

IMPACT OF DIFFUSION OF INNOVATION AMONG PAKISTANI CONSUMERS' ADOPTION OF HALAL COSMETICS

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ABSTRACT

The market for halal cosmetics has recently grown due to factors including the expanding Muslim populace and their choice of pleasant, hygienic, and secure cosmetics. This study investigates consumer willingness for halal cosmetics adoption and considers the ramifications of such adoption. In addition, it looks into how trust mediates between customers' knowledge of halal products and social influence by integrating the diffusion of innovation theory. The SEM-PLS technique is used in this study to examine both direct and mediated relationships between the hypothesized components. The results show that all examined variables have a substantial influence on whether halal cosmetics are adopted. The relationship between halal knowledge and social influence is found to depend heavily on trust. Nevertheless, despite consumer demand, halal cosmetics in Pakistan are still very uncommon for several reasons. This research aims to examine variables affecting the usage of halal cosmetics in Pakistan. It will provide certifying organizations and cosmetic manufacturers with significant information that will help them gain the trust of consumers and contribute to the existing body of knowledge. This research takes a quantitative approach, analyzing the collected data using multivariate statistical methods and descriptive statistics. The sample, which was constructed by purposive sampling, contained a total of 396 respondents out of 375 after screening and sorting; partial or missing data. Due to limitations, the study concentrated on three of Pakistan's largest cities, Karachi, Lahore, and Faisalabad for their dense populations and varied cultures. By carefully weighing factors including gender, age, and education, the research sample was chosen to assure representativeness and reduce any potential biases. The conceptual framework, the research questions, and the generated hypotheses were tested in the study using an administered questionnaire survey approach.

Keywords: Halal cosmetics, knowledge, social influence, trust, and adoption

INTRODUCTION

Cosmetics are needful adornments not only for females but a greater part of males also playing the role of its consumers. The prime point of consuming halal cosmetic products is cleanliness and harmless attributes (Pratiwi, Auliya, Yusar, & Shofwan, 2022) as they are made of natural ingredients and are free from harmful elements. Cosmetics enhance someone's allure to promote self-assurance and confidence. "Halal" is an innovative term that attracts Muslims to buy cosmetics that are labeled as halal. Religion is the main reason for picking only halal cosmetic products that are made obligatory for Muslims by Almighty Allah to consume only halal in every aspect of their life.

The term "halal" has expanded to include a variety of goods and services, including those used in the food, beverage, tabletop, cosmetics, and other sectors of the economy (Nghah, Gabarre, Han, Rahi, Al-Gasawneh, & Park, 2021). Islam has the fastest rate of growth worldwide, promoting cleanliness, and guaranteeing high-quality consumer goods. Muslim consumers have a strong market demand for halal cosmetics because of their high-quality standards and the requirement for moral consumerism.

The market for halal cosmetics was valued at \$30,685,40 m in 2020, and by 2031, it is anticipated to have grown to \$144,816.10 m, with a CAGR of 15.2% between 2022 and 2031 (Allied Market Research, 2022). Regardless of the horrible circumstances, there are a few positive situations that happened during the pandemic. The improvement of vaccines and their endorsement in a couple of countries has given some sustenance. The global halal cosmetics market is supposed to observe a V-formed recuperation post-pandemic. Along with this, a vertical pattern has been seen in the revenue of the key market players in the final quarter of 2020-2021 (Allied Market Research, 2022). According to Houllis (2015), halal cosmetics were valued at around 20 billion USD, and it is expected to reach 54 billion USD by 2022 (Nghah et al., 2021). Nevertheless, it is acknowledged that this number only covers 2.5% of the global cosmetics market.

Several factors, including the rising Muslim population, the expansion of the halal market, and the rising adherence to halal certification, are contributing to the significant growth of the worldwide halal cosmetic sector. As a consequence of this expansion and the escalated demand for halal products globally, halal cosmetics have significantly penetrated the cosmetic sector. The market for halal cosmetics has increased significantly in areas with a sizable number of Muslims, such as the UAE, Saudi Arabia, Indonesia, Malaysia, Turkey, and other places. According to a report released in March 2022 by Allied Industry Research, this trend is anticipated to persist and result in a larger halal cosmetics industry by 2031.

LITERATURE REVIEW

The Arabic word for "halal" refers to using things that are acceptable in Islam, such as food, drink, clothing, accessories, jewelry, cosmetics, conduct, and non-forbidden products (Majid et al., 2015). The term "halal" denotes food that Muslims may consume with the permission of Almighty Allah (Chaudry & Regenstein, 2000; Sakr, 1996).

The desire for halal has expanded beyond food to include non-food sectors such as cosmetics, as customers become increasingly religious as a result of increased knowledge and information about halal concerns (Lada, 2009). Halal cosmetics is an

innovating emergence; in fact, after food and finance, this industry is experiencing the inception of the halal business. (Mahathir, 2010).

