

Impact of Consumer Attitude and Online Video Advert Characteristics on Consumer Purchase Decision in Nuremberg Germany

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Abstract

Background: The global increased internet penetration has resulted in a shift in the way people do business. Similarly, marketers and companies have changed from traditional offline advertisements to online advertisement to increase their product reach and tap into new tech-survey customers who spend many hours online. Online Video Advertisement (OVA) is one of the forms of online advertisement that has witnessed tremendous growth over the last decade. With Germany being one of the countries with high internet penetration and high volumes of e-commerce, high internet and social media users, many companies have embraced OVA to reach this population with their brands. However, the consumers' knowledge, attitude, and perceptions of OVA have rarely been explored. It remains largely unknown how the OVA characteristics and consumer attitude on the OVA affect their purchase intention and purchase decision. In this study, we sought to assess the knowledge, attitude, and perceptions on OVA among consumers in Nuremberg, Germany and determine the influence of the OVA characteristics and consumer attitude on their purchase intention and decision.

Methods: A cross-sectional study was carried out among conveniently selected Nuremberg adult residents. A semi-structured questionnaire administered online was used for data collection using Google forms. The data was imported into Excel for cleaning before being imported into IBM Statistical Package for Social Sciences (SPSS) version 26.0 for analysis. For descriptive analysis, frequencies and percentages were used for categorical variables, while for the Likert scale data, mean and standard deviation were used. The reliability of the Likert scales was assessed using Cronbach alpha. Pearson's correlation was used to determine the association between the different scales, while Linear and multiple linear regression were used to quantify the association between perceptions on OVA influence of the OVA characteristics and consumer attitude (explanatory variables) and purchase intention and decision (outcome variable).

Results: Of the 206 participants, 128 (62.1%) were male. Most (135; 65.5%) had frequently seen OVA, 194 (94.2%), saw it in the last one month, 169 (82.0%) on YouTube, 13 (6.3%) on Facebook, and 7 (3.4%) on Instagram. A total of 195 (94.7%) preferred OVA with the skip option. More than half (104; 50.5%) agreed that OVA reinforce product familiarity. There was a strong significant positive correlation between attitude towards OVA ($r=0.622$; $P\text{-value}<0.001$) and content and quality of OVA ($r=0.602$; $P\text{-value}<0.001$) and purchase intention. In the multiple regression analysis, attitude towards OVA, invasiveness of OVA, and OVA quality and content were significantly associated with intention to purchase and purchase decision for the advertised product ($P\text{ value}<0.001$).

Conclusion: The positive attitude of the consumer on OVA, and its content and quality are key aspects that influence consumers to purchase the advertised product while invasiveness of the OVA seems to put them off. This has implication for marketers as these are key aspects that they need to consider in designing OVA to ensure that they result in improved sales hence value for money invested in OVA advertisements.

Keywords: Online Video Advertisement, Consumer decision, consumer purchase, marketing.

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1. Background

Advertisement is vital for businesses in attracting customers. It has always changed with changes in technology (Boateng & Okoe, 2015). Traditionally, radio ads, television advertisement and physical banner advertisements were mainly used. However, with the increased penetration of the internet and mobile connectivity, most businesses and marketers shifted from traditional methods to online advertising approaches (Aslam & Karjaluoto, 2017). The use of online advertisement has increased partly due to usage of social media facilitated by increased

ownership of smartphones and internet speed making it among the preferred advertisement platforms.

Online video advertisement (OVA), a form of advertisement where short videos are used to market products primarily via social media and mainstream media, has become popular globally. YouTube in-stream video advertisement is an example of a highly successful and widely used online in-stream video advertisement (Pashkevich, Dorai-Raj, Kellar, & Zigmond, 2012). It has been reported to be preferred by consumers in the U.S. over the T.V. advertisement. A previous study reported that 65% of consumers recall OVA compared to TV with 46% recall rate (Nielsen, 2010). In Germany, Video formats advertisements, especially on Facebook, is the fastest-growing medium. More generally, mobile video adverts continue in the ascendancy, claiming an ever-greater share of all investments by brands and advertisers (Abrams, 2020).

While the use of the OVA has increased globally, there remains a scarcity of data regarding its effectiveness in influencing consumers purchase intention and decision. In this study, we sought to assess the knowledge, attitude, perceptions, and preferences on OVA among consumers in Nuremberg, Germany, and determine the influence of the OVA characteristics on the consumers' purchase intention and decision.

2. Literature review

In this section, literature on the OVA and factors influencing it is presented.

