



ORIGINAL CONTRIBUTION

Comparison of Web and App Advertisement with Brand Identification Impact on Purchase Intention: Study on Pakistan's Personal Care Products Industry

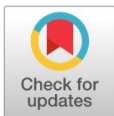
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Abstract— The main purpose of this study is to provide a comparison that describes the effect of web and app advertisements on the purchase intention of a consumer. As the web and app advertising sector grows, it's crucial to understand their effectiveness. This research investigates and equates web and app advertisements with reference to consumer behavior with variables of self-congruence, brand image, and brand identification and their impact on intention to purchase. The study also explains how web or app advertisements influence buyer intentions through the mediating role of brand identification. Literature based on the web and apps used in marketing, branding, and social identification are used to construct conceptual models. The research methodology is based on an online self-administered survey questionnaire. The sample used for analysis is 300 customers of personal care products consumers. Both Smart_PLS and SPSS are used for data analysis. The findings reveal significant and positive effects of both web and app advertisements on consumer behavior. Web advertisements have a stronger impact than app advertisements. Furthermore, the mediation of self-congruence brand image and brand identification is also found to be significant. These findings highlight the critical importance of digital advertising strategies in transforming consumer brand perceptions and buying intentions. This research provides valuable insights into the field of marketing, underlining the significance of web and app advertisements in transmuting consumer branding perceptions and purchase intentions

Index Terms— Mobile app ads, Mobile websites ads, Self-congruence, Brand image, Brand identification, Purchase intention

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Introduction

With the development of the internet towards the end of the 20th century, consumer purchasing patterns and business positions began to shift. Web advertisements initially appeared on Hotwired.com in 1994 for AT&T, marking the beginning of their use (Buchwitz, 2018). Businesses use digital platforms to advertise online and deliver marketing messages to their target audience. The internet is a unique platform for communication that combines various forms of advertising into one: online advertising (Tomyuk & Avdeeva, 2022). The internet gives marketers the ability to advertise across a variety of platforms, increasing the visibility of their goods and services (Husain, Ahmad, & Khan, 2022). More than ever, consumers are reliant on mobile devices. As noted by Graham and Wilder (2020), the success of online advertising depends on an advertiser's capacity to interact with customers.

Recent creative breakthroughs have boosted international companies' marketing campaigns to grab Generation Z's (digital natives) interest with narrative and real-time content. Prior research has mostly examined the efficacy of Internet advertising, with little regard

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for the effectiveness of alternative communication channels. In order to analyze the effects of each medium on customer harmony, brand image, brand recognition, and purchase intentions, this study will evaluate each one's efficacy independently. This study uses a framework based on the idea of Stimulus, Organism, and response to ascertain how consumers respond to advertisements (Laroche, Li, Richard, & Zhou, 2022), which explains how an advertisement functions as an exterior stimulus that affects a customer's internal psychology (Sharma, Fadahunsi, Abbas, & Pathak, 2022). The stimulus's result might be a person's intention to make a purchase (Belk, 1975; Roy, 2023).

The content of mobile applications possesses the capacity to exert a greater impact on users' purchase intentions and enhance brand recognition than online marketing. The advertising industry has been revolutionized by the advent of online advertising, which has been transformed into a significant revenue source for a variety of platforms and businesses. Branded mobile applications are those that can be downloaded onto a mobile device and that continuously illustrate a brand identity through the user experience. One may download these apps onto a smartphone. The name and logo of a smartphone app are one instance of a branded mobile application. Consumer equity and acquisition are both increased by branded apps. Customers' level of brand identification can be defined as the degree to which they regard a certain brand to be an important component of their own personal identity. Accordingly, Andrews et al. (2020) found that website advertising boosted brand recall and impressions. Huang et al. (2019) found that internet advertising boosts business reputation, helping customers feel competent and trustworthy. Website advertising can consolidate people's brand perceptions.

