

Impact of Sports Psychology, Human Behavior, and Advertisement on the sales of player's shirts and drinks

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Abstract

Growing health concerns and being overweight as a result of excessive consumption of soft drink have become a major concern around the world. The primary purpose of this research study is to measure the effect of sports psychology, human behavior, and advertisement on the sale of player's shirts and drinks. This research study uses primary data analysis, collected through a questionnaire including specific questions related to the independent and dependent variables under study. In this research study, sports psychology, human behavior, and advertisement are considered independent variables, and sales of player's shirts and sales of drinks are the dependent variables. For measuring data analysis, the study uses chi-square analysis, descriptive statistical analysis, regression analysis, least-square analysis and other histogram graphs. According to the overall study results, it has been found that sport psychology shows a positive and insignificant impact on the sale of players' shirts. On the other hand, human behavior is found to have a negative but significant impact on the sale of players' shirts. In other words, sport psychology has a negative effect on the sale of drinks, and human behavior has a positive effect on drinks sales. This study has important implications for marketers and policy-makers concerned with public health in general, and obesity reduction in particular. Through social marketing, soft drink marketers may incorporate obesity-reduction activities. This study proposes a conceptual framework soft drink anti-consumption behavior, emphasizing health concerns and exploring the impact of sociocultural variables on anti-consumption.

Keywords: Sports Psychology (SP), Human Behavior (HB), Advertisement (A), Sales of player's shirts (SOPS), Sales of Drinks (SOD).

Research Type: Research paper

Introduction

In light of increasingly complexities within the corporate world as well as an increasingly competitive industrial climate, businesses are finding it difficult to sell their products and goods in a timely manner. As a result, entrepreneurs employ a variety of methods and tactics to market their products and goods. Today's market is expanding at a breakneck pace. Every day, a new product is introduced in the market (Breuer, Dallmeyer, Rumpf, & Orłowski, 2021). A few decades ago, the market was restricted to a more limited number of goods and

products. As the market was expanding, there was an abundant supply of new consumers to attract, and individual businesses or firms faced less fear of losing their existing customers. However, market today is sophisticated, and competition is intense, and organizations have to adjust and adapt to rapidly changing marketing dynamics. "Sales promotions include a wide set of incentive measures, most of which are short-term (Voorveld, 2019), meant to encourage consumers or the trade to acquire specific products faster and in a larger amount." Sales promotion serves as a fast stimulant, encouraging customers to purchase items in the store. As a result, sales promotion may improve an organization's

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performance by increasing profitability (Barroilhet, 2016; Breuer et al., 2021)

For marketing any product, communication refers to the means of transmitting information about a product to sale from the manufacturer to customers. Communication holds great importance in terms of ensuring more effective marketing of products and goods. Some organizations use only one medium to communicate information related to their product (Bhasin, 2018; Biddiscombe, 2018) Others utilize multiple mediums for marketing, including sports sponsorship, to sell their sports products and drinks. Some organizations use electronic media as well as print media for the promotion of their organization (Bronnenberg & Dubé, 2017). Over time, electronic media has become the most prolifically used medium for marketing. However, it can still not substitute the role of print media because electronic media and print media have existed together and one cannot displace or downplay the significance of the other (Brown, 2017; Bunn et al., 2019) This research paper aims to explore the impact of sport psychology, human behavior, and brand advertisement on the sales of soft and hard drinks as well as sports products like players' outfits, shirts, or footwear (Bhasin, 2018; Biddiscombe, 2018) (Human behavior is the main factor affecting the sales of an organization, use of soft and hard drinks, and purchase of sports products depends significantly on human psychology. It is investigated that the use of soft drinks causes multiple health-related disorders like obesity, heart diseases, and reduced physical fitness among players. The consumption of soft and hard drinks is primarily associated with human psychological behavior. Another essential factor of sales and marketing is advertisement through any media. Sports events are considered a better opportunity for marketing sports products and drinks, it is one of the most effective platforms to introduce brands selling different goods and products through advertisement. Advertisements help build a deeper association between a sports organization and the advertisers. For sports events, sponsorship is the best way to advertise your product. We cannot see a sports event without any sponsorship, therefore, sports sponsorship plays a vital role in most developing economies (Shahzad, Tian, & Xiao, 2019; Stride, Catley, & Headland, 2020)

For these reasons, sports psychology have the potential to positively affect the sale of products like drinks and player's shirts. Some consumers buy sports kits and player's shirts to feel that they are part of the play, or the fan love which encourages them to buy shirts representing their favorite team players. It shows that human behavior also has a significant role in the purchase of sports products.

However, it is noted that gambling in sports has been increasing in developing countries for the past many years (Stride et al., 2020). Most gambling companies sponsor sports events or sports-related commodities such as shirts sponsored by gambling companies in EPL. These gambling companies sponsor events to advertise their brand and ensure better sales of products, which in turn, enhances the economy (Bhasin, 2018) Some companies use logos on the upper arm of the shirts of sports players to promote their brands, and some use drink sponsorship like Coca-Cola for the marketing of their organization. Some organizations in non-Islamic developing countries use advertisements to sell hard drinks like alcohol. According to this study, various elements in the youth's surroundings are connected to the consumption of hard drinks. Drinks advertisements on YouTube, Tik-Tok, and Facebook, are among the most seen media content and are therefore, significant predictors of consumer behaviour. However, this study also found that while hard drinks promotion through mass media is prohibited, this prohibition has limited influence on young people's drinking habits (Stride et al., 2020; Yifru, 2021).

