




“The impact of COVID-19 risk perceptions on intentions to consume energy beverages: The mediation role of a healthy lifestyle and sustainable consumption”

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THE IMPACT OF COVID-19 RISK PERCEPTIONS ON INTENTIONS TO CONSUME ENERGY BEVERAGES: THE MEDIATION ROLE OF A HEALTHY LIFESTYLE AND SUSTAINABLE CONSUMPTION

Abstract

The COVID-19 pandemic has produced tremendous socioeconomic upheaval worldwide, affecting people's purchasing habits and intentions. This study assesses the relationship between COVID-19 risk perceptions and intentions to consume energy drinks. Furthermore, it analyzes the role of a healthy lifestyle and sustainable consumption in mediating this relationship. A survey approach was used to obtain the data. An online questionnaire (400 samples) was distributed through social media to Palestinian citizens and residents (students, employees, free professionals, laborers, and others). The study used a 5-point Likert scale. Data analysis used descriptive statistics (measures of central tendency and dispersion). PLS was utilized to investigate the mediation effect, whereas SPSS was used to analyze the data and test the hypotheses. Risk perception was assessed using seven variables: fear, conduct, awareness and knowledge, trust and confidence, healthy lifestyle, sustainable consumption, and intention to use energy beverages. The findings indicate that COVID-19 risk perception affects the propensity to consume energy beverages ($B = 3.692$; $p < 0.001$). In addition, the results show that COVID-19 risk perception has a significant relationship with a healthy lifestyle and sustainable consumption ($B = 3.358$; $p < 0.001$; $B = 3.571$; $p < 0.001$). The findings also highlighted a partial mediation of healthy lifestyle and sustainable consumption in the association between COVID-19 risk perception and desire to use energy beverages.

Keywords Palestine, fear, behavior, awareness and knowledge, trust and confidence

JEL Classification M30, M39

INTRODUCTION

By the end of December 2019, the globe was faced with a significant event: COVID-19. At the start of the event, there was no therapy available to cope with this condition, which caused people to be terrified and surprised (Omar et al., 2021). Risk perception varies from person to person (Rana et al., 2021). The behavior of communities, corporations, and the government varies significantly during different stages of the pandemic (Khan et al., 2020). At this point, customers began evaluating products and services in various ways (Tanveer et al., 2020). COVID-19, as a worldwide pandemic, caused disease and death around the world, but it also encouraged people to adjust their actions and plans toward sustainable consumption and a healthy lifestyle in order to assist themselves by saving the environment (Chae, 2021).

When there is a pandemic, individuals search for methods to protect themselves, and one of these tools is choosing healthy meals and beverages. Those who consume energy drinks experience a variety of mental, psychological, and emotional problems (Seifert et al., 2011).

The caffeine content of energy drinks is primarily responsible for the health risks associated with their consumption (Flanagan et al., 1995). Many studies have examined COVID-19's affinity in many domains, such as consumption and consumer behavior, demonstrating significant modifications in behavior such as stockpiling and hoarding (Sheth, 2020). COVID-19 urges the government to enforce a quarantine to reduce the number of infections, but it also affects eating habits (Mumena, 2021). The epidemic compelled individuals to alter their purchasing habits (Eger et al., 2021). On the other hand, many studies believe that increased energy beverage intake would negatively impact mental health (Breda et al., 2014). Furthermore, drinks are indirectly associated with behavioral and emotional difficulties due to their relationship to the quantity of sleep and breakfast consumption (Veselska et al., 2021).

This study explores the relationship between COVID-19 and energy beverage intake and tests the mediation factors (healthy lifestyle and sustainable consumption) in this relationship. According to the prior reasoning, COVID-19 has altered consumer behavior, such as purchasing and consumption, providing several research opportunities. Furthermore, by examining the relationship between the variables, this paper highlights the antecedents that influence consumer intention to buy energy beverages. Therefore, it is crucial to set the intention of different age groups to energy beverages, help retailers avoid losses in such conditions, analyze the influence of COVID-19 on consumer intention toward energy beverages (positively or negatively), and determine how sustainable consumption and health are related.

