

# Comparative Analysis of the Impact of Advergaming on Cultural Outcomes in the United Kingdom and Saudi Arabia

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## Abstract

Advergaming represents a new advertising concept that uses internet technology to implement viral marketing campaigns. This study aimed to conduct a comparative analysis of the impact of advergaming on cultural outcomes. This cross-cultural study investigated the impact of advergaming on the cultural differences and similarities between the United Kingdom and Saudi Arabia. Participants from both Saudi Arabia and the United Kingdom were invited to complete a questionnaire. The sample consisted of male and female participants from all age groups. According to the findings, most of the Saudi Arabian respondents responded neutrally to considering cultural values within advergaming. By contrast, the majority of the United Kingdom participants agreed that they were indifferent to the culture projected by the advergaming characters. The findings also confirm the implementation of better strategies for games that consider the different cultural aspects of different countries. Notably, these findings suggest that visual familiarity can influence consumer behavior across cultures. We expect our findings to be used in future research that examines cultural outcomes in advergaming.

**Keywords:** advergaming, cultural outcomes, Saudi Arabia, UK, comparative analysis

## 1. Introduction

Culture frames the way people behave. As a system of patterns, culture is what differentiates the people of one group from those in another. Rapid increases in the internet and technology have made people more familiar with digital media, triggering them to spend a lot of time in multimedia environments (Moore & Rideout, 2007). Children are considered potential customers since they can influence purchase decisions made by parents or family (Buckingham, 2000; Calvert, 2008), causing more and more companies to use techniques that blur the boundaries between advertising, entertainment, and information to get their attention (Raney et al., 2003).

One of the most widely used marketing media is advergaming. Advergaming or advertising game is branded entertainment that displays advertising messages, logos, and characters in a game format (Mallinckrodt & Mizerski, 2007). Advergaming is a game designed as a media campaign with an emphasis on aspects of entertainment (Gross, 2010; Terlutter & Capella, 2013; Youn & Lee, 2012). In advergaming, the brand or product is central to the game; thus, the message conveyed is integrated into the gaming experience (Cauberghe & De Pelsmacker, 2010). In general, the use of advergaming for children is intended to make them learn about the products and the companies (Bogost, 2007) and the result is expected to form a positive attitude towards the brand and to enhance their intention to purchase the advertised product (Waiguny, Nelson & Terlutter, 2012). Previous research has shown that members from different cultures differ in their attitudes toward advergaming. This is mediated by the integration of the brand into the game. However, research on the role of advergaming within a cultural paradigm is still limited. Understanding culture is crucial in advertising and marketing research since people have different values that mediate consumer behavior. For instance, symbols, heroes, and rituals compose cultural values that are often mediated by marketing communications. This study explores the different impacts of advergaming on brand and cultural outcomes in the United Kingdom (UK) and Saudi Arabia (SA). The analysis of the survey was conducted with participants from the two countries, comparing the findings and

evaluating them in terms of their agreement or disagreement with the previous literature, and highlighting new elements. Therefore, the main objectives of this study are to:

- Explore the connection between advergame experience and consumer behavior across cultures.
- Compare the attitudes of Arab and British consumers regarding advergames.
- Understand the main principles of advergame design that could be used to influence the advergame experience and brand attitudes of Arab and British consumers.

The study formulated two hypotheses:

H0: There is no difference in the cultural dimensions between the two nationalities.

H1: There is a significant difference in the cultural dimensions between the two nationalities.

## 2. Literature Review

According to the literature, advertising through games can be done in two ways: in-game advertising (Ramzy Abdulhalim & Mashaly, 2019) or creating games using characters with brand-related markers (Al-Meshal, 2020; Wise et al., 2008). Some other aspects of games that deliver advertising material include the design, the user's experience with the game, the type of message/advertisement placement, and the categories of products or brands advertised.

According to the Entertainment Marketing Association (2004), all types of brand placement, such as TV, movies, and in-game advertising, share some similarities. All these types are marketing communication methods used to build brand equity and awareness, as well as to increase profits. A prominent similarity between the previous types is the entertainment factor. While watching TV or playing a game, consumers enjoy watching brands (Chen & Wells, 1999). Entertainment fulfills the audience's need for pleasure, escapism, and diversion. It can enhance online consumers' experience. Further, it is the main communication exchange driver in gratifications research. According to Lee et al. (2017), perceived enjoyment and interaction may affect people's intention to play online games. The study by Lee et al. (2017) presented an extension of the theory of planned behavior to predict how prior experience and perceived enjoyment explain the intention to play online games. A proposed model based on the technology acceptance model was developed to examine perceived enjoyment. Therefore, the proposed model shows that players have enjoyment reasons and a high intention to play interactive online games. A previous study found a positive correlation between entertainment and attitudes toward online advertising (Ferrazzi, Chen & Li, 2003).