2.1 Purchase Intention

The behavioural purpose is characterized as a person's subjective probability of performing a particular action. According to the reasoned action (TRA) theory, intention is the most crucial factor in determining behaviour (Davis, 1985). Purchase intention is characterized as a consumer's intention to buy a product in the future in consumer purchase behaviour studies (H. Y. Hsu & Tsou, 2011; Saxena, 2011). It can be used to predict actual purchase activity (H. Y. Hsu & Tsou, 2011). Several studies have been performed on the factors that influence consumers' purchasing intent for online channels such as websites (S.-H. Lee, 2009; Park, Lee, & Han, 2007), social networking sites (Mir & Ur REHMAN, 2013), and blogs (Bouhleb, Mzoughi, Ghachem, & Negra, 2010; C. L. Hsu, Lin, & Chiang, 2013; H. Y. Hsu & Tsou, 2011; Saxena, 2011). However, there is only one related study for YouTube (Mir & Ur REHMAN, 2013). As a result, this study aims to look into the factors related to OVA that influence consumers' purchase intentions; purchase intention is described as a consumer's desire to buy a product after watching an OVA in which the product is discussed.

2.2 Purchase decision

There are three different stages in the process of making purchasing decisions. First, problem recognition, and then searching of information, alternative valuation, and purchase decision. The last step is post-purchase evaluation. This structure clearly identifies the importance of information in the process of purchase decision, according to (Belch & Belch, 2004).

2.3 Influence of online advertisement on consumer intention

Advertisers always aim for a favourable and positive attitude towards the brand. It is clear that the interactivity level should be responsibly high for the participants to pay more attention to the advertisements. The opposite happens when the ads show less interactivity in return. The brand message is usually perceived better by participants in the case of interactivity. In the example of (Wu, 2000) dissertation studying websites' interactivity, a positive attitude was linked positively with interactivity towards the brand.

A Study by (Morris, Choi, & Ju, 2016) expressed that personal relevancy is one of the variables influencing customer's perception of Online advertisements. They contended that customer's consideration of advertisement could be achieved by how relevant it is advertised. Based on their study, the relationship between relevancy and attention showed a positive impact. Fundamentally, relevancy is an essential factor in determining whether the advertisement is valuable and productive (Jung, 2017). There is increased likelihood of purchase decisions when products advertised are more relevant to the consumer. (Morris et al., 2016) argued that the effectiveness of the advertisement comes mostly from relevancy.

In a study assessing the online video advertisement effectiveness on consumer intention or purchase, it was found that the advertisement effectiveness is not significantly affected by the OVA's interference nature. With valuable and relevant video advert with the correct message, consumers are more willing to listen or watch the ad and get the message presented. Explicit video advert placement is preferred to implicit placement with high effectiveness and high consumer product involvement (Lai, Lai, & Chiang, 2015). Sufficient and relevant information affects consumers' behaviour in purchasing products. In the online domain, informativeness is even more relevant to inform the consumer's positive attitude (Alalwan, 2018).

Informational advertisements are less irritating and interfering while bringing value (Goodrich, Schiller, & Galletta, 2015). (J. Lee & Hong, 2016) showed a linear relationship between informativeness and reactional consumer behaviour online. A higher purchase decision is derived from Digital video advertisements (Jain,

Rakesh, & Chaturvedi, 2018). More information allowed consumers to reflect on how functional and practical these products were in their lives, which helped decision-making. These essential details have allowed consumers to compare multiple products in terms of prices and functionality, and practicality. This finally influences purchase decisions (Leal, Hor-Meyll, & de Paula Pessôa, 2014).

2.4 Effects on intrusiveness

Intrusiveness is defined as the extent to which an advertisement can cause an undesirable interruption (McCoy, Everard, Polak, & Galletta, 2008). According to (Rejón-Guardia & Martínez-López, 2014), there is a relationship between an advertisement's intrusiveness and the level of irritation that an advertisement is likely to evoke. Hence, the intrusiveness caused by an advertisement can create irritation among consumers (Edwards, Li, & Lee, 2002). If an advertisement is perceived as irritating, consumers develop reactions towards the advertised brand (Edwards et al., 2002).

Even though in-stream video advertisements are perceived as intrusive by consumers, pre-roll and mid-roll in-stream video advertisements are likely to cause differences in the perceived level of intrusiveness. Whereas pre-roll in-stream video advertisements let consumers wait for the video content they want to watch (Dube-Rioux, Schmitt, & Leclerc, 1989), mid-roll in-stream video advertisements interrupt the viewing experience of consumers as they are shown in the middle of the video content. Viewers that are interrupted by mid-roll in-stream video advertisements are already absorbed in the video they are watching. Consequently, they can feel more engaged with it than viewers at the beginning of a video (Krishnan & Sitaraman, 2013). Hence, viewers that are interrupted by a mid-roll in-stream video advertisement could be slightly more tolerant towards the advertisement and more patient than viewers who are interrupted by a pre-roll in-stream advertisement at the beginning of a video (Krishnan & Sitaraman, 2013).