According to AO and NGUYEN (2020), internet advertising is a type of marketing that seeks to boost website traffic by sending promotional messages to particular audiences in order to attract such customers. This effort is done to boost website traffic. Increasing the volume of visitors to a website is, therefore, the aim of Internet advertising. The goal behind carrying out this operation is to boost the amount of traffic to the website. According to Kang and Namkung (2019), the most modern kind of brand communication tool that can increase customer involvement and brand experiences is branded mobile applications. This is so because more consumers can be reached by branded mobile applications. They emphasize, in particular, how this media has the ability to enhance both of these attributes. Academic researchers undertook a study to evaluate mobile application-based advertising. One marketing tactic used to promote mobile applications is called "self-congruity." The use of this strategy promotes the application. This word explains the phenomenon where people identify with a brand and have a closer relationship with it. This phenomenon is referred to as engagement with a brand. To this end, various strategies could be used. Two of these strategies are tailoring information to particular user preferences and focusing on certain demographics. In terms of click-through rates and user perception, native advertisements—which are made to appear like part of a website's content—were shown by Lin (2018) to be more successful than banner ads. Similar to web ads are banner ads. Native advertising is that which is made to appear to be part of the website's content. Banner advertising is made with the intention of identifying itself in order to stand out from the overall content of a website. Exposure to ads that aligned with one's own beliefs and values increased the likelihood that one would see the advertisement favorably, be more likely to buy the product, and feel more emotionally engaged in it. This was the situation whether or not the advertisement was a commercial. Some, on the other hand, saw ads that did not reflect who they were personally.

Advertising strategies such as behavioral targeting, location-based, programmatic, and social networking advertising all contribute to the improvement of consumer-brand interactions in this era of digital-first marketing. Brands have the ability to foster brand loyalty and evoke strong emotional responses from their target demographic through the practice of successfully establishing congruence (Escalas & Bettman, 2005). According to Alnawas and Altarifi (2016), psychological congruence refers to the objectives, ambitions, and self-concept of the intended audience in accordance with an advertisement.

Research questions

This study has the following questions:

- How do advertisements on mobile apps and websites influence self-congruity?
- How do advertisements on mobile apps and websites influence brand perception?
- How is brand identification affected by brand image and self-congruity?
- How do advertisements on mobile apps and websites influence consumer intentions towards purchases?

Research objectives

The study has the following objectives

- Analyze the influence of mobile apps and web advertisements on self-congruity.
- Examine the influence of brand and image identification on self-congruity.
- Analyze the effect of advertisements on websites and mobile apps on consumer purchase intention.

Every person gets information, organizes their cognitive processes, and responds to the information (Sun, Luo, Wang, & Fang, 2021). The two communication channels in this article stand in for the outside influences or stimuli that affect the customers' congruence and brand image process (brand identification), which in turn affects their behavioral responses (buy intention). This study aims to examine the connection between web and app ads and these essential characteristics by assessing empirical data and previous research studies. The goal is to provide marketers with actionable insights to boost customer purchase intention.

Literature Review and Hypothesis Development

Online advertising

Online advertising has transformed the advertising industry and become a substantial revenue stream for many platforms and businesses. According to an e-marketer projection, global digital ad spending is predicted to reach \$389.29 billion in 2025, indicating that online advertising will only grow in significance in the marketing landscape. Due to the sharp rise in internet usage, firms' current organizational structures have changed (Assija, Baliyan, & Jain, 2018; Hwang, 2018). Online advertising evolved dramatically over time, moving from simple forms such as email advertisements in the early 1990s (Li, 2007) to notable forms such as pop-ups, 3D visualization, banner ads, interstitials, revolutionary interactive, and game advertisements (Faber, Lee, & Nan, 2004).

Advertising on the internet is a kind of marketing approach that uses the internet to send promotional messages to the right target audience and increase website traffic (AO & NGUYEN, 2020). The ability to promote products across national boundaries is the main advantage of online advertising (Janssen, 2018). Online advertising uses a range of online paths, including websites, internet browsers, social media networks, mobile apps, email, and more, according to a previous study (Chaffey & Ellis-Chadwick, 2019).

Advertisement through branded applications

Branded mobile applications are those that can be downloaded on android device's and that continuously show a brand identity through the user experience, such as the app's name and logo (Bellman, Potter, Treleven-Hassard, Robinson, & Varan, 2011). Kang and Namkung (2019) say branded mobile apps are the latest brand communication medium that improves consumer engagement and brand experiences. Researchers examined app-based advertising's effectiveness. Branded apps promote and sell products on computers and mobile devices (. B. M. Huang Y., 2017). Applications with a brand's identity help build consumer relationships (Paul & Mas, 2020).

