

## Original Research Article

# Application of Garrett Ranking Technique to determine the Factors Affecting Outside Eating Habits among Students

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### ABSTRACT:

Generally, "Eating out" refers to food that is prepared or purchased and consumed outside the home. Eating habits refers to what we eat, how we eat and why we eat. Outside eating habits were influenced by a wide range of complex and interrelated factors. To investigate the factors affecting the outside eating habits among the students the present has undertaken. To know their general profile, to assess the factors affecting outside eating habits and ranking the affecting factors based on Henry Garrett ranking technique were the objectives of the study. For this investigation exploratory research design has chosen and google forms were used to collect data from students. A total of 220 responses were received through google forms from two community science colleges. The received responses were scored and analysed by using Garrett ranking method. The results indicated that, most of the respondents belong to 18-22 years age group, similar per cent were pursuing graduation, more than half of the respondents prefer both home delivery and going to restaurants and the students preferring friends to go out with and eat. Respondents prefer to have evening snacks at outside. It was also found that peer group, special events and Taste/flavor were the major affecting factors simultaneously religion, eating disorder and advertisement were the least influencing factors to eat outside.

*Key words: outside eating habits, Garrett ranking technique, Factors influencing, Peer group influence, hostel food effect, Mood influence on food choices and online food applications.*

### INTRODUCTION:

Our health and well-being, quality of life and ability to learn, work and play depend on how well we are nourished (Joshi and Kushwaha, 2019). Eating behavior is an important aspect of life as it can affect long term health outcomes because unhealthy eating habits such as consuming nutrient deficient food, skipping meals, and a lack of timely diet are understood to cause various health problems and nutritional deficiencies. In contrast, a balanced diet and the consumption of quality food can contribute to sustaining the physical well-being and mental stability of individuals. Studies demonstrated that student life in the university setting is characterized by many changes in eating behaviors and dietary patterns. (Kabir *et al.*, 2018)

Generally, "Eating out" refers to food that is prepared or purchased and consumed outside the home. Eating habits refers to what we eat, how we eat and why we eat. Generally, all people will eat to stay alive, but they also do it to show belongingness to family and other social groups. Economic factors like the availability of food and its cost can also affect food choices. The type of labelling made to food also influences the choice of food we consume.

The major food consumption trend in urban parts of developing countries is that more consumers are eating increasingly more meals outside of their homes and most of the growth in away-from-home eating has been in the fast-food sector (Kaynak *et al.*, 2006).

Eating out is now no longer just for special occasions. The choice of consuming food outside the home is influenced by a wide range of interrelated factors such as social, religious, cultural, economic, political, and environmental factors. Eating out has been found as most popular recreational activity for Indian consumers. People have different options starting from fast food centers to dining restaurants to eat-out. Basically, reasons for eating out side at fast food centers includes a way to socialize, convenience and also quick and easy to get option. Some studies reveal that young consumers' lifestyle is changing and the major reasons for consuming fast food consists of taste, convenience and seeking alternate food items (Karimikonda and Sankala, 2020).

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Thus, the present study aims to investigate the factors that affecting the outside eating habits among the students with the following objectives:

1. To know the general information about students
2. To assess the factors influencing the outside eating habits among the students
3. To analyze the factors by Garrett ranking technique

## REVIEW OF LITERATURE:

Joshi *et al.*, (2019) revealed that, out of 100 respondents 98 students were consuming fast foods. The factors affecting out choices were, likes and dislikes (83%), effected by mood (79%), body image conscious (53%), influenced by family culture (48%), friends' choices (30 %), influenced by media (22%) and effected mess bill (13%).

Al-Otaibi and Basuny (2015) found that the factors which influence fast food consumption were taste, easy to access and lack of cooking skills. The respondents consume fast foods once in a week, they prefer to go out with family to eat fast food, dinner was the most common meal eaten from fast food restaurants. Factors influencing fast food restaurants preference was cleanliness and hygiene, lower price, fast delivery, fast service, food quality and products diversity.