The purpose of this research paper is to propose a framework of study to investigate the influence of sport psychology on the development of the sale and production of goods and products in sports industries as well as the impact of human behavior and advertisement on the sales of drinks and player's shirts. To investigate the influence of these factors on sales of drinks and player's shirts, we use different models. For this purpose, an online survey has also been conducted which provides evidence of the positive influence of human behavior and advertisement on the sales of soft/hard drinks and players shirts. In this research paper, we also reach an understnading of gambling as a disorder of health and sports. In developing countries, gambling companies have been increasing their sponsorships in sports events to market their products like hard and soft drinks as well as using shirts sponsorship to promote their organization.

Literature review

Sports psychology and sales of drinks and player's shirts:

(Bunn et al., 2019; Cao, Cranfield, & Widowski, 2018) the association between sport psychology and the sale of sports products and drinks. It was examined that sports popularity has been increasing with the corresponding rise in popularity of sports products sold gambling companies because the gambling business has expanded over the years (Bunn et al., 2019; Ieg, 2016; Keshkar et al., 2019) (Apart

from this, it was found that the sales of sports products and the use of soft drinks during sports directly impact sports psychology. Furthermore, examining the literature, it has been found that worldwide gambling companies have been increasing engaged with sports organizations and individual players for more effective marketing of sports products like drinks, shirts, sports kits, etc. In this research paper, shirts sponsorship of gambling organizations has been discussed in the context of EPL and SPL, and a deeper association has been indicated between them. It has been considered an alternative way for gambling companies to increase their drinks and shirts marketing, and all these factors affect sports psychology. In this regard, (Cao et al., 2018; Killick & Griffiths, 2020; Owora, 2019a) has listed the gambling companies offering shirts and drinks sponsorship in sports events and/or to different clubs that have been playing in SPL and EPL.

Nowadays, sports sponsorship is considered an essential element of sports psychology and sports events. Sports sponsorship has a number of advantages. More variety of sponsorship has given way to advances in sports psychology and has allowed sports events to be organized in a better way, and is widely considered to be a powerful tool for the marketing of sports products by gambling companies and other sports manufacturing industries (Cao et al., 2018). Apart from this, shirts and drinks sponsorship in sports holds a special place in the marketing of sports products because it is deemed an effective tool in raising awareness of different drinks and shirts brands, increasing opportunities of hospitality, facilitating valuable networking as well as providing a new and effective platform of marketing. Marketing through sponsorship can also affect sports psychology. Sponsorships can also be influenced by players of different cultures, mainly when a worldwide sports sponsorship organizes events in different countries or different cultures. Sports sponsorship of drinks and shirts can influence sports psychology, and cultural obligations are an important factor in this regard. (Owora, 2019a, 2019b)

Human behavior and sales of drinks and player's shirts

(Cao et al., 2018) studied the impact of human behavior on the sales promotion of player's shirts and drinks during sports events. Similarly, in this research paper, a replica of a sports kit or shirt has been defined by two different aspects. First, it is made to look like and be sold as an outfit of their favorite teams. Secondly, fans buy it mainly because it reaches a level of similarity that satisfies their perception of a real player's product, with sportswear being a secondary factor. Therefore, human behavior satisfaction directly relates to the sales of players' products like shirts,

sports outfits, and it is found that human psychology has a direct impact on the sales of drinks as well. This is because individuals will only buy those products that meet their mind satisfaction, with human psychology playing a vital role in marketing different sports products. Humans have been purchasing these sports products since the 19th century, that is, when the first sports game is believed to have started.

There is a scarcity of comprehensive knowledge of human behavior on how people react to sports sponsorship communications. conducted an online survey that focused on the function of sports sponsorship portfolio size to understand the association between sports shirts and drinks sponsorship investments and human behavior in terms of brand preference. This article examines how human behavior might affect the promotion of sales of drinks and players' shirts as well as how several sponsored players wearing shirts of the different brands might influence decisions related to brand. How it can enhance the marketing of gambling companies and how different brands of drinks are affected by human behavior. Furthermore, other factors that can affect the sports brands of shirts and drinks marketing and decision-making process have also been discussed in the paper, including previous brand status, and previous experience of a brand (Biddiscombe, 2018; Pope & Williams, 2011; Shahzad et al., 2019; Stride et al., 2020)

Advertisement and sales of drinks and player's shirts

(Owora, 2019a; Pope & Williams, 2011) claimed that advertising is one of our societies' most utilized communication methods. People are continuously recruited by banners or advertising spots in the cities, Internet, or the television. Brands use this method of communication to try to persuade potential consumers to buy their product or service. In the case of sports, sports superstars have been an increasingly popular way to reach target audiences during the last decade. As a result, it was thought that it would be interesting to examine the usage of these personalities, which are defined as "individuals who are well-known in public and who utilize their celebrity to sell a product by appearing in an advertisement." It was investigated that advertisement substantially impacts the sales of sports products like shirts, sports kits, and soft and hard drinks. Gambling companies use sports sponsorships for the advertisement of their products related to sports.