1. LITERATURE REVIEW, AIMS, AND HYPOTHESES

In several nations, the fear of COVID-19 has resulted in city lockdowns and desolate streets. Due to school cancellations, many students have stayed at home, and individuals have been barred from traveling between cities and overseas (Strauss, 2020). High population density immensely contributed to COVID-19 (Kang et al., 2020). In some respects, COVID-19 has particularly affected how people work, shop, and engage with others (Chauhan & Shah, 2020). Because of the development of illnesses, the demand for essential items such as food and healthcare was twice as high as it was previously due to the fear of infection (Safara, 2020). As a result, consumers are becoming more interested in healthier foods (Bach & Roosen, 2015). COVID-19 led numerous companies to collapse due to insolvency as customers stayed at home and sought out healthful foods (Tucker et al., 2020). Because the epidemic has influenced economic and consumer behavior worldwide, businesses should stay cautious (Baicu et al., 2020).

Every day, most individuals participate in some harmful events, and its widespread presence has inspired significant efforts among academics to study how people perceive risks. The perception of risk has become an important topic for politicians and policymakers dealing with transportation

and safety concerns, and the psychoanalysis of this construct has piqued the curiosity of many researchers (Sjöberg et al., 2004). The concept of perception is crucial in developing a plan to manage disasters and catastrophes (Peacock et al., 2005). Risk perception is commonly utilized in studies to understand how individuals react to disasters (Birkholz et al., 2014). Risk perception reflects risk tolerance and, to some extent, anticipates community responses, which supports the formulation of appropriate public education programs and risk communication strategies (Diakakis et al., 2018). People do not appraise the risk to themselves, their families, or society (Sjöberg, 2000). Feelings and analysis are two components of risk (Slovic & Peters, 2006). Fear and rage, two powerful and visceral emotions, can have a role in risk as sensations (Lerner et al., 2003).

It is widely accepted that people's everyday actions and behaviors have an influence on their health, which is referred to as a healthy lifestyle (Emberson et al., 2005). The WHO (1948) defines health as "a condition of total physical, mental, and social well-being, rather than only the absence of sickness or disability." A healthy lifestyle is a set of characteristics and behaviors that include physical form, eating good foods, participating in activities, and taking medications legally or illegally (Davison et al., 1995). A completely healthy lifestyle, such as not smoking, eating nutritious foods,

exercising, and keeping a healthy weight, may be more beneficial than any other factor in lowering the risk of cardiovascular disease, diabetes, and cancer (Stampfer et al., 2000). In addition, healthy lifestyle choices influence the likelihood of developing a severe non-communicable illness, the world's leading cause of death (WHO, n.d.). There are five influential factors of lifestyle: smoking, exercise, food, body mass index, and alcohol intake (Chiuve et al., 2006).

On the other hand, the term "sustainability" has been characterized as "a powerful notion" (Mowforth & Munt, 2015). In addition, sustainability is an operation in which people profit from the available resources while not jeopardizing the potential of future generations to benefit from them (UN. Secretary-General & World Commission on Environment and Development, 1987). According to the Paris Climate Conference accord, "sustainable production and consumption patterns... have a considerable influence on the struggle against global warming" (Alfredsson et al., 2018). Furthermore, sustainable consumption aims to assist individuals in adopting a healthy lifestyle by utilizing sustainable items (Tussyadiah, 2016). Furthermore, the greatest strategy to enhance sustainability may be to show people the results of it, and there is a need to run several campaigns to raise people's knowledge of sustainability (Hanna et al., 2011).

