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THE MEDIATING ROLE OF HEALTH CONCERN ON THE CONSUMER
ATTITUDE AND BRAND PREFERENCE OF ORGANIC PACKED FOOD
PRODUCTS

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INTRODUCTION

Consumer behavior is a psychological process of recognizing the needs and finding the best information to satisfy the requirements. (Basha et al., 2015) The consumers' attitude is changing all the time, especially in the case of food products as we can see the organic, packed food product market is on the rise with a CAGR of 25% and the market expectation is that it will touch 12000 crores Nagaraj, S. (2021). The market size for Indian organic packaged food products is expected to cross ₹ 87.1 crores in the current year 2021, with a growth rate of 17%. The consumer's credence values such as healthiness, safety, protection from chemicals, environmental concern have a pivotal role in building organic market into such a pace. (C. Gan, Zhiyou, M.C.Tran, Cohen, & Xiangxiang, 2020)

The health concern of the individual consumer favorably influences the buying behavior and results in the purchase of organic products. (Nguyan, Nguyen, & Vu, 2019). The age, gender, marital status, and income of the consumers can act as an intervening factor in the purchase decision. The role of demographic factors in the buying pattern is questionable as it differs from person to person. The consumers' brand preference depends on their beliefs about a product and brand attributes (Ibrahim, Ghoneim, Irani, & Fan, 2016) and is intervened by the demographic characteristics.

REVIEW OF LITERATURE

Attitude is the mental state of individuals which triggers them to respond against the circumstances or situations. It also has a direct or indirect relationship with one's interests, liking, and desires (Vaughan, 2010).

Consumer loyalty improves consumers' positive mentality towards the consumption of organic food. The trust, relationship, and loyal commitment consumers increase the consumers' willingness to purchase organic food (Dias, Schuster, Talamini, & Revillion, 2015). Subjective norms play a prominent role in shaping positive buying intentions for organic food products (Swidi, 2013). The personal criteria act as a significant driving force towards organic food purchase. The adoption and use of organic food provide health-related benefits to its consumers. Intensive distribution and affordable prices can increase the market of the organic food product.

Health consciousness is the act of individuals who emulate the individuals' thoughts on health issues and their preparedness to ensure good health. The health concern of the consumer favorably results in the purchase of organic products. Sustainable buying behavior should be motivated that ensures safety in consumption. The consumer's food safety concern is profound, and it can bring a more positive attitude towards the consumption of organic foods. Food safety concern refers to the degree to which people are worried about pesticide residues contained in food and about food scares and are highly conscious about the food security claims in the products (Nguyen, Nguyen, & Vu, n.d.). Organic food products are healthy to eat because such products contain rich nutrition and are chemically free (L.M & K, 2008), and this motive creates positive purchase intention among the consumers to buy and use organic, packed food products.

The consumer's health consciousness and age positively affect the consumers' purchase behavior, and the aged people prefer the same as they perceive that the organic products have several vitamins and minerals content than conventional products. (Afonso et al., 2019)

Consumers are nowadays brand conscious and aim to fulfill their psychological and sensory needs through brand purchase as they feel that branded products have better utility. Consumer brand preference influences the consumer's purchase intention and social status and acts as one primary determinant in the consumer's purchase intention towards the valuable goods. (G & Nandhini, 2017). Brand preferences may be viewed as outcomes of stress, mediated through consumption-related lifestyles, as individuals try to adapt to stressful life conditions or role transitions marked by life events. The changes in the lifestyle and changes in the trends of the economy lead the consumer to have different brand choices. (Mathur & Moschis, 2001). Brand preference is regarded as a significant construct that can mirror customers' cognition and favorable emotional feelings, which can be saved in their minds when they make a purchase decision. (AlJohani, Saad, & Ahmad, 2020)

The consumers' awareness about health acts as an essential key determinant in consumers' willingness to pay premium prices for organic food products

(Rizzo, G., Borrello, M., Dara Guccione, G., Schifani, G., & Cembalo, L (2020). The attitude, utility, and trust in organic, packed food products positively affect the purchase intention and word-of-mouth intention (Cachero-Martínez, S., & Vázquez-Casielles, R. (2021). Organic consumers consider health as the pleasure they gain after consuming a food product with quality and taste. (Ditlevsen, K., Sandøe, P., & Lassen, J. (2019)

RESEARCH METHODOLOGY

The current study is descriptive and analytical that examined the mediating role of health concern on consumer attitude and brand preference. The researcher has selected organic, packed food products brand 24 mantras and Dhatu, and 466 consumers were given a structured questionnaire in a five-point Likert scale, and responses were from strongly agree to disagree strongly. The respondents from the Kerala state were selected, and reliability analysis using Cronbach alpha was conducted. The model acceptance was tested through SPSS 21.0 & AMOS 23. To evaluate the mediation analysis Andrew F Hayes, mediation analysis has been used.