(Owora, 2019a; Shahzad et al., 2019) According to the data, advertising has a substantial impact on brand choice. Most respondents considered it an essential element when deciding which alcoholic beverage brand should be

purchased for rugby matches. At the same time, the advertisement through messaging had just a modest impact on an individual's brand purchasing choice. Furthermore, the advertising media and channels employed had a limited influence on influencing the respondents' brand selection. Nonetheless, the channels must be used interchangeably to reach a bigger audience and a significant impact (Stride et al., 2020)

In most developing countries, gambling advertisement of soft and hard drinks has been increasing day by day with the popularity of sport betting online. There was a substantial amount of research on sports psychology and human behavior regarding the sales promotion of drinks and sports products. However, there was minimal research on the gambling advertisement of these products. This

research article aims to explore the impact of advertisement on the marketing of hard drinks and player's shirts. After investigation, it was noted that advertisement has both positive and negative impacts on human behavior and sports psychology, whereas, in the case of marketing of sports products, it plays an important role (Stride et al., 2020; Yifru, 2021) (

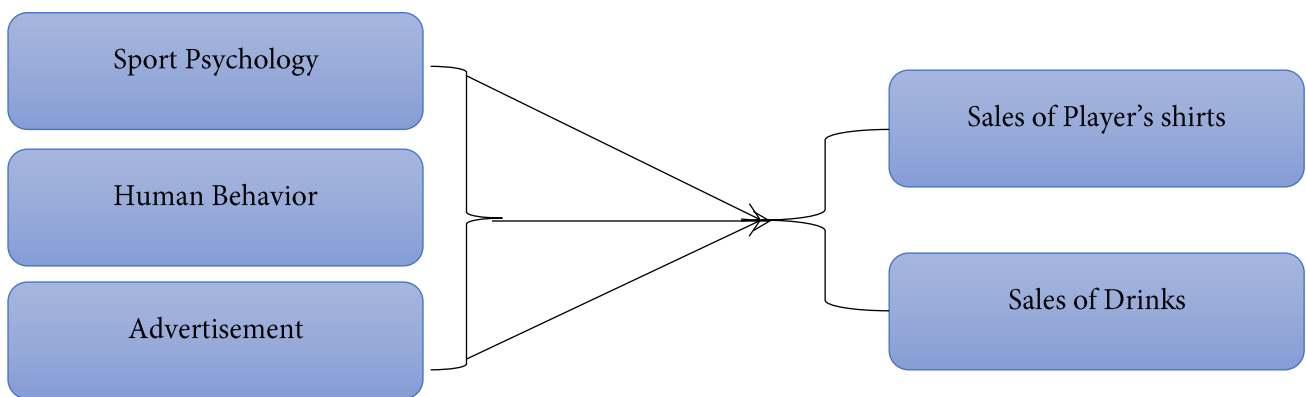
Hypothesis Development

H1= There is a positive relationship between sport psychology on sales of player's shirts and drinks.

H2= There is a significant effect of human behavior on sales of player's shirts and drinks.

H3= Advertisement shows positive and significant effect on the sales of players' shirts and drinks.

Theoretical Framework



Methodology

This research study seeks to assess the impact of sports psychology, human behavior, and advertisement on the sales of player's shirts and drinks. This research study is based on primary data sources. For data collection, we use a questionnaire related to sport psychology, human behavior, and advertisement. Therefore, in this paper, we have to choose a very inclusive approach related to sport psychology in our research study analysis of player's shirts and drinks.

Research design

The research study presents different analyses related to the dependent and independent variables; for the purpose of data analysis, the smart PLS software was used a number of statistical analysis techniques were run such as descriptive statistics, correlation coefficient, regression analysis, ANOVA test analysis, reliability, and validity analysis. These analyses were used to measure the impact of sports psychology, human behavior, and advertisements

on the sales of player's shirts and drinks.

Table 1

<i>Variables</i>		
Sr. No	Descriptions	Notations
1	Independent Variable	IV
2	Sport Psychology	SP
3	Human Behavior	HB
4	Advertisement	A
5	Dependent variable	DV
6	Rate of player's shirt	RPS
7	Rate of drinks	ROD

Sport Psychology

Sports psychology is an interdisciplinary science that draws on knowledge from different fields such as physiology, kinesiology, and biomechanics. This research study explores how psychological factors affect sports performance including how individuals and businesses are participating in sports activities as well as the role of psychological and physical factors in this regard. Sports

psychology helps professional athletes enhance their sports performance and helps them achieve their objectives and goals. Attention control, setting the goal, mental imagery, and working on interpersonal skills are to name some key components of sport psychology programs.

Human Behavior

Human behavior is refers to the potential and expressed capacity of an individual which includes physical, mental, and social dimensions of human behavior in response to internal and external stimuli. Human behavior is a branch of social sciences, and encompasses elements of sociology, anthropology, psychology, and economics. According to the research study, there are different types of human behavior which may be categorized into four main personality types, such as trusting, optimistic, envious, and pessimistic, as they relate to an individual’s human behavior. Human behavior plays an essential role in improving the lives of individuals who experience mental health and behavioral disorders. Human behavior also facilitates advancement in children's education, management and organizational behavior, and public health.

Advertisement on player's shirts and drinks

Advertisement is the primary means of communication with user in relation to a product or service. Advertisement

is the main message paid for by those who send them and intends to inform people who receive them. This research study measures the impact of sport psychology, human behavior, and advertisement related to sports shirts and drinks. There are different types of advertising: display advertising, mobile advertising, native advertising, and video advertising.

