

A Study of consumers purchasing behavior towards mobile phones with special reference to Bilaspur city of Central India.

Preetam Sahu

Research Scholar

Department of Commerce and Management

Dr. C. V. Raman University, Kargiroad Kota, Bilaspur, Chhattisgarh, India

Dr. Archana Agrawal

Associate Professor

Department of Commerce and Management

Dr. C. V. Raman University, Kargiroad Kota, Bilaspur, Chhattisgarh, India

Abstract

The aim of the present study is to understand the consumers perception and buying behavior towards various mobile brands, customer preference level associated with different mobile phones, major features which a customer looks for in a mobile before making a purchase and factors that influence decision- making in purchasing a mobile phone. The study was conducted in year 2019-2020 at Bilaspur, CG. A well structured questionnaire was prepared and interview has been conducted among 100 respondents of Bilaspur city of Chhattisgarh. The data was subjected to ANOVA to test the hypothesis, and multiple regression analysis was performed to test the significance and correlation using SPSS software. The results noted that the main brands of mobile phone purchased by the consumers in Bilaspur city were Xiaomi, Samsung, Apple, Oneplus, and other. It was observed that the consumers mostly prefer online shopping for purchasing the mobile phones. The most preferred features before buying a cell phone by respondents of Bilaspur city were performance, camera, design and gaming. The main factors for the selection of particular model of cell phone by the consumers were electronic billboards, affiliated videos of cell phone, best seller and word of mouth. A significant difference ($p \geq 0.05$) exists between the responses of the consumers for features of buying a mobile phone. It has been verified by the proposed regression models that the mobile brand, mobile feature, way of shopping, way of selecting model of mobile phone are having the ultimate effect on consumer purchase behavior as analysis suggested that all these elements have significant positive association with the consumer perceptions and purchase behavior. It was demonstrated that consumers are coherent in making assessments of their expectations, evaluating service quality and satisfaction during purchasing of mobile phones.

Keywords: Consumer purchase behavior, Mobile brand, Mobile features, Mode of selection.

I. INTRODUCTION

Customer buying behavior is the sum total of a customer's attitudes, preferences, intentions, and decisions regarding the customers behavior in the market place when purchasing a product or service [1]. The study of customer behavior draws upon social science disciplines of anthropology, psychology, and economics [2]. Customer buying behavior is also the process by which individuals search for, select, purchase, use and dispose of goods and services, in satisfaction of their needs and wants. The consumer behavior fluctuates time to time according to the technological up gradation, change of trend in fashion, change of trend in market, as well as some times by swing of mood so there is no rigid thumb rule which may help in grabbing the consumers perception towards his very own problems and its very own solution by a product. That is the duty and need of a marketer to understand the customers need and make a suitable option (a product or a service) which may help him to resolve the customers Problem / Need / Desire / expectations [3]. There are many more conducts which may help the enterprises to make a positive impact in customers mind towards his or her business, it may help in making a new customers as well possibly he may retain the customer for a long time, the excellent use of the marketing technique may change the new customer in a loyal customer of the enterprise. There are many options of the products from different brands but usually people prefer to use the same brands product (brand loyalty) which usually results when the customer gets a full satisfaction by using / consuming the product and feels the product has fulfilled all

the aspects regarding the products quality, products quantity, price of the product, availability of the product, packaging, labelling, and grading of the product and etc.

In the case of purchasing a mobile phone, the consumer goes through all the five stages of rational decision-making or he makes a quick purchase on the account of hedonic considerations. The general belief in the purchase process is that in case of utilitarian products, rational decision-making is involved, whereas in case of hedonic products, emotional decision making is involved. For mobile phone purchase, both rational and hedonic considerations are undertaken by consumers [4]. The purchase decisions for mobile phones mostly follow rational buying process, but in certain cases the decision may also be influenced by symbolic preference associated with some brands [5]. It has been observed that younger consumers value more hedonic features in mobile phones [6], while the older consumers are influenced by rational buying process. But in the present context the mobile companies should launch any mobile model by considering the market research of the region. Thus its essential for the market researchers that they should have complete information about the required features, brand etc of the mobile phones in any specific region.

This study explores the factors influencing consumer preference towards mobile phones and investigates the reasons that trigger the purchase of new ones. The brand loyalty of consumers is explored and the influence of gender on purchase choice is examined. The preferences of consumers can, to a larger extent, impact the technology push driven mobile phone industry in creating new models and adding innovative features to satisfy them.