Branded apps boost consumer equity and acquisition (Ho & Chung, 2020). Semantic web technologies offer mobile marketing via branded applications, allowing for the broadcast of more relevant, acceptable, and personalized advertisements to the target consumer (Çiçek, Eren-Erdoğan, & Daştan, 2018). The rise of mobile applications is fostering a deep and long-lasting connection between brands and consumers (Ho & Chung, 2020). For example, Yang (2017) discovered that exposure to in-app marketing increased consumers' perceptions of the businesses being advertised.

According to Y. Z. . L. S. Huang Y. (2019), in-app advertising has a beneficial effect on consumers' judgements of a brand's competence and reliability. Mobile app marketing employs self-congruity—the phenomenon in which people link a company with themselves to improve brand perception by focusing on certain groups and adapting content to their preferences. This strategy promotes stronger brand links as well as positive sentiments.

H1a: Positive and significant influence of mobile app advertisements on self-congruity.

H1b: App addition significantly and favorably affects brand perception.

Advertising through mobile web

A web page, according to Chi (2020), is a document made up of organized content in HTML format or languages that an internet browser can handle. Many businesses have websites that promote their offerings, brand identity, and advertisements (Google Inc., 2019). Text, video, and static or animated images are frequently blended in online advertisements, which are a type of visual advertisement that is embedded in websites. Web advertisements, such as pop-ups, posters, and native ads, are critical for extending your audience across a variety of websites and content types.

They successfully draw in people who aren't always devoted to a single app or frequent multiple websites. Compared to app-specific marketing, mobile web adverts are more cost-effective and offer a wider audience for brand exposure (Bezbaruah & Brahmhatt, 2023). The efficacy of adverts and user behavior. Lin (2018) found that native advertisements, which seamlessly integrate into the content of the website, generated greater click-through rates and were perceived more favorably than traditional banner ads.

Online marketing strengthened customers' associations with corporate legitimacy and reliability, according to . B. M. Huang Y. (2017). Customer self-congruity is how well a person's self-image matches the brand's. Advertising on mobile websites influences self-congruity Liu, Zhang, and Zhang (2020) and Moedeen et al. (2024).

H2a: Self-congruity is positively and significantly impacted by web ads.

H2b: The image of a brand is positively and significantly impacted by web ads.

Self-congruity

In the era of digital-first marketing, behavioral targeting, location-based, programmatic, and social networking advertising all play a role in augmenting consumer-brand interactions through the provision of relevant and timely brand information to consumers. For achieving these objective social media platforms are utilized such as X, Meta Apps. According to De Vries and Carlson (2014), self-brand image congruence is the state in which a person's impression of a brand is consistent with their own opinions about it.

According to Sirgy et al. (1997), advertising on a web stream has a positive influence on consumers. Customers' opinions about the product or specific brand are crucial. Additionally, evaluate their propensity to make a purchase and their degree of loyalty to the specific brand. More optimistic moods, more plans to buy, and a closer bond with the goods were associated with self-congruent advertisements than with incongruent ones. Self-congruity, as noted by Chieng, Sharma, Kingshott, and Roy (2022), increases the likelihood of brand-consumer affinity and similarity.

H3: Brand identification is positively impacted by self-congruity.

Brand image

The term "brand" finds its origin in the obsolete Norwegian verb "brand," which had the connotation of "to burn." Early humans identified their animals using this method (Lee, Leung, & Zhang, 2000). A brand image, according to Satchapappichit (2020), is the perception that customers have of a certain product in their minds. Understanding a brand's image is essential to comprehending how consumers think about it (Plumeyer, Kottemann, Böger, & Decker, 2019). Furthermore, customers are more inclined to be content with the brand as a whole if they have favorable impressions or attitudes (Song, Hur, & Kim, 2012). Apart from being an effective promotional instrument, brand image has been crucial in distinguishing various companies (Park & Park, 2019). However, a weaker brand image or no brand at all indicated that consumers didn't trust the products (Hsieh, Lu, & Lu, 2018).

Furthermore, purchase intention is favorably influenced by brand image variables (Sari & Santika, 2017). How businesses employ online advertising formats, such as social media, websites, and search engine marketing, to market their goods and services has an impact on their brand image. The format of web advertisements will increase brand recognition, increasing the possibility that customers will buy products (Mahmood & Bashir, 2020). In fact, some researchers claim that how well a brand and its customers view each other affects the behavioral intentions of customers towards that brand (Jamal & Goode, 2001). As a result, a good brand image contributes to the growth of consumer acceptance and trust in a brand, which influences consumers' decisions to buy (Paul & Rosenbaum, 2020). As a result, they are able to express themselves and construct a symbolic understanding of who they are.