Cosmetics are applied by both genders, but females adopt them more frequently and unconsciously (Kolondam, 2016) as cosmetics have distinctive power to fulfill women's personal beauty needs as well as act as a basis to define their societal expectations (Tagai et al., 2016). When applying cosmetics to the skin, their textural qualities are just as important as the sensation they produce. Cosmetic manufacturers' main goal is to close the color gap, and their choice of smell typically matches the intended physical texture (Bell, 2018).

Azmi et al. (2018) mentioned that halal standards influence the adoption referring to perceived halal knowledge, halal integrity, and anticipated business benefits. For Muslims in Pakistan, the concept of halal seems to have little value. Consumers are more concerned about halal food than halal cosmetics.

An Overview of Pakistan

Pakistan, a South Asian country, is the fifth-most populous nation in the world with a population of about 228.90 million (Pakistan Bureau of Statistics, 2022). The country borders Afghanistan, Iran, China, and India.

The country has also been involved in international trade in the years after its independence. Pakistan has been a member of SAARC and the World Trade Organization (WTO) since 1985 and 1995, respectively. This has given the country more opportunities to engage in international trade, both in terms of imports and exports.

Surging Demand for Halal Cosmetics in Pakistan.

Despite the fact that Muslims are using halal cosmetic products because of an increased interest in self-primping and gravitating to cosmetic products that adhere to religious duties, only a few research have looked into halal cosmetics from a Pakistani perspective especially considering trust as a mediator. Most of the research has focused on halal logistics, halal transportation, halal warehousing (Ngah et al., 2019, 2020, 2021), and halal food certification (Iranmanesh, Mirzaei, Hosseini, & Zailani, 2019).

Aromas, lipsticks, skin-lightening creams, shaving gels, foundations, hair care products, and moisturizers, including infant talcum powders and lotions, are among the cosmetic products available. Furthermore, in Pakistan, the acceptance of halal cosmetics among young Muslim customers is still unknown (Khan, Sarwar, & Tan, 2020).

Unpredictably, halal cosmetics are frequently viewed with suspicion because it is believed that they do not offer the same features as non-halal cosmetics, and are sold globally (Ali, Salman, Yaacob, & Parveen, 2019). According to Khan & Azam (2016), many women purchase cosmetic products with the misconception that more expensive products are more effective than halal cosmetic products. Consumers prefer strong beliefs and cling to what they trust. Although, even if they are produced in non-Muslim countries, the overwhelming of cosmetic brands in Pakistan are not halal certified. There is a gap in the narratives that the lack of halal-certified labels on products will lead Pakistani customers to lose trust in cosmetics when it comes to halal certification (Memon, Pitafi, & Panhwar, 2020).

CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

Diffusion of Innovation

Three of the aforementioned theories have been found to be used for predicting a variety of human behaviors in a range of settings as well as for understanding human attitudes. The preceding research has focused on defining individual behavior, which makes TRA and TPB different from Diffusion of Innovation (DOI). The literature has examined the spread of creative ideas and goods from a number of perspectives, such as the effects of client diversity, social influence, and marketing and advertising (Rogers, 2003).

Additionally, according to Hameed, Counsell, & Swift (2012), Rogers' (2003) theory of innovation and dissemination seeks to "understand, define, and foresee how companies or people will adopt emerging innovations or strategies for behavioral change." The factors that influence the decision to accept and propagate the concept are also described by DOI, in accordance with Mohammed, Ibrahim, & Ithnin (2016) and Rogers (2002).

Knowledge of Halal in Cosmetics

The lack of halal knowledge about why halal cosmetics are among Muslim and non-Muslim consumers undifferentiated, while halal labeling on cosmetics remains unclear in non-Muslim dominant markets, is a specific obstacle to the growth of halal cosmetics. Shirazi (2021) found that halal-labeled cosmetics were less understood and trusted than organic, green, vegan, and natural products. Organic, vegan, and natural cosmetics are the most formidable competitors for the halal cosmetics business to expand. Consumers can be perceived as a competitor or a challenge. It is observed that consumers are more interested in the product being natural than halal-certified and they are doubtful of haram (not permissible) substances as well.

According to Hashim (2013), it's critical for Muslims to comprehend the ingredients in the cosmetics and personal care items they use. Muslims are expected by Islamic law to be knowledgeable about all the processes, components, distribution, operations, and other components of a halal product. Muslims must also consider these considerations when using cosmetic and personal care items. There are specific requirements and processes that must be followed in order to differentiate between Halal and non-Halal products and ingredients. Certifications are an example of such requirements or techniques.

The halal cosmetics and personal care goods market should take seriously consumer worries, awareness, intentions, and adoption. They will benefit from an increase in revenue. Race and background have a significant impact on consumers, which has increased their awareness of and openness to halal products. The Pakistani cosmetics industry has failed to implement a halal logo and develop marketing strategies, despite the fact that consumers are growing increasingly conscious of the necessity for cosmetics and personal care products to be labeled as halal-certified. To avoid any distortion and misleading of false or non-adoption of halal-certified logos, there is a need to raise halal knowledge supported by an independent Islamic association.