Research hypothesis

- H01: Consumer Attitude has a direct positive influence on the health concern
- H02: Consumer Attitude has a direct positive influence on brand preference
- H03: Health Concern has a direct positive influence on brand preference
- H04: Health Concern mediates the relationship between consumer attitude and brand preference

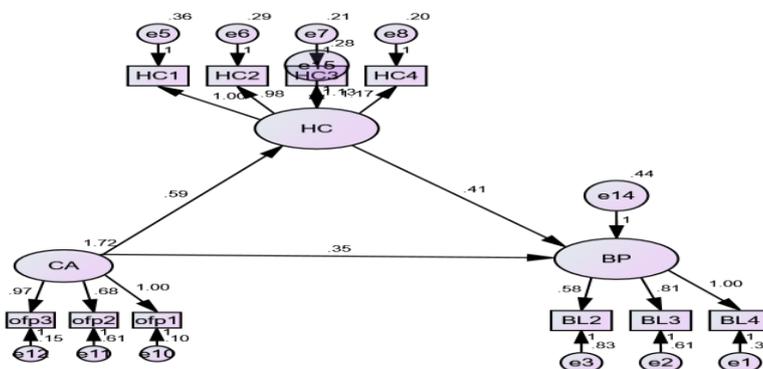


Fig 1: Conceptual Model with mediation

RESULTS AND DISCUSSIONS

H01: Consumer Attitude has a direct positive influence on the health concern
 The current study found that the consumer's attitude towards organic, packed foods positively affects health concern as the $\beta=0.593$, $CR=21.441$, $P<0.000$. The consumer's strong perception about the healthiness of consuming the organic product is positive definite. The consumer's attitude towards the

functional food was highly positive and undifferentiated and is influenced by the motives like health, mood, and sensory appeal. (Iris Žeželj, 2012) People are positively inclined towards health claims when a friend or a relative is hurt with a lifestyle disease.(Fiona Lalor, 2011). Consumer attitude directly influences the willingness to consume products of high price (Küster-Boluda, 2017,) and some consumers believe that consumption of organic, packed food products is healthy as it contains fewer chemicals and pesticides.

H02: Consumer Attitude has a direct positive influence on brand preference
Consumer brand preference is a function of consumers' beliefs about the brands features or attributes. (Reham Ebrahim, 2016). It also think about the rational and irrational as brand's consumer behavior (Schmitt, 2009). Brand preference feels to consumers' predisposition towards certain brands that summarise their cognitive information processing towards brand stimuli. (Howard, 1969). Consumer brand preference is highly influenced by the consumer attitude with $\beta=0.349$, CR=5.982, $P<0.000$ in organic, packed food products. The consumer strongly believes that the certification in the packaging ensures food quality and safety.

H03: Health Concern has a direct positive influence on brand preference
Health is a relative state in which one can function well physically, mentally, socially, and spiritually to express the full range of one's unique potentialities within the environment in which one lives. (M, Svalastog, Donev, & Gajović, 2017). The individual consumer is highly concerned with the health aspects of the product bought and their satisfaction. (M, Svalastog, Donev, & Gajović, 2017). The consumers evaluate the health benefits associated with a brand to ensure healthy eating. The organic, packed food products offer health benefits to the consumers, and as a result, the consumer's health concern positively influences the consumers to brand preference with $\beta=0.408$, CR=4.931, $P<0.000$.

Table (1) showing the Results of SEM Analysis

	Paths		β	S.E.	C.R.	P
HC	<---	CA	.593	.028	21.441	***
BP	<---	HC	.408	.083	4.931	***
BP	<---	CA	.349	.058	5.982	***
BL4	<---	BP	1.000			
BL3	<---	BP	.808	.049	16.330	***
BL2	<---	BP	.584	.049	11.908	***
HC1	<---	HC	1.000			
HC2	<---	HC	.981	.041	24.166	***
HC3	<---	HC	1.132	.042	26.858	***
HC4	<---	HC	1.166	.043	27.386	***
ofp1	<---	CA	1.000			
ofp2	<---	CA	.675	.029	22.909	***
ofp3	<---	CA	.968	.020	48.691	***

The above table depicts that all the path coefficients are significant, and as a result, there exists a positive relationship between path constructs.