H3a: Brand identification is positively impacted by brand image.

Brand identification

Both the degree to which a client perceives their own personal self-image as linked with the brand's image and their mental state of emotions, feelings, and respect for belonging to a brand are considered forms of brand identification (Lam, Ahearne, Mullins, Hayati, & Schillewaert, 2013). Brand identification is the extent to which a customer considers a brand to be a significant part of their self-concept. Brand identification creates an emotional connection and sense of belonging (Keller & Lehmann, 2006). Albert, Merunka, and Valette-Florence (2008) say it depends on how much consumers relate to the brand's values, qualities, and personality and how much they see it as part of their identity.

(Peng, Chen, & Wen, 2014) looked at how emotional behavior of customers is influenced by brand identity. Their study indicates that when customers have a strong emotional connection with a brand, their intentions to make purchases are much affected. Emotional attachment encourages brand identity and influences consumers to choose a certain brand above competitors. looked at how brand equity affected customers' decisions to buy. They found that consumers are more inclined to make a purchase when they strongly identify with a brand (Liao, Dong, Luo, & Guo, 2021).

H4: Brand identification has a significant impact on purchase intention.

Purchase intention

Purchase intention refers to the likelihood that a client will either actually purchase or express a desire to purchase a particular item at some point in the future (Wu, Yeh, & Hsiao, 2011). Mobile app content has the potential to influence users' purchase intentions and increase brand recognition more effectively than online marketing. A purchase intent is the likelihood that a client will want to buy a

specific product or service the next time (Martins, Costa, Oliveira, Gonçalves, & Branco, 2019). The procedure a consumer goes through when hiring a service or making a purchase may be connected to their intention to make a purchase. According to earlier studies, there is a positive correlation between buy intent and actual purchases (Martins et al., 2019).

Even if an attractive website, online features, and website style may impact a customer's purpose and incentive to visit the website for product search and purchase, a larger buy intention is still feasible. Kulathunga and Athapaththu (2018). Purchase intention associations the buyer's interest with the potential to make a purchase (Cuong, 2020). The primary result that promotional efforts will eventually affect is purchase intention (Akturan, 2018). Previous studies have shown that customers pay attention to ads that are entertaining, instructive, and less annoying (Açan & Akkaya, 2020).

Consumers' trust in online advertisements is significantly influenced by a number of factors, including business reputation, customer feedback, and website quality (Ceyhan, 2019). Positive perceptions and purchase intentions are positively impacted by a strong brand image. Additionally, it strengthens consumer perceptions and brand trust, which raises the possibility of a purchase. Consumers' perception of a company's attributes has an influence on purchase intention (Jasin, 2022).

Theoretical framework

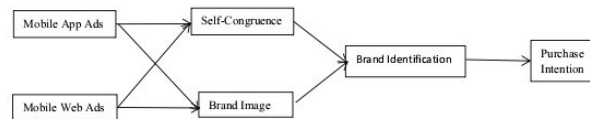


Fig. 1 Theoretical framework

Hypothesis

- H1a:** Positive and significant influence of mobile app advertisements on self-congruity.
- H1b:** App addition significantly and favorably affects brand perception.
- H2a:** Congruity is positively and significantly impacted by web ads.
- H2b:** The image of a brand is positively and significantly impacted by web ads.
- H3:** Brand identification is positively impacted by self-congruity.
- H3a:** Brand identification is positively impacted by brand image.
- H4:** Brand identification has a significant impact on purchase intention.
- H5:** Brand identification has a significant impact on purchase intention.
- H6a:** Mobile app ads have a positive and significant impact on purchase intention.
- H6b:** Mobile web ads have a positive and significant impact on purchase intention.

Research Methodology

We employed an online questionnaire as a research approach in this study. Fink (2003) defines a survey as a method for obtaining data, opinions, attitudes, and impressions from people about other people, events, and actions. The survey is the most widely used research strategy in social science research. The entire population of Pakistani consumers and users of personal care goods is the study's target population (Babbie, 2020). They have been exposed to digital marketing for personal care products, especially on mobile websites and applications. Simple random sampling is a fundamental statistical sampling technique, according to Kish (2005). This method gives every person an equal probability of getting sampled. The well-known Krejcie & Morgan's method from 1970 was utilized to determine the study's sample size. Based on these findings, it was determined that an adequate sample of 300 consumers or users of personal hygiene products would be appropriate for the research. This study's unit of analysis was individuals since it looked into how users of personal care products behaved. The online survey utilized a self-administered questionnaire to gather data, and the study was conducted in a non-contrived context.