Social Influence

In human behavior, social influence plays an important role. It is acknowledged that in interpersonal contacts, contemplations, mentalities, conduct, and feelings are substituted. In the cosmetics industry, the term "social influence" refers to the ability to respond to societal needs. If society permits the consumption of a certain item, the consumer will purchase it in accordance with societal standards. Social influence on consumer behavior is a cornerstone of marketing from a marketing standpoint. A cursory review of the conduct compositions of potential consumers reveals that most of them start out by taking into account how social influence affects customer behavior. Perhaps no industry offers a better understanding of how society affects people other than the cosmetics industry (Hunt, Fate, & Dodds, 2011).

Furthermore, Li & Tang (2011) stated that social influence may be recognized through differences in behavior in individuals that are purposefully or accidentally received by others. According to Ryan (2001), parents are a type of social support that may provide an individual with suggestions and feedback on how to think, select, and act in various situations. Parents and friends who offer friendly assistance may also be a source of influence and inspiration. Cultural and social factors are unquestionably important in the context of halal, and this emphasizes the ways in which consumer product choice is influenced.

Trust and Adoption of Halal Cosmetics

Building a strong connection between a product line and its customers in a cutthroat business environment depends on trust. Consumer understanding and evaluation of a product's features and benefits are two factors that contribute to consumer trust (Mowen & Minor, 2002). A person's opinion of something might be expressed through a personal or vocal declaration called trust (Schiffman & Kanuk, 2010). In the halal context, integrity can build trust, or the provision of a guarantee of (halal) ingredient information of the product that can be trusted by consumers, is the primary procedure by which a halal business can be operated.

It is advised to adopt halal certification in conjunction with the adoption of Islamic business ethics in a connected circumstance. The Islamic moral code is divided into several levels. According to research, consumers can pay for the confidence they need and want by being trustworthy.

Muslim customers today have a broader understanding of what constitutes halal than just meat-based products. In addition to being manufactured in Pakistan, cosmetics and healthcare products are imported from all over the world, particularly from non-Muslim countries. This raises the doubt that consumers, particularly those who identify as Muslims, continue to have about whether these products are truly halal. Given the complexity of the modern global commerce scene, consumers are very worried about whether cosmetics and personal care products are produced in accordance with the principles of halal and Syariah standards (Ahmed, Najmi, Faizan, & Ahmed, 2018).

The term "social pressure" also refers to the belief that customers have in societal norms that may include friends, partners, family, or other social groups. These illustrations may exert pressure on the individual. The trust that is a pervasive pressure on an individual to follow or reject particular behavior is sparked by social influence (Ajzen, 2015).

Halal, however, is not just regarded as a serious concern; it also pertains to commerce and trade, and it is evolving into a quality characteristic with global standards and well-being preference. Additionally becoming a big area where associations encourage research is the Islamic market segment. Both Muslims who need to put their trust in well-known good deeds and people other than Muslims who are attracted to the integrity, pureness, and humanism that Islamic brands are intended to show are lured to this rapidly growing market (Alserhan, 2010).

In the sequence of the above, the following hypotheses are developed.

H1: Knowledge has an influence on the adoption of halal cosmetics.

H2: Knowledge has an influence on trust.

H3: Social Influence has an impact on the adoption of halal cosmetics.

H4: Social Influence has an influence on trust.

H5: Trust has an influence on the adoption of halal cosmetics.

H6: Trust mediates the relationship between knowledge and the adoption of halal cosmetics.

H7: Trust mediates the relationship between social influence and the adoption of halal cosmetics.

Conceptual Framework

The literature review has been taken into consideration when developing the recommended model for this investigation. Based on factors identified in the literature review, including halal knowledge, social influence, and trust, this particular model focuses on consumers' acceptance of halal cosmetics. The model illustrates the relationships between variables and links them all together in a single frame. It also indicates the foundation around which the hypotheses have been developed. The proposed model for this research is depicted in Figure 1.

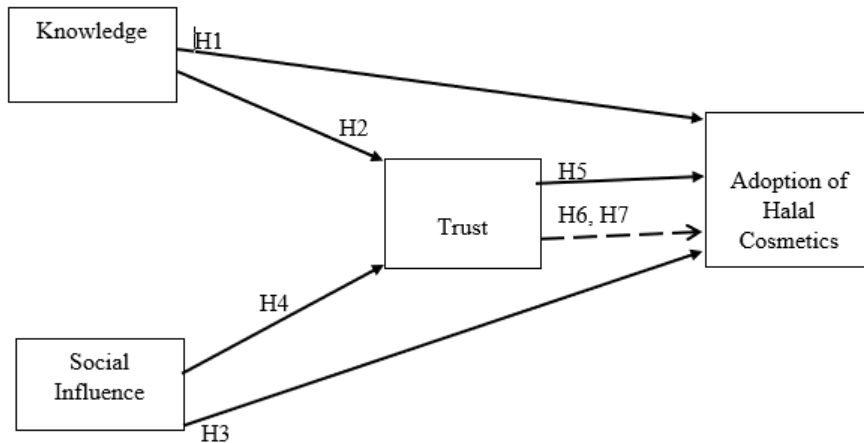


Figure 1. Conceptual Framework of the Study

The results of this study will be used to develop a framework based on the extended diffusion of the theory of innovation that promotes the use of cosmetics that are halal in Pakistan with the mediation function of trust, which will identify the factors that influence adoption.