This is because the former are eager to proceed to watch the video content, and it is unlikely that they stop watching the video because of an advertisement that appears in the middle of the video. Nevertheless, research shows that internet advertisements that interrupt a flow, in this case, the watching of video content, are perceived as more intrusive (Hairong Li, Edwards, & Lee, 2002). Besides, advertisements placed in the middle of a story are perceived as more intrusive by readers who are highly transported into the story than readers who are less transported (Wang, Lin, & Luarn, 2006).

Therefore, it is proposed that mid-roll in-stream video advertisements, compared to pre-roll in-stream video advertisements, are more likely to increase consumers' feelings of intrusiveness. When looking at the length of advertisements, research shows that online advertisements that are too long can increase irritation among consumers (Hairong Li et al., 2002). However, recent research by Goodrich and colleagues (Goodrich et al., 2015) found that shorter pre-roll in-stream video advertisements were perceived as more intrusive than longer ones. This happened to be the case as longer advertisements can transfer information and humour to a greater extent, which reduced their level of intrusiveness (Goodrich et al., 2015).

Overall, informative and entertaining advertisements are perceived as less intrusive (Rejón-Guardia & Martínez-López, 2014). This is because consumers always try to find a more informative advertisement and be in line with completing their tasks (Ducoffe, 1996; Xu, Liao, & Li, 2008). Hence in this study, we hypothesised that the OVA invasiveness negatively influences the purchase intention and decision of consumers.

2.5 Perceived video characteristics

Specific features of video adverts can influence purchase intentions. Video quality affects purchasing decisions (Satgunam, Woods, Bronstad, & Peli, 2010), and high-quality videos improve user interaction (Dobrian et al., 2011). The length of the video's perceived length may be a factor. The average length of marketing videos is 3-3.5 minutes, according to an analysis of the most popular Top 50 YouTube videos; however, the desire to share depends more on the intensity of emotions evoked by the video (Jarboe, 2012). As a result, not the exact length of the video, but how it is perceived, can influence attitudes and purchase intentions. Finally, the content's planning and presentation are thought to affect customer buying intentions. Since these factors will influence the amount of information consumers receive and therefore influence their attitudes. Hence in the study, we hypothesise that the quality and content of the OVA has an influence on the consumers purchase intention and decision.

2.6 Consumers attitude on the OVA

Attitude can be characterized as a person's positive or negative feelings and assessments toward performing a particular action (Mir & Ur REHMAN, 2013) or a consumer's positive or negative orientation towards a product or brand (Bouhleb et al., 2010; Mir & Ur REHMAN, 2013). According to the theory of reasoned action, one of the central roles in assessing behavioural intention is the attitude toward behaviour (Saxena, 2011), and it has been shown that increased attitude leads to increased behavioural intention (Bouhleb et al., 2010; C. L. Hsu et al., 2013; Mosavi & Ghaedi, 2012).

Several studies have found that there is a correlation between attitude and intention. (Yang, Chen, Wu, & Chao, 2010) discovered that one's attitude toward web-based services positively affects one's ability to use them. According to (C.-L. Hsu & Lin, 2008), users' intentions to join a blog are positively affected by their attitude. (Saxena, 2011) discovered that one's attitude toward blogs has a positive and significant influence on one's intention to use blogs. (Mir & Ur REHMAN, 2013) discovered a correlation between consumers' attitudes toward user-generated content (UGC) on YouTube and their intention to use that content to make purchasing decisions. Consumer attitudes influence online buying intentions, according to (Bouhleb et al., 2010), and users with a favourable attitude toward blogs are more likely to make actual purchases. We hypothesize that there is a correlation between attitude towards OVA and purchase intention and decision.

2. Methodology

We conducted an observational cross-sectional study among the adult population in Nuremberg, Germany, among individuals who had ever seen an online advertisement. The participants were recruited conveniently using social media networks. A sample size of 206 participants was used in the study.

Data was collected using an online semi-structured questionnaire. The questionnaire was divided into three sections. The first section contained questions regarding the participants' demographic information, including gender, age, marital status, income, employment status, internet usage, and device used to access internet.

The second part of the questionnaire included questions on the participants' knowledge, attitude and perceptions of OVA. The participants were asked how often they had seen OVA, the platform they had seen it on, how long they watched the OVA, their preferred type of OVA, and others' perceived value of OVA.

The last section of the tool had Likert scales on attitude towards OVA, invasiveness of OVA, OVA preference, content and quality of OVA, and purchase intention and purchase decision scales. The questions in each scale were derived from the review of related literature and discussion with experts on the subject.