Moreover, intention describes a person's internal ability to create anything. It might be described as the function of attitudes toward the conduct and subjective impressions of the behavior's standards (Hall et al., 2008). People expect different results from energy drinks, including the benefits, outcomes, and recommendations from credible sources (Shahid et al., 2017). Energy drinks include various ingredients that are promoted to boost energy, weight loss, and focus (Seifert et al., 2011). However, many studies have found that regular energy beverage usage is linked to various issues, including mental health issues and violent conduct (Veselska et al., 2021). In addition, energy drinks were linked to increased calorie consumption and weight concerns.

Furthermore, energy drinks appear particularly appealing, necessitating greater self-control to

avoid use (Hall, 2012). Teenagers' desire to use energy drinks is linked to other addictions, such as cigarette use (Breda et al., 2014). Many studies demonstrate that those who take energy drinks five times per week are at risk of developing mental health problems (Park et al., 2016).

Many other sorts of studies examine each characteristic but in a different field. Qi et al. (2009) used the protective incentive theory in order to disrupt travel intentions when risk perception exists. This concept is a variation of the expected value theory, concentrating on risk perception and "cognitive appraisal processes" that lead to changed intents or attitudes. Bae and Chang (2020) investigated the impact of perceived risk on behavioral intentions toward "intact" tourism during the pandemic. Their findings revealed that risk perception had a substantial impact. Even when people have a good attitude about tourism, risk has a significant impact on their behavior. According to Kourgiantakis et al. (2020), the pandemic has had a negative impact on travel intentions, confirming that the epidemic has generated dread and unease in many aspects of tourists' daily lives. Health emergencies have become more prevalent in recent years. Several studies have investigated the relationship between COVID-19 risk perception and health. The most significant challenges generated by these disasters are food safety and health (Perčić & Spasić, 2021). Faced with the pandemic, the government and businesses must adjust people's perceptions about the region, mainly tourists (Jamal & Budke, 2020). Previous studies have illustrated the sense of danger and the desire to avoid travel due to the pandemic (Ivanova et al., 2021).

Furthermore, Jribi et al. (2020) demonstrated the association between behaviors, attitudes, and living patterns with waste foods throughout the pandemic, resulting in a favorable influence inside the blocked time. For more than three decades, sustainable production has received attention from businesses, society, and the government; nevertheless, sustainable consumption has failed to receive equal attention (Cohen, 2019). On the one hand, the restrictions during the epidemic assist the environment, but on the other hand, they affect social and commercial life (Muhammad et al., 2020). With the cessation of production in ad-

vanced nations, pollution and nitrogen dioxide levels in the air have been reduced by nearly 30% (Wang & Su, 2020).

On the other hand, people must stumble during the epidemic and figure out how they connect (Ivanova et al., 2021). Furthermore, Hartjes et al. (2009) investigated the link between tourist behavior in travel and what is the process of protecting oneself from sickness. Furthermore, El Ghitany et al. (2018) analyzed healthy attitudes throughout the trip. Finally, Ivanova et al. (2021) examined the link between the sense of danger and the desire to travel during and after the COVID-19 pandemic.

According to Chen et al. (2017), a person who overthinks about the threat is more likely than others to engage in healthy activity to reduce the amount of danger. As a result, when the government or businesses implement health policies, they must respect human rights, women's freedom from violence, and workers' rights to be safeguarded from exploitation. Because of the appearance of numerous social efforts on both individual and community levels as they distributed supplies, medications, and self-protection gear, the pandemic caused a change in people's attitudes and behavior toward sustainable products and services (Orcutt et al., 2020).

COVID-19 is a considerable worry for the World Health Organization (WHO) since a patient with cardiovascular disease confronts a high risk of complications, and a healthy person faces significant difficulty (Elkind et al., 2020). Physical activities maintain a pleasant psychological state and reduce stress and anxiety; nevertheless, group activities were discontinued during COVID-19, which impacts a healthy lifestyle (Elkind et al., 2020). The pandemic has had a significant impact on young people's psychological well-being as well as a reduction in their physical health (Lee et al., 2021). Furthermore, the scarcity of fresh food and a larger concentration of fast food restaurants in low-income and minority neighborhoods lead to residents' poor eating habits and unhealthy lifestyles (Leone et al., 2020). However, Laurent et al. (2000) argued that caffeine is a vital element in energy drinks, which has an impact on a person's health. Therefore, many nations, including Australia,

Denmark, Germany, and Turkey, have prohibited the sale of energy drinks to teenagers for several years (Seifert et al., 2011). Furthermore, increased intake of these beverages without understanding their harmful effects will endanger an individual's health (Rehman et al., 2012).