METHODOLOGY

The postulated factors' influence was determined and described using the quantitative technique in this study. Descriptive statistics and multivariate statistical methods are employed to characterize the findings. The researchers were able to get responses from 396 respondents by employing purposive sampling to obtain the required sample from a predetermined population investigated for the same amount of time. Hullah, Baumgartner, & Smith (2017) advise using a nonprobability sample technique to evaluate fictitious impacts based on the study framework.

A sum of 387 responses was gathered for this research, of which 5% (21) were rejected after screening and sorting due to missing data or were incomplete (answered in a straight line). The conceptual model, the formulated research questions, and the proposed hypotheses were tested using an administered questionnaire survey approach.

The ideal research sample initially comprised eight (8) cities from different regions of Pakistan in order to execute the study properly. However, only three (3) major cities were included in the study: Karachi, Lahore, and Faisalabad due to a number of unprecedented difficulties, including geographic distances, time limits, and budgetary limitations. These Pakistani cities have long been acknowledged for their dense populations and wide cultural diversity. The study sample was purposefully chosen based on variables including gender, age, and education to reduce any potential biases and ensure its representativeness rather than depending just on chance (Jay & Cohen, 2010).

Table 1. Representation of the sample drawn

Cities	Sample drawn
Karachi	160
Lahore	140
Faisalabad	96
Total	396

Measurement of Variables

The factors are measured based on the perceptions of the respondents, who are not required to articulate any numbers in an objective manner but are instead asked to describe how they use halal cosmetics. Five measures that assess halal cosmetics compared to conventional cosmetics, the acceptability of products in daily life, and challenges associated with implementing such products to quantify innovation adoption as a construct, the adoption of halal cosmetics has three items adopted by Salman et al., 2020, Sadeeqa et al., 2013, and Hong et al. 2011, knowledge has five items were adapted from Divianjella et al., 2020, social influence has five items were taken from Lada et al., 2009, and six items for trust were adopted from Nurrachmi et al., 2020.

FINDINGS & DISCUSSION

Customers in three major cities in Pakistan who identified as Muslims were given 396 surveys. Online and hand-delivered questionnaires were both employed. After proportionate sampling, the researcher intentionally sought out potential Muslim survey participants using a purposive sample approach. A total of 387 out of 396 surveys were collected, representing a 97.72% response rate. (For instance, many replies to a single question). Due to incompleteness (blank responses), six (6) questions were not counted, and three (3) questionnaires were disqualified and rejected. Due to this, the study's total sample size was limited to 375 respondents, yielding a net sampling error of 94.69%.

Solicited information on the demographic statistics of the questionnaire, which included questions about the respondents' fundamental attributes such as age, gender, education, and occupation. Table 2 demonstrates that 28.5% of respondents were males and 71.5% of respondents were females.

Table 2. Demographic Statistics of the Survey Participants

Category	Frequency	(%) Percent
Gender		
Female	268	71.5
Male	107	28.5
Total	375	100
Age		
20-29	134	35.7
30-39	82	21.9
40-49	97	25.9
50-59	62	16.5
Total	375	100
Education		
SSC/ O Level	6	1.6
HSC/ A Level	7	1.9
Hons	95	25.3
Masters	205	54.7
Ph.D.	62	16.5
Total	375	100
Occupation		
Academic	70	18.7
Business	119	31.7
Govt: Employee	68	18.1
Student		
Com: Employee	17	4.5
Hoadoptionwife	21	5.6
Others		
Total	5	1.3
	75	20.0
	375	100
Income		
30000-44999	45	12.0
45000-59999	117	31.2
60000-74999	59	15.7
75000-84999	25	6.7
Above 85000	72	19.2
Others	57	15.2
Total	375	100

The current study tried to produce a representative sample of gender based on their adoption of halal cosmetics. In three of the cities, there were generally more females (n = 268, 71.5%) than males (n=107, 28.5). 35.7% of the participants were in the age group of 20 and 29, 25.9% of respondents were between the ages of 40 and 49, 21.9% of participants were between the ages of 30-39, and 16.5% were between the ages of 50 and 59. When it came to the religion section, only replies from Muslim customers were solicited after they had received a briefing on religion; hence, 100% of the respondents identified as Muslims. Statistics show that the majority of the 54.7% of respondents have master's degrees, 25.3% have bachelor's degrees with honors, 16.5% have doctoral degrees, 1.9% have completed their HSC or A-levels, and only 1.6% have completed their S- or O-levels.

