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Muslimah's Purchase Interest in Halal Cosmetic Products through E-Commerce Platforms: Analysis of Supporting Factors

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ABSTRACT

This research investigates the various factors that affect the purchasing intentions of Muslim women regarding halal grooming and cosmetic products in an online context. Drawing upon the theory of planned behaviour, the study evaluates how attitudes, subjective norms, and perceived behavioural control contribute to these purchasing intentions. Furthermore, this study examines the role of religiosity as a moderating variable that influences the interplay among attitudes, subjective norms, perceived benefits, and risks in relation to buy intention. Notably, religiosity has demonstrated significant moderating effects across various contexts, encompassing self-regulation, mental health, ethical behaviour, brand compliance, and overall well-being. The observed effect intimates that religiosity possesses the potential to either amplify or mitigate the influence of independent variables on the anticipated outcome, contingent upon the specific contextual nuances and an individual's subjective religious interpretation. Employing a convenience sampling methodology, the research disseminated questionnaires electronically through digital communication platforms including WhatsApp, Telegram, and Facebook, targeting respondents who had attained a minimum age of 18 years. The subsequent data analysis was rigorously conducted utilising Structural Equation Modeling (SEM) via the Partial Least Squares approach (SEM-PLS). The empirical findings reveal a statistically significant correlation among religiosity and the buy intention of halal products, thereby underscoring the profound significance of religious values in shaping the consumer decision-making processes of Muslim women.

Keywords: *cosmetic, halal, muslimah, online, SEM*

Introduction

By the year 2024, it is anticipated that the global Muslim population will surpass 2 billion individuals, accounting for approximately one-quarter of the world's total population [1]. One of the largest Muslim countries is Indonesia, which is home to more than 242 million Muslims. This number is about 87% of Indonesia's population and 11.7% of the world's total Muslim population.[2]. by this, Islam is expected to become the religion followed by one-third of the world's population, making it one of the most important principles at the global level. A key principle governing the consumption behaviour of Muslims is the concept of halal, which stipulates that they must consume only products deemed both permissible (halal) and wholesome (thayyib) for their well-being. Consequently, it is projected that the demand for halal products will experience substantial growth [3]. Various foods and cosmetics have been imported into Indonesia.

In 2022, the import value of cosmetics reached US$329.5 million by a volume of around 25.0 thousand tonnes. China has been the largest supplier to Indonesia's imported cosmetics market, at least in the last five years. During 2018-2021, the import value of cosmetics by China was US$349.9 million. The next largest supplier was South Korea, by US$212.2 million. France ranked third by a supply value of US$164.6 million.[4]. Based on data by the Food and Drug Administration (BPOM), imported products now dominate almost 60% of the cosmetics market in Indonesia. by the increasing number of product variants available, this affects cosmetic selection decisions, especially among Muslim women who tend to be open to trying new things. A study by Populix shows that 66% of consumers choose to buy cosmetics through *e-commerce* platforms.[5].

There has been a growing interest in halal cosmetics, particularly among consumers in communities that prioritise religious values. Individuals by a robust religious foundation are more inclined to select halal products, viewing their choice as a means of adhering to the principles and teachings of their faith. The impact of this decision may be viewed in both positive and negative terms; on the one hand, it can enhance self-confidence and provide a sense of fulfilment through the use of products that align by personal beliefs, while on the other hand, it may result in limited product options and potential social stigma if the products fail to meet halal standards. Consequently, it is crucial for manufacturers to recognise and address the specific needs and expectations of consumers in order to offer high-quality halal cosmetics.

Based on the phenomenon of purchasing halal care and cosmetic products online, there are inconsistencies in the findings of previous studies regarding the factors that influence consumer buy intention.

Research by Devany & Edy shows that recommendations are an important force influencing consumer attitudes, preferences, intentions and decisions. [6]. Meanwhile, research by Syifa and Istyakara found that social media marketing activities have an effect on buy intention, although the effect is not significant.[7]. This study, however, will not examine the impact of value or recommendations by reviews of halal cosmetics and skincare brands on buy intention. Rather, it will investigate the role of religiosity in shaping the connection among attitudes, subjective norms, perceived behavioural control, and the perceived benefits and risks associated by the buy of halal cosmetics and skincare by Muslim women.

Research Methods

This study draws upon the Theory of Planned Behaviour (TPB), as formulated by Ajzen and Fishbein, to underpin the connection among the concept of halal and various other factors influencing consumer buy intention. The Theory of Planned Behaviour (TPB), introduced by Icek Ajzen in 1985, comprises three primary components that shape behavioural intention: attitude, subjective norm, and perceived behavioural control. Previous research has indicated that, by the exception of self-efficacy, all other elements of the TPB exert a positive influence on the intention of Muslims to buy halal food products [8].

Definition of buy Intention

Interest can be defined as an interest in performing a behaviour. In addition, interest is not fixed and can change over time. Interest is a sense of interest, the willingness of a person's soul to carry out activities happily so that it affects changes in knowledge, skills and behaviour.[9]. An increase in interest in buying reflects an increase in the likelihood of a buy transaction, so it can serve as an important indicator in predicting consumer behaviour.

Factors that influence buying interest

Several factors, including attitude, subjective norms, and perceived behavioural control, play a role in shaping buy intention. Attitudes can be understood as consumers' evaluations and emotional responses towards objects or ideas, which, in turn, influence their behavioural intentions. This attitude can be positive or negative and has various functions, including adaptation and expression of values. In addition, attitudes towards behaviour are influenced by personal beliefs, while subjective norms refer to individual perceptions of social pressure by important people around them that influence certain actions.[8]. It is influenced by normative beliefs and includes the socially significant impact of groups such as family, spouse, and co-workers.