COVID-19 limits alter people's behavior by adjusting their intake of meals and items to be more positive (Jribi et al., 2020). COVID-19 benefits the environment by reducing pollutants in numerous nations, including the United States, Italy, and Spain (Muhammad et al., 2020). COVID-19 encourages consumers to seek sustainable consumption, which pushes businesses to strengthen their efforts to become more sustainable, both socially and ecologically, by using recycled materials and adopting more sustainable goods (Lo & Liu, 2018). According to Meyer et al. (2020), a sustainable system has a lesser environmental impact and aids in conserving resources for future generations. Consumers who pick food based on sustainability change their purchasing criteria (Asioli et al., 2017). Sustainable consumption for Swiss people depends on seeking out items that are beneficial to their health and avoiding energy beverages, which have been boosted by COVID-19 (Tobler et al., 2011). Therefore, it is crucial to determine how this pandemic, unlike any other health or tourism crisis, affects travel risk perception and intentions.

Following the literature review, the purpose of this study is to investigate the effect of COVID-19 risk perception on consumer intentions toward energy beverage in Palestine, as well as to test the mediation factor of a healthy lifestyle and sustainable consumption. Figure 1 depicts the suggested conceptual framework. As a result, the following hypotheses are proposed:

- H1: *COVID-19 risk perception significantly correlates with the intention to consume energy beverages.*
- H2: *COVID-19 risk perception significantly correlates with a healthy lifestyle.*
- H3: *COVID-19 risk perception significantly correlates with sustainable consumption.*

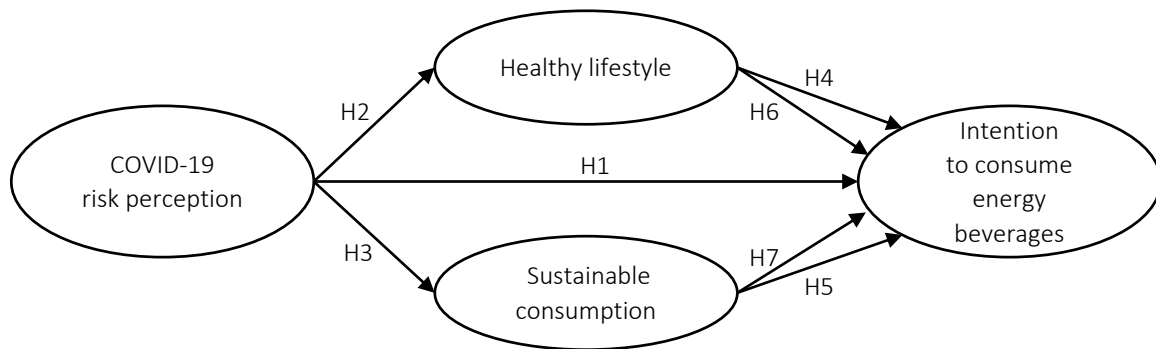


Figure 1. Conceptual model

- H4: Healthy lifestyle significantly correlates with the intention to consume energy beverages.*
- H5: Sustainable consumption significantly correlates with the intention to consume energy beverages.*
- H6: Healthy lifestyle mediates the relationship between COVID-19 risk perception and the intention to consume energy beverages.*
- H7: Sustainable consumption mediates the relationship between COVID-19 risk perception and the intention to consume energy beverages.*

2. METHODOLOGY

A survey study approach was used to obtain data from consumers in Palestine who used energy beverages, with the sample consisting of students, employees, free professionals, laborers, and others. Respondents were receiving electronic questionnaires over social media. The data were analyzed using 400 questionnaires. A 5-point Likert scale was employed in this investigation. Data analysis entailed descriptive statistics in the form of central tendency and dispersion measures. The hypotheses were tested using SPSS software, and the mediation effect was tested using PLS.