Validity and Reliability

The variables in this study are evaluated using a measuring model and two psychometric tests for validity and reliability. If the composite reliability (CR) score of the construct is higher than 0.7 and the average extracted variance meets the cut-off value, the construct is said to have a high level of reliability (Hair et al., 2013). The results of the measuring model are shown in Table 3. The results show that the measuring model has a sufficient level of reliability.

Table 3. Summary of Results

Variable	Item	Loadings	Ave	CR	Alpha
Knowledge	KNW1	0.818	0.759	0.921	0.929
	KNW2	0.844			
	KNW3	0.932			
	KNW4	0.831			
	KNW5	0.926			
Social Influence	SI1	0.75	0.670	0.886	0.877
	SI2	0.817			
	SI3	0.826			
	SI4	0.855			

Trust	SI5	0.841	0.682	0.907	0.906
	TR1	0.756			
	TR2	0.837			
	TR3	0.857			
	TR4	0.871			
	TR5	0.828			
Adoption of Halal Cosmetics	TR6	0.801	0.876	0.930	0.929
	AHC1	0.925			
	AHC2	0.945			
	AHC3	0.938			

This study is also focused on discriminant validity, which alludes to a construct that differs experimentally from other related variables (Hair et al., 2010). The cross-loading and Fornell and Lacker methods are frequently used in SEM-related research. The most sophisticated method for establishing discriminant validity in the variance-based SEM methodology, also known as the traditional approach, is the HTMT (Heterotrait-Monotrait) approach (inter-relationships among the constructs). It was offered by Henseler, Ringle, & Sarstedt (2015) as a new standard for determining discriminant validity and is believed to be more reliable than previously mentioned techniques.

The HTMT approach is carried out to assess discriminant validity. Discriminant validity results are detailed in Table 4. It should be observed that the AVE values of all the variables are significantly larger than the correlation between them. Further demonstrating the convergent validity, all of the items' factor loadings are larger than 0.6, which is significant as P 0.000. Model measurement and discriminant validity findings demonstrate that multiple validity and reliability criteria are acceptable and appropriate for evaluating the structural model and hypotheses testing.

Table 4. Discriminant Validity (HTMT)

No	Variable	AHC	KNW	SI	TR
1	Adoption				
2	Knowledge	0.620			
3	Social Influence	0.520	0.499		
4	Trust	0.662	0.651	0.695	

HYPOTHESIS TESTING

The process of testing the hypotheses is described in the paragraphs that follow. Through the bootstrapping technique, the proposed link between the constructs is examined. The path coefficient, t-value, and p-values are used to assess the association. 375 samples from a bootstrap are used to calculate the values of, p-value, and t-values in SmartPLS. All the suggested ideas were confirmed by the findings.

The hypotheses described the precise connections between each variable and the acceptance of halal cosmetics by consumers. The diffusion of innovation theory, which describes how people are convinced to embrace halal cosmetics (innovation) and how the idea of halal is pushed throughout society, provides conceptual support for the majority of the study's hypotheses. The findings specifically for hypothesis (H1) indicated a significant correlation between knowledge and usage of halal cosmetics, with the largest path coefficient ($\beta = 0.315$) and a p-value of 0.000. This connection is significant at the t-value (6.162). This supports the hypothesis (H1) that acceptance of halal cosmetics is influenced by knowledge. This outcome is in line with past empirical studies that found a significant relationship between knowledge and the use of halal cosmetics. According to Ahmad et al. (2015), awareness has a favorable impact on people's willingness to use halal cosmetics. The relationship between knowledge and the use of halal cosmetics has been examined in many studies (Aertsens et al., 2011; Chrysochoidis, 2000; Rahman et al., 2011; Stobbelaar et al., 2007).

The findings offered strong support for Hypothesis H2, which looked at the relationship between trust and knowledge. The study revealed a strong and favorable correlation between knowledge and trust, with a path coefficient of $\beta = 0.391$ and a very significant t-value of 9.356 (p 0.000). This indicates how information has a big impact on trust. The results are in line with research from Cook & Wall (1980), Khesal et al. (2013), Mayer et al. (1995), Probst et al. (2000), Shaari & Mohd Arifin (2009), and others that found a substantial correlation between expertise and trust.

The study's findings confirmed the release of hypothesis H3. The results demonstrated a positive correlation between adoption and social impact, as indicated by the path coefficient of $\beta = 0.110$. This correlation was found to be statistically significant with a t-value of 1.793 and a p-value of 0.037. Contrary to the conclusions of this study, investigations by Hajipour et al. (2015), Pavlou (2002), A. Salman & Jamil (2017), and Samiee (2010) have consistently demonstrated a high link between social impact and the acceptability of halal cosmetics.