Experience with the game is mainly concerned with the flow and other factors associated with user engagement. Several authors have examined the concept of flow (Catalán, Martínez & Wallace, 2019; Gurău, 2008; Hernandez, 2011). Chia-Wen et al. (2017) investigated the effects of game-brand congruity and flow in racing advergames to explore the influence of embedded brands. The results showed that game-brand congruity and flow impacted brand personality in games. The embedded brands that were congruent with the game negatively influenced brand personality. Gamers who exhibited high flow in the advergame gave positive feedback on brand personality; gamers who exhibited low flow in the advergame gave negative feedback on brand personality. Catalán, Martínez, and Wallace, (2019) defined flow as a measure of total enjoyment. Based on these views and definitions, the concept of flow is characterized by a high level of control and skill, telepresence, focused attention, and involvement in the game, as well as a high degree of challenge, playfulness, concentration levels, and arousal (Catalán, Martínez & Wallace, 2019; Vashisht et al., 2020). Research on consumer behavior across cultures has mainly focused on nuances between individualistic and collectivist cultures, particularly comparing Eastern and Western nations (Shavitt, Lee & Torelli, 2008). Studies of advergames across cultures show that players from different regions have a more favorable attitude towards advergames that are more negatively viewed in developed nations (Hernandez, 2011). This indicates that if people from different cultures have different attitudes towards an advergame, they may be influenced by their cultural values and the design of the advergame. The field of human-computer interaction has given a lot of attention to cultural issues within this context which could be represented by several strands such as internationalization (Heimgärtner, 2013), globalization (Marcus & Gould, 2000), naturalization (Bourges-Waldegg, 2021), and localization (Chen, 2017). What these strands have in common is the concept that while designing interfaces and interactive systems for people from different cultures, it is necessary to adapt aspects of the system to suit the user's cultural background. This suggests and supports the idea that the concept of "one-size-fits-all" is not suitable in a global world. Hence, adaptations of content and symbolic meaning should be considered within the interactive system design. By contrast, there are differences between these strands, exhibited by the level of adaptation. Culturalisation refers to different versions of systems, whereas internationalization is about sharing a common system between

cultures (Bourges-Waldegg, 2021). In other words, culture and human–computer interaction create different levels of adaptation. Often, these adaptations occur in representational dimensions, such as colors, icons, and symbols; however, the challenge is to understand which representations should be changed to suit one’s culture (Bourges-Waldegg, 2021). Hence, representations still play a big part in the understanding of cultural nuances in interactive systems. According to Chen (2017), players have more favorable attitudes toward advergames that are more attractive in design. It is attractive in games along with gameplay, reality-based graphics, and along with a good storyline. A study consistent with Wanick et al. (2019) collect behavior structures between British and Brazilian cultures. The findings showed that the Brazilian people have access to the knowledge and are more familiar with the visual factors included by advergame in contrast to the British people. Moreover, it was also found that Brazilians showed more interest attitude towards a brand that would access to lead consumer behavior influencing brand familiarity. The comparison between British and Brazilian players showed the same attitude towards advergame which constructed that visual similarity did not mainly affect the advergame experience (De La Hera, 2019). The goals of advergames have been generated to rise brand awareness and exposure by showing a positive experience to the users as well as creating a positive contraction between the brand, the game, and the users (Sung & Lee, 2020). The companies tend to promote their actions that lead prosaically, positively as well as liberal. In this way, consumers enhance their focus on this action and will link the brand with these actions (Sung & Lee, 2020). In similar companies, the main idea of advergame towards branding and equality towards a brand is to create a positive linkage between their products and their customers (Norman, et al., 2020).