Measurement

Park and Park (2019) did a study using the widely recognized Krejcie and Morgan's table from 1970, which was used to calculate the sample size for this study. Based on these findings, it was determined that a representative sample of 300 consumers or users of personal hygiene products would be appropriate for the research. The sample size of 300 is statistically significant for the analysis to ensure the

representative of the large population. The unit of analysis of this study was individuals because we investigated the behavior of personal care product customers. Data was collected through a self-administrated questionnaire by online survey, and the setting of this study is the non-contrived objective of examining several factors that impact consumer behavior regarding mobile applications and websites of personal care products. First, respondents were asked how often they used branded mobile services. This was done through a single item that had a scale with a midpoint of 0 and a range of -4 (not at all) to 4 (always). Second, self-congruence—a person's sense of being aligned with the brand—was assessed using a four-item scale that was modified from Sirgy et al. (1997) and used a five-point Likert scale. Thirdly, using revised items by Lian (2020) on a comparable Likert scale, a brand image, which represents the general image of the brand, was evaluated. Fourth, using four items modified from Kim, Han, and Park (2001), brand identification, which measures how much people identify with the brand, was assessed. Lastly, four items taken from scales created by Zhang, Wang, Liu, and Zhou (2023) was used to measure purchase intention, which represents customers' willingness to make a purchase. These thorough assessments sought to clarify the complex connections between consumer attitudes and actions about Personal Care brands on mobile platforms.

Data Analysis and Results

Table I
Distribution of employment

Items	Code	Frequency	Percentage
Gender	Male	151	50.3 %
	Female	149	49.7 %
Age(Years)	Up to 20 or less	25	8.3 %
	Up to 20-25	152	50.7 %
	Up to 26-30	95	31.7 %
	Up to 31-36	28	9.3 %
Income	Up to 100,000	15	5 %
	100,001-200,000	116	38.7 %
	100,001-200,000	115	38.3 %
	Above 500,000	54	18 %
Education	Intermediate	55	18.3%
	Bachelor's Degree	104	34.7%
	Master's Degree	232	43.7%
	Doctorate or Professional Degree	10	3.3%
Employment	full time	47	15.7%
	part-time	58	19.7%
	Unemployed	37	12.3%
	Self-employed	49	16.3%
	Student	106	53.3%
	Other	3	1.0%

Three hundred consumers of personal care product brands who frequently visit their websites and apps are the source of the data. There were 151 male and 149 female clients out of 300 responders. The following table provides detailed information about the age of the respondents. It reveals that 50.7% of respondents were in the 20–25 age, and 8.3% of respondents fall into the category of those who are 20 or under. Furthermore, 9.3% of respondents fell into the age bracket of 31–36.5%, while 31.7% of respondents were in the 26–30 age range. Additionally, 10% of respondents earned 100,000 rupees every month. Approximately 38.3% of respondents held a theology degree, whereas 38.7% of respondents earned between 100,000 and 200,000 Rupees every month. The data presented above shows the distribution of employment status among a sample of 300 individuals; of the respondents, 35.3% were students, making up the majority of the sample. Part-time workers made up 19.3% of the workforce, and full-time workers made up 15.7%. 16.3% of the sample consisted of self-employed individuals. Furthermore, 12.3% of the participants disclosed their unemployment, with the remaining 1.0% categorized as "Other."

Reliability and validity

Table II
Cronbach’s alpha and Average Variance Extracted (AVE)

Variables	Cronbach’s Alpha	Average Variance Extracted (AVE)
Usage Frequency of mobile website apps	.900	.778
Self-Congruence	.929	.737
Brand Image	.919	.741
Brand Identification	.823	.762
Purchase Intention	.905	.704

The dependability metric of internal consistency Cronbach's Alpha assesses how effectively the items on a scale or questionnaire represent the same core concept or idea. In this case, the Cronbach's Alpha score is 0.900, which is considered very good. It suggests that all four questions on the scale measure the same core concept very consistently. An AVE score of 778 means that an intrinsic variable accounts for 77.8% of the variance in the dependent variable. The self-congruity scale has a Cronbach Alpha rating of .929, which indicates good internal consistency. The underlying construct is whose Cronbach Alpha rating is on the brand image scale. 919 valid to acceptable accounts for roughly 73.7% of the variation in the indicators. The brand identification scale's reliability rating is .823, indicating a high degree of internal consistency in the tool. The scale purchase intention's Cronbach's Alpha value is .905 higher than the benchmark value of .7, indicating the scale's great reliability.