The maximal path coefficient and t-value of the analysis ($\beta = 0.451$; p 0.000, with a statistically significant t-value of 10.381) showed a substantial and robust association between social influence and trust, confirming hypothesis H4. This result is consistent with research by Mikalef et al. (2013), Hajli et al. (2013), Kim & Prabhakar (2000), and Hajli et al. (2013), all of which highlighted the tight relationship between social influence and trust. These findings support Tsai and Ghoshal's (1998) finding that the concepts of trust and social influence are interrelated.

Thus, the findings offer more proof in favor of hypothesis H5. The study discovered that trust had a positive impact on the adoption of halal cosmetics, with a path coefficient of $\beta = 0.352$. The related t-value of 4.968 exhibits statistical significance

with a p-value of 0.000. This outcome is in line with past research that emphasized the critical role that trust plays in adoption. For instance, Berry and Parasuraman (2004) hypothesized that trust has a significant impact on adoption, but Al-Nasser et al. (2014) offered evidence that consumer trust influences adoption. Additionally, statistically significant evidence of the impact of trust on acceptance was found by Sekhon et al. (2014), Soon et al. (2017), Sayogo (2018), and Jarvenpaa et al. (2000). Investigations by Adnan Ali et al. also reveal a relationship.

As a result, the mediation analysis's findings provided evidence in support of hypothesis H6. The results demonstrated that, as evidenced by a path coefficient of $\beta = 0.138$, a significant t-value of 4.405, and a p 0.000 value, trust mediates the positive link between knowledge and the use of halal cosmetics. It is significant to emphasize that there is a knowledge gap because little research has looked at the role of trust as a link between knowledge and adoption. This study aimed to fill this gap by putting forth the hypothesis that trust would serve as a mediator between knowledge and the adoption of halal cosmetics. These results confirm past research associating knowledge and the use of halal cosmetics, as demonstrated by studies carried out by Alam, Mohd., & Hisham (2011), Lee (2015), Ambali & Bakar (2014), and Lim & Kim (2012).

To the best of the knowledge of the author, relatively little study has yet been done on how trust mediates societal influence and halal cosmetic acceptance. By proposing the idea that trust mediates the association between social influence and the adoption of halal cosmetics, this study attempted to fill this research vacuum. Since the path coefficient ($\beta = 0.159$) was of statistical significance at $t = 4.380$ and $p = 0.000$, the investigation's findings supported hypothesis H7. These findings suggest that trust mediates the relationship between adoption and social influence. According to a study by Mohezar (2016), this result is consistent with earlier studies that showed the mediating function of trust between social impact and the adoption of halal cosmetics.

Table 5. Results for the direct path coefficients (Hypotheses Testing)

Hypothesis	Proposed Path (Relationship)	Path Coefficients	t-values	P values	Decision
H1	KNW \longrightarrow AHC	0.315	6.162	0.000	Supported
H2	KNW \longrightarrow TR	0.391	9.356	0.000	Supported
H3	SI \longrightarrow AHC	0.110	1.793	0.037	Supported
H4	SI \longrightarrow TR	0.451	10.381	0.000	Supported
H5	TR \longrightarrow AHC	0.352	4.968	0.000	Supported
Mediating Effect of Trust					
H6	KNW \longrightarrow TR \longrightarrow AHC	0.138	4.405	0.000	Supported
H7	SI \longrightarrow TR \longrightarrow AHC	0.159	4.380	0.000	Supported