The Theory of Planned Behaviour (TPB) posits that subjective norms exert a positive influence on an individual's intention to engage in a particular behaviour. Inside of the framework of this study, perceived behavioural control pertains to an individual's perceived ability and assessment of their capacity to buy halal cosmetics or skincare products online. It can be defined as the degree to which individuals believe they have control over their attitudes or opinions regarding the behaviour in question—specifically, the process of purchasing halal cosmetics and skincare products [10].

Perceived Impact

Consumers are more likely to make buys when they believe that the transaction will yield substantial benefits. For instance, inside of the context of Social Cognition Theory, an individual's knowledge of nutrition, their perception of the benefits of healthy eating, and their awareness of the detrimental effects of poor dietary habits, all significantly influence their eating behaviour [11]. It is important to note that the decision to make an *online* buy is robustly influenced by consumers' perceptions of the benefits and risks associated by the transaction.[12].

Perceived benefits of *online* shopping contribute significantly to consumer intention to transact. This is closely related to the benefits gained by the adoption of *e-commerce* in fulfilling consumer needs and preferences.[13]. *Online* shopping has revolutionised consumers' methods of acquiring goods and services, offering increased convenience, variety and greater value. Consumers can now carry out shopping activities by high time flexibility, devoid of any restrictions on operating hours, allowing transactions to be carried out continuously.[14].

Buy intentions are often closely linked to the level of convenience and benefits expected by consumers. In addition, *online* shopping offers various advantages, including greater convenience in the transaction process, which further increases the attractiveness for consumers[15]. Many studies show that electronic commerce is considered riskier compared to traditional commerce. One of the main risks identified is the potential for fraud in *online* transactions. While perceived risk was explored in relation to online shopping, the analysis could be deepened by identifying the specific types of risks Muslim consumers face. These include fears over product authenticity, the absence of clear halal labeling or certification in product listings, and concerns over cross-contamination during production or packaging. These factors are crucial in maintaining trust and satisfaction, particularly in products tied closely to religious observance

Perceptions of existing risks can negatively impact the level of user trust in *online* applications.[16]. Risk can be defined as the likelihood that a product will not fulfil the benefits expected by consumers.[17]. Perceived risk can be defined as any action taken by a consumer that may result in unforeseen consequences, where some of those consequences may be adverse or unpleasant [18]. Perceived risk can be understood as an expectation of loss that is assessed based on an individual's subjective view. This assessment reflects personal perceptions of potential threats or losses that may arise by a decision.

Religiosity

Religiosity is a key determinant of an individual's behaviour, influencing consumer attitudes and actions through the depth of their understanding and commitment to their religious beliefs [19]. Religiosity refers to the level of individual belief and commitment to the absolute certainty and quality of truth inherent in religious teachings and scriptures. Religiosity plays an important role in encouraging individual commitment to behave in accordance by their religious values. These religious values, in turn, influence the way individuals evaluate products as well as in the decision-making process.[20]. The entire decision-making process, by product selection to buy execution, is highly dependent on an individual's commitment to religious values. Therefore, the greater an individual integrates religion into his or her identity, the more significant the impact it has on his or her values and behaviour.

The effect of religious moderation suggests that religiosity has an important role in moderating the connection among certain factors and desired outcomes. The following are the moderating effects of religiosity:

1. Religiosity has a positive influence on moderation, suggesting that a higher degree of religiosity can either amplify or mitigate the impact of the independent variable on the dependent variable.[21]. For example, in the context of Indonesian research, religiosity influences moderation by increasing religious intelligence, ideology, and public practices associated by religiosity.[22].
2. Religiosity is considered as a source, motivation, and guarantee of morality. This means that religion not only helps in the moral development of individuals, but also in the maintenance and improvement of morality in society[23]
3. Religiosity serves to moderate the connection among the use of traditional media and moral evaluation, implying that religious beliefs may shape the way individuals assess and assign value to moral behaviour based on the media they engage by.[24].

Halal Cosmetics

Halal cosmetics refer to care and beauty products that fulfil halal criteria in accordance by Islamic principles.[25]. This means that the ingredients used in these products do not contain haram elements, such as alcohol or ingredients derived by animals that are not slaughtered in accordance by Sharia law. In addition, the production process of halal cosmetics must also meet halal standards, including hygiene and separation by non-halal products, so that Muslim consumers can use them by the confidence that the products are in accordance by religious teachings.

Halal in product buys is a very important aspect for Muslim consumers, as it is directly related to compliance by religious teachings. The buy of halal products not only reflects compliance by Islamic law, but also contributes to the health and well-being of individuals. Consumers who choose halal products believe that they are avoiding potential health risks associated by unauthorised ingredients. In addition, halal is also often interpreted as a moral and ethical value, reflecting social and environmental responsibility in production and consumption [26]. Thus, halal not only serves as a religious guideline, but also as an indicator of product quality and safety for consumers.

Population and Sample

As reported in the 2022 edition of The Muslim 500 by The Royal Islamic Strategic Studies Centre (RISSC) or MABDA, Indonesia is home to approximately 231.06 million Muslims, representing 86.7% of the nation's total population. This figure accounts for 11.92% of the global Muslim population [27]. Furthermore, by 2014, the number of internet users in Indonesia had risen to 107 million, which constituted approximately 24% of the country's total population [28]. For survey research that employs multivariate statistical techniques, the suggested sample size typically ranges among 160 and 300 respondents [29]. This range of sample sizes is deemed sufficient to uphold the validity and reliability of the analyses, thereby ensuring that the study's results can be interpreted accurately.