The questionnaire was entered into a google form and the link shared via the social media platform of Nuremberg residents. The form had a section where the purpose of the study was explained, and consent sought from the participants who opted in by clicking yes on the question asking for their consent to participate. They then completed a question regarding if they had ever seen an OVA. Only those who reported having ever seen an OVA could access and complete the questionnaire.

The data was downloaded from the google form drive into MS Excel, where it was cleaned and formatted. It was then imported into IBM statistical Package for Social Sciences (SPSS) version 26.0 for analysis. For descriptive analysis, frequencies and percentages were used for categorical variables, while mean and standard deviation were used for Likert scale data.

The reliability of the Likert scales was determined using the Cronbach alpha. Reliability test for each item in the scale was also tested and any item found to affect scale reliability removed. Any scale with a Cronbach alpha of 0.7 and above was considered reliable. Correlation analysis between the different scales was done using Pearson's correlation. Linear and multiple linear regression were then conducted to determine the influence of the OVA characteristics on the consumers' purchase intention and purchase decision. A p-value of < 0.05 was taken to be statistically significant.

3. Results

3.1 Demographic information

Of the 206 participants in the study, 128 (62.1%) were male while 78 (37.9%) were female. The age of 97 (47.1%) was 26-35 years, 73 (35.4%) were aged between 18-25 years, 27 (13.1%) 36-45 years, 5 (2.4%) 46-55 years and 4 (1.9%) more the 55 years. Most, 123 (59.7%) had attained university level of education, 38 (18.4%) high school, 25 (12.1%) Ausbildung (*Technical training school*) level, 14 (6.8%) college level of education while 6 (2.9%) had attained other levels of education. Among them, 76 (36.9%) were students, 68 (33.0%) had formal employment, 27 (13.1%) were self-employed, 18 (8.7%) were unemployed while 17 (8.3%) were businesspersons. A total of 158 (77.2%) were single, 31 (14.9%) were married, 2 (1.0%) were widowed, 2 (1.0%) were divorced while 13 (5.9%) had other marital status. A total of 64 (31.1%) had a monthly income of less than £500, 61 (29.6%) £500-£1,499, 51 (24.8%) £1500-£2999, 19 (9.2%) £3,000-£5,000 and 11 (5.3%) more than £5,000.

Most, 101 (49.0%) spend 1-5 hours on the internet daily, 82 (39.8%) more than 5 hours, 20 (9.7%) 31-60 minutes and 3 (1.5%) less than 10 minutes. The mobile phone was used by 135 (65.5%) to access internet while 34 (16.5%) used desktops, 29 (14.1%) laptops and 8 (3.9%) tablets/iPad. (**Table 1**).

Table 1: Demographic information

Demographic information	Frequency (%)	Percent (%)
Gender		
Male	128	62.1
Female	78	37.9
Age of participants		
18-25 years	73	35.4
26-35 years	97	47.1
36-45 years	27	13.1
46-55 years	5	2.4
>55 years	4	1.9
Highest level of education		
High school	38	18.4
Ausbildung	25	12.1
College	14	6.8
University	123	59.7
Other	6	2.9
Occupation		
Student	76	36.9
Unemployed	18	8.7
Self-Employed	27	13.1
Businessperson	17	8.3
Formal employed	68	33.0
Marital status		
Single	158	77.2
Married	31	14.9
widowed	2	1.0
Divorced	2	1.0
Others	13	5.9
Monthly income		
Less than £500	64	31.1
£500- 1499	61	29.6
£1500-2999	51	24.8
£3000-5,000	19	9.2
More than £5,000	11	5.3
Time spends on the internet daily		
Less than 10 minutes	3	1.5
10- 30 minutes	0	0
31-60 minutes	20	9.7
1-5 hours	101	49.0
More than 5 hours	82	39.8
Device used to access the internet		
Mobile phones	135	65.5
Desktop	34	16.5
Laptop	29	14.1
Tablet	8	3.9

3.2 Knowledge, attitude, and perceptions

Most (135; 65.5%) reported having frequently seen video adverts, while 71 (34.5%) reported rarely seeing them. The majority, 194 (94.2%), reported having seen a video advert in the last month while 12 (5.8%) had not. Of those who responded yes, 169 (82.0%) had seen the advert on YouTube, 13 (6.3%) on Facebook, and 7 (3.4%) on Instagram. Most, 109 (52.9%) spend 5-30 seconds watching the advert, 79 (38.3%) less than 5 seconds, 15 (7.3%) 30-60 seconds and 3 (1.5%) more than 1 minute. A majority of the participants, 195 (94.7%), preferred video adverts with a skip option, while the remaining 11 (5.3%) preferred those with no option to skip. Only 45 (21.8%) recalled the last online video advert they had watched, while most did not (161; 78.2%). (Table 2).