Econometric Model

$$AoS = \alpha + sp\beta_1 + hb\beta_2 + \epsilon \tag{1}$$

$$AOD = \alpha + SP\beta_1 + HB\beta_2 + \epsilon \tag{2}$$

Where:

AOS= advertisement of player's shirts

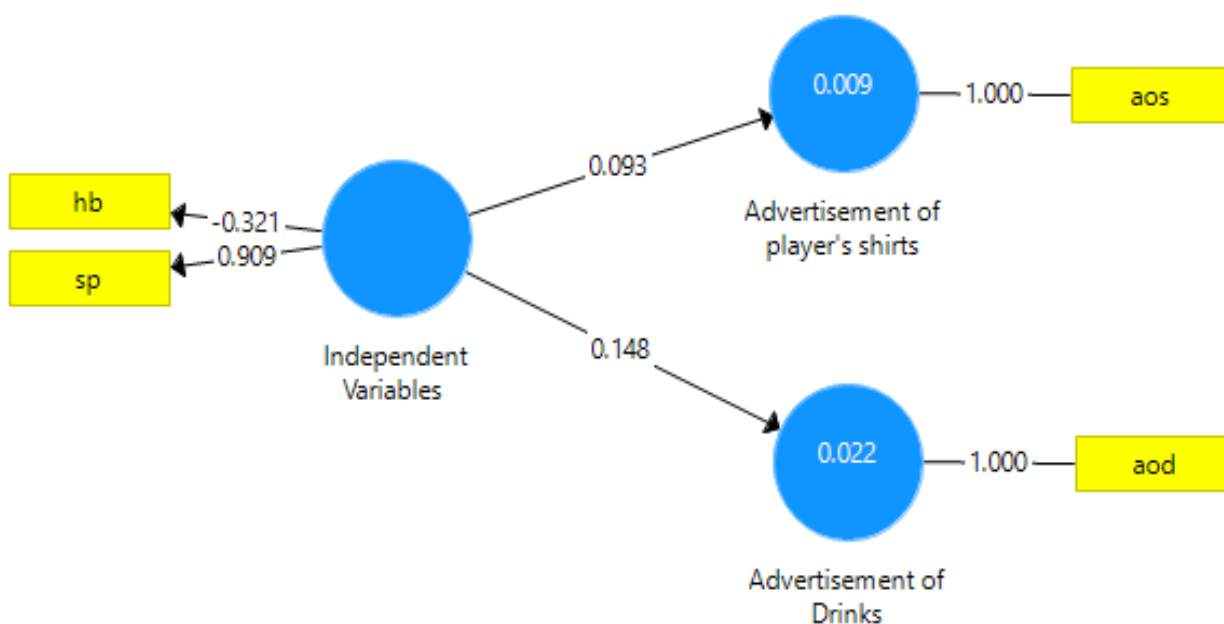
AOD= Advertisement of Drinks

SP= Sport Psychology

HB= Human Behavior

The above equations present the econometric model as related to the independent and dependent variables understudy. For example, equation one shows that advertisement of player's shirts is a dependent variable, and sport psychologies and human behavior are both considered independent variables. Similarly, in equation two, drinks advertisements are a dependent variable, and sports psychology and human behavior are identified as the independent variables.

Smart PLS Algorithm Model



The smart Algorithm model presents the effect of sport psychology and human behavior on dependent variables

such as the sale of shirts and drinks. Human behavior shows a positive impact on the advertisement of player's

shirts rate at 0.093. Sport psychology also shows a positive impact on the advertisement of drinks at 0.148 and 0.022

respectively which shows a positive and significant relationship.

Results and Descriptions

Chi-Square Analysis

Table 2

Test Statistics

	Sport psychology	human Behavior	advertisement	sale of player's shirts	sale of Drinks
Chi-Square	35.520 ^a	28.720 ^a	87.600 ^b	46.100 ^b	33.840 ^a
df	3	3	4	4	3
Asymp. Sig.	.000	.000	.000	.000	.000

a. 0 cells (0.0%) have expected frequencies less than 5. Therefore, the minimum expected cell frequency is 25.0.

b. 0 cells (0.0%) have expected frequencies less than 5. Therefore, the minimum expected cell frequency is 20.0.

The above table presents the Chi-square analysis related to the variables including independent and dependent variables, that is, sport psychology, human behavior, and advertisement. These three are considered independent variables while the sale of player's shirts and the sale of drinks are both dependent variables. Therefore, the rate chi-square value of sport psychology is 35.520, its human behavior rate is 28.720 while advertisement shows 87.600 rates, sale of players shirts is 46 and sale of the drink is 33, respectively. Therefore, the significant level of the overall result is 0.000, which means a 100% significant level.

Descriptive Statistic analysis

Table 3

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
sport psychology	1001.00	4.00	2.1600	.92899	
human Behavior	1001.00	4.00	1.9900	.85865	
advertisement	1001.00	5.00	2.1900	.76138	
sale of player's shirts	1001.00	5.00	2.5900	.96499	
sale of Drinks	1001.00	4.00	1.8900	.82749	
Valid (listwise)	N ₁₀₀				

The above table presents the descriptive statistical analysis among all variables including dependent and independent variables. The result shows the minimum values, the values of maximum, the average values, and the standard deviation. The total number of observations is 100; the overall minimum value is one, and the maximum value is 5. The average value of sport psychology is 2.1600, and its standard deviation value is 0.92899, which shows that 92% deviate from the mean. Human behavior is the second independent variable; its mean value is 1.9900, and its standard deviation is 0.85865. Another independent variable considers advertisement; its average value is 2.1900, and the standard deviation value is 0.76138, which shows that 76% deviate from the mean. The sale of player's

shirts and the sale of drinks are both considered dependent variables; their mean values are 2.5900 and 1.8900, its standard deviation values are 0.96499, and 0.82749 respectively which means that 96% and 82% deviate from the mean. The descriptive statistical analysis describes the overall performance related to sport psychology, human behavior, and advertisement.