The research employs a convenience sampling method, which was selected for its practicality and efficiency, enabling researchers to easily access respondents and gather data in a timely manner. The survey questionnaire was administered online and primarily distributed to Muslim women via communication platforms such as WhatsApp, Telegram, and Facebook. The respondent criteria were established to include individuals aged 18 or older, as this age is regarded as the threshold of maturity, where individuals are capable

of making independent decisions devoid of the need for parental advice or recommendations. Figure 1 illustrates a graph that outlines the demographic characteristics of the survey respondents, offering valuable insights into the profile of the participant population in this study.

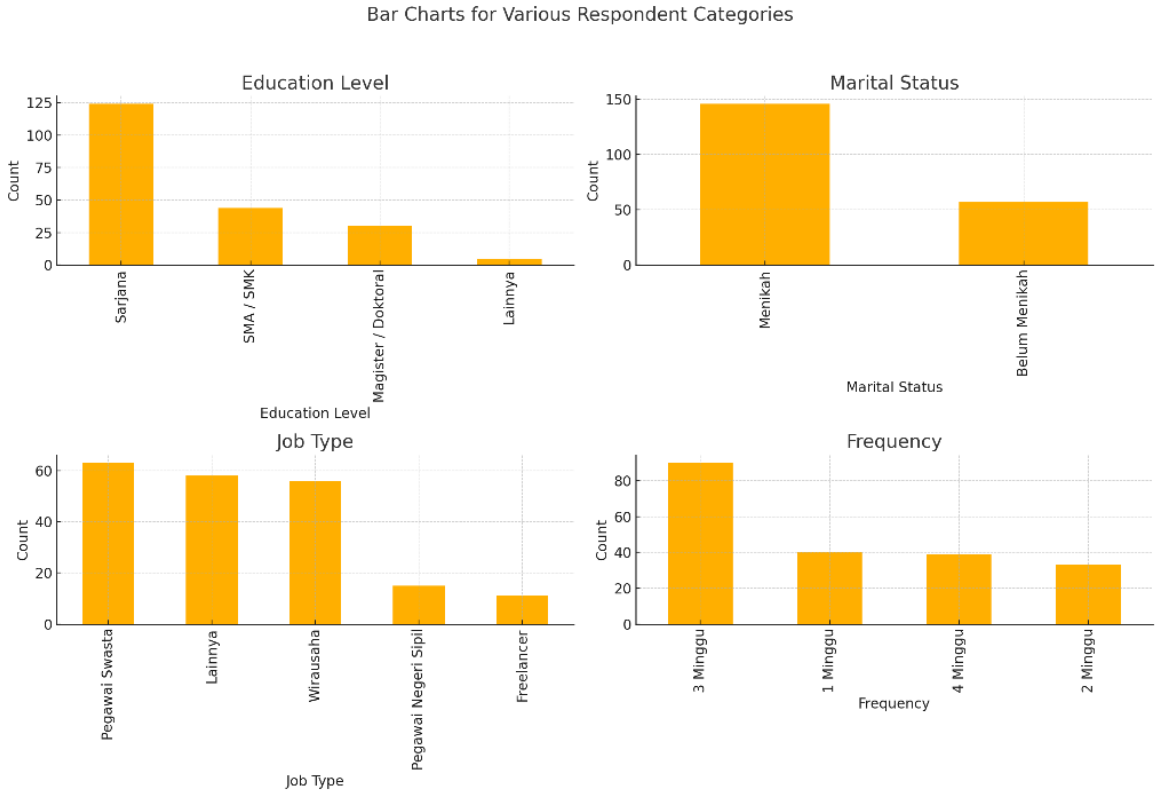

Figure 1 Respondent demographics

Based on the demographics of the respondents presented in Figure 1, the hypothesis can be formulated as follows:

H1 : Attitude (AT) has a significant influence on Interest To Buy (INT)
H2 : Perceived Benefit (PB) has a significant influence on INT
H3 : Perceived Benefit Control (PBC) has a significant effect on INT
H4 : Perceived Risk (PR) has a significant influence on INT
H5 : Religiolity (RL) has a significant influence on INT
H6 : Subjective Norm (SN) has a significant influence on INT
H7 : RL and AT have a significant effect on INT
H8 : RL and SN have a significant influence on INT
H9 : RL and PBC have a significant effect on INT
H10 : RL and PB have a significant influence on INT
H11 : RL and PR have a significant influence on INT

In line by the established hypothesis, a survey was designed and conducted, targeting Muslim respondents, particularly women, as the research sample. This choice was made based on the fact that the PLS-SEM method is suitable for prediction models, even by relatively small sample sizes, such as a minimum of 30 respondents.[30]. In this study, hypothesis testing was carried out using the Partial Least Squares (PLS) method, which serves as an alternative to Structural Equation Modelling (SEM) based on variance. One of the key advantages of PLS is that it does not rely on stringent assumptions and can be applied to relatively small sample sizes. The analysis was conducted using SmartPLS 4.0, a specialised programme designed specifically for estimating structural equations based on variance.