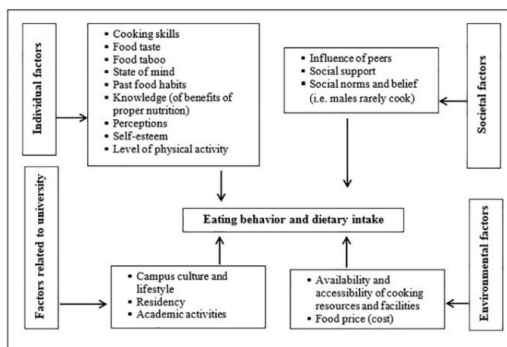
Mat *et al.* (2016) the revealed young consumer eats fast food when even they like and choose the simplest menu to occupy their appetite and budget.

Sheikh *et al.* (2016) reported that more than half of the participants had a lot of changes in eating habits since they started attending university. Among them had an indicative of having an eating disorder. Happiness was observed to be predominant emotion to influence outside eating among respondents. Thirty per cent of the students were considered as unrestrained eaters i.e., they were not really bothered by what they ate and eleven per cent of participants had high self-control around food.

Habib *et al.* (2011) found that, time constraints, new demographics, the health, away-from-home eating habits, new consumer tastes and eating habits were the main reasons for preferring fast foods. The major influential factors for fast food purchasing and consumption were, price, quality, freshness, the taste suit to them, food safety, attractive packaging, healthy food, (x) the outlet within vicinity, easy to cook, advertisement, influence of friends and family members and the influence of preferred brand

Seo *et al.* (2011) identified the attitudes toward fast food consumption, the subjects showed strong positive attitudes toward taste, fast food store environments, and familiarity and strong negative attitudes toward saltiness of fast food. Boys had a significantly stronger attitude toward taste and saltiness of fast food than did girls.

Sharif *et al.* (2017) analysed the increasing preference of people in regard to dining out as compared with eating at home. The study stated that the trend of eating out was started with having a meal to socializing with friends or trying out new places and new varieties. And also, further stated that the trend of dining out was increasing as it was being taken as a leisure trip or a social gathering.



(fig. 1: factors affecting the outside eating habits (Kabir *et al.*, 2018))

## METHODOLOGY:

### Research design

Exploratory research design was adopted for the present study to examine the factors influencing the outside eating habits among students. Quantitative research was used rather than qualitative because quantitative data will have closed ended questions and they make the statistical analysis easy.

### Location:

The study was conducted in College of Community Science, Professor Jayashankar Telangana State Agricultural University, Hyderabad, Telangana and College of Community and Applied Sciences, Maharana Pratap University Agriculture and Technology, Udaipur district of Rajasthan.

### Population

The population of the study was the students who are pursuing their education in College of Community Science, PJTSAU and College of Community and Applied Sciences MPUAT i.e. Under graduate (UG), Post Graduate (PG) and Doctor of Philosophy (Ph.D.).

### Sample and sampling procedure

Convenient sampling technique was adopted during the sample selection. It was a non-probability sampling technique. The sample comprises of UG, PG, and Ph.D. students from College of Community Science, PJTSAU and College of Community and Applied Sciences, MPUAT.

### Development of Research Tool

In online questionnaire, statements and list of factors were developed by reviewing research and review articles related to the research topic. Developed questionnaire was given to experts for the evaluation and finalised with the incorporated suggestions and corrections received from the expert. Likert scale five-point quantum was used to collect the data and to know the severity of the influencing factor. The five-point quantum was Strongly Agree, Agree, Neutral, Disagree and Strongly Disagree. Developed questionnaire consists of Two main sections:

#### a. General information

General information includes the questions like age, gender, education, with whom you Prefer to go out for eating, Preferable time/meal to eat outside and Preferable mode of eating outside food.

