Influence Of Online Apps In Increased Consumption Among Customers/ Youth

Jain James[1], Dr. V. Sudha[2]

[1] Research Scholar, Department of Commerce, KAHE, Coimbatore
[2] Research Guide, Department of Commerce, KAHE, Coimbatore

Abstract

This paper aims to examine the subject of this research – the effect of online shopping applications on the overconsumption of young people with corresponding buying behaviours, psychological and social factors, the effect of such advertising as targeted advertising and individual recommendations. In this respect, the study adopts a descriptive research approach to gather data from 261 respondents aged 18-30 using a convenient online survey conducted in the region of Kerala. In this case, stratified random sampling ensured that all the participants are sampled in each age category and geographical region. Thus, ANOVA and Friedman tests were used to analyse the variables. From the results, it can be ascertained that the youth are influenced a lot by apps involved in online shopping and perceptions of convenience, trust and satisfaction across educational background are metamorphosed. Related to this, psychological and social factors such as peer pressure concern, stress, and social media advertisements also help in controlling consumption whereas consumers having different employment statuses also show some variation in that regard. Among the analysed variables, consumption related to targeted advertising and suggestion of concrete products have been identified as playing a major role in influencing overall consumption; Further, consumers' satisfaction with the ads has been described as most decisive. Some of these features include the fact that the study involves a particular region/area and particular group while others may disagree. Also, data collected using self-reporting may also have biases. Nevertheless, it offers insights to marketers and app developer to market specific strategies according to the needs and wants of young consumers focusing on the educational and employment setting influencing their online shopping.

Keywords: Online apps, youth, consumption, customers, consumers

1. INTRODUCTION

The contemporary age can be characterized by numerous revolutions in different spheres of human life, and shift to buying things online through applications is the most powerful driving force among them. The availability of these applications has reinvented the ways and means of promoting products and services, thereby transforming the conventional approaches to shopping (Dute et al., 2016; Buchanan et al., 2018). One of the worst-hit categories is the youth which is not only digital-savvy, but also is equally presented in the online consumer pool. Therefore, the purpose of this research is to assess the role of availability and use of application in online shopping on the enhanced consumption levels amongst the youth along with identification of psychological and social factors facilitating this behaviour, appraisal of the effects of targeted advertisement and related suggestions (Quelly et al. , 2016; Berg, 2018; Holzinger et al. , 2010).

Over the past few years, mobile applications like Amazon, Flipkart, Alibaba, and other similar applications make the shopping of the people easier and far more comfortable than ever before (De Cock et al. , 2017). These platforms avail a wide range of products and services on the palm of a consumer's hand, giving the consumer an incredible shopping experience (Lu et al. , 2022). The use of the different applications is particularly embraced by the youth, these are, adept at the use of technology, and are known to have preferences for immediate

satisfaction. The possibility to shop anytime, anywhere and with the wide range of products available to choose from has impacted their buying behaviours (Conley et al., 2022). This research aims at establishing the extent to which these apps are influencing consumption patterns of the young customers by focusing on the aspect of increase in consumption.

Closely related to the nature of online shopping apps is the nature of psychological and social factors that lead to the consumption of goods by young people (Șchiopu et al., 2016). Hence, the psychological factors that include impulse buying, the need to fit in the society, and peer pressure cannot be undermined as influential factors affecting consumers'   behaviour. The need for immediacy in satisfying the desire of using shopping apps and the variety of products available with a short tap, swipe, or click causes young shoppers to make uninformed decisions. Further, the motive of fitting into a certain society as well as the pressure from fellow individuals is a great determinant of consumptions. Blogs and social networks, which are generally linked to applications for online shopping, only enhance such consequences because trends and preferences are quickly disseminated in cyberspace. The proximal aims of this study are to outline and analyse these psychological and social factors that can contribute to the reasons behind purchasing, ultimately increasing the consumption rate among youths through use of online apps (Szinay et al., 2020).

The other factor that needs to be pointed when analysing the impact of the popular online shopping apps is the effect that advertising with subsequent targeted recommendations has. Today's e-commerce websites and applications use features such as artificial intelligence and big data analysis to facilitate the shopping process. By assessing the users' behaviours, tendencies, and past purchases, these applications can offer very specific adverts and suggestions for each client (Zhou, 2019). This makes the shopping experience much more interesting and appealing as it is appropriately adapted to each buyer. But it poses privacy issues and questionable techniques of marketing and persuasion. This research will aim to factor the degree to which stakeholders in the youths' lives are able to use targeted advertising and recommendation to alter consumption patterns for the better while also identifying any negative effects of the practices.

Though convenient to use, the young consumers have incorporated these apps into their everyday lives (Schmuck, 2020). Since the shopping is done at the convenience of one's personal time, the barriers to consumption have been greatly eased (Chau et al., 2018). Moreover, the application of the secure payment gateways structures and user-friendly design has improved the shopping attractiveness to the youth. The specific objectives of this study are as follows: This research seeks to establish the impact of these technological changes as a way of understanding how these factors support the promotion of consumption among young customer through use of online apps.

The economic effects of having multiple numbers of peoples buying products have an impact from the use of online shopping applications. The youths as the population with increasing purchasing power are future markets to various industries. The changes, therefore, the upswing of consumption manifested by youth influence on the economy by demanding virtually all classes of goods and services (Grahlher et al. , 2024). Widening the topic of the economic effects caused by enhanced buying behaviour among the young generation, this research will look at how such online purchasing apps are fuelling economic growth and development. Furthermore, it shall assess the long-term effects of these consumption patterns placed on the environment with concerns to sustainability and use of resources.

Besides, it is equally vital to consider the social and cultural consequences of consumption through such applications (Weaver et al., 2013). Because the youth is always in-vogue and adopts new technologies within the shortest time possible, they have a function of influencing societal norm and culture. From the findings enlighted above, it is perceptive that different facets of young customers tend to have an impact on different sectors of societies such as fashion trends, lifestyle, and social relations (Hur et al., 2017). The purpose of this research is to study the general social and cultural implications of raise in consumption due to online applications, thereby, giving an insight into the future of the shopping applications.