Table 4

Model Summary

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate
1	.220 ^a	.048	.019	.95597

a. Predictors: (Constant), advertisement, human Behavior, sport psychology

Table 4 presents the model summary in order to measure the impact of sports psychology, human behavior, and advertisements on the sales of player's shirts and drinks. The value of R is 0.220, its R square value is 0.048, adjusted R square values is 0.019, and the standard error of the estimated value is 0.95597, respectively.

Table 5

ANOVA

Model	Sum of Squares	d.f	Mean Square	F	Sig.
1 Regression	4.458	3	1.486	1.626	.188 ^b
Residual	87.732	96	.914		
Total	92.190	99			

a. Dependent Variable: sale of player's shirts

b. Predictors: (Constant), advertisement, human Behavior, sport psychology

The above table presents the ANOVA analysis related to the regression analysis, the residual values, and total values. The table presents the sum of square values, the value of df, the mean square values, F statistic values, and the significant level. For example, the sum of square 4.458, 87.732, 92.190, its mean square values are 1.486 0.914, and F-statistic value is 1.626 and its F statistic value is 0.188, which implies an 18% significant level.

Regression Analysis when the dependent variable is a sale of player's shirts

Table-6

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	2.110	.400		5.273	.000
	Sport psychology	.129	.105	.124	1.233	.220
	human Behavior	-.110	.113	-.098	-.974	.332
	advertisement	.192	.127	.151	1.509	.135

a. Dependent Variable: sale of player's shirts

Table 6 presents the regression analysis between an independent and dependent variable with the help of unstandardized and standardized coefficients on the basis of beta and standard error. The result present the statistic and significant level of sport psychology as an independent variable; its beta value is 0.129, its standard error value is 0.105, its t statistic value is 1.233. Human behavior is the second independent variable; its beta value is -0.098, its t statistic value is -0.974, which shows a negative and

insignificant level. The significant level is 0.332, which shows a 33% insignificant level. The third variable is advertisement; its beta value is 0.151, its t statistic value is 1.509, and its significant level is 0.135, which shows 13% significance. According to the results, the study rejects the null hypothesis and accepts the alternative hypothesis that there is a positive but insignificant relation between sport psychology and the sale of players' shirts. Therefore, there is a negative but significant relationship between human behavior and the sale of player's shirts.

Periodogram Sale of Drinks

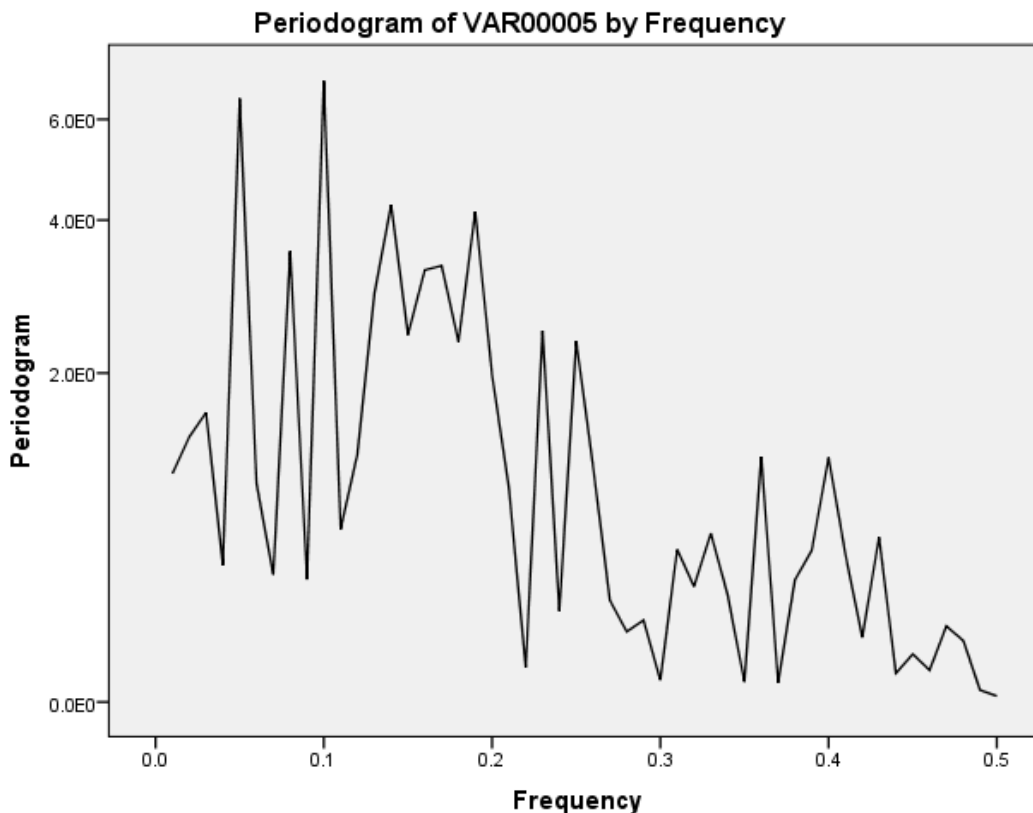


Figure 1

The above figure shows the periodogram effect of the sale of drinks which is considering a dependent variable. According to the results, the vertical side presents the

periodogram from 0.00 to 6.00, and the horizontal side shows frequency level which starts from 0.0 to 0.5.