#### b. Specific information

Specific information consists of the 29 different factors that are influencing outside eating habits among university students and which can assist to analyse the major factors affecting outside eating habits among students.

### Procedure of data collection:

The study was conducted through an online survey method that is Google form. After the finalization of questionnaire, it was converted into google forms. Google forms are the easiest and effective way to collect data within a less time. The prepared google forms was shared to the students of Under Graduate, Post Graduate and Ph.D. from both colleges with a description about the researcher along with the purpose of the study. By this method the data was collected. A total of 220 responses were received from the students. Thus, the final sample size is 220.

### Ethical consideration

- Participation in this research was voluntary.
- Respect for the dignity of research participants has been prioritized.
- The research data was kept confidential

### Analysis of data

Data Received through google forms were coded, tabulated and analysed to achieve the aim of the study. statistical tools like Garrett's Ranking Technique were used to analyse the data.

### Gerrett Ranking methodology:

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**Commented [A4]:** How long did you collect the data? Are the data collected really 220 samples, or have they been cleaned? You can make it with the table about your total population from UG, PG, and PHD so clearly your total population, and in the end, your samples you make the data for analysis

Factors that affect the outside eating habits among students were identified by studying previous research studies. Garrett's Ranking Technique provides the change of orders of factors into numerical scores. The prime advantage of this technique over simple frequency distribution is that the factors are arranged based on their severity from the point of view of respondents.

This ranking was done to find the most influencing factor among students to eat outside foods. The purpose of this ranking was to determine the most influencing factor among students to eat outside foods. It is commonly used to rank statements based on respondent ratings, which were subsequently converted into specific ranks. These responses were ranked using the Garrett ranking technique based on the frequency levels such as "Strongly agree, Agree, Neutral, Disagree and Strongly Disagree" with corresponding rankings of 1,2,3,4 and 5 respectively. To convert these ranks into percentage, percent position formula was used. The ranking of each statement was converted into points using the Garrett table provided by Garrett and Woodworth, 1969. This conversion involved assigning points based on the per cent position of each rank. The resulting value, denoted as  $R_{ij}$ , was then multiplied by the corresponding Garrett value to obtain the total Garrett score.

Subsequently, the average Garrett score was calculated by dividing the total Garrett score by the number of statements. Based on the Garrett ranks i.e. 1 to 5, the Garrett value was obtained from the standard Garrett table. The scores of each statement in each dimension were multiplied and calculate separately by the obtained Garrett value. These resulting scores were recorded and by summing up each row the total Garrett scores were obtained and divided by the total number of the respondents to get Average score/Mean score. The statement with the highest average value was considered the best-ranking option. Garrett's formula for converting ranks into a per cent is as follows.

$$\text{Percent position} = \frac{100 \times (R_{ij} - 0.5)}{N_j}$$

Where;

$R_{ij}$  = rank given for  $i$ th factor by  $j$ th individual;

$N_j$  = number of factors ranked by  $j$ th individual.

The per cent position of each rank will be converted into scores referring to the table given by Garrett and Woodworth

Table 1. Percentage positions and their corresponding Garrett table values

Rank	Percentage position	Garrett table values	
1	$100 \times (1-0.5)/5$	10	75
2	$100 \times (2-0.5)/5$	30	61
3	$100 \times (3-0.5)/5$	50	50
4	$100 \times (4-0.5)/5$	70	40
5	$100 \times (5-0.5)/5$	90	25

## RESULTS AND DISCUSSION:

Table 2: Distribution of respondents according to their general information

n=220

S. No.	General information	f	%
<b>Age</b>			
1	Less than 18	4	1.8
2	18-22	201	91.6
3	Above 22	15	6.8
<b>Gender</b>			
1	Male	23	10.4
2	Female	196	89.1
3	Prefer not to say	1	0.5
<b>Education</b>			
1	Graduation	202	91.8
2	Post Graduation	12	5.4
3	Doctor of Philosophy	6	2.8
<b>Mode of eating outside food</b>			
1	Going to restaurant	64	29.1
2	Home delivery	42	19.1