The threats of the implication that consumption increases among youths would also be a major concern. The problems like overconsumption, owing of debt, and increase production and hence, consumption leading to environmental degradation as well are quite noticeable. The problem arises from convenience-store shopping because easy access to credit and buy-now-pay-later services from e-shops can put pressure on young clients (García-Fernández et al. , 2020). Also, the consequences, associated with consumption and emission of new goods and services, such as manufacture and disposal, are questionable regarding the environmental sustainability. These

possible negative outcomes will be discussed in this research thus offering an objective view on impact of online shopping applications to youths' consumerism. The extent to which these online shopping apps have contributed to this increase in the rate of consumption among the youths cannot be considered a simple one-dimensional problem and therefore requires a more elaborate analysis. This research expects to capture the specific part these apps have in influencing purchasing decisions, the psychological and social influences that enhance consumption and the influence of advance advertisement approaches such as targeted and recommended items. Therefore, through elaborating these aspects, the study aims to advance the knowledge of how the online shopping apps are changing the buying patterns in young customers. Furthermore, it is equally important to learn how these changes actually affect the wider economic, social, and cultural landscape, thus the research interest in presenting balanced analysis of young people's consumption encouraged and affected by the means of online shopping applications. In targeting consumers' engagement in the identified digital tendencies, the findings of this study are expected to be helpful for policymakers, marketers and researchers interested in considering the European consumer digitalisation experience in strategy making.

2. SIGNIFICANCE OF THE STUDY

Apparently, the advancement in the online shopping applications has greatly shifted the consumerism pattern especially among the youths. The intention of this research is to scan the current literature to obtain a broad perspective of these platforms' effects on consumers' purchasing decisions, and identify the psychological and sociological factors that are relevant, as well as assess the effects of ads and recommendations. Therefore, the importance of this study is located in the use of a number of methodologies for evaluating a phenomenon that cuts across marketing and consuming communities and has wider social impact on policy makers and other stakeholders. In the era of advanced technology, this research can therefore be described as important to contemporary society as it examines the influence of online shopping applications in changing purchasing behaviours among young people. This is because they are considered to be early adopters of products in their society, which makes youth an important segment for online retailers. This way, based on the impact which the mentioned applications have on this audience's purchasing decisions, the analysed businesses will be able to improve their approaches and adapt them to the needs of this significant target market. The findings of this research can clarify what features and functions are more appealing to consumers and thus improve the performance of the businesses by focusing on the aspects that are most likely to make people engage and purchase products. A study of the psychological and social motivations which has led to raise in consumption through such online applications among the young customers make it easier to understand the latent factors that are instigating young customers. Some of the areas of focus would be the level of comfort consumers feel when making purchases using the pocket devices, the need to have easy to navigate applications and sites, the factors of social pressure and influence. Thus, the research can identify the possibilities to develop more effective marketing concepts that appeal to the young customer's innate and extraneous need for motivations. Furthermore, it will assist the educators and the parents to direct the youths into practicing a better consumption of these products through gaining financial literacy as well as responsible usage of their earnings. The effect of targeted advertising and recommendations based on the results of their survey will be analysed in terms of their influence on youth consumption through apps on the Internet. Today, the practice of marketing targeting a specific consumer or audience is one of the main activities in the context of the accumulation of large databases and the use of high-tech solutions. Thus, evaluating the impact of these strategies on the buying decision process, the research will be helpful for marketers interested in enhancing their strategies. Knowledge of the effectiveness of the personalized recommendations can strengthen the firms' algorithms for enhancing the visibility of material that consumers might find appealing, thus increasing the chances of sales and satisfaction.

3. SCOPE OF THE STUDY

The target objectives of the research are to uncover the various ways that the online shopping apps have impacted the young customers' consumption behaviours. The use of smartphones and internet connection has made online shopping a way of life through which people, especially the youths, shop. Considering that this study targets the impact of psychological and social buying processes on purchasing on digital platforms where targeted adverting, good-recommendation systems play an essential role, it is pivotal to know this innovation's potential. The first research question of this study is therefore: In what ways do online shopping applications influence purchasing behaviour among young people? The features such as easy access, availability, and numerous choices have

considerably changed the shopping culture. This research is set to investigate the roles played by these online platforms in shaping consumer's decisions right from the time they begin to search for products to the time they make a purchase. Some of the relevant factors that need to be investigated include the layout, navigational buttons of the websites, probability of acquiring customers' feedback and ratings. The knowledge of these variables should help the study to establish which features are most influential in altering young consumers' purchasing behaviour. The second objective relies on understanding the psychological and social factors that would ensure higher consumption levels through the online applications with the youthful customers. The study will focus on challenges like the aspects of impulse buying, tendency to be influenced by others, and the need to conform to other people's standards and perceived norms as causes of higher spending. The inside story on psychological stimuli such as FOMO, limited time offers, and exclusivity will be examined. Furthermore, the interaction of such behaviours with the use of social media platforms such as Instagram for the promotion of such psyches by social media influencers and users will be investigated. Awareness of these factors is important in explaining the fundamental issues that explain consumption growth in this subpopulation. The third objective is to evaluate the impact of targeted advertising and personalized recommendations on the consumption patterns of youth using online apps. Online platforms leverage data analytics and machine learning algorithms to tailor advertisements and product suggestions to individual users. This research will assess how these personalized approaches affect the buying behaviour of young consumers. The study will consider the effectiveness of different types of targeted ads, the influence of recommendation algorithms, and the ethical implications of data usage. By evaluating these aspects, the study aims to provide a comprehensive understanding of the power of personalization in driving consumption.

4. PROBLEM STATEMENT

Today's society has changed a lot due to the advanced use of the internet, especially with the applications of shopping online and the use of social networks through which the youths majorly depend. The advanced technology has enhanced ease of access through the use of mobile phones and the internet through young people's purchase of the various products and services by a simply touching the screen of phones. Due to this transformation, the consumption levels among this group have gone up and several questions can then arise regarding the causes and effects of these behaviours. It is of particular interest to establish how the applications that are available on the internet have an impact on the increased consumption rate in youths, as it ultimately contributes to employing the knowledge in relevant marketing strategies for organizations, as well as in social transformations that different authorities and educators strive for.

Mobile applications for purchasing items have tremendously changed the behaviour of young consumers in the marketplace. The Hour I-day operation, friendly interfaces, extended option to compare the service and prices online have made such platforms highly preferred by the youth. This objective aims at understanding how these mentioned features influence the purchasing behaviours. It will focus on the degree to which openness and various options presented on these platforms affect the frequency and the amount of buying. Besides, it will explore ways that elements of game design incorporated in shopping including points' reward, flash sales, and time-bound offers have in influencing the purchase choices of young customers. By focusing on these aspects, the study expects to offer a comprehensive explanation into how use of online shopping applications influences young people's consumptive behaviours.