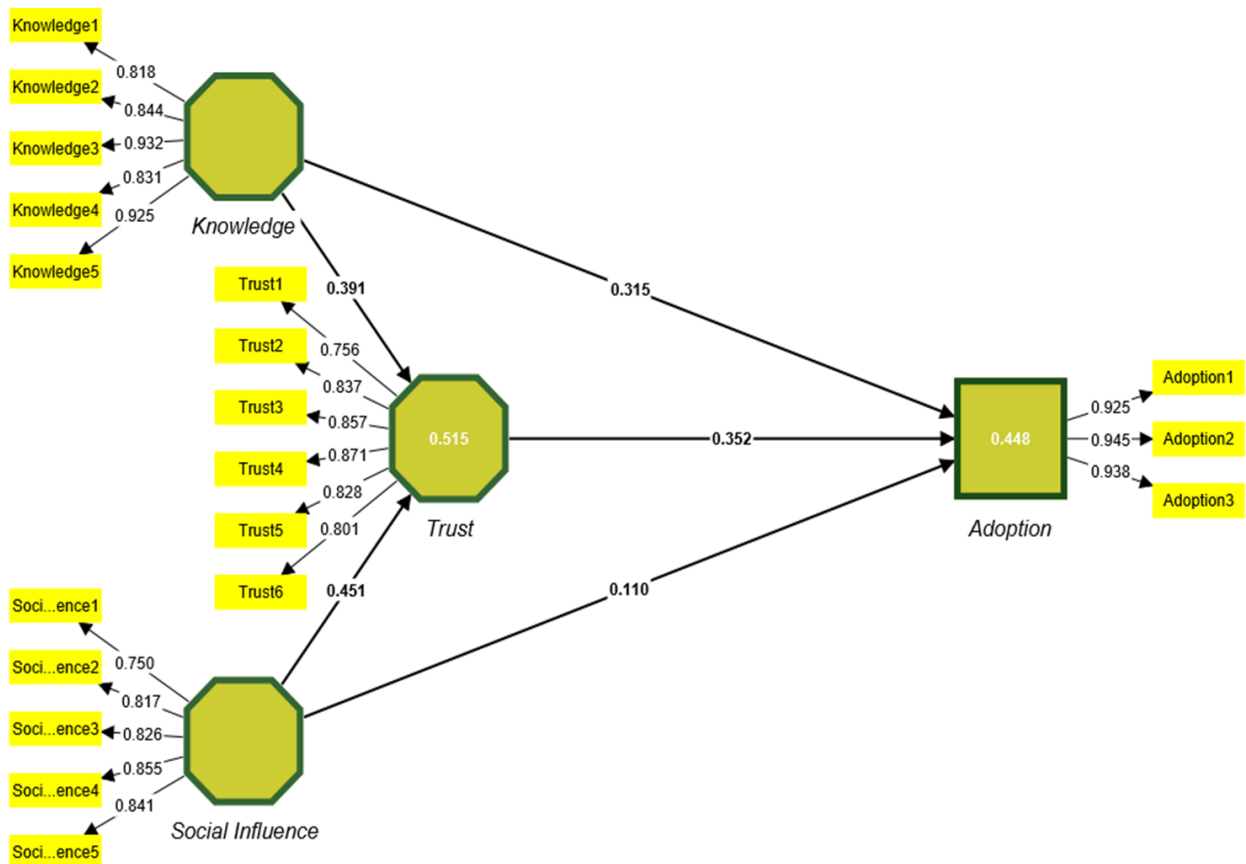


Figure 2. Measurement Model of Adoption of Halal Cosmetics

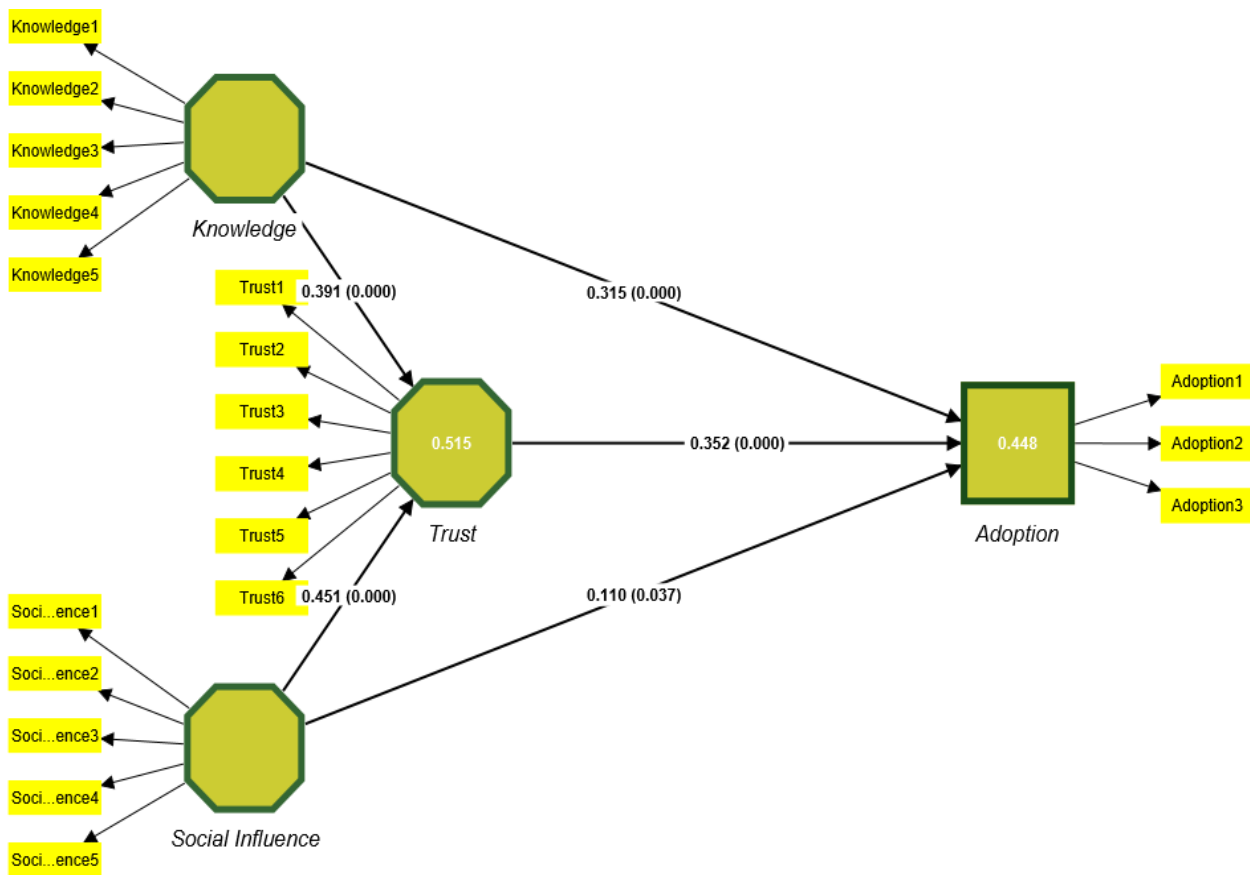


Figure 2. Structural Model of Adoption of Halal Cosmetics

DISCUSSION

Modern times have seen a tremendous increase in the demand for halal cosmetics. The key factors driving demand increase are the expanding Muslim population and consumer demand for palatable, sanitary, and secure cosmetics. Many consumers are halal-conscious and look for cosmetics that have been approved by the relevant authorities. This study examines how consumers accept and support the adoption of halal cosmetics and the repercussions of doing so. Sustainability authorities are working to increase consumer knowledge of halal, but they won't succeed until customers understand their obligation to eat the halal products they choose.

SEM-PLS was used to assess for direct and mediated effects between the hypothesized constructs. The findings showed that every research construct had a substantial impact on the uptake of halal cosmetics. The findings also proved that trust serves as a mediator in the relationship between adoption-related knowledge and social influence.

Despite this, the halal cosmetics sector has historically complied with customer requests for a variety of reasons. This is the cause of the limited consumer adoption of halal cosmetics in Pakistan. The aim of this study was to assess the factors influencing the consumption of halal cosmetic products in Pakistan. The results aim to assist concerned certifying bodies and cosmetics producers in fostering customer trust while also adding to the theory.

IMPLICATIONS

According to the findings, this research has a number of significant potential outcomes in theory for scholarly viewpoints.

First, this study combined DOI with the two external variables of gender and trust. The inclusion of external factors emphasizes how consumers view adoption while also supposing a mediating and moderating role in the research.

Second, the objective is to enhance the distinction between male and female participants by enlarging the current evaluation framework and incorporating controlling characteristics like gender., the validation of the proposed research model contributes to the awareness of adoption from a consumer point of view. A larger sample size might also improve the generalizability of recent discoveries. This thesis makes a noteworthy addition to the field of study. In general, the fusion