Least Square Model

Table 7

Model Summary

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate
1	.112 ^a	.013	-.018	.83503

a. Predictors: (Constant), advertisement, human Behavior, sport psychology

The above model presents the least square model related to the regression analysis in this result; the predictors' variables are advertisement, human behavior, and sports psychology. According to the result, the value of R is 0.112, the R square value is 0.013, the adjusted R square value is -0.018, and the standard error of the estimated value is 0.83503, respectively, which shows that the model is fit for analysis and the results support the alternative hypothesis in this research.

Regression analysis when the dependent variable is a sale of drinks

Table 9

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.786	.349		5.112	.000
	sport psychology	-.049	.092	-.055	-.537	.593
	human Behavior	.100	.098	.104	1.020	.310
	advertisement	.005	.111	.004	.041	.967

a. Dependent Variable: sale of player's Drinks

The above table presents regression analysis results for the dependent and independent variables with the help of unstandardized coefficient and standardized coefficients values of beta, standard error, T-statistic value, and significant value. Sports psychology is an independent variable; its beta value is -0.055, its t-statistic value is -0.537, and its significant level is 0.593, respectively. The result shows a negative and insignificant relation between sport psychology and the sale of drinks. Human behavior shows a positive and insignificant relation between them; its values are 0.104, 1.020 and its significant level is 0.310, respectively. The advertisement shows that there is a positive and insignificant relationship which means that advertisement has a direct impact on the sale of drinks (Bhasin, 2018) (Alex Miller, et al 2016). The above analysis accepts all alternative hypotheses regarding the effect of sport psychology, human behavior, and advertisement.

Table 8

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.851	3	.284	.407	.748 ^b
1 Residual	66.939	96	.697		
Total	67.790	99			

a. Dependent Variable: sale of Drinks

b. Predictors: (Constant), advertisement, human Behavior, sport psychology

The above table presents the ANOVA test analysis regarding the regression analysis when the dependent variable is the sale of drinks. The sum of square values is 0.851, 66.939, and 67.790; the mean square value is 0.284 and 0.697, respectively. According to the result, its F-statistic value is 0.407, and its significant level is 0.748, which shows a 74% significance level.

Table 9

Component Matrix

	Component	
	1	2
sport psychology	.614	.313
human Behavior	.060	.796
advertisement	.630	.125
sale of player's shirts	.675	-.277
sale of player's Drinks	-.231	.569

Extraction Method: Principal Component Analysis.

a. two components extracted.

The above table presents the component matrix analysis related to the principal component analysis. The result analysis is divided into two components; the variables have positive and some negative impacts on each other; according to the first component, its values are 0.614, 0.060, 0.630, 0.675, -0.231, respectively. Similarly, the second column shows that values are 0.313, 0.796, 0.125, -

0.277, 0.569 respectively. These results shows the principal component analysis of sport psychology, human behavior, advertisement and sales of shirts and drinks.

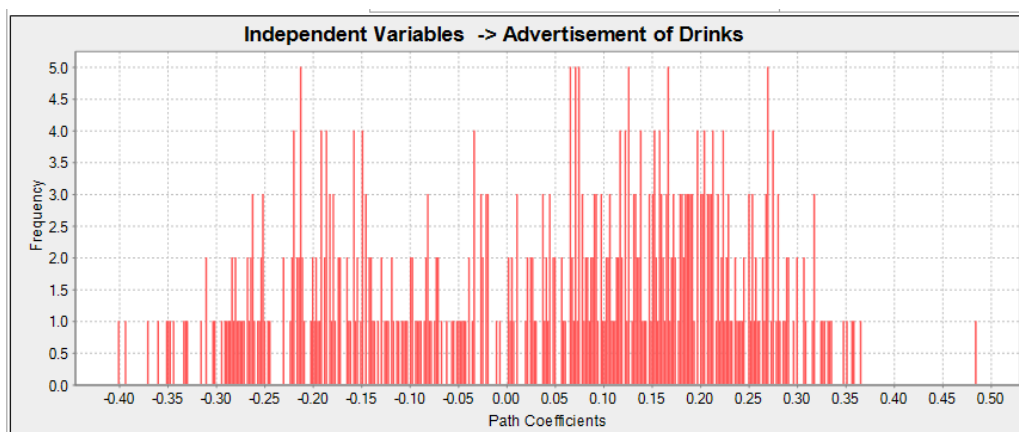


Figure 2

The above figure shows the path coefficient graph, which presents the relationship between independent variables and drinks advertisement. According to the figure, the vertical side shows frequency level, which starts from 0.0

to 5.0; the horizontal side presents the path coefficient levels, which started from -0.40 and ended at 0.50 respectively. The red bar lines present the relation between independent variables and the advertisement of drinks.

Table 10

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.287	25.740	25.740	1.287	25.740	25.740
2	1.148	22.959	48.699	1.148	22.959	48.699
3	.959	19.184	67.883			
4	.839	16.789	84.671			
5	.766	15.329	100.000			

Extraction Method: Principal Component Analysis.

The above analysis explains total variance with the help of initial eigenvalues and defines the extraction sums of squared loadings values. The results indicate that the percentage of variance, cumulative percentage, and total values divided into five components are 25.740, 22.959, 19.184, 16.789, and 15.329, respectively. According to the

analysis, its cumulative percentage values are 25.740, 48.699, 67.883, 84.671, and 100.00, respectively. The total values present the total initial eigenvalues, which are 1.287, 1.148, 0.959, 0.839, and 0.766, respectively, showing a positive variance percentage.