Thus, the psychological and social factors are significant in explaining the increase in consumption through the Internet among young people. This objective entails outlining and studying the psychological stimuli and social factors that cause consumers to spend more. The availability of immediate incentives that drive the purchasing process will also be investigated in the study; this will deal with the aspect of instant gratification, where the act of buying new products provides the gratification needed for repeated consumptions. It will also look at how social media and peer pressure influences expenditure, where visibility in particular as well as the ability to conform to fashion is a stimulus to spending. Moreover, the study will also explore the psychological impact of self-promotions and discounts, which have certain characteristics that leave the customers with the feeling that they are special and hence they should grab the offer before it is out. Thus, identifying these factors should help the research reveal what has pushed young consumers to shop online more actively.

One of the most effective and useful strategies that the online shopping apps uses is the advertising strategy and recommendation to related commodities. In fact, the objectives include the assessment of the impact the above-mentioned marketing strategies have on the consumption behaviours of young users. Nowadays, with the help of

data analysis and artificial intelligence an online platform can accurately and effectively trace the tendencies in users' behaviour and their preferences and consequently offer individualized content and recommendations. The research will also assess the effects on young consumers' decision-making by such targeted marketing promotions. This will determine whether the strategy of getting client-specific recommendations increases not only the number of purchases per client but also the average amount spent per order. In addition, the study will explore the ethical implication and risks that might be inherent in such practices as a result of infringement of the privacy of the clients, as well as the possibility of the use of manipulative marketing strategies. Noting the effects of specific advertising appeals, the study underpins the findings to offer better understanding about how such tactics support the general concept of promoting more consumption among youths.

 It is clearly the case that apps used for online shopping have resulted to increased consumption among youngsters and the issue can well be described as complicated in nature that needs detailed research. Still, by interrogating the part of shopping apps in choosing   behaviours, dissecting the psychological and social components motivating higher purchases through apps, and assessing the effectiveness of targeted ads and specific suggestions, this study intends to broaden understanding of the main actors of this phenomenon. The result of this research will be useful for various consumers like business organizations that want to enhance their marketing procedures, policymakers interested in the legal regulation of the digital marketplace, and educators who want to contribute to the change of the consumption patterns among young people. Lastly, having a clearer picture of the factors that affect the consumption of apps by the young customers will contribute in modelling healthier and more moderate consumption patterns amongst the customers in the Internet era.

5. OBJECTIVES OF THE STUDY

1. To investigate the role of online shopping apps in shaping purchasing behaviours among youth

2. To analyse the psychological and social factors driving increased consumption through online apps among young customers

3. To evaluate the impact of targeted advertising and personalized recommendations on the consumption patterns of youth using online apps

6. REVIEW OF LITERATURE

1. **Stavropoulos et al., 2021:** The continuous advancement of cutting-edge digital technology has led to a notable surge in the popularity of the Internet. This has led to a heated discussion over how to strike the right balance between the technology's many advantages and any possible drawbacks. Experts have concurred that a more thorough understanding of the ways in which individual distinctions—which are influenced by both other real-life experiences and the individual's unique experiences engaging with the medium—lead to distinct developmental trajectories is necessary in order to address these questions. The goals of this review are therefore as follows: (i) give a thorough overview of the variations in digital media applications, users, and usage; (ii) present the Cyber-Developmental Framework (CDF) as a comprehensive framework for understanding the individual differences in youth's use of digital media, both adaptively and maladaptively; (iii) define the cyber-component of this framework in relation to the digital context, users' activity within it, and their digital self-presence, which may influence their use of digital media; and (iv) condense the priorities and future directions via the lens of this CDF. In this context, the review focuses especially on how teenage consumption of digital media affects their psychological health. It is argued that the qualities of young people, their proximal and distal surroundings, and the particulars of the digital application(s) they use all interact to shape the trajectory they will take in their Internet usage. The study highlights the need for research focused on the evolution and context-related digital factors that impact young people's Internet use trajectories.

2. **Dute et al., 2016:** Fifteen research in all with twelve different applications were examined. Ten of these apps were used as tracking tools to assess nutritional intake or levels of physical activity. The other apps made use of a web-based platform to let users record and take pictures of their troublesome meals as well as to motivate them to be physically active. There was a clear description of the   behavioural theory that formed the basis for the creation of five applications. Techniques for behaviour modification that are widely used include encouraging self-monitoring of conduct and giving performance feedback. Applications are often used as parts of therapeutic procedures or to support educational activities, even if they can function independently. As early as age 10, users could be able to use programmes. There are

only four apps that were created with teenagers in mind. Every application was given a quick evaluation period and a narrow scope. Despite these technologies' great potential and youths' extensive use of them, there is a dearth of study on health promotion and applications for teenagers. Applications seem to be a potential technique for health promotion as a monitoring tool. Applications let users set goals, enhance self-monitoring, and become more aware of their surroundings. Even though three of the programs had social aspects, making them "social media," there wasn't much data to support their potential.

3. **Szinay et al., 2020:** A total of 2285 youth, including 1675 young adults and 610 adolescents between the ages of 13 and 17, completed the survey. Of them, 1645, or 72.0%, expressed worry about gaining weight for themselves or their friends. Afterwards, depending on their age and place of origin, 807 young people (376 adolescents and 431 young adults) were selected to take part in 12 online focus groups. 719 of the youth finished the sessions out of this group. Four main themes emerged from the analysis: (1) attitudes toward one's own weight; (2) views on lifestyle apps and desired content to prevent weight gain; (3) social media apps, lifestyle apps, and retention motivation; and (4) data usage, safety, and confidentiality. Young people are interested in evidence-based recommendations in programs that take their preferences into account. In six nations, concerns about weight growth and obesity are regularly and persistently expressed by young people. If young people's viewpoints are included in the program's content, they would be grateful for evidence-based mobile health initiatives.

4. **Zhou, 2019:** There are 26 capacity, opportunity, and motivational elements that affect a broad range of groups and behaviours when it comes to the adoption and engagement of health and well-being smartphone apps. Our recommendations may help legislators, creators of health app portals, and app developers optimize apps for health and well-being.

5. **Chau et al., 2018:** Sixteen publications found a nutrition-related intervention for young adults or adolescents that used social media. Interventions included social media, communication, education, health monitoring, customization, social support, and gamification. Of the 16 trials, 11 had at least one important clinical or   behavioural outcome linked to diet. Nutritional therapies including social media may be beneficial for adolescents and young adults. Only a few   researches that included social media were found. The majority of the identified research had positive outcomes. We found that most research used just basic social media characteristics, did not evaluate the effectiveness of individual social media elements, and did not distinguish between the effectiveness of social media and other distribution methods.

