent to which people follow the news and adhere to the health guidance from the WHO on COVID-19. The WHO has declared several effective health precautions to prevent the COVID-19 pandemic, such as social and physical distancing, avoiding crowded public places, using cleaning wipes that contain at least 60% alcohol or chloride, wearing a cloth covering when outdoors, maintaining a distance of at least 6 feet from others, and washing hands with soap for at least 20 seconds, along with maintaining a healthy diet rich in vitamins and minerals<sup>(43)</sup>.

#### **4.CONCLUSION**

The current study expanded upon the use of TPB by incorporating the knowledge of Covid-19 and health awareness into the Theory of Planned Behavior (TPB). We aimed to measure the influence of attitude (ATT) towards vitamins, health awareness (HA), perceived behavioral control (PBC), subjective norms (SN), and Covid-19 knowledge (KN) on vitamin purchasing intention (PI) in Kuwait during the COVID-19 period.

The findings revealed that health awareness (HA) significantly influences attitude (ATT), attitude (ATT) significantly influences purchase intention (PI), knowledge (KN) significantly influences attitude (ATT), knowledge (KN) significantly influences purchase intention (PI), perceived behavioral control (PBC) positively influences purchase intention (PI), subjective norms (SN) significantly influence purchase intention (PI), and subjective norms (SN) positively influence purchase intention (PI).

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## تقييم تأثير جائحة COVID-19 على نية شراء الفيتامينات في الكويت باستخدام نظرية السلوك المخطط

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### ملخص

باستخدام نظرية نموذج السلوك المخطط الذي طوره أجزين في عام 1985، قام المؤلفون بقياس تأثير السلوك تجاه الفيتامينات والوعي الصحي والتحكم السلوكي الملحوظ والمعايير الذاتية ومعرفة فيروس كورونا المستجد بخصوص نية شراء الفيتامينات في الكويت خلال فترة انتشار الفايروس. أكمل 587 شخصاً بالغاً يعيشون في الكويت الاستبيان الموزع عبر الإنترنت باللغتين العربية والإنجليزية. وتضمنت المتغيرات التي تم قياسها الوعي الصحي والسلوك والمعرفة بالفايروس ونية الشراء والتحكم السلوكي المتصور والمعايير الذاتية. وتشير النتائج إلى أن الوعي الصحي له تأثير كبير على السلوك. وكشفت النتائج أن الوعي الصحي له تأثير كبير فعلاً على السلوك، وأن السلوك له تأثير كبير على نية الشراء، وأن المعرفة لها تأثير كبير على السلوك، والمعرفة لها تأثير كبير على نية الشراء، والتحكم السلوكي المتصور له تأثير إيجابي على نية الشراء، والمعايير الذاتية لها تأثير كبير على نية الشراء، والمعايير الذاتية تؤثر إيجابياً على نية الشراء.

الكلمات الدالة: كوفيد-19، الكويت، فيتامينات، نظرية السلوك المخطط.

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