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3	Both	114	51.8
<b>Who do you prefer to eat out with?</b>			
1	Alone	14	6.4
2	Family	36	16.4
3	Friends	113	51.4
4	Alone and family	2	0.9
5	Alone and friends	5	2.2
6	Alone, family and friends	14	6.4
7	Friends and family	35	15.9
8	Seniors	1	0.4

### Age

From the table no. 2 the results revealed that more than ninety per cent of the respondents belonged to 18-22 years age group followed by nearly seven per cent were belonged above 22 years and very less per cent i.e. nearly two per cent were less than 18 years.

### Gender

It is clear from table 2, nearly ninety per cent of the respondents were female followed by ten per cent of male respondents and only point five per cent i.e. one respondent was preferring to not say about gender.

### Education

It is revealed from table 2, nearly ninety-two per cent of the respondents were graduate students followed by more than five per cent were pursuing their post-graduation and very little per cent i.e. nearly three per cent of the respondents were the Ph.D. scholars.

### How do you like to eat outside food?

It is evident from table 2 that more than half of the students preferring both ways i.e. going to restaurant and home delivery followed by nearly thirty per cent were preferred only going to restaurants and nearly twenty per cent were preferring only home delivery.

### Who do you prefer to eat out with?

From the table 2, more than half of the respondents prefer only friends to go out to eat followed by family (16.4 %), friends and family (15.9 %) and very less i.e. not even one per cent of them prefer seniors to go out for eating.

### Preferable meal to eat outside

**Table 3: Distribution of respondents according their preferable meal to eat outside**

n=220

S. No.	Preferable meal to eat outside	f	%
1.	Evening Snack	118	53.6
2.	Dinner	74	33.6
3.	Lunch	68	30.9
4.	Breakfast	20	9.1
5.	Brunch	14	6.4

*\*Multiple responses were received*

The results from table 3 revealed that more than fifty per cent of the respondents preferring to have evening snack at outside followed by nearly forty per cent were preferring to have dinner outside, thirty-one per cent respondents prefer to have lunch outside, breakfast (9.1 %) and brunch (6.4 %)

**Table 4: The calculation of Garrett value multiplication with the frequency each rank**

n=220

S. No.	Factors	Strongly Agree (Rank 1)	Agree (Rank 2)	Neutral (Rank 3)	Disagree (Rank 4)	Strongly Disagree (Rank 5)
1.	Taste/Flavour	4050	6710	850	1080	300

2.	Financial status	3525	5551	1300	1520	450
3.	Weight loss /Weight gain	3000	6100	1700	880	600
4.	Mood	4050	6100	1350	920	400
5.	Stress	3150	5490	1900	1120	550
6.	Peer group	5775	5551	1250	560	325
7.	Eating disorder	2025	2806	2500	2320	975
8.	Culture	3375	4087	1750	1880	650
9.	Religion	1350	2074	1950	3000	1350
10.	Hostel food	5625	4392	1550	840	525
11.	Accessibility	2325	6222	1900	1120	525
12.	Health	2100	5002	2200	1880	475
13.	Preparation time	2775	4941	1850	1640	600
14.	Restaurants rating	4125	4392	1350	1800	525
15.	Weather	4350	4941	1250	1720	325
16.	Online food delivery applications	3375	4636	2100	1360	575
17.	Offers in online food delivery applications	3525	4758	1650	1600	550
18.	Special events	6150	4209	950	1480	325
19.	Life style	3525	5795	1000	1480	525
20.	Company	3075	4758	1950	1800	425
21.	Time of the day	4575	4880	1250	1240	575
22.	Different varieties of food	3450	5551	1300	1640	400
23.	Near ness or convenience	3675	4697	1700	1640	475
24.	Socialisation	3975	4941	1700	1480	375
25.	Peer group suggestion or influence	3900	4697	1400	1640	550
26.	Having own vehicle	3900	3538	1700	1760	800
27.	Busy work schedule	5175	3904	1400	1840	325
28.	Prior food experiences	2400	5307	1800	1640	600
29.	Advertisement	2100	3782	3000	1720	675

