

Mapping of Online Shopping behaviour: A Dark Triad Approach

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ABSTRACT

The main purpose of this study is to examine a probable association between personality factors and the online shopping behavior of a consumer. A design of descriptive research is found to be suitable for carrying out the analysis for the framed objectives. A questionnaire with 3 sections is devised, consisting of demographic factors, dark triad of personality, and online shopping behavior. A multi-stage random sampling technique was utilized for the research. The paper focuses on the determination of impact of personality factors with respect to Dark triad in formulating the online shopping behavior of an online consumer. This is in lieu of the correlation of the concepts of Marketing and psychology. The results obtained cannot be generalized for the entire customer segment. The limitations are also possible because of the fact that the analysis is based on the responses obtained on the basis of questionnaire distributed to the respondents. The present study mainly deals with the consumer behavior aspect of an individual. It takes into account the personality of a person in an individual way that affects his/her choices over an online e-commerce platform. Thus, it will result in understanding the needs and preferences of probable customers who are surfing items over online domain. The research will provide insight over the basis of decision making of an online consumer based on his/her individual personality traits which will lead to him/her ordering a product online.

Keywords: *Dark Triad of Personality, Online Shopping Behavior, Demographic Factors and Personality Factors.*

Introduction:

Marketing and Psychology in terms of their correlation have been a sought-after proposition in the research arena (Godwin and Kalpana, 2013). The online or digital domain of online shopping is considered in the brackets of marketing for this study. Individual thought process and decision making as per individual personalities dictate the online behavior and presence of users (Liao and Chung, 2011). Consumer mind is divulged with the individual psychology of an individual (Ladas, Ferguson, Aickelin, and Garibaldi, 2014). This psychological aspect of a person can also be impacted with the influences of surroundings or several other information that are available online.

Problem Statement:

The primary problem dealt with in the study in unavailability of study that is done to develop an association between the psychological factors and the online shopping preferences of an individual (Liao and Chung, 2011). The various parameters that can be framed with the help of information present online can determine such traits of an individual that affect his/her decision making (Mohammadinejad, Farahbakhsh, and Crespi, 2016). The parameters and their changing factors can actually influence the changes in demand of specific products over the digital space (Boyu, 2012). The purchase intention of a person depicted online can be on the basis of individualistic needs of a person (Yu and Fu, 2010). The presence of online shopping at the tip of your hands has increased the consumer's interests and so, it

is essential to understand the innate needs of a consumer on the basis of what kind of personality he/she belongs to (Zhang, Li, and Azamat, 2012).

Purpose of the Study:

The study tries to focus on the growing popularity of online shopping amongst the shoppers, in general with the ease of access to online medium of purchasing (Liao and Hsieh, 2010). The innate needs that instigate this emotion of needs can be analyzed with the help of technology by examining each and every move of a person over the digital medium. These behaviors can change with the span of time and so, involve numerous risks with it that should be focused on to serve the probable customers (Yi and Fan, 2011). These risks when dealt carefully can make a low frequency shopper into a loyal customer and solve all the issues for him/her (Luo, Yu, Han, and Zhang, 2016).

Research Questions:

With different attitudes, beliefs, needs, wants, and individual choices, the perceived choice of each and every consumer will be different and the study tries to target the same notion. So, the major questions that the research intends to put forward are:

- i. Do the components of personality traits determine online shopping behavior?
- ii. What is the association of demographic factors with regard to online shopping behavior?

Objectives:

- 1) To explore the influence of personality traits of an individual in determining online shopping behavior
- 2) To assess the association of demographic factors with regard to online shopping behavior

Scope of the Research:

The main aim that the study tries to achieve is to provide an insight to the e-commerce players as to how they can analyze the choices of their customers (Yang, 2010). For this, it is necessary to understand that the customer has several psychological reasons behind making a purchase decision. So, a behavioral analysis is required to understand as to what a consumer want and what kind of psychological factor is playing an important role in changing his/her preference (Huang and Wang, 2011). Sometimes, the decisions can also be reflective of what the person is going through in terms of his/her own social life (Anonymous, 1984). This can be understood only if one understands that it is not necessary that a happy customer will become a loyal customer as happiness and satisfaction are two different emotions. This is required to be perceived well before designing any product offering (Shi, et al., 2017).