Results and Discussion

A total of 181 respondents took part in this study, by their demographic details presented in Figure 1. The majority of participants were aged between 25 and 35 years, and most had completed their undergraduate education. The respondent demographic shows a concentration of educated women aged 25–35, suggesting that this group may have greater digital literacy and brand awareness, particularly when engaging with halal-

certified products online. However, the study does not explore how these demographic factors—age, education, marital status—directly shape purchase intention. Further elaboration on these intersections could provide deeper insight into specific segments of Muslimah consumers and their behavioral tendencies Among the respondents, 146 were married, while the remaining individuals were unmarried. Approximately 31% of the respondents were employed in the private sector. The data analysis was carried out in two stages: descriptive analysis and PLS-SEM. The PLS-SEM method was employed to identify the key factors driving the construct, specifically those influencing the online buy of skincare and cosmetic products in this study. Analyses and testing were performed using SmartPLS 4 software, by both the measurement and structural models being assessed in order to meet the research objectives.

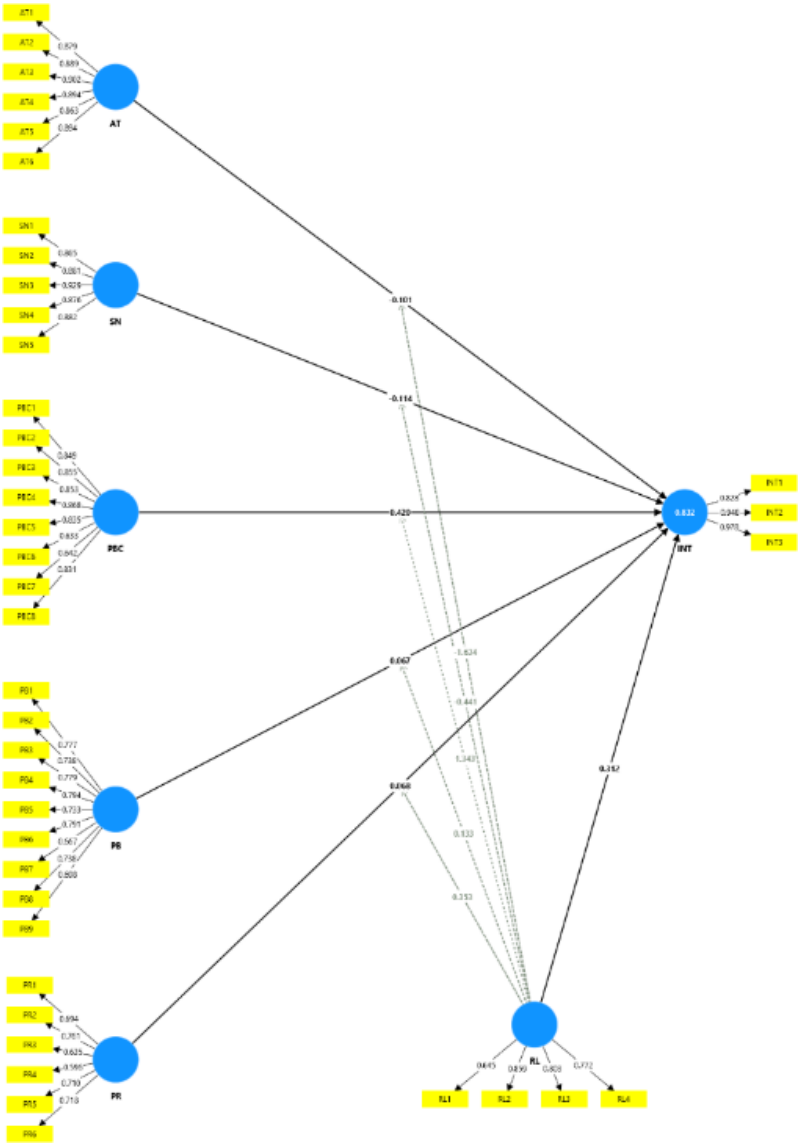

Figure 2 Structural model

The survey questionnaire was administered online and distributed to the general public, primarily via communication platforms such as WhatsApp, Telegram, and Facebook. Although the data collection was conducted via social media platforms such as WhatsApp, Telegram, and Facebook, the current study does not investigate the specific influence of these platforms on consumer behavior. Social media, as a marketing and engagement channel, plays a vital role in shaping consumer awareness and trust, particularly for halal products that often require certification visibility and user-generated reviews. Future research is encouraged to explore how exposure to halal cosmetic content across different social media platforms (e.g., influencers, product reviews, brand campaigns) impacts consumers' perceptions, attitudes, and purchase decisions.

Respondents were required to be at least 18 years old, as this age is recognised as the threshold of adulthood, where individuals are capable of making independent decisions devoid of the need for parental guidance. Furthermore, participants were also asked to provide information regarding the frequency of their online buys. The analysis results reveal that both attitude and subjective norm significantly influence the intention to buy halal skincare and cosmetic products online. This finding aligns by prior research, which has demonstrated that both attitude and subjective norm positively affect buy intentions for specific products. These outcomes suggest that Muslims are more inclined to select products that align by their religious beliefs. Moreover, respondents expressed the belief that purchasing halal skincare and cosmetic products online is a prudent decision, particularly as it allows them to avoid the need for physical shopping and direct, face-to-face interaction. The structural model developed in this study is illustrated in Figure 2.

Figure 2 shows that the *Attitude* (AT) construct is analysed using six indicators, namely AT1, AT2, AT3, AT4, AT5, and AT6. The *Subjective Norm* (SN) construct is analysed by five indicators, namely SN1, SN2, SN3, SN4, and SN5. Meanwhile, the *Perceived Behavioural Control* (PBC) construct was analysed using eight indicators, namely PBC1, PBC2, PBC3, PBC4, PBC5, PBC6, PBC7, and PBC8. This analysis aims to measure various relevant variables in the study.