A positive user experience is developed towards advergames to increase brand exposure and awareness that eventually generate a positive link between the player, the game, and the brand (Sung & Lee, 2020; Aktan & Koçak, 2020; Munaretto, 2021). As the prospects of brand equality, it will link the brands with a positive response which constructs positive encouragement towards the player with the association of the game player (Munaretto, 2021). This association leads to the creation of that environment which helps to encourage the promotion of the brand. According to Van Berlo, van Reijmersdal and Eisend (2021) that examined the effects of advergames on brand recall have found that consumers have less recall of profitable information which is fixed in advergames, like banners and the billboards in the game. In line with the results of Wiemerslage (2021) attitude defines a mindset toward a brand that can be positive and negative. Attitudes are accessed by brand or productive attributes, social engagements, advertising, and experience, and those aspects can continuously rise or sub continuously is stroked over time (Wiemerslage, 2021).

### **3. Method**

#### *3.1 Study Design*

This study adopted a quantitative approach to achieve the research objectives. The research was conducted among residents of the UK and SA.

#### *3.2 Study Sample*

Researchers have determined the sample size when the exact size of the population is unknown. The Z-score formula was used, which helps determine the relationship of a value to the mean through standard deviation. A Z-score of zero shows that the score of the data points is the same as for the mean. In sample size determination, the Z-score is 1.96 at the 95% confidence level, where the confidence interval is 0.05 (Hui, 1988; Costantino, et al., 2009). According to the World Bank (AlSayyari & AlBuhairan, 2018), the population of SA in 2019 was 34,268,530, and that of the UK was 66,834,400. This indicates values of 12.34% for SA and 27.61% for the UK. Therefore, the study chose 166 participants from SA, as shown in Equation 1, and 307 participants from the UK, as shown in Equation 2. The sample consisted of male and female participants from all age groups. Before the commencement of the study, the researcher explained the purpose of the study and collected a written consent form from all participants.

#### *3.3 Sampling Technique*

The random sampling technique was used to recruit the participants. To ensure randomness, the study used third-party websites. A likelihood of bias exists in web surveys (Przybylski & Weinstein, 2019; Rudolf et al., 2020). However, since advergames are accessed from internet sources, a sample that consists of internet sources is not subject to bias. Moreover, according to Adinolf and Turkay (2018), those who have more experience with online gaming are more inclined towards self-selecting via web questionnaires. In this study, participants who came across the link of the questionnaire could choose whether they were willing to take part in the survey.

#### *3.4 Data Collection*

The questionnaire was developed for data collection. This study measured the culture outcomes under five

aspects: collectivism, indifference to culture, cultural alignment/congruence, non-verbal transfer, and verbal transfer, all of which were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Collectivism is defined as a set of feelings, beliefs, behavioral intentions, and behaviors related to solidarity and concern for others (Zhao, 2017). Costantino et al. (2009) defined cultural congruence as the distance between the degree of cultural competence provided by the organization and the employees' perceptions regarding how well their cultural needs are met. Cultural indifference is the opposite of cultural empathy. This means that instead of feeling for and understanding another culture, feelings are absent. Whereas non-verbal transfer is used as non-verbal communication, differences between cultures occur because of how different people around the world interpret actions in social interactions.

### 3.5 Data Analysis

The collected data were analyzed using the Statistical Package of Social Sciences (SPSS) version 23.0. Due to differences in the normality of the variables, non-parametric statistical tests were employed, namely the Mann–Whitney U test for the cultural aspects of community, content, expression, and sentences. The Mann–Whitney U test is used to compare differences between two independent groups when the dependent variable is either ordinal or continuous but not normally distributed (Al-Olayan & Karande, 2000). The test was used to measure the differences between two cultures on the dependent variables (collectivism, indifference to culture, non-verbal transfer, and congruence), alongside an independent samples t-test (parametric). The null hypothesis for both tests was that there was no difference in the cultural dimensions between the two nationalities.

## 4. Results

Figure 1 shows the age profiles of the SA and UK participants. For both countries, respondents aged between 18 and 25 years dominated the sample (37.18% of the total UK sample, and 57.06% of the SA sample). The lowest number of respondents from both countries were from the age range of above 55 years (11.54% of the total UK sample, and 0% of the SA sample). Hence, the age distribution of the UK and SA respondents was similar, with younger people dominating, and the number of participants declining with older ages.