Literature Review:

Dark Triad Theory of Personality:

It is a psychological framework that deals with the most aversive collection of traits. But, it cannot be denied that an aversive character has a higher attractive power to become an influencer in a society. The three different categories of these socially aversive characteristics are, Machiavellianism, Narcissism, and Psychopathy. These can be regarded as a threat to an ideal society. But, they have the capability to influence the decision making pattern of an individual (O'Boyle et al., 2014). People with Machiavellianism trait are really manipulative and do not consider the emotion of other people. They have a cynical perspective and work in the same framework of being pessimistic about everything (Rauthmann and Will, 2011). The people, who have a grand perspective about themselves and are absorbed completely in their own existence and the greatness of it, are considered to be narcissistic in nature. They can have different traits that can sum up to the trait of narcissism (Miller et al., 2010). All these traits will instigate different kind of attitude in a person that has to be analyzed differently. A Psychopathic person fails to feel any emotion. They are ignorant and have no sense of regret in them. They do not tend to sympathize or empathize towards any other individual. This can become an anti-social trait, very often (Miller and Lynam, 2015). These people rarely get affected by anything and tend to develop an attitude of indifference. This generates a feeling of materialism in their lives and towards any instance of their lives. But, all these characteristics make them different from the crowd which makes them attractive to the audience and have the ability to generate affection from a lot of people. (Lee et al., 2012). These people get frustrated quite easily as they have no emotional quotient to understand anything. They can sometime be dangerous as well with their aggression and violence (Muris, Meesters, and Timmermans, 2013; Ziegler-Hill, Vonk, 2015). Today, with the materialistic infusion in all our lives, the youth of present times can seem quite apathetic, making it quite difficult for anyone to understand what is actually going on inside their heads.

H₁: Dark Triad Personality will positively influence Online Shopping

Online Shopping Behavior:

The traits that have an influence over the Online Shopping Behavior over an individual while he/she is surfing online for different products can be divided into positive and negative ones. These traits give rise to development of positive and negative notions in the head space of a customer. The positive ones include the wide assortment of products, accessibility, information search possibility, comfortable space and

availability at the tip of hands to serve the day-to-day needs of a customer. So, it is a quick detour for a customer to get anything and everything that he/she requires (Devkishin, Rizvi, and Akre, 2013). The attention to the online customer that is given in the online space with the related product searches segment or different offers or individualistic design of product assortment gives a positive view in the minds of customer for purchasing items online (Qiao, Zhang, Lindgren, and Yang, 2016). If we consider an offline retail space, the way a product is displayed can attract a customer very often to place any order for any specific product (Chynal, Sobecki, Rymarz, and Kilijanska, 2016). In a similar manner, the product assortment over an online e-commerce space is

utilize the technology of past data history of each and every customer to develop individualized offering for them to make them comfortable in the online shopping domain (Ahmeda, Shehaba, Morsya, and Mekawiea, 2015). Demographic influences can also not be denied in such circumstances. So, the effective parameters that can be taken into account are age, marital status, living status, gender, geographical location, income category, and educational qualification.

H₂: Demographic factors will significantly associate with online shopping behavior

Conceptual Framework:

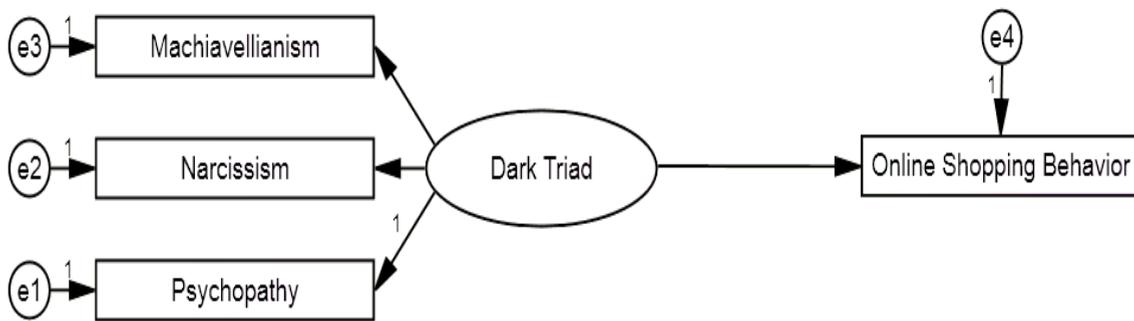


Fig.1: BenShiv Online Shopping Model

equally important to give customers a clear-cut overview of the available products and also, the products that he/she can be interested in adding it to their online carts. The primary negative attribute of an online domain that can turn risky for the e-commerce business is the kind of security the portal is providing for the data exchange happening with the customer (Li and Liang, 2011). Security breaches can happen with a fraud being present online as an online product surfer and trying to attack the data of probable shoppers. So, a proper online security is essential for such situations (Yu et al., 2016). This will dictate the kind of trust, loyalty and satisfaction you want your customers to develop with your online presence. The logistics of doing online shopping is really important, in terms of delivery and returns to make a customer happy and satisfied (Dong, 2011). These negative traits, if not tackled well can become a nightmare for the online customers (Wang and Sie, 2012). Zhuo and Xiaoting (2010) indulge in examining all the factors that can have impact on customer behavior in an online space. Gu (2011) impressively points out that an unhappy customer will eventually become a window shopper who will just surf the website without adding any substantial items to his/her cart for purchases. Li and Liu (2010) showcases that these factors should be taken into consideration by understanding that the undergraduates are the future consumers that one is looking to lure for product purchases. So, one must