Table 2: Knowledge and attitude

Knowledge on Video adverts	Frequency (n)	Percent (%)
Frequency of seeing video advert		
Rarely	71	34.5
Frequently	135	65.5
Seen video advert in the last month		
Yes	194	94.2
No	12	5.8
Yes, platform video advert was seen		
You Tube	169	82.0
Spotify	4	1.9
Facebook	13	6.3
Amazon	6	2.9
Instagram	7	3.4
All of them	2	1.0
Others	5	2.4
Time spends on watching the video advert		
Less than 5 seconds	79	38.3
5-30 seconds	109	52.9
30-60 seconds	15	7.3
More than 1 minute	3	1.5
Preferred video advertisement		
With the option to skip	195	94.7
With no option to skip	11	5.3
Recall the last OVA watched		
Yes	45	21.8
No	161	78.2

When asked if the OVA helped them know about new products, 98 (47.6%) respondents yes while 108 (52.4%) respondent no. Most, 158 (76.7%) did not pay attention to OVA. Half (104; 50.5%) agreed that OVA reinforce product familiarity. Most 147 (71.4%) disagreed with the statement that OVA provide valuable product information. Only 76 (36.9%) agreed with the statement that OVA provide the product information conveniently. A majority reported not to be kept updated regarding products by the OVA (144; 69.9%). **(Table 3).**

Table 3: Attitude and perceptions

Attitude	Frequency (n)	Percent (%)
OVA help to know new products		
Yes	98	47.6
No	108	52.4
Give attention to video adverts		
Yes	48	23.3
No	158	76.7
OVA reinforce familiarity with products		
Yes	104	50.5
No	102	49.5
OVA provide valuable product information		
True	59	28.6
False	147	71.4
OVA conveniently provide product information		
True	76	36.9
False	130	63.1
Updated on products by OVA		
True	62	30.1
False	144	69.9

2.3 Influence of OVA on brand recall and purchase

Only 96 (46.6%) agreed that OVA create awareness to buy preferred products. A total of 65 (31.6%) were convinced by OVA to buy the same brand. Most, 143 (69.4%) agreed that OVA result in the recall of the brand in mind.

3.3 Characteristics of OVA and purchase intention and decision

3.3.1 Scales Reliability

Cronbach alpha was used to determine the reliability of the scales. Most of the scales were found to be highly reliable. The attitude scale had a Cronbach alpha of 0.737, invasiveness scale of 0.877, content and quality scale 0.844, purchase intention scale 0.862 and purchase decision scale of 0.800. Preference scale had low reliability ($\alpha=0.223$); hence was dropped from further analysis. (Table 4).

Table 4: Reliability of the scales

Scale	Cronbach alpha (α)	Scale mean	Standard deviation	No of items
Attitude on OVA scale	0.737	19.9	5.4	8
Invasiveness of OVA scale	0.877	24.1	4.9	5
OVA preference scale	0.223	19.0	2.9	5
Content and quality of OVA scale	0.844	21.0	7.0	7
Purchase intention scale	0.862	10.4	3.3	3
Purchase decision scale	0.800	8.91	2.4	2

3.4 Influence of the OVA on the consumers' purchase intention and decision

There was a strong positive correlation between attitude towards OVA and purchase intention ($r=0.622$) and content and quality of OVA and purchase intention ($r=0.602$). The correlation was highly significant (P-value <0.001). There was a medium negative correlation between invasiveness of OVA and purchase intention ($r=-0.360$), and the correlation was highly significant (p value <0.001). (Table 5).

Table 5: Correlation between attitude, invasiveness, content, and quality of OVA with purchase intention

Scale	Pearson's correlation r	P value
Attitude on OVA	.622	<0.001
Invasiveness of OVA	-.360	<0.001
Content and quality of OVA	.602	<0.001

There was a strong positive correlation between attitude on OVA and consumer purchase decision ($r=0.567$) and OVA content and quality and purchase decision ($r=0.583$). The correlation was highly significant (p-value <0.001). There was a medium negative correlation between OVA invasiveness and consumer purchase decision ($r=-0.319$) and the correlation was highly significant (P value <0.001). (Table 6).

Table 6: Correlation with purchase decision

Scale	Pearson's coefficient r	P value
Attitude on OVA	.567	<0.001
Invasiveness of OVA	-.319	<0.001
Content and quality of OVA	.583	<0.001

3.6 Association between attitude, invasiveness and content quality scales and purchase intention

3.6.1 Linear regression

On linear regression analysis, a unit increase in attitude towards OVA score resulted in a 0.992 increase in purchase intention, and the association was statistically significant (P -value <0.001). A unit increase in the OVA invasiveness scale score resulted in a 0.39 reduction in intention to purchase the advertised product. The association was statistically significant (B=-0.390, P value <0.001). A unit increase in OVA content and quality score resulted in a 0.651 increase in purchase intention score, and this association was highly significant (B=0.651, Pvalue <0.001). (Table 7).