Objectives of the Study

- To study the perception & buying behavior of customers towards various mobile brands.
- To know about the customer preference level associated with different mobile phones.
- To study the major features, which a customer looks for in a mobile before making a purchase.
- Factors that influence decision-making in purchasing a mobile phone.

Hypothesis

- H01: The mobile brand has no relationship with the consumer purchase behavior.
- H02: The Mobile operating system has no significant influence on the consumer purchase behavior.
- H03: The Mobile Features has no relationship with the consumer purchase behavior.
- H04: The mode of selection of Mobile phone has no relationship with consumer purchase behavior.

Limitations

- The universe being large the study will be restricted to respondents of Bilaspur
- The sample size of the study will be limited to 100 respondents only
- Time is also a limit for the study.

II. RESEARCH METHODOLOGY

The aim of this study is to understand the consumer purchase intention when they are purchasing mobile phones in Bilaspur Chhattisgarh, India. The people of Bilaspur city are considered as the population of this study. A sample of 100 respondents was selected and data was collected by well structured questionnaire which was prepared under the guidance of supervisor. The questionnaire consisted of 40 items, which represent the mobile brands, mobile operating system, mobile features and mode of selection of mobile phones and consumer buying behavior. Face to face interview was conducted for collecting the responses of the respondents in Bilaspur city. The consumers were asked to indicate their choice of preferences with regard to mobile brands, mobile operating system, mobile features and mode of selection of mobile phones. Their choice and preference with the respective weights of different scales were classified [7]. The respondents were also asked to indicate the factors affecting their buying decision while purchasing mobile phones. The weighted values were calculated by multiplying weights with the number of respondents. The percentage weighted value was also calculated. The collected data was fed up in the excel spreadsheet for further analysis. Finally, the data was subjected to analysis of variance to test the hypothesis. Multiple regression analysis was carried out for the correlation and significance of the obtained data.

III. RESULTS AND DISCUSSION

Table-1 indicates the demographic profile of the respondents interacted in Bilaspur city of Chhattisgarh. The Table represents the gender of the respondents in which 63% of the respondents are Male i.e. 63 respondents, and the rest of the 37% of the respondents are Female i.e. 37 respondents. In this study the majority of the respondents were Male.. The maximum number of respondents belongs to income group of above Rs 45000 i.e. 56 % and rest 44 % belongs to four groups divided between Rs.15001 to Rs. 45000. Graduated respondents cover up 50 % of the total respondents and the Post Graduates were 30% of total. Rest 20 % belongs to Higher Secondary and Ph.D. The family size was divided in four sets of 2 to 5, 6 to 9, 10 to 13 and 14 and above. Out of which 67 % respondents belongs to 2 to 5 family size. 24 respondents belong to 6 to 9 family size 6 respondents belongs to family size of 10 to 13 and 3 respondents belongs to 14 and above family size. Out of 100 respondents 73% respondents are unmarried and 27% are married. The demographic profile of the study showed that the diversity in the gender, age, income, family size etc of the consumer in Bilaspur Chhattisgarh, India. Sharma and Sharma [3] have also recorded such type of consumer flux in Bilaspur, Chhattisgarh while studying the buying behavior of the consumers of this region. Massicotte, et al., [8] have observed that adults and youngsters differ in their purchase intention than the older ones. This type of demographic profile for studying the consumer buying behavior is in consistent with those of Trivedi and Puri [9] Tiwari, and Abraham, [10]

Table-1. Demographic profile of the sampled respondents in the shopping malls of Bilaspur, CG,India. (n=100)

	Demographic	Frequency	%
Gender	Male	63	63.00
	Female	37	37.00
Age	16-20yr	10	10.00
	21-25yr	20	20.00
	26-30yr	46	46.00
	31-35yr	14	14.00
	above 35yr	10	10.00
Marital status	Married	27	27.00
	Unmarried	73	73.00
Education	Higher Sec	13	13.00
	Graduate	50	50.00
	PG	30	30.00
	PhD	07	07.00
Monthly Income	Below 15000	17	17.00
	15001-25000	22	22.00
	25001-35000	14	14.00
	35001-45000	11	11.00
	45001 or above	56	56.00
Family Size	2-5	67	67.00
	6-10	24	24.00
	11-15	06	06.00
	16 and above	03	03.00