Methodology:

Descriptive research design is the research technique utilized for the present study. This is a technique in which different set patterns or changes in a situational element are gauged in order to study it minutely without any preconceived notion regarding how the results should be. The constructs, sub-scales, variables, etc. cannot have any influencing factor over them and external impact has to be minimized in such a study. Since, the instrument of questionnaire is utilized for the present research, so, Descriptive research design is the most appropriate study for the collection of data primarily. The questionnaire is developed on the basis of standardized scales and has been improvised with respect to the study concerned. The construct of Dark Triad of personality in the questionnaire is gauged using the improvised scale of Dirty Dozen questionnaire as developed by Jonason and Webster (2010) in their study “What lies beneath the Dark Triad Dirty Dozen: Varied Relations with the Big Five”. The Questionnaire basically comprised of five-point Likert scale ranging from “1 – Strongly disagree” to “5 – Strongly agree”. The study is conducted from September, 2017 to February, 2018, that is, for a period of 6 months over the IT population of Bengaluru. IT professionals are found to be apt for such a study as they have

reasonable income for indulging in shopping arenas along with the savviness required to deal with the technology of online shopping. The city of Bengaluru is found to be substantial in this study as it is the hub of technology in India and has an amalgamated number of various IT professionals and firms. A total of 875,000 IT professionals are working being spread over a number of 11,152 IT companies in the city of Bengaluru. Whitefield area of Bengaluru is chosen for the study as it has 32,861 population of IT professionals. Krejcie and Morgan (1970) sample size determination model is the basis of determining the appropriate sample size for conducting the present study. Multistage Random Sampling is used to define the set of samples that are utilized for the research. The data received from the respondents is analyzed consequently with software like IBM SPSS Statistics 20.0 and AMOS statistical software using multiple linear regression analysis, ANOVA, and structural equation modeling (SEM) with maximum likelihood estimation.

Findings & Discussion:

This section of the paper deals with the results obtained for the present study. The data used primarily is the one received from the respondents of the questionnaire. Cronbach reliability test is applied to test the data reliability for further research. Confirmatory factor analysis of the data gives the convergent and discriminant validity of the data. Normal Bell-shaped curve is obtained for the data with Kolmogorov-Smirnov and Shapiro-Wilk Normality test. Finally, the conceptual framework of the model hypothesis is tested by AMOS software for Maximum Likelihood Estimation. The model fit, path significances and the predictive power are also analyzed with respect to the model fit analysis.

Objective 1: To explore the influence of personality traits of an individual in determining online shopping behavior.

Table 1: Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	Psychopathy, Narcissism, Machiavellianism	.	Enter

a. **Dependent Variable:** Online Shopping Behavior
 b. All requested variables entered.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.506 ^a	.256	.250	.58637

a. Predictors: (Constant), Psychopathy, Narcissism, Machiavellianism

Table 3: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	44.378	3	14.793	43.023	.000 ^b
	Residual	129.281	376	.344		
	Total	173.659	379			

a. Dependent Variable: Online Shopping Behavior

b. **Predictors:** (Constant), Psychopathy, Narcissism, Machiavellianism

Table 4: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.790	.223		8.021	.000
	Machiavellianism	.335	.049	.353	6.894	.000
	Narcissism	.114	.032	.172	3.543	.000
	Psychopathy	.103	.042	.119	2.459	.014

a. Dependent Variable: Online Shopping Behavior

The influence of personality traits of an individual in determining online shopping behavior is analyzed using Multiple Linear Regression analysis for testing hypothesis H₁. It is found that for every unit changes in Dark Triad of Personality, the Online shopping behavior of an individual will change by 0.256 units as observed in table 2. So, the divergence is of 25.6% towards the online shopping behavior from Dark triad of personality factors. All the three sub-scales, that is, Machiavellianism, Narcissism, and Psychopathy are found out to be significant and so, H₁ hypothesis is accepted.

Objective 2: To assess the association of demographic factors with regard to online shopping behavior.