Table 7: Linear regression of attitude, Invasiveness and content and quality scale with purchase intention

Purchase intention	Unstandardized		Standardized Beta	t	Sig.	95.0% CI of B	
	B	SD					
(Constant)	-.308	.225		-1.371	.172	-.751	.135
Attitude scale mean score	.992	.087	.622	11.346	.000	.819	1.164
Invasiveness scale score	-.390	.071	-.360	-5.504	.000	-.530	-.250
Content and quality scale score	.651	.061	.602	10.756	.000	.532	.771

On linear regression analysis, a unit increase in score of attitudes towards OVA resulted in a 1.016 increase in purchase decision score, and the association was statistically significant (B=1.016, P-value <0.001). A unit increase in the OVA invasiveness scale score resulted in a 0.389 reduction in the decision to purchase the advertised product. The association was statistically significant (B=-0.389, P-value <0.001). A unit increase in OVA content and quality score resulted in a 0.71 increase in purchase decision score, and this association was highly significant (B=0.71, P-value <0.001). (Table 8).

Table 8: Linear regression of attitude, Invasiveness and content and quality scale with purchase decision

Purchase decision	Unstandardized		Standardized Beta	t	Sig.	95.0% for CI B	
	B	std				B	B
Purchase decision							
Attitude scales score	1.016	.103	.567	9.830	.000	.812	1.220
invasiveness scale score	-.389	.081	-.319	-4.812	.000	-.549	-.230
Content and quality scale score	.710	.069	.583	10.253	.000	.573	.846

3.6.2 Multiple linear regression

On multivariate analysis, after controlling for all the factors, the association between attitude towards OVA, invasiveness of OVA and content and quality of OVA scores and intention to purchase the advertised product remained highly significant (P value<0.001). (Table 9).

Table 9: Multiple linear regression of attitude, Invasiveness and content and quality scale with purchase intention

Purchase intention	Unstandardized		Standardized Beta	t	Sig.	95.0% CI of B	
	B	SD				B	B
(Constant)	.472	.315		1.496	.136	-.150	1.093
Attitude scale score	.679	.093	.426	7.289	.000	.496	.863
invasiveness scale score	-.260	.054	-.240	-4.817	.000	-.366	-.153
Content and quality scale score	.325	.065	.301	5.009	.000	.197	.454

On multivariate analysis, after controlling for all the factors, the association between attitude towards OVA, invasiveness of OVA and content and quality of OVA remained highly significantly associated with the purchase decision of the advertised product (P-value<0.001). (Table 10).

Table 10: Multiple linear regression of attitude, Invasiveness and content and quality scale with purchase decision

Purchase decision	Unstandardized		Standardized t	Sig.	95.0% CI for B		
	B	SD			B	B	
(Constant)	.312	.381	.819	.414	-.439	1.063	
Attitude scale score	.642	.113	.358	5.705	.000	.420	.864
invasiveness scale score	-.243	.065	-.199	-3.724	.000	-.371	-.114
Content and quality scale score	.402	.078	.331	5.127	.000	.248	.557

4 Discussion

4.1 Demographic information

There were more men in the study (62.1%) compared to women. This might have been due to more men being willing to volunteer to participate compared to women. Alternatively, it might have been due to the survey link being shared in social networks with more men than women. However, it might also be that more men had seen a video advert recently than women hence the higher number of males compared to females in the study.

Most of the study participants were youths below 35 years. This is the group that spend most of their time on social media and the internet. It is also the group that utilizes modern technology most of the time and more likely to interact with OVA as they spend their time on the internet.

The young population being the majority of such as a study is not new. Previous marketing studies reported the majority of participants to be young (Ho & Dempsey, 2010; Huang, Lin, & Lin, 2009). This is mainly due to young people being the majority of the people who watch and interact with online video (Madden, 2007).

Most of the participants had a university level of education. This is in line with the available data, which shows that most Germans have a high level of education. This group is likely to be well informed and versed in internet use. Educated people are also likely to utilize the internet more for shopping and daily transaction.

The high proportion of participants were students (36.9%) or employed (33.0%). Higher education students have been shown to be tech-savvy and likely to utilize the different new technologies and also to spend most of their time online hence more likely to interact with OVA.

Most spend 1 hour and more on the internet daily, highlighting the long period people spend online, especially the youths. Globally, the social media usage of internet users was found to be 142 minutes per day in 2019 and 145 minutes per day in 2020. In America, internet users spend an average of 2 hours, three minutes on the internet daily in 2020 (Statista, 2021)

Mobile phones were the widely used devices to access online platforms and carry out online transactions. According to a survey by (Statista, 2021) internet-enabled phones ownership has grown globally, becoming a key communication and entertainment tool. It was shown that approximately 90% of the global population go online using mobile devices.