7. RESEARCH GAP

Despite extensive research on online shopping behaviours, significant gaps remain in understanding the specific influence of online shopping apps on increased consumption among youth. Existing studies often generalize digital consumer behaviour without isolating the unique attributes and impacts of mobile shopping applications. Furthermore, while the role of psychological and social factors in consumer behaviour is well-documented, there is limited research examining how these factors specifically drive increased consumption through online apps among young customers. Another critical gap is the lack of comprehensive analysis on the effectiveness of targeted advertising and personalized recommendations in shaping youth consumption patterns. Although these marketing strategies are widely used, their nuanced impact on different subgroups within the youth demographic remains underexplored. Furthermore, literature covering regional analysis especially in areas such as south India particularly in Kerala is considerably limited, and, thus the ability to assess how cultural and economic factors affect online shopping is also restricted. To establish effective and ethical marketing communication strategies for young consumer's digital consumption awareness thus needs to be filled in assessment.

8. RESEARCH METHODOLOGY

Research Design

Descriptive research method is used in the study since the aim of the study is to determine the extent of the impact of apps on the rise of consumption among youths in Kerala, thus serving to describe the phenomenon. This design is selected in order to gain rich knowledge on how such buying apps influence purchasing decisions, as well as the psychological and social factors that lead to a higher rate of consumption, and the consequences of the promoted advertisements and suggested offers on consumption.

Population

The target population for the present research includes youths of age group 18-30 years who are residing in Kerala and frequently accessing online shopping applications. This demographic is chosen because it occupies a vast proportion of the consumer population, and thus, the population most likely to be impacted by digital marketing.

Sampling

Sampling Method

Stratified random sample method is used so that each and every segment of the target population is covered to a satisfactory level. Based on the age and geographical areas, relatively different groups have been considered; four age groups, namely 18-21, 22-25, 26-30 years and two areas of Kerala namely urban and rural.

Sample Size

This study involved 261 participants of which the following variables have been analysed below. This size is decided in line with the assumed sample size that will provide adequate statistical power to establish the level of differences and interrelations within the variables under research. Sample sizes are also harmonized with the practical aspects like time, resources, and access to the respondents.

Data Collection

Information is gathered through survey questionnaire in a web-based format aimed at assessing the variables connected with the research aims. It has Likert scale questions and ranking questions that aim at eliciting the perceptions, attitudes, and behaviours of the respondents. The survey will be conducted through online post in Facebook, Twitter, LinkedIn, and other social media sites, emails and included specific group discussion forums commonly used by the youths in Kerala.

Ethical Considerations

Ethical considerations are strictly adhered to in this study to ensure the rights and well-being of the participants. Key ethical aspects include:

- **Informed Consent**: Participants are provided with detailed information about the study's purpose, procedures, potential risks, and benefits. Consent is obtained before participation.

- **Confidentiality**: All responses are kept confidential and used solely for research purposes. Personal identifiers are removed to ensure anonymity.

- **Voluntary Participation**: Participation in the study is voluntary, and respondents have the right to withdraw at any time without any consequences.

- **Data Security**: Data is securely stored and only accessible to the research team to protect participants' privacy.

9. DATA ANALYSIS AND INTERPRETATIONS

Surveys that are conducted in this process give out quantitative data that is statistically analysed depending on the objectives of the research. Main variables are tested using inferential statistics such as ANOVA test and Friedman test to establish the significant differences as well as relations between the variables that have been hypothesized.

ANALYSIS

This section provides the overall outcome of the study in accordance with research questions and objectives formulated at the beginning of the paper. The survey generates information from the respondents, which is subsequently subjected to statistical analysis addressing the study's objectives. Inferential statistics (ANOVA, Friedman test) are employed to test the hypotheses and identify significant differences and relationships among the variables. The analysis of the section includes the test results for the One-way ANOVA and Friedman test .and the result which is satisfying the objectives of the study. The detailed analysis is as follows;

Investigating the Role of Online Shopping Apps in Shaping Purchasing Behaviours among Youth

Hypothesis

Null Hypothesis (H0): There is no significant difference in the mean score on the variables related to investigating the role of online shopping apps in shaping purchasing behaviours among youth related to the education of the

respondents

Alternate Hypothesis (H1): There is a significant difference in the mean score on the variables related to investigating the role of online shopping apps in shaping purchasing behaviours among youth related to the education of the respondents

Table 1. Investigating the Role of Online Shopping Apps in Shaping Purchasing Behaviours among Youth

		Sum of Squares	df	Mean Square	F	Sig.
Online shopping apps influence my buying decisions.	Between Groups	116.077	4	29.019	30.276	.000
	Within Groups	245.371	256	.958		
	Total	361.448	260			
I prefer shopping through apps over physical stores.	Between Groups	166.874	4	41.719	54.900	.000
	Within Groups	194.536	256	.760		
	Total	361.410	260			
Online shopping apps save me time.	Between Groups	166.236	4	41.559	53.595	.000
	Within Groups	198.507	256	.775		
	Total	364.743	260			
I trust the reviews and ratings on shopping apps.	Between Groups	205.041	4	51.260	76.632	.000
	Within Groups	171.243	256	.669		
	Total	376.284	260			
Shopping apps offer better discounts than physical stores.	Between Groups	208.552	4	52.138	80.339	.000
	Within Groups	166.137	256	.649		
	Total	374.690	260			
I am satisfied with the variety of products available on apps.	Between Groups	183.089	4	45.772	68.072	.000
	Within Groups	172.137	256	.672		
	Total	355.226	260			
Online shopping apps provide a convenient shopping experience.	Between Groups	198.592	4	49.648	75.271	.000
	Within Groups	168.856	256	.660		
	Total	367.448	260			
I rely on online shopping apps for my regular purchases.	Between Groups	186.724	4	46.681	76.860	.000
	Within Groups	155.483	256	.607		

	Total	342.207	260			
I feel the need to buy more due to the ease of online shopping.	Between Groups	189.917	4	47.479	78.505	.000
	Within Groups	154.827	256	.605		
	Total	344.743	260			

The investigation into the role of online shopping apps in shaping purchasing behaviours among youth reveals significant findings based on the education of the respondents. The analysis, summarized in Table 1, shows that there are substantial differences in mean scores across various variables, indicating that the role of online shopping apps is perceived differently depending on the educational background of the youth. For instance, the variable "Online shopping apps influence my buying decisions" exhibits a significant difference (F = 30.276, p < 0.001), as does "I prefer shopping through apps over physical stores" (F = 54.900, p < 0.001). Similar significant differences are found in other variables such as "Online shopping apps save me time" (F = 53.595, p < 0.001), "I trust the reviews and ratings on shopping apps" (F = 76.632, p < 0.001), and "Shopping apps offer better discounts than physical stores" (F = 80.339, p < 0.001). The significant p-values for all variables (p < 0.001) indicate that the null hypothesis (H0), which states that there is no significant difference in the mean scores related to the role of online shopping apps based on the education of respondents, is rejected. These results highlight that educational background plays a crucial role in how youth perceive and interact with online shopping apps, affecting factors such as convenience, trust, time-saving, and satisfaction with product variety. Consequently, marketers and developers should consider these educational differences when designing and promoting online shopping platforms to better cater to the diverse needs and preferences of young consumers.