The tools utilized in this investigation were adapted from earlier research. A 5-point Likert scale was employed, with 1 being “strongly disagree” and 5 being “strongly agree.” COVID-19 risk perception was assessed using four dimensions (fear, conduct, awareness and knowledge, and trust and

confidence) from Rana et al. (2021). A healthy lifestyle was determined by adopting four things from Mak and Fancourt (2020). The impact of sustainable consumption has been quantified by adopting five items from Balderjahn et al. (2013). The intention to use energy beverages was assessed using 7 questions adapted from Gossling et al. (2020). Finally, Cronbach’s Alpha was used to measure the degree of dependability, which defines the level of acceptability of the measuring equipment at 60% or above (Sekaran & Rani, 2010).

3. RESULTS

Table 1. Internal consistency coefficients (Cronbach’s Alpha)

Variables	Stability coefficient	Questions
Fear	.801	3
Behavior	.743	3
Awareness and knowledge	.660	3
Trust and confidence	.676	3
Healthy lifestyle	.768	4
Sustainable consumption	.781	6
Intention to consume an energy drink	.825	6
Total	.757	28

The reliability test results, which varied from 66 to 82%, are presented in Table 1. Table 2 shows the mathematical averages of respondents’ answers regarding COVID-19 risk perception. The first variable is fear, with a mean of 3.91 and a high degree, then behavior, with a mean of 2.88 and a medium degree, then awareness and knowledge, with a mean of 2.66 and a medium degree, and finally, trust and confidence, with a mean of 1.91 and a low degree.

Table 2. Means and standard deviations of independent variables

Variables	Mean	Standard deviation	Degree of approval
Fear	3.9067	.72981	High
Behavior	2.8783	.61194	Medium
Awareness and knowledge	2.6575	.77677	Medium
Trust and confidence	1.9083	.51428	Low
COVID-19 risk perception	2.8377	.37123	Medium
Healthy lifestyle	4.1044	.55030	High
Sustainable consumption	4.1942	.50925	High
Intention to consume an energy drink	4.2358	.54542	High

Table 3. Hypothesis 1 testing

Model	R	R ²	Adjusted R Square	Std. Error of the Estimate
1	.322a	.104	.095	.51901

Note: a R adjustment.

Table 3 tested the first hypothesis, checking the relationship between COVID-19 risk perception and intention to consume energy beverages. The correlation coefficient between COVID-19 risk perception and the intention to use energy drinks was 32.2 percent, according to Table 3. The coefficient of determination (R²) is 0.104, which means that the model explains 10.4 percent of the total variance, while the remainder is explained by other variables (Hair et al., 2010).

Table 4. Analysis of variance for H1 (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.296	4	3.074	11.412	.000b
	Residual	106.401	395	.269		
	Total	118.697	399			

Note: b, 0.001 ≤.

Table 4 reveals that F is 11.412 and the statistical significance threshold is 0.00, smaller than 0.05. As a result, H1 is supported.

Table 5. Coefficients for H1

Element	B	Std. Error	Beta	T	Sig.
(Constant)	3.692	.233		15.833	.000
Fear	.165	.041	.220	4.040	.000
Behavior	.103	.050	.115	2.072	.039
Awareness and knowledge	-.074	.039	-.106	-1.910	.057
Trust and confidence	-.103	.061	-.097	-1.698	.090

The coefficients of the effect of COVID-19 risk perception on the intention to use energy drinks are shown in Table 5. The estimated t-values for fear, conduct, awareness and knowledge, and trust and confidence are 4.040, 2.072, 1.910, and 1.698, and the t-significant threshold was 0.00, 0.039, 0.057, and 0.090. Table 5 also demonstrates that fear and behavior have a statistically significant influence on the intention to consume energy drinks. In contrast, awareness and knowledge and trust and confidence do not impact the intention to consume energy drinks.