4.2 Knowledge, attitude, and perceptions on OVA

The majority (65.5%) of the study participants reported seeing OVA more often. The use of digital advertisement like OVA is different from the traditional T.V. or broadcasting advertising such that the video ads are mostly displayed to the audience based on algorithms, based on user behaviours and does not depend on geography. Hence the easiest method to determine exposure and impact is by the use of the self-reported method. The self-reported method has been found to be reliable and a likely valid method considering the lack of standardized objective measure for the same (Loughney, Eichholz, & Hagger, 2008).

YouTube is among the leading video platforms where OVA are commonly used, and this explains why most people had seen them on YouTube in this study. The rest also reported having seen them on social media platforms such as Facebook and Instagram. Social media platforms are popular with a worldwide reach hence the preferred platform by advertisers for OVA. With the daily usage of these platforms, they are likely to be viewed by online users regularly, as was the case in this study where 94.2% has seen OVA in the last one month.

Most spent 30 seconds or less watching the adverts and preferred shorter OVAs. The duration of an advert has previously been found to be a vital determinant of the advert message recall (Singh & Cole, 1993). Contrary to these study findings where consumers prefer shorter adverts, a previous study reported longer adverts to be effective in higher advert recall (Newstead & Romaniuk, 2010). According to some arguments, shorter ads lack the repetition required for a memorable message (Singh & Cole, 1993). While short OVAs of between 6, 15 or 30 seconds are recommended (IAB, 2016), longer videos have been reported to be effective in increasing consumer brand recognition (Hao Li & Lo, 2015) and the advert recall (Goodrich et al., 2015). However, long videos are considered irritating by consumers (Hairong Li et al., 2002). To add to the inconsistency, a study by Goodrich and colleagues found that consumers perceive shorter OVAs to be more intrusive compared to longer ones (Goodrich et al., 2015).

Video adverts with skip option were preferred compared to those without skip options. This might be due to the flexibility offered by videos with skip options where the user can skip them when they do not wish to view them. While the skip option is preferred, such videos are less likely to be viewed, especially when they are perceived intrusive or time-consuming. Online advertisements such as OVA that are perceived as more intrusive might be considered irritating, resulting in a negative attitude from consumers (Edwards et al., 2002; McCoy et al., 2008). If not offered the option to skip the video, the consumers are likely to engage in avoidance behaviour that is more emotional based. This also makes them form a negative attitude towards the OVA, ignoring it all together with some scrolling to the next link to avoid the advert (Baek & Morimoto, 2012).

Most of the participants in this study did not recall the last OVA watched online. The memory of an advert is a critical aspect in evaluating the OVA or any advert's effectiveness and value (Hao Li & Lo, 2015). For the brand being advertised to be remembered by potential consumers, consumers must pay attention to the advert (Anderson, 2000). While forced non-skip OVAs might alleviate the exposure challenge by ensuring consumers watch the advert, it also has the challenge of negative consumer attitude, affecting their perspective on the product advertised.

Seeing the brand advertised by OVA has been shown previously to result in brand recall supporting what was reported by the majority of the participants in this study. Exposure to a brand in the advert triggers the consumers' attention, leading to the increased recall of the product as their brain encodes the information and stores it, retrieving it when they require a similar product (Hao Li & Lo, 2015).

4.3 Influence of OVA on consumers purchase intention.

In this study, we determined the OVA factors influencing consumer purchase intention as purchase intention can be used to predict actual purchase activity (H. Y. Hsu & Tsou, 2011). The current study found that consumers' attitude toward OVA significantly affected purchase intention. The findings of this study are in line with those of previous studies where a positive attitude towards the OVA was found to be associated with a higher probability of purchase intention as a result of a higher level of interactivity. A similar trend was found in (Cho, 1999) study, where attitude and perceived interactivity were significant determinants of purchase intention (Cho, 1999).

There was a significant association between attitude on OVA and purchase intention. This was in agreement with previous study findings where attitude on OVA and purchase intention were significantly associated (Jain et al., 2018). Consumers with a positive attitude on a product through watching the OVA on it have been found to have a higher likelihood of having a purchase intention for such a product (Bouhleb et al., 2010; C.-L. Hsu & Lin, 2008; Saxena, 2011) as was the case of beauty products on YouTube (Yüksel, 2016).

The content and quality of OVA are vital in increasing influence on the consumer. The content and quality of the video have been thought to influence consumers depending on how informative, educational and credible its content is. These are some of the metrics used in evaluating the OVA's effectiveness and ease of recall (Jain et al., 2018) hence widely used in related marketing studies.