Measurement Model Test Analysis (Outer Model)

Outer model test is a test to see whether the research tool can produce valid and reliable data, which is very important for good research. [31]. After obtaining the calculation results using SmartPLS 4.0, the next step is to analyse the connection among constructs (latent variables) and indicators by evaluating the outer model. This evaluation includes several important aspects, namely *convergent* validity, *discriminant* validity, reliability, AVE value and *communality*. This process aims to ensure that the model built has sufficient quality and is reliable in describing the connection among the variables studied.

1. Convergent Validity Test

The convergent validity measurement model illustrates the connection among the indicators and the latent variables. The results of the convergent validity test, which were conducted using SmartPLS 4.0, are presented in Table 1.

Table 1 Convergent validity test results

	AT	INT	PB	PBC	PR	RL	SN	RL x AT	RL x SN	RL x PBC	RL x PB	RL x PR
AT1	0.879											
AT2	0.889											
AT3	0.902											
AT4	0.894											
AT5	0.863											
AT6	0.894											
INT1		0.828										
INT2		0.948										
INT3		0.978										
PB1			0.777									
PB2			0.738									
PB3			0.779									
PB4			0.794									
PB5			0.733									
PB6			0.791									
PB7			0.667									
PB8			0.738									
PB9			0.698									
PBC1				0.849								
PBC2				0.855								
PBC3				0.853								
PBC4				0.868								
PBC5				0.835								
PBC6				0.633								
PBC7				0.642								
PBC8				0.831								
PR1					0.694							
PR2					0.761							
PR3					0.635							
PR4					0.596							
PR5					0.710							
PR6					0.718							
RL1						0.645						

	AT	INT	PB	PBC	PR	RL	SN	RL x AT	RL x SN	RL x PBC	RL x PB	RL x PR
RL2						0.859						
RL3						0.803						
RL4						0.772						
SN1							0.865					
SN2							0.881					
SN3							0.929					
SN4							0.876					
SN5							0.882					
RL x PBC										1.000		
RL x PB											1.000	
RL x AT								1.000				
RL x PR												1.000
RL x SN									1.000			

Table 1 displays the results of the convergent validity test, which includes the outer loading values. Since all statement items have factor loadings exceeding 0.50, it can be concluded that all items are convergent valid. Meanwhile, Table 2 presents the results of the discriminant validity measurement, conducted using SmartPLS 4.0..

2. Discriminant Validity Test

The discriminant validity test in this study consists of several measurements of *Heterotrait-monotrait Ratio* (HTMT), *Fornell - Lacker criterion*, and *Cross loading*.

Table 2 Heterotrait-monotrait Ratio (HTMT)

	AT	INT	PB	PBC	PR	RL	SN	RL x AT	RL x SN	RL x PCB	RL x PB	RL x PR
AT												
INT	0.807											
PB	0.687	0.632										
PBC	0.718	0.839	0.752									
PR	0.761	0.713	0.688	0.803								
RL	0.553	0.815	0.535	0.675	0.654							
SN	0.680	0.643	0.609	0.691	0.723	0.412						
RL x AT	0.117	0.118	0.117	0.199	0.305	0.471	0.079					
RL x SN	0.043	0.242	0.295	0.175	0.535	0.647	0.183	0.780				
RL x PBC	0.064	0.264	0.137	0.177	0.436	0.573	0.153	0.776	0.793			
RL x PB	0.059	0.307	0.306	0.139	0.541	0.504	0.302	0.667	0.893	0.702		
RL x PR	0.167	0.473	0.392	0.334	0.616	0.644	0.392	0.785	0.826	0.807	0.846	

Table 2 presents the results of the discriminant validity test, which was conducted using the heterotrait-monotrait ratio (HTMT). A connection among constructs is deemed to exhibit good discriminant validity if its value is below 0.90.

Table 3 *Fornell - Lacker criterion*

	AT	INT	PB	PBC	PR	RL	SN
AT	0.887						
INT	0.747	0.920					
PB	0.652	0.604	0.747				
PBC	0.959	0.759	0.705	0.801			
PR	0.663	0.782	0.594	0.685	0.688		
RL	0.479	0.695	0.482	0.564	0.818	0.774	
SN	0.653	0.605	0.551	0.651	0.791	0.363	0.887

Table 4 *Cross loading*

	AT	INT	PB	PBC	PR	RL	SN	RL x AT	RL x SN	RL x PBC	RL x PB	RL x PR
AT1	**0.879**	0.660	0.610	0.851	0.590	0.445	0.556	-0.198	-0.050	-0.079	-0.030	0.014
AT2	**0.889**	0.643	0.641	0.854	0.602	0.440	0.594	-0.108	0.008	0.003	-0.003	0.145
AT3	**0.902**	0.617	0.518	0.857	0.598	0.442	0.542	-0.162	0.036	-0.046	0.003	0.079
AT4	**0.894**	0.632	0.469	0.865	0.608	0.434	0.606	-0.040	0.045	0.073	0.110	0.191
AT5	**0.863**	0.668	0.616	0.841	0.492	0.318	0.533	-0.020	0.071	0.083	0.105	0.230
AT6	**0.894**	0.739	0.603	0.836	0.634	0.467	0.638	-0.079	0.012	0.047	0.052	0.206
INT1	0.684	**0.828**	0.652	0.734	0.530	0.492	0.425	0.144	0.207	0.239	0.223	0.345
INT2	0.683	**0.948**	0.478	0.671	0.796	0.696	0.613	0.090	0.213	0.234	0.304	0.449