Table 6. Hypothesis 2 testing

Model	R	R ²	Adjusted R Square	Std. Error of the Estimate
1	.625a	.390	.384	.43191

The correlation coefficient between the COVID-19 risk perception and a healthy lifestyle was 62.5 percent, and the coefficient of determination (R²) was 0.390, indicating that the COVID-19 risk perception explains 39.0 percent of the total variance of a healthy lifestyle.

Table 7. Analysis of variance for H2 (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	47.143	4	11.786	63.177	.000b
	Residual	73.687	395	.187		
	Total	120.830	399			

Table 7 shows that F is 63.177 and the statistical significance level is 0.00, smaller than 0.05. As a result, H2 is supported.

Table 8. Coefficients for H2

Element	B	Std. Error	Beta	T	Sig.
(Constant)	3.358	.194		17.308	.000
Fear	.290	.034	.384	8.539	.000
Behavior	.151	.041	.168	3.657	.000
Awareness and knowledge	-.059	.032	-.084	-1.825	.069
Trust and confidence	-.347	.050	-.324	-6.871	.000

The coefficients for the effect of COVID-19 risk perception aspects on a healthy lifestyle are shown in Table 8. The estimated t values for dread, behavior, awareness and knowledge, and trust and confidence are 8.539, 3.657, -1.825, and 6.871, with significance levels of 0.00, 0.00, 0.069, and 0.00.

Table 8 also reveals that fear, behavior, and trust and confidence have a statistically significant influence on a healthy lifestyle, while awareness and knowledge have no impact.

Table 9. Hypothesis 3 testing

Model	R	R ²	Adjusted R Square	Std. Error of the Estimate
1	.502a	.252	.245	.44255

Table 9 shows a 50.2 percent correlation coefficient between COVID-19 risk perception and sustainable consumption and a coefficient of determination (R²) of 0.252, indicating that COVID-19 risk perception explains 25.2 percent of the total variance of sustainable consumption.

Table 10. Analysis of variance for H3 (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.114	4	6.528	33.334	.000b
	Residual	77.362	395	.196		
	Total	103.475	399			

According to Table 10, the value of F is 33.334, and the statistical significance is 0.00, which is less than 0.05. As a result, H3 is supported.

Table 11. Coefficients for H3

Element	B	Std. Error	Beta	T	Sig.
(Constant)	3.571	.199		17.964	.000
Fear	.234	.035	.336	6.750	.000
Behavior	.090	.042	.108	2.121	.035
Awareness and knowledge	-.042	.033	-.065	-1.273	.204
Trust and confidence	-.230	.052	-.232	-4.448	.000

The coefficients for the influence of COVID-19 risk perception factors on sustainable consumption are shown in Table 11. The estimated t-values for fear, behavior, awareness and knowledge, and trust and confidence are 6.750, 2.121, -1.273, and -4.448, and the degree of significance of t sig is 0.00, 0.035, 0.204, and 0.00, accordingly. Table 11 also reveals that fear, behavior, trust and confidence statistically influence sustainable consumption, whereas awareness and knowledge have no impact.

Table 12. Hypothesis 4 testing

Model	R	R ²	Adjusted R Square	Std. Error of the Estimate
1	.365a	.133	.131	.50854

Table 12 shows a 36.5 percent association coefficient between a healthy lifestyle and the propensity to drink energy beverages. The coefficient of determination (R²) is 0.133, indicating that a healthy lifestyle explains 13.8 percent of the total variation in energy beverage intention.