Table 5: ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Gender	Between Groups	10.579	45	.235	1.244	.146
	Within Groups	63.106	334	.189		
	Total	73.684	379			
Age	Between Groups	27.112	45	.602	1.390	.047
	Within Groups	144.769	334	.433		
	Total	171.882	379			
Marital Status	Between Groups	5.221	45	.116	1.177	.213
	Within Groups	32.914	334	.099		
	Total	38.134	379			
Living Status	Between Groups	14.371	45	.319	.785	.838

	Within Groups	135.868	334	.407		
	Total	150.239	379			
Geographic Region of Origin	Between Groups	50.408	45	1.120	1.033	.029
	Within Groups	362.063	334	1.084		
	Total	412.471	379			
Educational Qualifications	Between Groups	11.759	45	.261	1.053	.010
	Within Groups	82.922	334	.248		
	Total	94.682	379			
Income Category	Between Groups	39.290	45	.873	1.082	.001
	Within Groups	269.437	334	.807		
	Total	308.726	379			

The Analysis of variance, that is, ANOVA, is carried out to examine the association of demographic factors with regard to online shopping behavior (H₂). Out of all the sub-scales, it is found that a total of four of them are found to be significant from the above-mentioned table 5. These sub-scales are Age, Geographic region of origin, Educational Qualifications, and Income category. Thus, a significant association of demographic factors with online shopping behavior is found to exist. Therefore, Hypothesis H₂ is accepted in the study.

SEM - Proposed BenShiv Online Mapping Model:

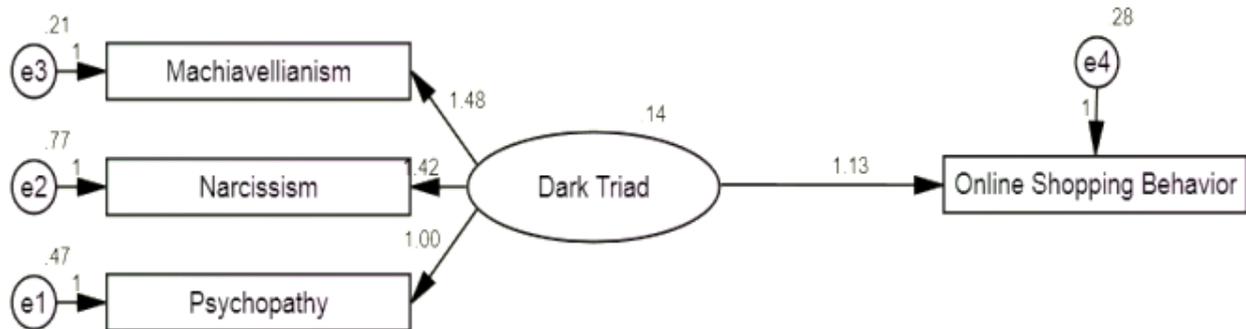


Fig. 2 Unstandardized estimates of BenShiv Online Shopping Model

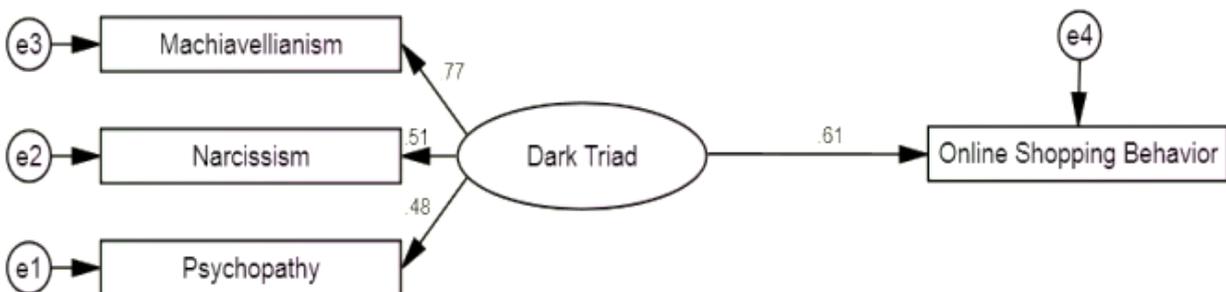


Fig. 3 Standardized estimates of BenShiv Online Shopping Model

IBM AMOS software is used for structural equation modeling for maximum likelihood estimation for the proposed model. The Chi-square value for the proposed model is found out to be significant (p=.000). The model fit for the proposed model is found out to be a good, sheer, moderate and reasonable fit across various indices (Yuan, 2005). Thus, the proposed BenShiv Online Shopping Model can be considerably accepted.

Conclusion:

With the course of the study, it can be inferred that the study of consumer behavior will have a great aid with the present research. The study is projected towards the designing of product offerings to the customers in a digital domain. It will give insights in terms of positive and negative experiences of an online customer and how to curb them by providing best services for making a customer loyal and satisfied. However, the study has some limitations of not being able to generalize it for the entire IT sector. As it is completely based upon the responses of the respondents, so, it cannot be liable for being true for the entire segment of population. Since, the objectives of the study have found significant acceptance, the results of the study can be perceived as an important contribution for the E-commerce domain in determining a customer’s online shopping behavior.

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