Measurement model

To assess the validity and reliability of the measurement model, parameters are taken from each latent variable, including the outer loads and the values of the Variation Inflation Factor (VIF). These parameters function as significant metrics. A number of 0.70 is considered desirable for outer loads, and values below 5 for VIF. All variables' variance inflation factors were less than 5, indicating the absence of collinearity, and the outer load values were greater than 0.70, which is required for accurate model estimation. These numbers represent the constructs' and the PLS-SEM measuring model's fitness. PLS-SEM estimation may be challenging due to colinearity (Hair Jr et al., 2021).

Table III
Measurement model

	App Add	Brand Identification	Brand Image	Purchase Intention	Self-Congruence	Web Add	(VIF)
AppAdd B1	0.885						2.530
AppAdd B2	0.878						2.530
BIdentification1		0.804					3.592
BIdentification2		0.889					3.993
BIdentification3		0.809					3.389
BIdentification4		0.915					4.151
BIdentification5		0.870					3.834
BrandImage1			0.871				3.446
BrandImage2			0.821				3.146
BrandImage3			0.892				3.145
BrandImage4			0.858				3.178
PI1				0.877			3.081
PI2				0.886			2.605
PI3				0.856			3.419
SC1					0.827		2.543
SC2					0.831		3.102
SC3					0.876		2.398
SC4					0.822		2.707
WebAddB1						0.715	1.697
WebAddB2						0.896	1.697

Heterotrait-Monotrait Ratio (HTMT)

The statistical HTMT ratio evaluates element discriminant reliability. Strong discriminant validity is when a study's constructs correlate with their own indications (monotrait) better than other constructions' components (heterotrait) (Henseler, Ringle, & Sarstedt, 2015).

All constructs have HTMT ratios < 0.85, showing discriminant validity.

Table IV
HTMT Ratio

Constructs	Ad-App	Brand Im	Brand Id	Purchase Int	Self-Congruence
Add App					
Brand Im	.630				
Brand Id	.750	.543			
Purchase Int	.817	.754	.665		
Self-congruence	.687	.675	.754	.652	
Web Add	.864	.759	.694	.734	.712

Fornell & Larcker criterion The Fornell & Larcker criterion can evaluate SEM component discriminant validity. A construct's correlation with others should be less than the extracted average variance's square root. Franke and Sarstedt (2019) say this distinguishes the construct's signals.

Table V
Fornell & Larcker criterion

Constructs	Ads. App	Brand Im	Brand Id	Purchase Int	Self-congruence	Web Ads.
Ads App	.882					
Brand Im	.937	.861				
Brand Id	.920	.859	.863			
Purchase Int	.930	.851	.934	.873		
Self-congruence	.818	.863	.839	.863	.839	
Web Ads	.888	.904	.907	.896	.753	.811

Direct and indirect effects

Web and app advertising predict brand image, self-congruence, brand recognition, and purchase intent, as seen in the table. The PLS-SEM output enables the simultaneous analysis of the direct, indirect, and total impacts of predictor, mediator, and outcome variables. This table compares the data with the theoretical framework's hypothesis. The app significantly improved self-congruence ($\beta = 0.608, p < 0.001$) and brand image ($\beta = 0.177, p < 0.001$). With a value of $\beta=0.280, p<0.001$, the predictor's influence on the study's purchase intention result is significant and favorable. Brand identification's beta value ($\beta = 0.999, p<0.001$) demonstrates a strong mediating influence between predictor and result. There is a significant association between the two constructs, as seen by its effect on intent to buy ($\beta = 0.543, p<0.002$) and beta, the value of self-congruence upon brand identification ($\beta = 0.453, p<0.001$). The study web adds second predictor also had a significant impact on the mediators and model outcomes, including the effect on the brand identification (beta value = 0.635, $p<0.001$), brand image ($\beta = 0.726, p<0.002$), and purchase intention ($\beta = 0.635, p< 0.002$).