Table 13. Coefficients for H4

Element	B	Std. Error	Beta	T	Sig.
(Constant)	2.753	.192		14.370	.000
Healthy Lifestyle	.361	.046	.365	7.809	.000

The coefficients for the influence of a healthy lifestyle on the intention to use energy beverages are shown in Table 13. The estimated t values are 7.809, and the degree of significance t-sig was 0.00, indicating that a healthy lifestyle significantly influences the desire to drink energy beverages. As a result, H4 is supported.

Table 14. Hypothesis 5 testing

Model	R	R ²	Adjusted R Square	Std. Error of the Estimate
1	.447a	.199	.197	.48864

The correlation coefficient between the intention to use energy beverages and sustainable consumption is 44.7 percent, as shown in Table 14. Furthermore, the coefficient of determination (R²) is 0.199, indicating that the desire to consume energy beverages accounts for 19.9 percent of the variation in sustainable consumption.

Table 15. Coefficients for H5

Element	B	Std. Error	Beta	T	Sig.
(Constant)	2.230	.203		10.988	.000
Sustainable consumption	.478	.048	.447	9.957	.000

The coefficients of the impact of sustainable consumption on the intention to consume energy beverages are shown in Table 15. The computed t-value is 9.957, and the degree of significance t-sig is 0.00, indicating that sustainable consumption significantly influences the intention to drink energy beverages. As a result, H5 is supported.

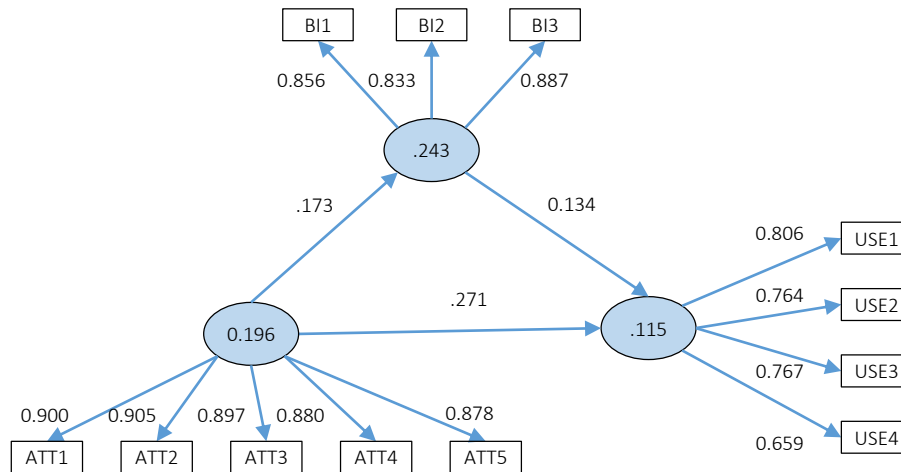


Figure 2. Mediation effect

Table 16. Path analysis results using Smart PLS3

Hypotheses	Relationship	Std. Error	Beta	T-value	Bootstrapped Confidence Interval	Decision
Healthy lifestyle	HL-SD-CI	.032	.309	7.286	95% LL 95%UL	
Sustainable consumption	SC-SD-CI	.031	.0584	13724	0.031 0.266	Accepted
Variable		VAF	Result	Result	0.028 0.234	Accepted
Healthy lifestyle		42.60%	Partial Mediation	Partial Mediation		
Sustainable consumption		43.75%	Partial Mediation	Partial Mediation		

PLS was used to examine the mediation impact of a healthy lifestyle and sustainable consumption on COVID-19 risk perception and intention to drink energy beverages. Hair et al. (2014) indicate that if VAF is less than 20%, there will be no mediation; if the value is between 20% and 80%, there will be partial mediation; and more than 80% indicates full mediation. Table 16 and Figure 2 demonstrate that VAFs for both healthy lifestyle and sustainable consumption are 42.6 and 43.7, indicating some mediation.