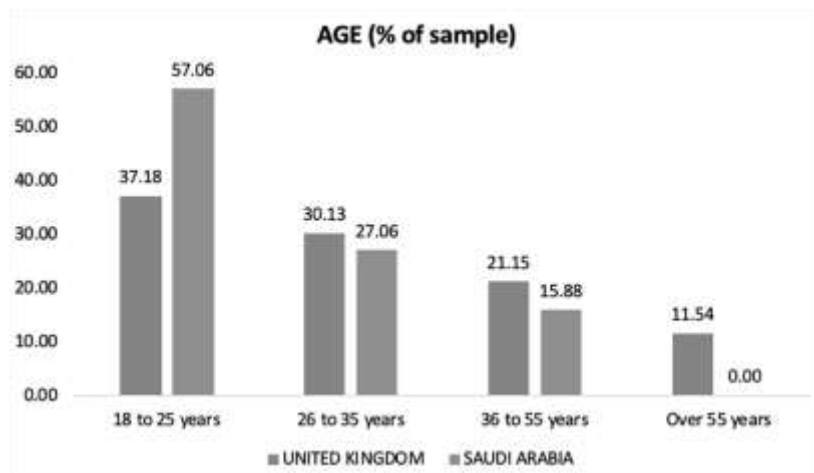


Figure 1. Age profile of the respondents from SA and the UK

Figure 2 shows that the proportion of male and female, participants from both countries, in the study's sample was relatively balanced. 58.58% of the SA population sample comprised females and 41.42% males. Although, in the UK sample, there were more male respondents (55.95%) than females (44.05%).

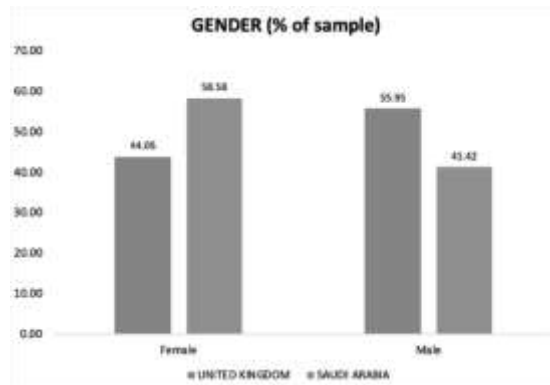


Figure 2. The proportion of male and female participants

4.1 Overview of AdvergAMES

Figure 3 illustrates the game preferences of the respondents, which included Call of Duty, Doctor Driving, FIFA, GTA 5, Frozen, Fortnite, Pepsi Man, and Minions, among others. Call of Duty was the game most preferred by the SA respondents, accounting for 21.41% of the total, whereas it was the second most preferred game by the UK respondents, accounting for 14.52% of the total, following FIFA (14.73%). FIFA was the second most preferred game among the SA respondents, accounting for 15.29% of the total. Certain games dominated the preferences of the participants from both countries: Call of Duty, Doctor Driving, FIFA, GTA 5, Frozen, Fortnite, Pepsi Man, and Minions, in total accounting for 97.88% of the SA gamers' preference and 96.59% of the UK participants' preference.

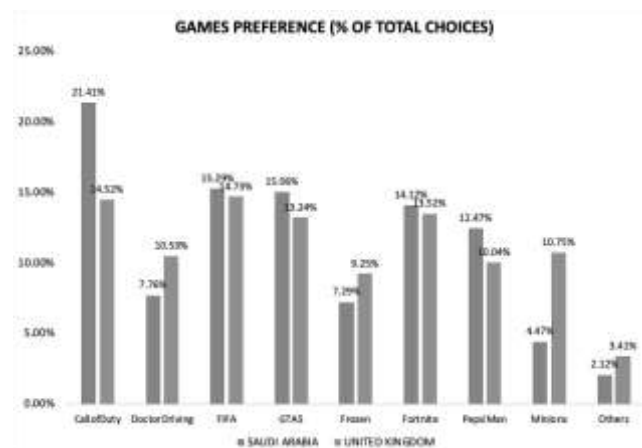


Figure 1. Game preference

4.2 Culture Outcomes

Table 1. Cultural aspects descriptive statistics

Cultural aspects	Country	Scale				
		1	2	3	4	5
Collectivism	SA	8.82%	11.18%	40.59%	18.82%	20.59%
	UK	3.53%	5.13%	23.08%	48.08%	20.19%
Indifference	SA	7.06%	15.88%	42.35%	18.24%	16.47%
	UK	1.28%	5.13%	23.40%	50.96%	19.23%
Congruence	SA	20.00%	32.94%	34.12%	7.65%	5.29%
	UK	5.77%	11.22%	29.81%	33.33%	19.87%
Non-verbal transfer	SA	30.59%	8.24%	25.88%	19.41%	15.88%
	UK	12.82%	13.78%	25.00%	30.77%	17.63%
Verbal transfer	SA	14.71%	18.24%	27.65%	24.71%	14.71%
	UK	19.55%	11.22%	19.23%	30.13%	19.87%