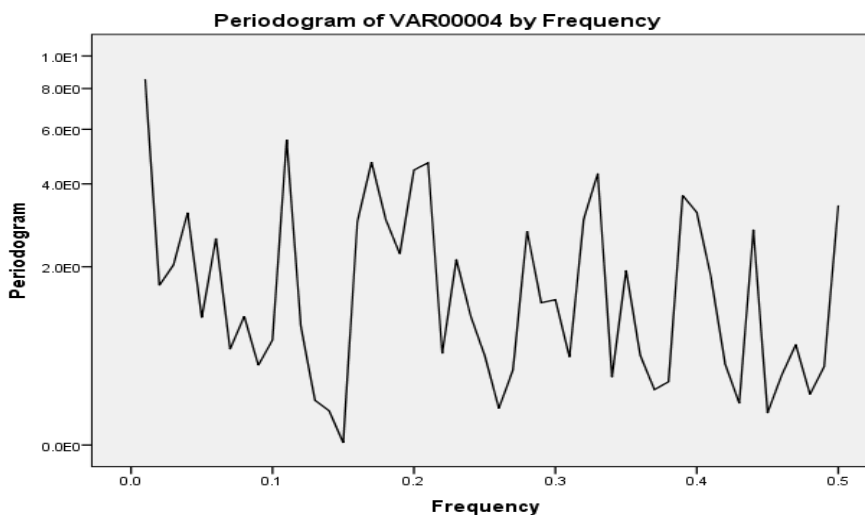


Figure 3

Similarly, Figure 3 performs the same function as Figure 2; the graph presents the sale of player's shirts. Its vertical side

shows a periodogram. The horizontal side presents frequency levels which start from 0.0 to 0.5.

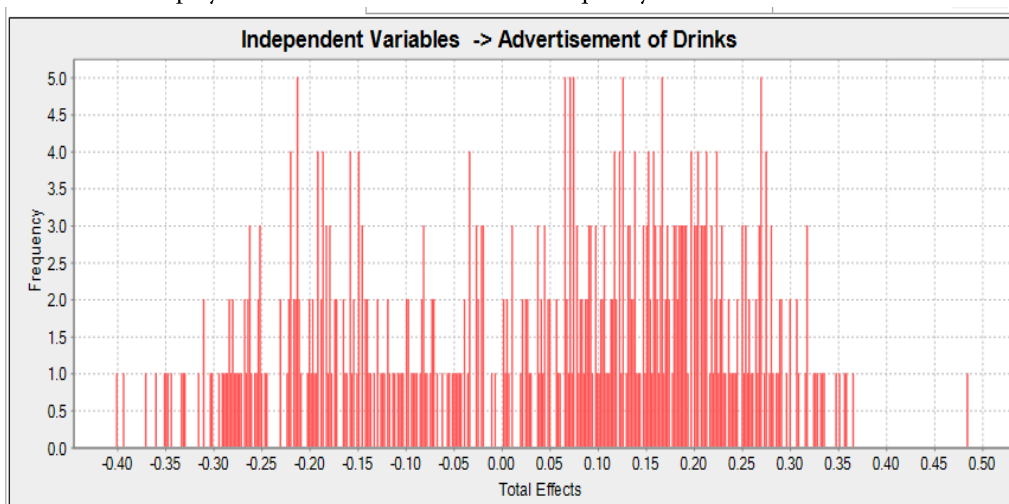


Figure 4

Figure 4 shows the total effect between independent variables and the advertisement of drinks. The vertical side shows the frequency level, and the horizontal side presents the total effect which starts from -0.40 and ends at 0.50, respectively.

Discussions

Sports psychology is generally known for supporting competitors in conquering psychological issues and improving their presentation, such as helping a football player break out of a droop or a sprinter rediscover certainty following a physical setback. While execution is recognized as the foundation of game sport psychology, it is just a single component of what sports psychologists are presently doing to help players. Their growing responsibilities include assisting athletes with interpersonal challenges and treating mental health conditions like anxiety, depression, and eating disorders. In addition, sports psychology research is also gaining popularity outside of games. Sports analysts are progressively sought after by experts in high-stress occupations like doctors, firefighters, and performing artisans. International Events Group – IEG (2018). This research study is based on sport psychology, human behavior, and advertisement, and aims to measure their impact on sale of player's shirts and drinks. In this research, we use the smart PLS software for data analysis while using different tools and techniques included chi-square, regression analysis, least square analysis, as well as histogram analysis. The result founded that there is a positive and insignificant relationship between sport psychology and sale of player's shirts. On the other hand, a

direct and significant impact of human behavior was observed on sale of drinks. Barroilhet, T. (2016) studied sport related programs and found same results. The possibility that clothing may be worn off the field or court, which was just an age before considered unlawful, was quickly retained into football fan subculture from existing male patterns – and every so often got back with interest.

Conclusion and recommendations

Advertising, as a reliable means of communication, influences our perception of what is proper or not. It has always impacted how society seeks to protect and maintain products and companies, resulting in the creation of standards and the alteration of widely held beliefs. The role of advertising in our culture is continually expanding, evolving into more subtle forms. Brands and businesses all over the globe have significantly dedicated a portion of their investments to advertising to improve their market share, income, and brand position.