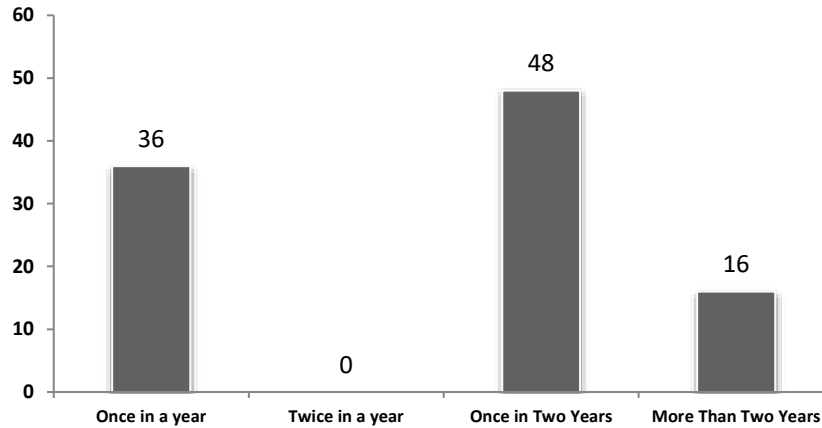


Fig-1: Frequency of respondents purchasing cell phone in Bilaspur, Chhattisgarh India.

The Fig-1 shows how many times respondents, like to purchase cell phone. The highest number of respondents is 48 who like to purchase cell phone once in a two year. The second highest number of respondents is 36 who like to purchase cell phone once in a year. The third highest number of respondents is 16 who like to purchase cell phone after / more than two year. This shows that the majority of respondents like to purchase cell phone once in two year.

Hypothesis (H01): The mobile brand has no relationship with the consumer purchase behavior.

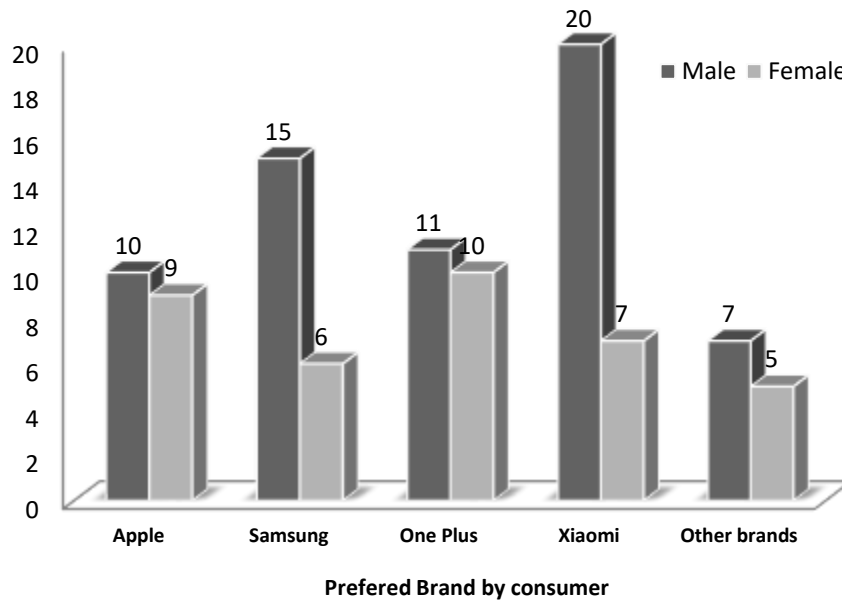


Fig-2: Preference of Mobile brand by the consumers of Bilaspur Chhattisgarh, India.

The above graph shows the most preferred cell phone brand used by the respondents. The highest number of respondents is 27 out of which male is 20 and female is 7 who likes the brand Xiaomi. The number of respondents who likes cell phone brand one plus is 21 out of which 11 is male and 10 is female. The other 21 respondents out of which 15 is male and 6 is female likes to use brand Samsung. 12 respondents are those who prefer brands other the the mentioned one, out which 7 are male and 5 are female. The majority of respondents like to purchase the cell phone of brand Xiaomi.