As halal cosmetics have become an international need, this study also gives practical consequences for their adoption. As a result, there will be a growing movement in the global cosmetics market that will spark interest in halal cosmetics that satisfy social and cultural needs. Similar to other consumers, halal cosmetics buyers worldwide seek out products that are natural and secure. This explains why halal cosmetics are spreading and encroaching on markets that are not Muslim. The younger generations

of Muslims are becoming more intelligent and well-educated, and many of them are wealthy, which has led to a rise in the number of Muslims who are willing to adoption halal cosmetics.

CONCLUSION

This study put up a comprehensive model of the diffusion of innovation theory to explain why Pakistani Muslims started using halal cosmetics. The study's primary constructs included knowledge, social influence, trust, and acceptance of halal cosmetics.

Consumer adoption fosters innovation in halal cosmetics by disclosing unmet needs, encouraging customization, demanding openness, integrating technology, creating a feedback loop for constant enhancement, harmonizing with cultural and moral principles, and stimulating competitiveness. A strong understanding of these factors enables businesses to develop effectively and satisfy the ever-evolving needs of the halal cosmetics market.

A larger consumer base signifies greater market opportunity and competition. Companies that want to differentiate themselves and gain a larger market share are encouraged to innovate. Innovations in packaging, marketing techniques, and product differentiation are critical in a competitive landscape driven by customer uptake.

The integrated model (PLS-SEM) was evaluated employing the partial least squares technique of structural equation modeling. The suggested model received empirical approval and met the necessary psychometric standards for construct validity, construct reliability, and the usefulness of the path coefficients.

The results show that the adoption of halal cosmetics is significantly positively correlated with knowledge, social influence, and trust. The results confirmed that social influence and awareness are important factors in Pakistan's acceptance of cosmetics claiming halal. The need for halal cosmetics has grown significantly in the modern period. The growing Muslim population and customer demand for pleasant, sanitary, and safe cosmetics are the main drivers of demand growth. Many consumers are halal-conscious and look for cosmetics that have been approved by the relevant authorities. This thesis examines how consumers accept and support the usage of halal cosmetics as well as the repercussions of their adoption. Sustainability authorities are working to increase consumer knowledge of halal, but they won't succeed until customers understand their obligation to consume the halal products they choose.

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