4. DISCUSSION

The findings indicate a link between COVID-19 risk perception and the propensity to use energy beverages. This result shows that consumers must consider the danger of COVID-19 when deciding whether to drink or use energy beverages. This result is due to the widespread impact of COVID-19 on the world and the shift in human attitudes and behaviors. The results also reveal that behavior, fear, and trust and confidence have a positive link with the intention to consume energy beverages, implying that COVID-19 can modify and affect

an individual’s fear, behavior, and trust when they think about or intend to consume energy beverages. This finding is consistent with Bae and Chang (2020).

Furthermore, the results suggest that COVID-19 risk perception has a positive link with a healthy lifestyle and sustainable consumption, indicating that the influence of COVID-19 changes people’s lifestyles, causing specific differences in their culture or habits, particularly in the Arab world. Furthermore, COVID-19 alters person consumption behavior when they go shopping, focusing more on medical goods and nutritious beverages, fruits, and vegetables since they are confident that these purchases would safeguard their health. This outcome is consistent with Ivanova et al. (2021) and Cohen (2019).

On the other hand, the study found that a healthy lifestyle and sustainable consumption are linked with the intention to use energy beverages. This indicates that during COVID-19, people followed country rules, which affected their lifestyle and consumption. For example, because of the quarantine and curfew, people had less time to go shop-

ping. This is consistent with Chen et al. (2017) and Orcutt et al. (2020). Furthermore, the results show that a healthy lifestyle and sustainable consumption mediate the relationship between COVID-19 risk perception and the intention to consume energy beverages. Thus, there is a relationship between COVID-19 risk perception and the intention to consume energy beverages. However, this relationship occurs partially through a healthy lifestyle and sustainable consumption, implying that these mediation variables may improve consumers' intentions.

In this unprecedented epidemic, this study presents a relevant and informative examination of the impact of COVID-19 risk perceptions on the intention to consume energy beverages among Palestinian residents. This study adds to marketing literature by evaluating an ongoing contempo-

rary issue that has produced significant upheaval in global society and individual lives. The findings of this study will serve as an essential reference point for future longitudinal studies examining consumers' intentions to purchase energy beverages. This study examined intention as an umbrella concept to signify consumer behavior that meets customers' need to use energy beverages even during the pandemic while limiting perceived hazards of this disease. Individuals' intentions for health protection might be future study paths in the post-COVID-19 era. This study verified the function of healthy living and sustainable consumption in modulating the relationship between COVID-19 risk perceptions and the desire to drink energy beverages. The results of this study will help nuanced insights regarding consumers' intentions during outbreaks of infectious diseases in the future.

CONCLUSION

The study analyzes the effects of risk perceptions related to COVID-19 on energy beverage consumption in Palestine, as well as the mediation influence of healthy lifestyle and sustainable consumption on this relationship. It was concluded that COVID-19 risk perception influenced the desire to consume energy beverages. Furthermore, a healthy lifestyle and sustainable consumption moderate the link between COVID-19 risk perception and intention to drink energy beverages. The correlation coefficients between COVID-19 risk perception and the variables were: intention to use energy drinks – 32.2 percent; healthy lifestyle – 62.5 percent, sustainable consumption – 50.2 percent. The correlation coefficient between a healthy lifestyle and the propensity to drink energy beverages is 36.5 percent. The correlation coefficient between the intention to use energy beverages and sustainable consumption is 44.7 percent.

Fear and conduct influence the desire to consume energy beverages, which means that individuals' fear-related behaviors play a vital part in their intention to buy or consume the energy beverage. Furthermore, risk awareness influences attitudes for both men and women, with female participants showing a higher negative impact on risk perception on behavioral intentions than male participants. The COVID-19 pandemic has affected consumer intention to purchase or consume goods and beverages, negatively impacting public and private economics. As a result, the study advised decision-makers in public and private organizations to implement a suitable and effective method to control this decreased purchasing power and consumer intention to purchase goods and beverages. As for future studies, this study was done in Palestine; it is advised to be replicated in other countries to generalize the findings.

AUTHOR CONTRIBUTIONS

Conceptualization: Iyyad Zahran.

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