Table 1 shows that in terms of collectivism, most of the SA participants, who accounted for 40.59% of the total number of respondents, were neutral regarding the belief that advergAMES encouraged a community sense, in the environment and the interactions among family members. By contrast, 68.27% of the UK participants (48.08%

of whom responded 4 on the scale, and 20.19% of whom responded 5) scored highly in their agreement with the relevant statement indicating a tendency to agree that advergames are useful for encouraging a sense of community. Similarly, SA participants remained neutral (42.35%) regarding the opinion that a gamer is comfortable with the content of the advergame irrespective of the presence or absence of cultural cues, whereas the majority of the UK participants (50.96%) agreed with the opinion.

Furthermore, regarding the statement of congruence that the advergames align with a gamer's personal beliefs and practices, 52.94% of SA participants disagreed (20% of the participants strongly disagreed and 32.94% of the participants disagreed). By contrast, the UK participants contradicted the SA participants, as 52.3% of the UK participants agreed with the statement (33.33% agreed and 19.87% strongly disagreed). In terms of verbal transfer, 30.59% of SA participants strongly disagreed with the statements that a gamer finds themselves using the non-verbal expressions of the characters in the advergames, either in terms of mimicry, motion, or dance. However, 30.77% of the UK participants agreed with the statement. Lastly, concerning the belief that by verbal transfer, a gamer uses the words spoken by the characters in a game in their sentences or speaks like the characters in the advergames, the majority of SA (39.42%) and UK participants agreed with the statement (24.71% agreed and 14.71% strongly agreed) and 50% of the UK (30.13% agreed and 19.8% strongly agreed) participants.

Table 2. Cultural differences between the UK and SA participants

Cultural dimension	Rank SA (obs: 170)	Rank UK (obs:312)	p-value
Collectivism	34,711	81,692	0.0000
Indifference	32194.5	84,208.5	0.0000
Congruence	33,542.3	82,206.5	0.0000
Non-verbal transfer	36,382.5	80,020.5	0.0010
Verbal transfer	39,204	116,403	0.1943
Cultural dimension	Mean SA (obs: 170)	Mean UK (obs:312)	p-value
Collectivism	2.523	3.592	0.000
Indifference	1.356	3.456	0.000
Congruence	2.452	3.503	0.000
Non-verbal transfer	2.632	3.105	0.000
Verbal transfer	1.532	3.006	0.000

Table 2 demonstrates that the responses of the SA and UK participants were statistically significant regarding cultural dimensions. Specifically, the p-values of the test for collectivism, indifference to culture, non-verbal transfer, and congruence were all less than a 1% significance level, suggesting sufficient evidence to reject the null hypothesis, and confirming the significant difference between the views of the Saudis and UK participants. Based on the rank and mean results, UK consumers had higher scores than SA consumers, confirming previous findings. Further, the difference in the average perspective of verbal transfer had a p-value of 0.1943 which was higher than the significance levels of 1%, 5%, and 10%; thus, there was no sufficient evidence to reject the null hypothesis that agreed with the descriptive findings.

#### 4.3 Participant characteristics versus views about culture

This section explores the cultural dimensions by investigating the demographic factors that affected the cultural aspects of the two nationalities in this study. The findings are useful for identifying the control variables.