Analysing the Psychological and Social Factors Driving Increased Consumption through Online Apps among Young Customers

Hypothesis

Null Hypothesis (H0): There is no significant difference in the mean score on the variables related to the psychological and social factors driving increased consumption through online apps among young customers based on the employment status of the sample

Alternate Hypothesis (H1): There is a significant difference in the mean score on the variables related to the psychological and social factors driving increased consumption through online apps among young customers based on the employment status of the sample

Table 2. Analysing the Psychological and Social Factors Driving Increased Consumption through Online Apps among Young Customers

		Sum of Squares	df	Mean Square	F	Sig.
Peer pressure influences my online shopping habits.	Between Groups	153.592	4	38.398	52.829	.000
	Within Groups	186.070	256	.727		
	Total	339.663	260			
I shop online when I feel stressed or anxious.	Between Groups	132.040	4	33.010	44.848	.000
	Within Groups	188.427	256	.736		
	Total	320.467	260			
Social media advertisements impact	Between Groups	135.186	4	33.797	46.024	.000

my online purchasing decisions.	Within Groups	187.986	256	.734		
	Total	323.172	260			
I enjoy the excitement of receiving packages from online purchases.	Between Groups	132.040	4	33.010	44.848	.000
	Within Groups	188.427	256	.736		
	Total	320.467	260			
I am influenced by what my friends and family buy online.	Between Groups	55.387	4	13.847	9.283	.000
	Within Groups	381.839	256	1.492		
	Total	437.226	260			
The convenience of online shopping leads me to buy more.	Between Groups	61.851	4	15.463	10.379	.000
	Within Groups	381.398	256	1.490		
	Total	443.249	260			
I feel more satisfied with purchases made through online apps than in-store purchases.	Between Groups	57.491	4	14.373	9.638	.000
	Within Groups	381.751	256	1.491		
	Total	439.241	260			
I often buy items I don't need because they are recommended by online apps.	Between Groups	64.108	4	16.027	10.765	.000
	Within Groups	381.133	256	1.489		
	Total	445.241	260			
Sales and promotions on online apps make me purchase more than I planned.	Between Groups	64.613	4	16.153	12.229	.000
	Within Groups	338.146	256	1.321		
	Total	402.759	260			

The analysis of psychological and social factors driving increased consumption through online apps among young customers, as depicted in Table 2, reveals significant differences based on the employment status of the sample. Each psychological and social factor examined shows a highly significant F-value ($p < 0.001$), indicating strong variability in how these factors influence consumption patterns among employed and unemployed youth. Specifically, peer pressure (F = 52.829, p = 0.000) and social media advertisements (F = 46.024, p = 0.000) were found to have substantial impacts on purchasing decisions. Similarly, shopping online to alleviate stress (F = 44.848, p = 0.000) and the excitement of receiving packages (F = 44.848, p = 0.000) significantly drive consumption. Moreover, recommendations by friends and family (F = 9.283, p = 0.000), the convenience of online shopping (F = 10.379, p = 0.000), and promotions (F = 12.229, p = 0.000) are also influential factors. The significant F-values across all variables, coupled with low p-values, lead to the rejection of the null hypothesis, affirming that employment status significantly affects how these psychological and social factors influence online shopping behaviour among youth. This underscores the need for tailored marketing strategies that consider the employment context to effectively address and leverage these factors for increased consumption through online apps.

Evaluating the Impact of Targeted Advertising and Personalized Recommendations on the Consumption Patterns of Youth Using Online Apps

Hypothesis

Null Hypothesis (H0): There is no significant difference in the mean score on the variables related to the psychological and social factors driving increased consumption through online apps among young customers based on the employment status of the sample

Alternate Hypothesis (H1): There is a significant difference in the mean score on the variables related to the psychological and social factors driving increased consumption through online apps among young customers based on the employment status of the sample

Table 3. Mean ranks on the Evaluating the Impact of Targeted Advertising and Personalized Recommendations on the Consumption Patterns of Youth Using Online Apps

	Mean Rank
The relevance of targeted advertisements	5.54
Personalized recommendations based on previous purchases	5.60
Frequency of targeted advertisements	5.49
Visual appeal of personalized advertisements	5.22
Influence of targeted advertisements on impulse buying	5.37
Perceived trustworthiness of personalized recommendations	5.56
Effectiveness of targeted advertisements in introducing new products	5.49
Impact of personalized recommendations on purchase frequency	5.43
Satisfaction with purchases made based on targeted advertisements	5.62
The overall influence of targeted advertising and recommendations on spending	5.68

As for Table 1, Friedman test outcomes revealing the effect of targeted advertising and recommendation on the youth's consumption through online applications, the mean rank difference of the variables is statistically significant. This means that the approval which the youths have given to the fact that targeted advertising and recommendations affect them in a certain way differs depending on aspects. Particularly, the total effect of targeted ads and suggestions on expending (Mean Rank= 5. 68) overwhelms other metrics as the most crucial. By contrast, the aesthetic appeal of the specific advertisements (Mean Rank = 5. 22) is considered the least significant. These results indicate that despite the utility, credibility, and the timeliness of targeted advertisement and recommendation, the visual aspect does not impact youths' consumption. This insight can help the marketing in directing the energy to increasing the overall impact and pleasure received from the use of targeted promotion so as to facilitate young consumers' engagement and expenditure.