	AT	INT	PB	PBC	PR	RL	SN	RL x AT	RL x SN	RL x PBC	RL x PB	RL x PR
INT3	0.701	**0.978**	0.561	0.703	0.808	0.711	0.614	0.075	0.215	0.220	0.279	0.447
PB1	0.625	0.452	**0.777**	0.677	0.460	0.453	0.400	0.100	0.099	0.147	0.010	0.190
PB2	0.641	0.442	**0.738**	0.669	0.352	0.303	0.358	0.026	0.096	0.075	-0.020	0.198
PB3	0.513	0.265	**0.779**	0.530	0.360	0.182	0.494	-0.016	0.144	0.008	0.156	0.201
PB4	0.428	0.322	**0.794**	0.436	0.402	0.229	0.504	-0.030	0.092	-0.009	0.181	0.222
PB5	0.422	0.340	**0.733**	0.439	0.537	0.273	0.664	-0.081	0.179	-0.033	0.260	0.274
PB6	0.491	0.515	**0.791**	0.560	0.552	0.410	0.535	-0.112	0.167	-0.054	0.259	0.266
PB7	0.481	0.621	**0.667**	0.547	0.445	0.440	0.282	0.145	0.257	0.225	0.216	0.361
PB8	0.292	0.393	**0.738**	0.318	0.484	0.417	0.342	0.142	0.514	0.197	0.604	0.476
PB9	0.411	0.459	**0.698**	0.443	0.335	0.348	0.247	0.097	0.344	0.129	0.256	0.327
PBC1	0.869	0.653	0.614	**0.849**	0.575	0.426	0.550	-0.181	-0.046	-0.073	-0.026	0.021
PBC2	0.887	0.638	0.635	**0.855**	0.601	0.437	0.593	-0.096	0.016	0.012	0.011	0.152
PBC3	0.898	0.618	0.513	**0.853**	0.601	0.446	0.546	-0.167	0.034	-0.050	-0.001	0.075
PBC4	0.896	0.638	0.467	**0.868**	0.616	0.441	0.614	-0.045	0.043	0.070	0.108	0.189
PBC5	0.854	0.657	0.604	**0.835**	0.484	0.310	0.526	-0.006	0.080	0.092	0.120	0.236
PBC6	0.463	0.542	0.458	**0.633**	0.546	0.649	0.475	0.302	0.305	0.309	0.228	0.507
PBC7	0.455	0.514	0.458	**0.642**	0.421	0.442	0.347	0.261	0.343	0.280	0.241	0.500
PBC8	0.721	0.580	0.753	**0.831**	0.530	0.508	0.484	0.158	0.203	0.194	0.116	0.356
PR1	0.396	0.438	0.405	0.443	**0.694**	0.306	0.870	0.077	0.214	0.158	0.329	0.372
PR2	0.458	0.633	0.424	0.479	**0.761**	0.860	0.353	0.170	0.316	0.262	0.250	0.285
PR3	0.238	0.517	0.305	0.288	**0.635**	0.803	0.174	0.526	0.601	0.612	0.509	0.623
PR4	0.327	0.445	0.275	0.342	**0.596**	0.772	0.093	0.277	0.512	0.375	0.365	0.319
PR5	0.598	0.589	0.572	0.619	**0.710**	0.305	0.866	-0.008	0.170	0.092	0.309	0.341
PR6	0.666	0.563	0.436	0.611	**0.718**	0.328	0.882	-0.046	0.126	0.081	0.200	0.293
RL1	0.462	0.536	0.463	0.631	0.539	**0.645**	0.474	0.283	0.320	0.289	0.243	0.507
RL2	0.431	0.622	0.423	0.458	0.737	**0.859**	0.338	0.191	0.320	0.276	0.249	0.296
RL3	0.238	0.517	0.305	0.288	0.635	**0.803**	0.174	0.526	0.601	0.612	0.509	0.623
RL4	0.327	0.445	0.275	0.342	0.596	**0.772**	0.093	0.277	0.512	0.375	0.365	0.319
SN1	0.588	0.581	0.570	0.609	0.705	0.308	**0.865**	-0.002	0.161	0.096	0.303	0.338
SN2	0.629	0.547	0.418	0.576	0.705	0.322	**0.881**	-0.052	0.121	0.073	0.191	0.282
SN3	0.718	0.609	0.567	0.677	0.728	0.325	**0.929**	-0.037	0.131	0.089	0.211	0.298
SN4	0.404	0.439	0.400	0.446	0.695	0.308	**0.876**	0.077	0.213	0.159	0.332	0.371
SN5	0.499	0.470	0.458	0.537	0.670	0.352	**0.882**	0.169	0.158	0.237	0.257	0.392
RL x PBC	0.017	0.250	0.119	0.118	0.372	0.494	0.141	0.976	0.793	1.000	0.702	0.807
RL x PB	0.045	0.294	0.286	0.116	0.465	0.434	0.288	0.667	0.893	0.702	1.000	0.846
RL x AT	-0.113	0.109	0.053	0.019	0.230	0.406	0.026	1.000	0.780	0.976	0.667	0.785
RL x PR	0.164	0.452	0.386	0.301	0.533	0.562	0.374	0.785	0.826	0.807	0.846	1.000
RL x SN	0.023	0.230	0.291	0.139	0.456	0.555	0.173	0.780	1.000	0.793	0.893	0.826

If the correlation among an indicator and its corresponding construct exceeds the correlation among the indicator and other constructs, all statement items can be considered valid in terms of discriminant validity. This suggests that the indicator explains the factor variable more effectively than it does other factors.