Table-2: ANOVA (Two factor)

Source of Variation	SS	df	MS	F	P-value	F crit
Mobile Brand	57.375	3	19.125	1.163	0.453	9.277
Gender	78.125	1	78.125	4.747	0.118	10.128
Error	49.375	3	16.458			
Total	184.87	7				

Two-way ANOVA was carried out for the variation in the responses of male and female consumers regarding the influence of mobile brand on the consumer buying behavior (Table-2). From Table-3 this is confirmed that the mobile brands has not significant ($p=0.452$) impact on the consumers purchase intention. From the analysis table it's also seen that that male and female response doesn't alter significantly. Thus the null hypothesis is accepted ie H_0 : The mobile brand has no relationship with the consumer purchase behavior. Hasan, [11] has observed that the brand of a mobile has a positive relationship with the consumer buying behavior.

Hypothesis (H02): The Mobile operating system has no significant influence on the consumer purchase behavior.

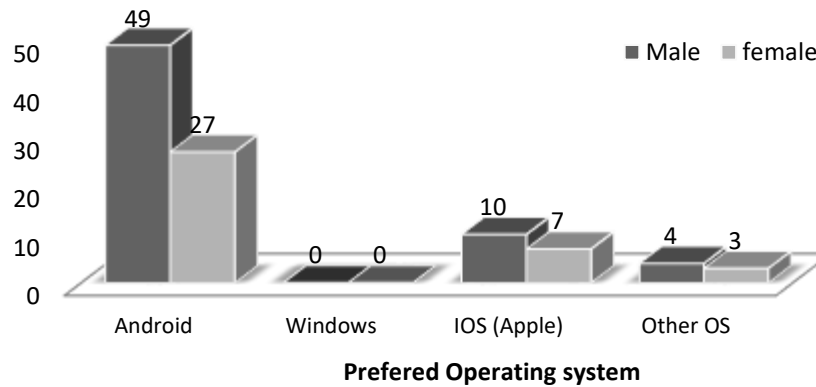


Fig-3: Preferred mobile operating system by consumers of Bilaspur Chhattisgarh, India.

The Fig- shows the most preferred operating system used by the respondents. The highest number of respondents is 76 who prefer android; out of which male is 49 and female is 27. The second highest number of respondents is 17 who likes to use IOS, out of which of male is 10 and female is 7. The third highest number of respondents is 7 who mainly prefers operating system other than the mentioned one's, out of which the 9 is male and 7 is female. This shows that the majority of respondents prefer operating system- android.

Table-3: ANOVA (Two Factor)

Source of Variation	SS	df	MS	F	P-value	F crit
Operating System	73	2	36.5	31.286	0.031	19
gender	2.667	1	2.667	2.286	0.270	18.52
Error	2.333	2	1.167			
Total	78	5				

Two way ANOVA presented in Table-3 shows the significance level for the preferred mobile operating system by consumers of Bilaspur Chhattisgarh, India. The analysis enlighten in the table shows that the operating system of mobile phones has a significant influence ($p=0.031$) on the consumers purchase intention in Bilaspur. Thus the Null hypothesis i.e., “The Mobile operating system has no significant influence on the consumer purchase behavior” is rejected. Its observed that operating system of mobile phones is considered by the consumers of Bilaspur while purchasing a mobile phone.

Hypothesis (H03): The Mobile Features has no relationship with the consumer purchase behavior.

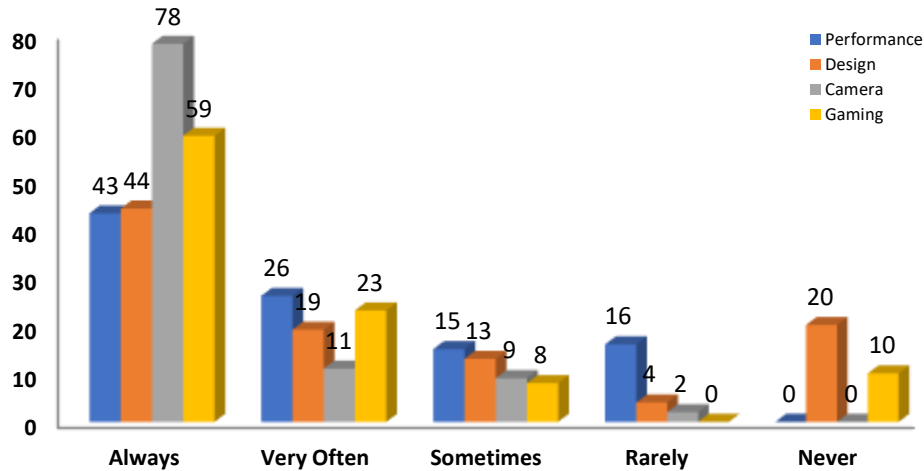


Fig-4: The preferred features of consumers of Bilaspur Chhattisgarh, India.