Table 4. Test statistics of Evaluating the Influence of Targeted Advertising and Individualized Recommendations through Internet Applications on the Consumption Behaviour of Young People

N	261
Chi-Square	51.015
df	9
Asymp. Sig.	.000
a. Friedman Test	

Table 4 reflects the test statistics, as a result of the Friedman test used to determine changes in the youths' consumption patterns as influenced by targeted advertising and recommendation apps. Hypothesis Two is that there will be a significant difference between the MSHS students' online and offline social interaction based on their gender, major, year in school, and whether they live on campus or off campus. With a sample of 261 respondents, the calculated values are a Chi-Square of 51. WE obtain a chi-square value of 015 with 9 degrees of freedom. These findings indicate that there are statistically significant differences in the mean ranks of the variables considered in the study. The null hypothesis, which posits that there is no significant difference in the mean scores across the various factors of targeted advertising and personalized recommendations, is rejected. This implies that youth perceive and respond to different elements of targeted advertising and personalized recommendations in varied ways. Some factors have a more substantial influence on their consumption patterns than others. Consequently, marketers and app developers should prioritize the most impactful factors, such as satisfaction with purchases and the overall influence on spending, to effectively tailor their strategies and enhance consumer engagement and spending among youth.

10. FINDINGS AND CONCLUSION

The study reveals significant differences in how online shopping apps influence the purchasing behaviours of youth based on their educational background. The results, summarized in Table 1, show that education plays a crucial role in shaping perceptions and behaviours related to online shopping. Key findings include:

- **Influence on Buying Decisions:** There is a significant difference in the mean scores for the statement "Online shopping apps influence my buying decisions" across different educational levels ($F = 30.276$, $p < 0.001$).

- **Preference for Shopping Through Apps:** Youth with different educational backgrounds exhibit varied preferences for shopping through apps over physical stores ($F = 54.900$, $p < 0.001$).

- **Time-Saving:** Perceptions of online shopping apps as time-saving tools differ significantly among youth with different educational qualifications ($F = 53.595$, $p < 0.001$).

- **Trust in Reviews and Ratings:** Trust levels in reviews and ratings on shopping apps vary significantly based on education ($F = 76.632$, $p < 0.001$).

- **Discounts and Variety:** Educational background influences perceptions of the discounts offered by online shopping apps ($F = 80.339$, $p < 0.001$) and satisfaction with the variety of products available ($F = 68.072$, $p < 0.001$).

- **Convenience and Regular Purchases:** The convenience of online shopping apps ($F = 75.271$, $p < 0.001$) and reliance on these apps for regular purchases ($F = 76.860$, $p < 0.001$) also show significant differences based on education.

- **Impulse Buying:** The ease of online shopping leading to more purchases is perceived differently among youth with various educational backgrounds ($F = 78.505$, $p < 0.001$).

These findings indicate that educational background significantly affects how youth perceive and interact with online shopping apps. Marketers and app developers should consider these differences to better cater to the diverse needs and preferences of young consumers.

Analysing the Psychological and Social Factors Driving Increased Consumption through Online Apps among Young Customers

The analysis reveals that employment status significantly influences the psychological and social factors driving increased consumption through online apps among youth. Key findings, as detailed in Table 2, include:

- **Peer Pressure and Social Media Influence:** Peer pressure (F = 52.829, p < 0.001) and social media advertisements (F = 46.024, p < 0.001) significantly impact online shopping habits.

- **Stress Relief and Excitement:** Shopping online as a means to alleviate stress (F = 44.848, p < 0.001) and the excitement of receiving packages (F = 44.848, p < 0.001) are strong drivers of consumption.

- **Influence of Friends and Family:** Recommendations from friends and family significantly affect online shopping behaviour (F = 9.283, p < 0.001).

- **Convenience and Satisfaction:** The convenience of online shopping (F = 10.379, p < 0.001) and satisfaction with online purchases (F = 9.638, p < 0.001) lead to increased consumption.

- **Impulse Buying and Promotions:** Recommendations by online apps often lead to buying unnecessary items (F = 10.765, p < 0.001), and sales promotions significantly increase unplanned purchases (F = 12.229, p < 0.001).

These results indicate that psychological and social factors significantly influence online shopping behaviours among youth, with employment status playing a critical role. Tailored marketing strategies that consider these factors can effectively drive increased consumption through online apps.

Evaluating the Impact of Targeted Advertising and Personalized Recommendations on the Consumption Patterns of Youth Using Online Apps

The study evaluates the impact of targeted advertising and personalized recommendations, revealing significant differences in how these factors influence youth consumption patterns. Key findings, summarized in Tables 3 and 4, include:

- **Overall Influence and Satisfaction:** The overall influence of targeted advertising and recommendations on spending is perceived as highly impactful (Mean Rank = 5.68), along with satisfaction with purchases based on targeted advertisements (Mean Rank = 5.62).

- **Relevance and Trustworthiness:** The relevance of targeted advertisements (Mean Rank = 5.54) and the perceived trustworthiness of personalized recommendations (Mean Rank = 5.56) are also significant factors.

- **Frequency and Visual Appeal:** The frequency of targeted advertisements (Mean Rank = 5.49) is impactful, whereas the visual appeal of personalized advertisements is considered the least influential (Mean Rank = 5.22).

- **Impulse Buying and New Products:** Targeted advertisements significantly influence impulse buying (Mean Rank = 5.37) and the introduction of new products (Mean Rank = 5.49).

- **Purchase Frequency:** Personalized recommendations significantly impact purchase frequency (Mean Rank = 5.43).

 The Friedman test results gave a Chi-Square equal to 51. 015, df = 9, p < 0. 001), thus respecting statistical significance of the variables' mean rank. From this, one infers that the youth have different attitudes towards the special types of advertising and recommendations, while certain elements cause greater shifts in consumption behaviour. Mobile application marketers and developers must focus on the most significant factors to improve youths' engagement and spending.

The study set out to investigate the influence of online apps on increased consumption among youth in Kerala, focusing on three primary objectives: the significance of applications through which people buy various products and services, the psychological and social motives that define escalating tendencies in consumption, and targeted advertising and individualized recommendations. Thus, the results of this study contribute to the understanding

of the impact of online shopping apps on young consumers' consumption and reveal rather crucial factors that should be taken into consideration by marketers and APP developers to facilitate appropriate appeal to the younger audience.

The evaluation carried out in the present study is to recognize that such apps related to online shopping do impact upon the buying decisions of the youths in Kerala. Consequently, it is possible to conclude that the selection and combination of these behaviours depend on the educational background. In the following subtopics, youth with different education levels' perception and interaction with the online shopping apps are presented differently. For instance, the youth with higher educational standards have confidence in using the reviews and ratings features of the shopping apps, and they prefer shopping through apps than physical stores. Regarding this demographic, they view online shopping as a convenient and time-saving method for purchasing products and therefore, will prefer online purchases. They also prefer apps because of better discounts and a variety of products that are available online. Thus, it can be concluded that the peculiarities identified should be taken into consideration by marketers with the purpose of creating targeted strategies for each particular educational group.