**Table 5: Ascending order arrangement of factors affecting outside eating habits**

n=220

S. No.	Factors	Total Score	Mean Score	Garett Rank
1.	Peer group	13461	61.18	1
2.	Special events	13114	59.61	2
3.	Taste/Flavor	12990	59.04	3
4.	Hostel food	12932	58.78	4
5.	Mood	12820	58.27	5
6.	Busy work schedule	12644	57.47	6
7.	Weather	12586	57.21	7
8.	Time of the day	12520	56.91	8
9.	Socialization	12471	56.68	9
10.	Financial status	12346	56.12	10
11.	Different varieties of food	12341	56.09	11
12.	Life style	12325	56.02	12
13.	Weight loss /Weight gain	12280	55.81	13
14.	Stress	12210	55.50	14
15.	Restaurants rating	12192	55.41	15
16.	Peer group suggestion or influence	12187	55.39	16
17.	Near ness or convenience	12187	55.39	16
18.	Accessibility	12092	54.96	17
19.	Offers in online food delivery applications	12083	54.92	18

20.	Online food delivery applications	12046	54.75	19
21.	Company	12008	54.58	20
22.	Preparation time	11806	53.66	21
23.	Prior food experiences	11747	53.39	22
24.	Culture	11742	53.37	23
25.	Having own vehicle	11698	53.17	24
26.	Health	11657	52.98	25
27.	Advertisement	11277	51.25	26
28.	Eating disorder	10626	48.30	27
29.	Religion	9724	44.20	28

According to table 5, different factors were ranked by respondents which affected their outside eating habits. On the basis of their severity of influencing, Garrett scores was calculated for each factor and arranged the list of factors in descending order on the basis of mean score and assigned them with Garrett rank. the results revealed that, Peer group was ranked 1 with 61.18 mean score and it was considered as the most influential factor for the students to prefer outside eating habits followed by special events with mean score 59.60 was ranked 2, Taste/Flavour with mean score 59.04 was ranked 3, Hostel food with mean score 58.78 was ranked 4, Mood with mean score 58.27 was ranked 5, Busy work schedule with mean score 57.47 was ranked 6, Weather with mean score 57.20 was ranked 7, Time of the day with mean score 56.90 was ranked 8, Socialization with mean score 56.68 was ranked 9, Financial status with mean score 56.11 was ranked 10, Different varieties of food with mean score 56.09 was ranked 11, Life style with mean score 56.02 was ranked 12, Weight loss /Weight gain with mean score 55.81 was ranked 13, Stress with mean score 55.5 was ranked 14, Restaurants rating with mean score 55.41 was ranked 15, Peer group suggestion or influence and Near ness or convenience with mean score 55.39 were ranked 16, Accessibility with mean score 54.96 was ranked 17, Offers in online food delivery applications with mean score 54.92 was ranked 18, Online food delivery applications with mean score 54.75 was ranked 19, Company with mean score 54.58 was ranked 20, Preparation time with mean score 53.66 was ranked 21, Prior food experiences with mean score 53.39 was ranked 22, Culture with mean score 53.37 was ranked 23, Having own vehicle with mean score 53.17 was ranked 24, Health with mean score 52.98 was ranked 25, Advertisement with mean score 51.25 was ranked 26, eating disorder with mean score 48.3 was ranked 27 and Religion with mean score 44.2 was ranked 28.

#### CONCLUSION:

It can be concluded from the results that, peer group is the main factor that affecting the outside eating habits among students followed by special events, taste, hostel food and mood. Similarly, religion, eating disorder, advertisement, health and having own vehicle were the least influencing factors to prefer outside out.

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