The above graph shows the most preferred features before buying a cell phone by respondents. Each section is considered as 100 Percentage in itself. Performance is always preferred by 43 respondents, very often by 26 respondents, sometimes by 15 respondents, rarely by 16 respondents and never by 0 respondents. Design is always preferred by 44 respondents, very often by 19 respondents, sometimes by 13 respondents, rarely by 4 respondents and never by 20 respondents. Camera is always preferred by 78 respondents, very often by 11 respondents, sometimes by 9 respondents, rarely by 2 respondents and never by 0 respondents. Gaming is always preferred by 59 respondents, very often by 23 respondents, sometimes by 8 respondents, rarely by 0 respondents and never by 10 respondents. The Camera and Gaming Feature is mainly preferred by the majority of respondents before buying cell phone.

Table-4: ANOVA (Two Factor)

Source of Variation	SS	df	MS	F	P-value	F crit
Mobile Feature	6956.5	4	1739.125	14.95485	0.00013	3.259167
Error	1395.5	12	116.2917			
Total	8352	19				

Two-way ANOVA was carried out for the relationship between preferred features of mobile phones and consumer buying behavior in Bilaspur, Chhattisgarh (Table 5a). We observed from Table-4 that the preferred features of mobile phones has a significant ($p=0.00013$) impact on the consumers buying behavior. In the light of the above presented data analysis we reject therefore null hypothesis ($F=14.95$) i.e., “The Mobile Features has no relationship with the consumer purchase behavior”. Thus we observed that the features of the mobile phones have a significant impact on the consumer purchase intention.

Hypothesis (H04): The mode of selection of Mobile phone has no relationship with consumer purchase behavior.

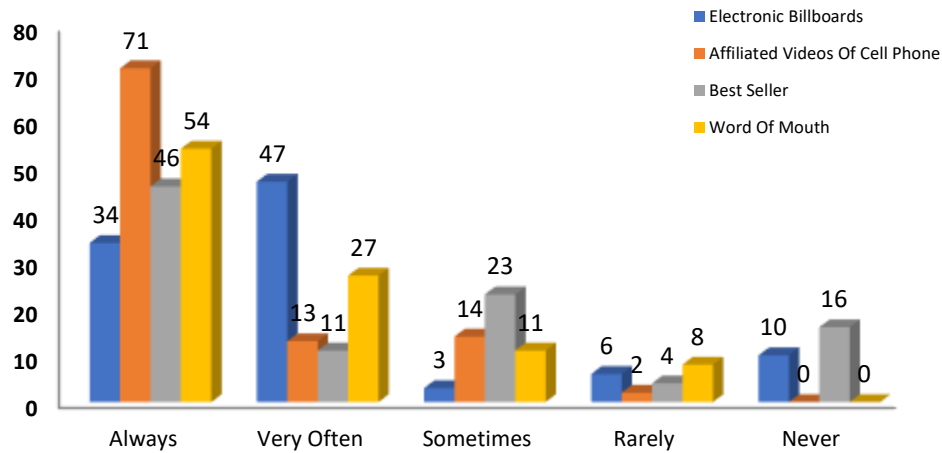


Fig-5: Mode of selection of a particular Mobile phone by consumer of Bilaspur Chhattisgarh.

Fig-5 shows that how selection is being done of particular model of cell phone by respondents. Each section is considered as 100 Percentage in itself. Electronic Billboards is always preferred by 34 respondents, very often by 47 respondents, sometimes by 3 respondents, rarely by 6 respondents and never by 10 respondents. Affiliated videos of cell phone are always preferred by 71 respondents, very often by 13 respondents, sometimes by 14 respondents, rarely by 2 respondents and never by 0 respondents. Best Seller is always preferred by 46 respondents, very often by 11 respondents, sometimes by 23 respondents, rarely by 4 respondents and never by 16 respondents. Word of mouth is always preferred by 54 respondents, very often by 27 respondents, sometimes by 11 respondents, rarely by 8 respondents and never by 0 respondents. From above data we can conclude that majority in selection of particular model of cell phone by respondents is being done by watching affiliated videos of cell phones.