##### 4.3.1 Age

Table 3. Cultural dimension diversity across age groups

Country	Reason variables	F statistics	Prob > F
SA	Collectivism	2.30	0.1039
	Indifference	4.39	0.0139
	Congruence	4.49	0.0126
	Non-verbal transfer	0.32	0.7290
	Verbal transfer	0.45	0.6359
	Reason variables	Chi-squared	Prob > chi
UK	Collectivism	11.148	0.0110
	Indifference	20.754	0.0001
	Congruence	35.052	0.0001
	Non-verbal transfer	49.436	0.0001
	Verbal transfer	48.448	0.0001

Small p-values of less than 5% significance level were attributed to indifference and congruence. The findings implied that for the SA respondents, not all age groups, agreed that the content of advergames should be seen as independent of local culture. Further, not all agreed that advergames aligned with their beliefs and personal

practices. By contrast, high p-values of greater than 5% were obtained for the cultural dimensions of community, expression, and sentences. The participants suggested that the SA consumers, regardless of their age, had similar views of how advergames influence community-like relationships and that their verbal and non-verbal communication, in terms of their form of expression and sentences, was affected by advergames. By contrast, small p-values of less than a 5% significance level were found for the UK respondents, confirming the rejection of the null hypothesis and indicating that the UK participants across the age bands had different views regarding the way advergames affected all of the cultural dimensions. Specifically, the different age groups held differing views on the way that advergames affected community relationships and their non-verbal expressions and verbal sentences.

#### 4.3.2 Gender

Table 4. Cultural perception diversity across genders

Country	Culture variables	Diff (F-M)	t statistics	Prob (T<t)
SA	Collectivism	-0.2694	-1.4656	0.0723
	Indifference	-0.4167	-2.4192	0.0083
	Congruence	-0.1346	-0.8102	0.2095
	Non-verbal transfer	-0.4207	-1.8648	0.0320
	Verbal transfer	-0.3135	-1.5869	0.0572
	Reason variables	Diff rank (F-M)	z	Prob > z
UK	Collectivism	< 0	0.155	0.8764
	Indifference	< 0	0.099	0.9208
	Congruence	< 0	-0.427	0.6694
	Non-verbal transfer	< 0	-1.629	0.1033
	Verbal transfer	< 0	-1.428	0.1532

The 5% significance level recorded for the SA respondents, as shown in Table 4, suggested their indifference to the culture integrated with the advergames' content. Non-verbal transfer differed significantly by gender (the p-values for the two dimensions were 0.0083 and 0.0320, respectively). The male respondents' indifference to the culture was greater than that of the female respondents, and the majority of male respondents agreed to the presence of non-verbal transfer more than their female counterparts. There were no significant differences by gender for the UK participants.

## 5. Discussion

This study explores the different impacts of advergames on brand and cultural outcomes in the UK and SA. This section presents the analysis of the survey conducted with participants from the two countries. This study compared the findings and evaluated them in terms of their agreement or disagreement with the previous literature, highlighting new elements. This study examines the impact of advergames on the cultural demographic profile of the participants. These findings are consistent with those of previous studies, suggesting that the sample was representative. As Al-Sayyari and AlBuhairan (2018) explained that the younger generation constitutes half of the Saudi population and more of these younger people engage with media, including playing video games, than older individuals. Moreover, Przybylski and Weinstein (2019) observed that nearly all young people in the developed world, including the UK, now play video games.

This study measured the culture outcomes under five aspects: collectivism, indifference to culture, cultural alignment/congruence, non-verbal transfer, and verbal transfer. All of them were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The collectivism aspect was measured by the statement that advergames should show a sense of community in which extended family members can interact and learn from each other. Indifference to culture was measured by the statement that a gamer is comfortable with the content, irrespective of the presence or absence of cultural cues. Congruence was measured by the statement that the advergames align with a gamer's personal beliefs and practices. The non-verbal transfer was measured by the statement that a gamer finds themselves using the non-verbal expressions of the characters in the advergames, either in terms of mimicry, motion, or dance. The verbal transfer was measured by the statement that a gamer uses the words spoken by the characters in a game in their sentences or speaks like the characters in the advergames.

The extent of a belief in the importance of collectivism promoted by games might be determined by the players' country. Because those who live in individualistic cultures, such as the UK, might agree with the need to promote a collectivist culture, whereas those from cultural settings like SA, may respond more neutrally. The study conducted by Lee et al. (2017) also found that players believe that games promote individualist/collectivist cultures, and Zhao (2000) acknowledged the presence of cultural differences in the makeup of advertising content.