A further breakdown of the psychological and social aspects that influence the consumption proliferation through online application among young clients shows all the effects according to the employment status of the respondents. Young unemployed and employed have different consumption pattern that as a result of peer pressure reduction of stress through buying, Word of mouth from social network and ease of making purchases online. Youth who are employed, for instance, are typically more likely to be triggered by peer pressure and ads on social media hence deriving higher consumption levels. Other scenarios that promote impulse buying include the feeling that comes with receiving packages and the ease in getting goods through the internet. With reference to the insights provided in this work, it is recommended that the employment status of the target population should be taken into consideration in marketing strategies since psychological & social factors in relation to consumption cannot just be wished away.

Specifically, it revealed that promotion of consumer-related products and services through planned form of advertising and recommending relevant products to consumers, specifically through selected apps used by youths significantly influence the consumption rates of youths. Carrying out the Friedman test, it is possible to state that there are significant differences in the perceived values of the separate components of the targeted advertising and personalized recommendations by the youth. As of the details, the opinion of people regarding the influence of targeted advertising within the overall spending, and satisfaction with purchases made through this advertising technique can go a long way in the success of new products launched through such advertisements. On the flip side, the reception of tangible re ads is not as visually appealing as that of the personalized advertisements. In this respect, it could be argued that, as far as youth are concerned, views on the appropriateness and efficacy of targeted ads are possibly equalled by their aesthetic appeal. Marketers should therefore shift their efforts to improving the overall satisfaction and perceived efficacy of categorized ads in the hope of increasing the young consumers' attention and expenditure.

To increase efficiency of online shopping apps, marketers and app developers should ensure that the platforms being created and popularized are appropriate for the targeted customers' level of education. This includes giving product descriptions that are accurate and credible, giving discounts for educational institutions and coming up with promotions that focus on the efficiency of shopping online. Adjusting the advertisement appeals to the perceived self-identity of various groups in education can improve the chances of a website that sells consumables.

The employment status of the targeted audience must be determined as it will greatly affect the marketing mix to be implemented. Youth in employment are likely to be more influenced by peer pressure and social media advertising hence implying that campaign based on these elements will likely to elicit high participation and consumerism. Also, drawing on perceived self-employment, present consumption, and leisure, specific marketing promotion techniques that bring in stress relief and the joy of receiving packages can work wonders in making unemployed as well as employed youth give in to impulse buys.

Therefore, to ensure that the use of targeted advertising and personal recommendations bear the intended fruits, marketers should pay attention to variables that have a strong bearing on youth consumption. This also entails guaranteeing that the advertisements to be aired are legitimate, are relevant in the target market, and will create awareness of the new products. Recommendations should be formulated based on the purchases made by a particular customer in his or her other trips and should therefore be specific to the consumers' requirements. It is not as important for the ads to look good but how satisfactory they look and how effective the targeted ads would

appear to the clients to ensure that they engage and spend. As a result, this study ensured all participants' rights and safety through the guidelines of ethical practices. The participants provided their consent, the study did not divulge any identities, recruiters and participants had a choice not to participate in the study and all the data collected was stored securely. Each of these ethical issues is important when conducting research that is sensitive to the participants' rights and seeks to ensure their self-determination and privacy.

 Further research might be directed towards other demographic factors among the users as gender, income level and cultural influences in order to get a holistic opinion about the impact of the particular online shopping apps among the target population. Furthermore, there could be longitudinal studies focusing on the impact of the apps for online shopping on the consumption and psychological health in the long run. Awareness of these aspects can also help in the future to advance the development of concepts advertising, which will act as a constructive and fair.

 From the study it can be concluded that the results and understanding of this research offers a firm framework for analysing how these online shopping apps are impacting the young generation of Kerala. Education, employment, psychological, and social characteristics are among the influential factors in the manifestation of these behaviours. These findings would help marketers and app developers in the fashioning of specific tactics that would fit into the requirements of such younger consumers. Thus, if marketers pay much attention to increasing the appropriateness and impact of the conveyances of the ads and suggestions to buy the products and mature-thing more, they can boost the young generation's buying behaviours in the better educational or employment related backgrounds they make use of. It also establishes the need for more complex analysis of approaches that are adopted in digital marketing especially when it comes to the persuasion strategy.

11. FUTURE IMPLICATIONS

 Reflections on the future research and development of the subject of examination that is the effects of online apps in enhancing consumption patterns midst youths, several areas of a technological, psychological and even societal nature can be offered that would help to widen and enrich the further research of the said relationship. The following areas outline potential directions for future studies:

Longitudinal Studies

 Hence, future studies should employ cross-sectional research design to examine the impact that online shopping apps are likely to have on consumers' Consumption habits in the long run. Most importantly, keeping a longitudinal cohort of youth over several years would give information on the changes of purchasing behaviours considering the exposure they have to the online shopping apps and the advertisements. It could also discover whether early influences are strong or decay with time in the event the assessment was made at an early stage in their relations.

Cross-Cultural Comparisons

 Extending the research beyond the state of Kerala will help the researcher to get more varied picture of how the use of online shopping apps is helping the society. It is possible to compare the youth from the different regions or countries to observe that cultural differences in consumption, the relevance of advertising or marketing with the focus on specific preferences, and the effects of adopted suggestions can be quantified. This in turn will be useful for further studies in global marketing and development of applications that would meet user's cultural traits.

Technological Advancements

 Due to the big scope of this study, future studies should look into the effect that other advanced technologies like artificial intelligence, augmented reality and virtual reality will have on online shopping. For instance, how much are the AI-generated personalized recommendations strategies more efficient than conventional strategies? AR and VR as technologies that are used in online shopping, how do they affect consumer satisfaction and the probability of an online purchase being made? For this reason, it is crucial to identify these technological influences to enable marketers and developers to assist young consumers better.

Psychological and Emotional Factors

 Future research can expand on this study by exploring in detail the psychological and emotional aspects that

influence online shopping among the youth. Research propositions could be developed to analyse the impact of emotions on consumers' decisions to shop online like stress, loneliness, or presence of happiness. Also, investigating the effects of app design features such as colours, the ease of using the app interfaces, and interactive tools on learners' emotions and consumption behaviours may help app developers who seek to improve consumption experiences.