As is the case in most previous study findings, the content and quality of the videos had a significant influence on the purchase decision. Very informative video adverts with key information such as product

description and price are vital in ensuring product recall, ultimately resulting in the purchasing of the product whenever they require it as they will easily remember the product they had viewed in the OVA (Alijani).

Besides, persuasive messaging is vital in OVA effectiveness. Use of evidence-based approach, data, facts and humour is more appealing to the consumer and makes the product memorable ultimately playing a role in the consumer purchase intention and decision (Ritonga, 2005).

Informative content and entertaining content have previously been found to be key in informing the purchase intention, concurring with this study's findings. A study in Turkey found a positive effect of content informativeness and entertainment on the YouTube video advertisement, whose effectiveness positively influenced purchase intention (Firat, 2019). How informative any advertisement is having been previously demonstrated to positively influence purchase intention (Kim et al., 2010). Informativeness of the advertisement positively influences consumers' attitude and social networks, resulting in its effectiveness for its intended purpose (Logan, Bright, & Gangadharbatla, 2012).

As was with previous studies that focused on YouTube videos (Bouhleb et al., 2010; C. L. Hsu et al., 2013; Yang et al., 2010), this study highlights the importance of the content of OVA in influencing the consumer purchase decision and intention. Consumers will form their own opinion regarding the usefulness of the OVA content depending on how they feel it will be critical in their purchase decisions. Hence, while attitude is likely to influence purchase intention and decision, the attitude is also likely to be influenced by OVA characteristics such as content, invasiveness, and quality.

This study showed that perceived intrusiveness of OVA was negatively associated with purchase intention and decision. The findings on the effect of perceived intrusion on the advertisement have been mixed. A previous study found that the feeling of OVA intrusion was associated with increased advertised brand recall (McCoy et al., 2008). However, in line with these study findings, (Edwards et al., 2002) found that OVA intrusiveness was associated with increased irritation. However, others believe that intrusiveness is likely to catch the consumer's attention, leading to a more excellent recall of the brand advertised. Hence the proposal that the consumer who feels the advert was intrusive are highly likely to recall the advert.

However, similar to this study findings, Taylor and colleagues found consumers to be less likely to prefer products associated with OVA that they perceive to infringe on their privacy (Taylor, Lewin, & Strutton, 2011). Unlike in this study, invasiveness of OVA was not associated with purchase intention in the study by (Jain et al., 2018) and (Goodrich et al., 2015).

5. Conclusion

With the ever-increasing competition and the rapid changing advertisement and marketing strategies, businesses are looking for innovative and effective ways to influence consumers to purchase their products. The current over-reliance on the internet and increased social media usage has presented new opportunities to target customers. Video advertisement has since taken prominence in the field, increasing the need for evidence on what consumers like or dislike about them. Our study findings show that online video advertising is seen more frequently by many, with YouTube being the main platform where they are seen. The content and quality of the OVA positively influence the consumer to make a purchase decision or have an intention to purchase the product they saw online, while the invasiveness of the OVA negatively influences them. Hence marketers need to find ways of making OVAs less invasive while ensuring that they are of the right content and quality.

5.1 Research limitations and further research

This study cannot be generalized to other settings. However, it does present critical findings that can be used to inform critical decisions. Besides, the findings might be transferrable to other products and context. In the study, the participants were recruited conveniently utilizing the participants' social networks, with young people being most of the participants hence the finding might not be generalized to other adult age groups. However, if this is done, the results must be interpreted with caution.

Further research exploring other OVA factors influencing purchase intention and purchase decision is needed to have an in-depth understanding of the subject. Besides, there is a need to conduct an in-depth analysis of how the duration of the OVA affects the consumers' attitude and hence product purchase as there seem to be inconsistencies in the results on the subject.

5.2 Implications of the study findings

With heightened competition in the business world, every business is trying to be innovative and increase its visibility to remain profitable. Hence many organizations spend millions of dollars yearly on advertisement, with OVA being one of the latest preferred advertisement options. However, there has always been limited data regarding how OVA characteristics influence the consumers' purchase decision that this study has attempted to address. The findings of this study provide marketers with key information regarding the areas to focus on when designing marketing OVA.

In addition, the study highlights what consumers know, think and perceive about OVA. Such information is vital for businesses in rethinking if to use OVA for marketing and how to design it to appeal to consumers. The evidence from this study will be helpful, especially to businesses and marketers in Nuremberg, Germany, the study setting to inform their marketing strategies going forward. The study findings highlight the importance of consumers' attitude on OVA effectiveness in influencing consumer purchase intention and decision. Besides, the OVA content, quality, and perceived invasiveness are vital considerations that the companies will consider when developing and using OVA to promote their products and businesses.

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