Another contrasting result was evident in the degree of congruence in the games perceived by the respondents, with 52.94% of the SA participants disagreeing with the statement and selecting options 1 (20.00%) or 2 (32.94%) on the scale. Whereas 53.20% of the UK participants agreed with the statement. This finding indicated that the games in question were aligned more with the beliefs of the UK respondents than with those of the Saudi respondents. In their study, Kalliny (2007) found that the culture underlying an advertisement aligns more with its country of origin than that of other geographical locations. Since most games are developed in Western countries, it is, therefore, arguable that they reflect UK culture more than Saudi culture. Further, Al-Olayan and Karande (2000) reported that consumer response that is congruent with advertising messages is favorable and tends to reward advertisers that customize their adverts to consumers' specific values and beliefs. Thus, congruence plays a significant role in distinguishing consumers by their behavior. Therefore, it can be expected that if the level of collectivism presented to players is low, there is an increased likelihood that other cultural norms and beliefs are also underrepresented, or do not exist. It has been endorsed by the findings of the present study recorded for the participants from SA.

Regarding the non-verbal transfer from the gamers in the present study, unlike the majority of the SA respondents (38.83%) who did not agree with the statement that advergames influenced their non-verbal expression, most of the UK participants (48.40%) agreed with the statement. According to the findings, most of the SA respondents (42.35%) responded neutrally regarding the fact that advergames should be seen irrespective of cultural values. In contrast, the majority of the UK participants (70.19%) agreed that they were indifferent to the culture, projected by the advergame characters. The findings of previous studies indicated that consumers generally care about the culture present in advertising unless the cultural differences concerned are minor (Al-Olayan & Karande, 2000). The neutrality of the responses of the Saudi participants in the present study can be taken as indicative of tolerance. However, in their study, Obeidat et al. (2022) explained that Muslims (Saudis who are assumed to be Muslim) are offended by gender-oriented and healthcare-incongruent products. Although incongruence may have existed in the games with which the present study was concerned, their content was not deemed by the Saudi respondents to be offensive.

The only cultural dimension for which similar findings were reported by both the SA and UK participants in this study was verbal transfer. It denotes that aspects of advergames influenced the players' verbal expression, including using the words spoken by the characters or speaking like the characters in the advergames. In total, 39.42% of SA respondents agreed or strongly agreed with this statement, as did 50% of the UK respondents. Therefore, most of the Saudi participants disagreed that the advergames enabled collectivism, congruence, or non-verbal transfer, in contrast to the majority of the UK respondents. Additionally, they were neutral regarding the culture embedded in the games while concurrently acknowledging the presence of verbal transfer.

Previous research has employed social cognitive theory to explain the mimicking of behavior by those who play advergames, especially children (Obeidat et al., 2022). In the present study, such mimicry was acknowledged by the agreement of the participants from both countries that verbal transfer is present, although only the UK participants generally agreed that non-verbal transfer occurs. This non-verbal transfer, namely the copying of styles of dress and gestures, may not occur for the Saudi participants due to the incongruence and disapproval present for these individuals, whereas verbal transfer may be desirable for them as a language learning mechanism.

Previous studies have employed an advergame as a category that has two sides; one aspect for the game and the other for the advertisement. Moreover, they considered different cultures which could show the same design principal intercultural human-computer interaction research that is transforming and converges to represent as well as figurative factors are moralized through effective across cultures. The present study constructs a division of two components high context individuals and low-context individuals' context. However, as a result, high-context cultures understand the information from clues easily not just from one Couse communication (Hermeking, 2005; Berque et al., 2020; Park & McKilligan, 2018). This proves how cultural communication depends on the feeling of a comfortable environment and how they react to the present scenarios to deliver it.

From the access of researchers on advergame design, evidence shows that different cultural aspects are found towards different likes and dislikes for specific advergames only because the different perspectives towards brands are socially constituting towards culture prospects. According to Keller (2001), consumers involves in different prospects based on their culture. Furthermore, the aspect of effectiveness of advergames design making should include those features which help the consumer relevance to the brand. In this case, as stated by Wanick et al. (2019), to make the advergame popular in the creative strategy according to the targeted market audience, the machine that they use to make the advergames popular is familiar with the particular culture.



A further study conducted by Montola (2005) asserted the requirement of the game in cross-culture prospects. It asserts that symbols, colors, and location are needed. Moreover, this study examines that the involvement of the consumer differs from culture to culture in the case of Saudi Arabia and the UK. Different attitudes towards brands have been constructed by participants of this study. The same age group from both countries, purchasing power, and perceptions towards the brand were two different prospects among both countries. However, advergame advertising toward a brand implies that access to cultural behavior varies from culture to culture based on cultural values.