Table VI
Direct and indirect effects

Effect of	Self-Congruence			Brand Image			Brand Identification			Purchase Intention		
	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
App add	.608		.608	.177		.177	.599		.599	.280		.280
SC							.453		.453	.543	.342	.542
BIM							.432		.432	.506	.602	.660
BID										.999	.351	
Webadd	.743		.743	.726			.635		.635	.634		.634

p<0.001

All of the suggested hypothesized (H1a, H1b, H2a, H3a, H3b, H4, H5a, & H5b) are supported by the study, which shows that app advertisements significantly improve brand image self-congruence, which leads to stronger brand identification as well as raised purchase intentions among consumers ($p<0.001$). Significantly, app advertisements account for 72% of the variance in brand recognition, 75% of the variance in brand image, 63.1% of the variance in self-congruence, and 91% of the variance in buy intention. Although app advertising is slightly less effective than web ads, both have a major influence on customer behavior and positively impact these aspects.

Hypothesized relationship

Table VII
Hypothesized relationship

Hypothesized Relationship	Results
H1a: App Ad Self-Congruence	Supported
H1b: App Add Brand Image	Supported
H2a: Web Add Self-Congruence	Supported
H2b: Web Add Brand Image	Supported
H3a: Self-Congruence Brand Identification	Supported
H3b: Brand Image Brand Identification	Supported
H4: Self-Congruence Brand Image Brand Identification	Supported
H5a: App Add Self-Congruence Brand Image Brand Identification Purchase Intention	Supported
H5b: Web Add Self-Congruence Brand Image Brand Identification Purchase Intention	Supported

Discussion

The study emphasizes how important apps and online ads are for improving customer behavior when it comes to personal care items. Enhancing self-congruence and brand image increases purchasing intentions. According to Lian (2020) and others, app ads closely fit users' identities and values, affecting self-congruence and brand identification. Holmes (2021) and Escalas and Bettman (2003) say interactive and engaging web commercials boost self-congruity and brand image. Digital media platforms emphasize digital marketing's broad impact on customer interaction and brand image. It boosts brand awareness and sales.

Managerial implications

The survey suggests that advertisers should allocate mobile site and app advertising spending better. User engagement, branding consistency, and platform-specific advertising may increase with the research. Mobile app push alerts and localization personalize adverts. By enabling data-driven decision-making and more precise group targeting, the insights may inspire tailored apps with deeper advertising interactivity. By analyzing the platform impact, marketers are able to employ mobile applications to develop tailored experiences that foster long-term relationships with customers and facilitate transactions in a timely manner. Advertising performance must be analyzed often to adjust to client preferences and keep campaigns current. These tactics can increase brand recognition and buying intent in Pakistan.

Limitations

Because of its small sample size, reliance on mobile devices, and potential impact of external factors like geography and intercultural variety, the study's findings on the Pakistani personal care items market may not apply to other markets or regions.

Future Recommendations

Understanding consumer interest and brand recognition is aided by conducting studies over an extended period of time. Combining quantitative and qualitative data makes it easier to look at designs for multimedia material, designs that are easy for people to use, and differences in geography and cultural factors. With the help of new technologies like AR and VR, mobile ads can work better. It is possible to find similarities and differences between studies done in different countries.

Conclusion

The primary objective of this study is to examine the impact that web and mobile application advertisements have on consumers' brand awareness and propensity to purchase specific product brands, with a particular emphasis on the personal care products market. More specifically, the study will concentrate on the market for personal care products. Specifically, the investigation will center on the personal care products market. The results of the present study indicate that this distinction is plausible; consequently, there are several significant ways in which the two forms of advertising can be distinguished. This is an outcome that can be attributed to the execution of the study. According to findings from scientific investigations, mobile applications not only influence customers' purchase intentions positively but also contribute to the improvement of consumers' brand recognition. Mobile applications generally provide more personalized and captivating user experiences compared to their desktop counterparts. This is due to the fact that mobile applications are intended for use. An explanation for why this is the case is provided below. Conversely, the continued visibility and accessibility of mobile online

advertisements contribute to an enhanced customer's ability to identify the brand. This represents an alternative perspective. Potentially advantageous to the Pakistani market for personal care products would be the strategic integration of the two media formats. This is a potentiality that warrants due consideration. It is imperative to consider the likelihood that a particular occurrence will transpire by applying the concept of probability.

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