The brand preference has been evaluated using three items; BL4: I prefer branded, organic, packed food, BL2: I feel that branded products are healthier to consume, and this influences brand preference, BL3: Quality of branded products create positive cues in my mind and hence results in brand preference. The above statement's reliability was tested using Cronbach alpha ($\alpha=0.856$).

Quality act as a strong influencer in the brand preference of the organic, packed food consumers with $\beta=0.808$, $CR=16.330$, $P<0.000$. The consumers have a strong inner feeling that branded products have higher quality.

The health concern of the consumers evaluated using four items; HC1: I am highly concerned with the health aspect of the food that I consume, HC2: Food habits act as a central element in my health concern, HC3: I give prime importance to nutrition values, HC4: I am always concerned about the calories, fat and other protein content in the food I consume—the reliability score Cronbach alpha ($\alpha=0.896$). The organic, packed food consumers show great concern towards calories, fat, and other protein content in their food intake with $\beta=1.166$, $CR=27.386$, $P<0.000$.

The Consumer attitude has been evaluated using three items; OFP1: I believe that organic products are safe to consume, OFP2: I would like to follow my peers' and colleagues' eating habits, OFP3: Organic food products have fewer chemicals and pesticides. From the study, the consumers have a perception that Organic food products have fewer chemicals and pesticides with $\beta=0.968$, $CR=48.691$, $P<0.000$.

The consumers of organic, packed foods have a positive attitude about the products, and they believe that the products have fewer chemicals and pesticides in them. Quality is one primary determinant that influences the brand preference of the organic, packed food consumers, and the consumers are highly concerned about the calories, fat, and other protein content in the food that they consume and which shows their health consciousness.

MODEL FIT INDICES

INDICES	ACTUAL VALUE	RECOMMENDED VALUE
CHI SQUARE	93.934	
NORMED CHI SQUARE	2.935	<5
RMSEA	0.065	<0.08
GFI	0.964	>0.90
AGFI	0.938	>0.80
NFI	0.978	>0.90
TLI	0.979	>0.90
CFI	0.985	>0.90
RMR	0.027	<1

IFI	0.985	>0.90
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Source: Amos 21 Output file

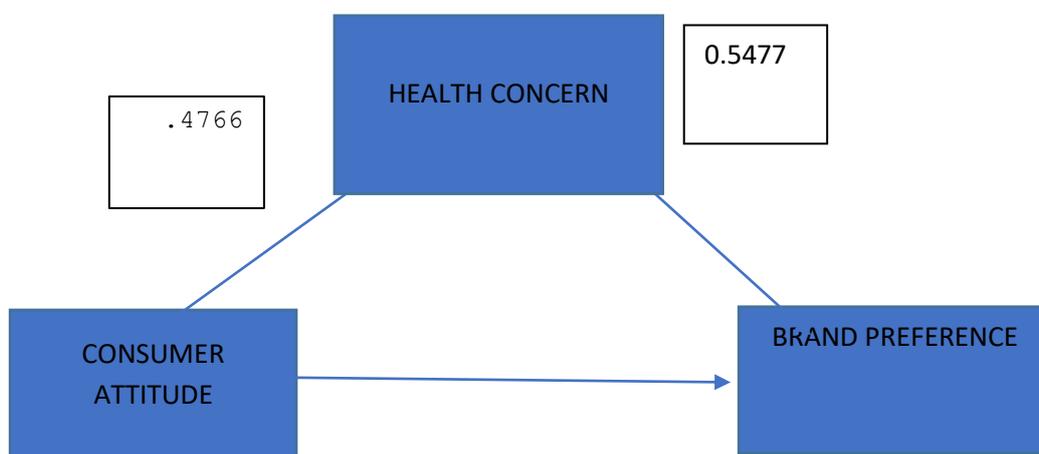
The fit indices shown in the above table for the proposed theoretical model indicate that the model is a good fit for the given data with GFI=0.964, AGFI=0.938, NFI=0.978, TLI=0.979, CFI=0.985, RMR=0.027, IFI=0.985, Normed Chi Square=2.935.

The Chi square value = 93.934

The paths between consumer attitude to a health concern, health concern to brand preference, and consumer attitude to brand preference was found to be positive and statistically significant at 1% level.