The question of whether the differences between the UK and SA participants' responses to the cultural aspects were found as significant. Due to differences in the normality of the variables, non-parametric statistical tests were employed, namely the Mann-Whitney test for the cultural aspects of community, content, expression, and sentences, alongside an independent samples t-test (parametric). The null hypothesis for both tests was that there was no difference in the cultural dimensions between the two nationalities, while the alternative hypothesis was that a significant difference existed between the two nations. In a competitive context, the two researchers asked the question that how advergames affected the brand results and why cross-cultural behavior prospects needed to be concentrated during the implications of advergame design. The recent outcomes indicate that advergame improves brand image and encourages and enhances awareness towards the targeted audience when the user's experience is significant. Consequently, it will generate a positive response between the game, the player, and the brand. The researcher consisted of Aktan and Koçak (2020), Munaretto (2021), and Sung and Lee (2020), who all stated that the development of exposure and awareness among players are enhanced by advergames. The finding is also relevant to the brand results, which include brand recall, purchase, attitudes, intentions towards the purchase, and the actual behavior of the players if constructed when advergames design, could be a greater help in advertising and marketing. Gamers increase brand recall because of their high persuasive knowledge. This is in a similar context with Vashisht and Pillai (2017) and Chiu (2019), who stated that high brand recall is more linked with social advergames and advergames offer the opportunity for the brand that affects the attention and recall of it. A recent study also found that attitudes toward players are influenced directly by the flow of the game toward brands rather than the brand attitude, which is constructed with the study of Hartini (2020). The advergame attractiveness whether it relates to any type or category encourages spontaneous purchasing, and the intention towards the purchase originates from brand attitude and persuasion. Advergames towards player behavior also create a duplication effect in the real world because the choice of playing a game is similar to the real-life decisions.

### *5.1 The Impact of Advergames on Culture*

This section examines how playing advergames impacted the participants' views of culture, commencing with a discussion of the demographic attributes.

A one-way analysis of variance (ANOVA) was used for the Saudi sample, and the Kruskal–Wallis test was used for the UK sample. Table 3 shows the association between age and culture variables. The null hypothesis of both tests was that consumers have identical perceptions of culture across age groups, while the alternative hypothesis was that perceptions of culture across age groups are significantly different. In the SA participants, not all age groups agreed that the content of the advergames should be seen as independent of local culture, and they did not agree that advergames should be aligned with their beliefs and personal practices. Regardless of their age, they had familiar views of how advergames influence community-like relationships and their verbal and non-verbal communication. In contrast, the UK participants rejected the null hypothesis that they had identical perceptions of culture across age groups. This means that across age groups, the UK participants had different beliefs about the way advergames influenced cultural dimensions. Likewise, the present study, Hanbazazah et al. (2022) has presented a comparative analysis to examine the two elements of the advergames players in the United Kingdom and Saudi Arabia. These elements included brand outcomes and consumer behavior. The findings of the study asserted that brand performance hinges on the perceptions, level of experiences, and purchases among people of different cultures. Table 4 shows the range of cultural perceptions across the genders of the two nationalities. Since there were two categories for gender, the parametric test applied to the SA respondents was a two-independent sample t-test. While the non-parametric test applied to the UK respondents was the Mann–Whitney test. The null hypothesis of both tests stated that the different genders held an identical view of the cultural dimensions. While the alternative hypothesis stated that the different genders held differing views of the cultural dimensions. The findings indicate that there was no significant difference between genders for the UK participants, whereas SA participants showed significant differences between genders in non-verbal transfer and indifference to the culture integrated with the advergames content.

## 6. Study Limitations

This study has a few limitations. Firstly, it has a limited sample size. Secondly, it is restricted to two countries, the UK and SA; therefore, the results cannot be generalized.

## 7. Conclusion and Recommendations

This study explores the different impacts of advergames on brand and cultural outcomes in the UK and SA. In this research, a cross-cultural perspective was followed to analyze the impact of advergames on cultural outcomes. An in-depth comparison of the two different cultures of the UK and SA was performed. These findings are consistent with those of previous studies, suggesting that the sample was representative. Regarding their implications, the findings can assist managers of a brand who used advergames as a tool for advertising in understanding all aspects of cultural outcomes that influence advergames in different cultures. The findings beget the implementation of better strategies for games that consider the different cultural aspects of different countries.

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