Social Media Integration

Since social media plays such a crucial role in the purchasing decisions of consumers then future research could examine the extent and nature of the integration of online shopping applications with such social media sites. In what ways do social media, therefore, influence others through engaging in influencer marketing, user-generated content, and social commerce features affect the purchases? Knowing the relationship between social media and online shopping app can inform the application of the 'best of both worlds' marketing that fully utilize both networks.

Behavioural Economics

Using principles of behavioural economics it is possible to get deeper insights into such shoppers' behaviours based on principles of the theory of choice. Future studies can look at the principles of behavioural economics such as, nudge, loss aversion and choice architecture when it comes to application used for online shopping. For example, how does the use of small pop-up notifications with mid-time or scarcity messages affect youth consumption habits? It is about such insights as to how persuasive app features promoting the necessary consumer habits can be designed.

Policy and Regulation

Since there is a growing trend of online shopping the effects, policies and regulations on the consumption pattern deserve to be understood. This study can inspire future research concerning the effects of consumer protection legislation, data protection policies, and advertising law on the buying behaviours of the clients on e-shops. Also, the research on ways to prevent problematic behaviours by regulating the use of freedoms can give best practices based on evaluations of the effectiveness of restrictions for decision-makers.

Sustainability and Ethical Consumption

As people become more conscious of the impact, they make on the environment and the society, future research can focus on the development of mobile applications for online shopping which encourage consumers to make green purchases. It is possible to also research how aspects such as the use of labels, ratings such as the environmental, the social, and the ethical impacts, and recommending which products are sustainable can affect youths' decisions. Knowledge of these dynamics may contribute to creating application that encourages customers' consumption and at the same time fosters a responsible and ethical consumption.

REFERENCES

1. Stavropoulos, V., Motti-Stefanidi, F., & Griffiths, M. D. (2021). Risks and opportunities for youth in the digital era. *European Psychologist*.
2. Dute, D. J., Bemelmans, W. J. E., & Breda, J. (2016). Using mobile apps to promote a healthy lifestyle among adolescents and students: a review of the theoretical basis and lessons learned. *JMIR mHealth and uHealth*, *4*(2), e3559.
3. Buchanan, L., Kelly, B., Yeatman, H., & Kariippanon, K. (2018). The effects of digital marketing of unhealthy commodities on young people: a systematic review. *Nutrients*, *10*(2), 148.
4. Quelly, S. B., Norris, A. E., & DiPietro, J. L. (2016). Impact of mobile apps to combat obesity in children and adolescents: a systematic literature review. *Journal for Specialists in Pediatric Nursing*, *21*(1), 5-17.
5. Berg, L. (2018). Young consumers in the digital era: The selfie effect. *International Journal of Consumer Studies*, *42*(4), 379-388.
6. Holzinger, A., Dorner, S., Födinger, M., Valdez, A. C., & Ziefle, M. (2010). Chances of increasing youth health awareness through mobile wellness applications. In *HCI in Work and Learning, Life and Leisure: 6th Symposium of the Workgroup Human-Computer Interaction and Usability Engineering, USAB 2010, Klagenfurt, Austria, November 4-5, 2010. Proceedings 6* (pp. 71-81). Springer Berlin Heidelberg.

7. De Cock, N., Vangeel, J., Lachat, C., Beullens, K., Vervoort, L., Goossens, L., ... & Van Lippevelde, W. (2017). Use of fitness and nutrition apps: associations with body mass index, snacking, and drinking habits in adolescents. *JMIR mHealth and uHealth*, *5*(4), e6005.

8. Lu, L., Liu, M., Ge, B., Bai, Z., & Liu, Z. (2022). Adolescent addiction to short video applications in the mobile internet era. *Frontiers in psychology*, *13*, 893599.

9. Conley, C. S., Raposa, E. B., Bartolotta, K., Broner, S. E., Hareli, M., Forbes, N., ... & Assink, M. (2022). The impact of mobile technology-delivered interventions on youth well-being: Systematic review and 3-level meta-analysis. *JMIR Mental Health*, *9*(7), e34254.

10. Șchiopu, A. F., Pădurean, A. M., Țală, M. L., & Nica, A. M. (2016). The influence of new technologies on tourism consumption behavior of the millennials. *Amfiteatru Economic Journal*, *18*(Special Issue No. 10), 829-846.

11. Szinay, D., Jones, A., Chadborn, T., Brown, J., & Naughton, F. (2020). Influences on the uptake of and engagement with health and well-being smartphone apps: systematic review. *Journal of medical Internet research*, *22*(5), e17572.

12. Zhou, B. (2019). Fear of missing out, feeling of acceleration, and being permanently online: a survey study of university students' use of mobile apps in China. *Chinese Journal of Communication*, *12*(1), 66-83.

13. Schmuck, D. (2020). Does digital detox work? Exploring the role of digital detox applications for problematic smartphone use and well-being of young adults using multigroup analysis. *Cyberpsychology, Behavior, and Social Networking*, *23*(8), 526-532.

14. Grahlher, K., Morgenstern, M., Pietsch, B., Gomes de Matos, E., Rossa, M., Lochbühler, K., ... & Arnaud, N. (2024). Mobile App Intervention to Reduce Substance Use, Gambling, and Digital Media Use in Vocational School Students: Exploratory Analysis of the Intervention Arm of a Randomized Controlled Trial. *JMIR mHealth and uHealth*, *12*, e51307.

15. Weaver, E. R., Horyniak, D. R., Jenkinson, R., Dietze, P., & Lim, M. S. (2013). "Let's get wasted!" and other apps: characteristics, acceptability, and use of alcohol-related smartphone applications. *JMIR mHealth and uHealth*, *1*(1), e2709.

16. García-Fernández, J., Gálvez-Ruiz, P., Grimaldi-Puyana, M., Angosto, S., Fernández-Gavira, J., & Bohórquez, M. R. (2020). The promotion of physical activity from digital services: Influence of e-lifestyles on intention to use fitness apps. *International Journal of Environmental Research and Public Health*, *17*(18), 6839.

17. Hur, H. J., Lee, H. K., & Choo, H. J. (2017). Understanding usage intention in innovative mobile app service: Comparison between millennial and mature consumers. *Computers in human behavior*, *73*, 353-361.

18. Chau, M. M., Burgermaster, M., & Mamykina, L. (2018). The use of social media in nutrition interventions for adolescents and young adults—A systematic review. *International journal of medical informatics*, *120*, 77-91.