Table-5: ANOVA (Two Factor)

Source of Variation	SS	df	MS	F	P-value	F crit
Mode of Selection	5826.5	4	1456.6	8.91	0.001	3.259
Error	1961.5	12	163.5			
Total	7788	19				

Two-way ANOVA was carried out for the relationship between mode of selection of mobile phones and consumer buying behavior in Bilaspur, Chhattisgarh (Table-5). We observed from Table-5a that the mode of selection of mobile phones has a significant ($p=0.001$) impact on the consumers buying behavior. In the light of the above presented data analysis we reject therefore null hypothesis ($F=8.91$) i.e., “The mode of selection of Mobile phone has no relationship with consumer purchase behavior”. Thus we observed that the mode of selection of the mobile phones have a significant impact on the consumer purchase intention.

Multiple regressions Analysis

Table-6: Multiple regression analysis for dependent variables (Mobile brands, Operating system, Mobile features and Mode of selection) and independent variable (Consumer purchase behavior) of consumers in Bilaspur, Chhattisgarh.

Dependent	Predictor	SE	t-value	R ²	Adj. R ²
Mobile brand		1.10	2.07*	0.780*	0.747*
Operating System	Consumer	0.89	7.33*	0.902*	0.900*
Mobile Features	Purchase	0.64	4.69*	0.925*	0.917*
Mode of selection	Behavior	1.24	8.89*	0.805*	0.781*

In order to describe the relationship for the consumer purchase behavior towards mobile phones multiple regression analysis was carried out (Table-6). The dependent factors like mobile brand, operating system, mobile feature and mode of selection while purchasing mobile phone in Bilaspur, Chhattisgarh were tested for the prediction of the consumer purchase behavior. In this study the adjusted R² of these models ranged between 0.780 to 0.925 respectively for different dependent attributes of Bilaspur Chhattisgarh. The test indicates that these attributes create 78 % to 92.5% of the variation in the consumer purchase intention. This indicates that the mobile phone attributes directly influences the customer purchase intention along with demographics. The t values of different dependent attributes (Table-6) record a significant influence on the consumer purchase intention at different shopping malls of Bilaspur, Chhattisgarh.

Managerial Implications

The present study reveals the psychology of consumers about purchase intention towards mobile phones. It considers Bilaspur to understand consumer buying behavior towards mobile phones. Bilaspur bears a diverse type of consumers and sets a perfect example of the consumer buying behavior and satisfaction. The results of the study show that the mobile phone attributes directly influence the consumers purchase intention. Hence its recommended that;

- Company should try to tap female customers who are not the frequent buyers.
- Company should try to sell maximum mobile phones in price band of 10000-20000 to maximize sales.
- Company should increase its promotions and advertisements to maximize brand awareness amongst customers.
- The company should focus on the professional customers, service sector customers and students to maximize sales.

IV. CONCLUSION

Understanding the customer purchase intention has never been an easy task, be it in the case of traditional unorganized market or today's organized market, this scene also has become more complex. The consumer buying a variety of mobile phones which satisfy his wants and they are always influenced by his purchasing activities by some considerations which lead him to select a particular brand, feature, mode of selection or a particular store in preferred to others. Consumers mostly preferred Samsung and Xiaomi mobile phones. The study has observed that there are many factors deemed as selection criteria of mobile phone. The most preferred features before buying a cell phone by respondents of Bilaspur city were performance, camera, design and gaming. Not necessarily all the variables for the purchase of mobile phone influence a person in the same way and same extent. In case of choosing mobile phone brands by a consumer in Bilaspur, the mostly considered factors by the consumer include physical attributes like pricing, charging, operating facilities, size and weight. The results of these findings can be used by the mobile companies for production of mobile phones which are demanded by the consumers and this study also adds new data base to the existing literature for intensively understand the consumer purchase intention towards mobile phones.

V. CONFLICT OF INTEREST

The author would like to undertake that the above mentioned manuscript has not been published elsewhere, accepted for publication elsewhere or under editorial review for publication elsewhere. The authors declare that they do not have any conflict of interest with the submission of this manuscript.

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