Mediation analysis

Mediation shows the sequence of causal relationship by which X employs Y by influencing the intervening factor. (Hayes, 2009)



The path (direct effect) from consumer attitude to brand preference is positive and significant ($b=0.4766, se=0.0331, p<0.001$), indicating that persons or consumers having a positive consumer attitude express a positive intention towards branded organic packed food products.

The direct effect of health concern on brand preference is positive and significant ($b=0.5477, se=0.0354, p<0.001$), indicates that health concern has got a significant favorable influence on the brand preference of organic food products.

The indirect effect is tested using non-parametric bootstrapping. If the null of 0 falls between the lower and upper bound of the 95% confidence interval, the indirect effect is inferred as non-zero.

In this case the indirect effect ($IE=0.3656$) is statistically significant at 95% confidence interval $CI=(0.2948, 0.4376)$.

From the above details, it is evident that there exists a positive predictive relationship between Consumer attitude and brand preference of organic, packed food products with Health concern as the mediator and is statistically significant.

$$\begin{aligned} \text{The effect} &= (\text{Indirect Effect of Brand Preference}/\text{Total Effect}) * 100 \\ &= (0.3656/0.8776) * 100 \\ &= 41.65 \% \end{aligned}$$

A 41.65 % variation in the brand preference about organic packed food products when health concerns act as a mediator between consumer attitude (X) and brand preference (Y).

Bad health practices such as unhealthy eating, low physical exercises, and nonobedience with disease detection and prevention guidelines create diseases in the later stage of life (Rimm, 1995). Individuals with inflated health consciousness show constructive attitudes towards nutrition, self-care, exercise, and healthier lifestyles than individuals with low health consciousness. High-conscious individuals prefer to buy branded products as it will ensure them with security through certification. (Hollis, 1986). The current study found that individuals' health concern positively influences brand preference and acts as a mediator in bringing a positive attitude and higher brand preference.

CONCLUSION

The consumer's consciousness about health mediates their decision-making about the brands they bought. Organic, the consumers highly prefer packed food products as it is healthy to consume and due to the absence of pesticides and chemicals. The presence of consumer's positive attitudes generates the potential for organic food products. Quality acts as a strong determinant in consumers' brand preference as consumers feel branded product ensures quality, so proper marketing strategy with quality enhancement can increase the market growth.

Motivation of the study

The consumption of organic food products is on a hike based on the researcher's secondary research, and the researcher has a question about the influence of health concerns on the purchase of organic products. Based on the researcher's literature (author), health concern is an essential factor in purchasing organic food products. The author has a curiosity to evaluate the mediating role of the individual's health concern towards the brand preference and consumer attitude of organic food products. The branded market is an organized segment of the organic market with high market attention. Judging the influence of the individual's health concerns on his attitude about the brand preference will make a difference in the existing studies and create new learning for the marketers of organic, packed food products.

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Appendix

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.5.2 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com

Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4

Y : BRANDSCA

X : attitude

M : HEALTHCO

Sample

Size: 466

OUTCOME VARIABLE:

HEALTHCO

Model Summary

R	R-sq	MSE	F	df1	df2	p
.7129	.5082	.3693	479.4369	1.0000	464.0000	.0000

Model

coeff	se	t	p	LLCI	ULCI
constant	1.3046	.0965	13.5156	.0000	1.1150 1.4943
attitude	.6674	.0305	21.8960	.0000	.6075 .7273

OUTCOME VARIABLE:

BRANDSCA

Model Summary

R	R-sq	MSE	F	df1	df2	p
.8776	.7703	.2147	776.1604	2.0000	463.0000	.0000

Model

coeff	se	t	p	LLCI	ULCI	
constant	-.0065	.0869	-.0752	.9401	-.1773	.1642
attitude	.4766	.0331	14.3802	.0000	.4115	.5417
HEALTHCO	.5477	.0354	15.4734	.0000	.4782	.6173

***** DIRECT AND INDIRECT EFFECTS OF X ON Y

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
.4766	.0331	14.3802	.0000	.4115	.5417

Indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI	
HEALTHCO	.3656	.0362	.2948	.4376

***** ANALYSIS NOTES AND ERRORS

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

WARNING: Variables names longer than eight characters can produce incorrect output

when some variables in the data file have the same first eight characters. Shorter

variable names are recommended. By using this output, you are accepting all risk

and consequences of interpreting or reporting results that may be incorrect.

----- END MATRIX -----