For starters, a constructive outcome of a sponsorship upgrade on buyer decision was seen inside the controlled setting of the analysis, giving further affirmation of a client's social shift because of sponsorship exercises. Second, the review takes a look at the impact of the size of a sponsorship portfolio. As indicated by the research findings, organizations need a profound comprehension of their image in the market because afore-mentioned impacts are brand explicit and might be affected by apparent brand attributes. If organizations anticipate unavoidable losses, they should decide the right size of their sponsorship portfolio to guarantee the speculation's monetary proficiency. The current research study

measures the impact of sport psychology, human behavior, and advertisement on sale of shirts and drinks. After analysis, all data related to the variables indicates that sport psychology has a positive but insignificant effect on sale of player's shirts; therefore, human behavior is shown to have direct effect on sale of drinks. Both variables are found to have a direct and significant effect on advertisement of sports-related products.

Limitations and future research

For the present study, we use the Bronnenberg and Dubé's hypothetical model to show the importance of a microeconomic point of view in understanding customer conduct regarding sports. The study carries certain limitations that might be addressed in future research. Firstly, while evaluating the data, the controlled environment of the experiment must be taken into account. Although the line-up job assures the participant's

active participation, future exploration should focus on affirming the discoveries in the field and building up genuine games sponsorships. It further bears to note that people's socio-segment qualities are a subsequent limitation. Since contrasts in related involvements, information, and commitment impact the relationship between sponsorship improvements and social outcomes, the findings of the study are dependent on a specific objective arrangement of significant firms. Lastly, the review utilized circumstance with just two significant brands; future exploration is encouraged to investigate into the effect of sponsorship portfolio size in more complex situations while focusing on a limited number of specific brands related to sports.

Acknowledgments

Researchers Supporting Project number (RSP-2021/87), King Saud University, Riyadh, Saudi Arabia

Reference

- Barroilhet, T. (2016). Brand Integration and Sports Sponsorship: Benefits and Pitfalls.
- Bhasin, H. (2018). Psychological pricing and its application in marketing. Retrieved March, 24, 2019. doi:<https://doi.org/10.1080/00036846.2020.1834500>
- Biddiscombe, R. (2018). DAZN: The Netflix of sports. Retrieved January, 23, 2019.
- Breuer, C., Dallmeyer, S., Rumpf, C., & Orlowski, J. (2021). The effect of sponsorship portfolio size on brand choice: an experimental approach. *Applied Economics*, 53(10), 1200-1211. doi:<https://doi.org/10.1080/00036846.2020.1834500>
- Bronnenberg, B. J., & Dubé, J.-P. (2017). The formation of consumer brand preferences. *Annual Review of Economics*, 9, 353-382.
- Brown, P. (2017). *Savage Enthusiasm: A History of Football Fans*: Goal Post.
- Bunn, C., Ireland, R., Minton, J., Holman, D., Philpott, M., & Chambers, S. (2019). Shirt sponsorship by gambling companies in the English and Scottish Premier Leagues: global reach and public health concerns. *Soccer & Society*, 20(6), 824-835. doi:<https://doi.org/10.1080/14660970.2018.1425682>
- Cao, Y., Cranfield, J., & Widowski, T. (2018). Position-Dependent order effects on the prediction of consumer preferences in repeated choice experiments. *Applied Economics*, 50(3), 287-302. doi:<https://doi.org/10.1080/00036846.2017.1321836>
- Ieg. (2016). What sponsors want and where dollars will go in 2018. *IEG Sponsorship Report*.
- Keshkar, S., Lawrence, I., Dodds, M., Morris, E., Mahoney, T., Heisey, K., . . . Ghasemi, H. (2019). The role of culture in sports sponsorship: An update. doi:<https://doi.org/10.29252/aassjournal.7.1.57>
- Killick, E. A., & Griffiths, M. D. (2020). A thematic analysis of sports bettors' perceptions of sports betting marketing strategies in the UK. *International Journal of Mental Health and Addiction*, 1-19. doi:<https://doi.org/10.1007/s11469-020-00405-x>
- Owora, C. S. (2019a). Factors Associated With Alcoholic Beverage Preference in Sports: A Case of Rugby Fans In Kenya.
- Owora, C. S. (2019b). *Factors Associated With Alcoholic Beverage Preference in Sports: A Case of Rugby Fans In Kenya*. United States International University-Africa,
- Pope, S., & Williams, J. (2011). 'White shoes to a football match!': female experiences of football's golden age in England. *Transformative Works and Cultures*, 6, 176-195. doi:<https://doi.org/10.3983/twc.2011.0230>
- Shahzad, M. F., Tian, Y., & Xiao, J. (2019). "Drink It or Not": Soft Drink Anticonsumption Behavior and the Mediating Effect of Behavioral Intentions. *Sustainability*, 11(12), 3279. doi:<https://doi.org/10.3390/su11123279>
- Stride, C., Catley, N., & Headland, J. (2020). Shirt tales: how adults adopted the replica football kit. *Sport in History*, 40(1), 106-146. doi:<https://doi.org/10.1080/17460263.2019.1578255>
- Voorveld, H. A. M. (2019). Brand communication in social media: A research agenda. *Journal of Advertising*, 48(1), 14-26.
- Yifru, Y. (2021). Effects of Social Networking Sites Alcohol Advertisement and Ban of alcohol advertisement on Main stream media on Youths Alcohol Drinking Behavior: Evidence from Addis Ababa, Ethiopia.