3. Reliability Test

The reliability test is designed to assess the consistency of a measurement. In this study, construct reliability was evaluated through both the composite reliability test and Cronbach's alpha. According to the results presented in Table 5, the construct reliability and validity tests, conducted using the SmartPLS 4.0 programme, indicate that the composite reliability and Cronbach's alpha values for all constructs meet the established criteria.

Table 5 Results of *Construct Reliability and Validity*

	Cronbach's Alpha	Composite Reliability
AT	0.946	0.957
INT	0.907	0.943
PB	0.903	0.919
PBC	0.918	0.934
PR	0.775	0.843
RL	0.772	0.855
SN	0.932	0.949

Based on the results shown in table 5, that all construct indicators are reliable or pass the reliability test. This can be seen by the *composite reliability* and *Cronbach's alpha* values for all constructs that are already good, which are above 0.70. by *Cronbach's alpha* and *composite reliability* values for all variables greater than 0.70, all variables can be considered reliable.

Structural Model Test Analysis (Inner Model)

The structural model was evaluated by assessing the R-square value, which serves as a key indicator of model fit. This analysis was carried out to examine the connections among exogenous and endogenous factors, as well as to assess the connection among the R-square and F-square values.

1. *R-Square*

R-Square quantifies the proportion of variation in the endogenous (affected) variable that can be accounted for by the exogenous (explanatory) variable. This measure is valuable for assessing whether a model is of high quality or contains flaws. The criteria used for this evaluation are as follows:

a. If the value $R^2 = 0.75 \rightarrow$ Substantial model (robust)
b. If the value $R^2 = 0.50 \rightarrow$ The model is moderate.
c. If the value $R^2 = 0.5 \rightarrow$ Weak (bad) model

Table 6 *R-Square*

	R-Square	Adjusted R-Square
INT	0.832	0.819

As shown in Table 6, this model demonstrates substantial or robust quality. An R-Square value exceeding 0.75 suggests that the model is capable of explaining a significant proportion of the variation in the endogenous variables. This implies that the exogenous predictor variables employed in the model effectively capture the connection by the INT variable, resulting in a robust and substantial model.

2. *F-Square*

Effect size (F-Square) is a metric used to assess the proportional influence of exogenous (influencing) variables on endogenous (influenced) variables. The criteria for evaluation are as follows:

a. If the value $F^2 = 0.02 \rightarrow$ A weak effect of the exogenous variables on the endogenous variables is indicated by the red colour.
b. If the value $F^2 = 0.15 \rightarrow$ A weak to moderate effect of the exogenous variables on the endogenous variables is represented by the black colour.
c. If the value $F^2 = 0.35 \rightarrow$ A robust influence of the exogenous variables on the endogenous variables is denoted by the green colour.

Table 7 *Effect Size* (F-Square)

	AT	INT	PB	PBC	PR	RL	SN	RL x AT	RL x SN	RL x PBC	RL x PB	RL x PR
AT		0.002										
INT												
PB		0.011										
PBC		0.029										
PR		0.001										
RL		0.035										
SN		0.006										
RL x AT		0.172										
RL x SN		0.141										
RL x PBC		0.160										
RL x PB		0.013										
RL x PR		0.147										

Table 7 shows that:

a. Effect of AT on INT: 0.002, Effect of PB on INT: 0.011, Effect of PR on INT: 0.001, Effect of SN on INT: 0.006, Effect of RL and PB on INT: 0.013. This effect shows that all of these variables have a small influence on the INT variable. by values below 0.15, these connections are considered practically insignificant and are marked in red.
b. Effect of PBC on INT: 0.029, Effect of RL on INT: 0.035, Effect of RL and SN on INT: 0.141, Effect of RL and PR on INT: 0.147. This effect shows a clearer influence, but is still classified as moderately weak. by values among 0.15 and 0.35, these connections are marked in black. This indicates that these variables have a better influence compared to the first group, but have not yet reached a robust level.

c. Effect of RL and AT on INT: 0.172, Effect of RL and PBC on INT: 0.160. Indicating this robust influence is above 0.15, by values closer to 0.35. This indicates that the two variable combinations have the most influence on the INT variable, which is marked in green.

Hypothesis Test

Hypothesis testing is carried out by analysing the t-statistic and corresponding probability values, by the aim of assessing the significance of the connection among the exogenous and endogenous components. If the t-count value is greater than or equal to the t-table value, the test is deemed significant, indicating that the connection among the endogenous and exogenous variables has a meaningful effect. Conversely, if the t-count does not meet this threshold, the connection is considered insignificant.[30]. For hypothesis testing at the 5% significance level, a t-statistic value of 1.96 is employed. Consequently, the hypothesis is rejected if the t-statistic is below 1.96, while it is accepted if the t-statistic exceeds 1.96.

Table 8 Hypothesis Test Results

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
AT → INT	-0.101	-0.134	0.232	0.435	0.664
PB → INT	0.067	0.075	0.059	1.135	0.257
PBC → INT	0.420	0.444	0.240	1.746	0.081
PR → INT	0.068	0.060	0.205	0.332	0.740
RL → INT	0.312	0.320	0.138	2.258	0.024
SN → INT	-0.114	-0.108	0.121	0.942	0.346
RL x AT → INT	-1.634	-1.620	0.397	4.111	0.000
RL x SN → INT	-0.441	-0.439	0.132	3.342	0.001
RL x PBC → INT	1.343	1.328	0.341	3.937	0.000
RL x PB → INT	0.133	0.128	0.133	0.997	0.319
RL x PR → INT	0.353	0.355	0.105	3.349	0.001

by table 8 the hypothesis test results show:

a. by regard to the AT variable, the t-statistic value recorded is 0.435, which falls below the critical value of 1.96, and the p-value is 0.664, exceeding the threshold of 0.05. As a result, H1 is not supported, suggesting that AT does not exert a significant impact on INT.
b. For the PB variable, the t-statistic is 1.135, which is again smaller than 1.96, and the p-value stands at 0.257, which is above the 0.05 significance level. Consequently, H2 is rejected, implying that PB does not significantly influence INT.
c. In the case of the PBC variable, the t-statistic value is 1.746, which is less than the critical value of 1.96, while the p-value is 0.081, which is also greater than 0.05. Therefore, H3 is rejected, indicating that PBC has no discernible effect on INT.
d. In the case of the PR variable, the t-statistic value is 0.332, which is below the critical threshold of 1.96, while the p-value is 0.740, surpassing the 0.05 significance level. As a result, H4 is rejected, suggesting that PR does not have a significant impact on INT.
e. For the RL variable, the t-statistic value obtained is 2.258, exceeding the critical value of 1.96, and the p-value is 0.024, which is below the 0.05 threshold. This leads to the acceptance of H5, indicating that RL has a statistically significant effect on INT.
f. Regarding the SN variable, the t-statistic value is 0.942, which is smaller than 1.96, and the p-value is 0.346, greater than the 0.05 significance level. Consequently, H6 is rejected, implying that SN does not significantly influence INT.
g. by respect to the RL and AT variables, the t-statistic value is 4.111, which exceeds 1.96, and the p-value is 0.000, which is well below the 0.05 level. Thus, H7 is accepted, indicating that both RL and AT have a significant effect on INT.
h. For the RL and SN variables, the t-statistic value is 3.342, which exceeds the critical value of 1.96, and the p-value is 0.001, falling below the 0.05 threshold. Consequently, H8 is accepted, signifying that both RL and SN significantly influence INT.
i. In the case of the RL and PBC variables, the t-statistic value is 3.937, which is greater than 1.96, and the p-value is 0.000, which is well below 0.05. As such, H9 is accepted, indicating that RL and PBC have a significant effect on INT.
j. by respect to the RL and PB variables, the t-statistic value is 0.997, which is below the critical value of 1.96, and the p-value is 0.319, exceeding the 0.05 significance level. Therefore, H10 is rejected, suggesting that RL and PB do not significantly affect INT.

k. Regarding the RL and PR variables, the t-statistic value is 3.349, which is greater than 1.96, and the p-value is 0.001, which is smaller than 0.05. Thus, H11 is accepted, demonstrating that RL and PR significantly affect INT.

The findings of this study suggest that multiple factors can influence consumers' intention to buy halal cosmetics and skincare products. Notably, religiosity was found to have a significant effect on the intention to buy these products. However, this particular outcome contrasts by the results of previous research, which has highlighted that factors such as customer satisfaction, product quality, and customer experience exert a positive and significant influence on the intention to buy halal cosmetics.[6]. The results of the study revealed that religiosity significantly influences the intention to buy halal cosmetics and skincare products. This implies that religious considerations may play a pivotal role in shaping consumer decisions regarding the buy of such products. Consumers by a high level of religiosity are more likely to prioritise halal considerations when making product choices, including those related to cosmetics and skincare. Understanding the impact of religiosity is therefore crucial for marketers, as it can inform the development of more targeted and effective marketing strategies, while also addressing the needs and preferences of consumers who place significant importance on adhering to religious principles, particularly when selecting beauty products.

The results concerning the moderating variables indicate that religiosity significantly moderates the connection among subjective norms and the intention to buy halal cosmetics and skincare online, whereas the other variables do not yield significant results. This implies that a higher level of religiosity may alter the influence of subjective norms on buy intention, potentially shifting the effect by positive to negative in the context of halal cosmetics and skincare products. One possible explanation for this is the respondents' concern regarding the composition of the ingredients and the production processes, particularly in relation to whether they align by religious values.

Conclusion

This study utilized a convenience sampling approach, primarily via online platforms, which may introduce sampling bias and limit the generalizability of the findings. The sample may overrepresent certain age groups, education levels, or tech-savvy individuals. Future studies should aim to include a more diverse demographic representation using stratified or probabilistic sampling to ensure broader applicability of the results. The findings of this study suggest that multiple factors influence Muslim women's intention to buy halal cosmetic products via e-commerce platforms. Specifically, the research revealed that religiosity exerts a significant impact on buy intention, as evidenced by a t-statistic value of 2.258 and a p-value of 0.024. This indicates that an increase in religiosity is associated by a robuster intention to buy halal products. Both Attitude and Subjective Norm were found to have no significant effect on buy intention, as indicated by t-statistics of 0.435 and 0.942, and corresponding p-values of 0.664 and 0.346. As a result, the hypotheses related to these two variables were rejected. Similarly, Perceived Behavioural Control and Perceived Risk also demonstrated no significant impact, by t-statistics of 1.746 and 0.332, and p-values of 0.081 and 0.740, respectively. The analysis results indicate that religiosity serves as a moderating variable, enhancing the connection among subjective norms and buy intention, as evidenced by a t-statistic of 3.342 and a p-value of 0.001. This suggests that subjective norms can exert a positive influence when supported by a high level of religiosity. Furthermore, the model demonstrates a commendable R-Square value of 0.832, signifying that it accounts for 83.2% of the variation in buy intention for halal cosmetic products, thus reflecting its considerable explanatory power. In conclusion, this study underscores the pivotal role of religiosity in shaping buy decisions for halal products and highlights the necessity for marketers to incorporate religious values into their strategies to effectively appeal to Muslimah consumers.

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