Promoting Culinary Heritages as a Destination Attraction: A Case Study of Ancient Temple Food ‘Mahaaprasaada’

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Promoting Culinary Heritages as a Destination Attraction: A Case Study of Ancient Temple Food ‘Mahaaprasaada’

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The growth of the food tourism segment in the last two decades has opened enormous scope for the marketing & promotion of ‘indigenous food products’ which otherwise remain limited to a particular region. These unique culinary products have created special segments like food & wine tourism, oleo tourism, whiskey tourism, beer tourism, and religious food tourism (like Halal & Kosher tourism). From this perspective ‘religious culinary heritage’ (practiced in ancient Hindu temples) shows a huge potential to be marketed as a tourism attraction, however, there are very few studies about this topic. Hence the present research identifies and analyses the unique heritage aspects (Eno-gastronomic elements) of an ancient Hindu temple food - ‘Mahaaprasaada’ (as practiced at Jagannath Temple Puri, India) and its potential as a destination attraction.

Initially the Eno-gastronomic aspects of Mahaaprasaada were identified & interpreted through ‘Directed Qualitative Content Analysis.’ This required the review of temple literature, developing a questionnaire for personal in-depth interviews and focus group discussions (with temple officials, cooking staff & priests), field visits (to the temple premises & associated areas), observation (covert, overt & participatory) of the ongoing cooking and distribution mechanisms and recording data through event, time and instantaneous sampling methods. Post interpretation, the ethnicity and Eno-gastronomic nature of the culinary heritage (Mahaaprasaada) was analysed through Actor Network Theory.

From the current research it can be generalised that religious gastronomic practices followed by the heritage temples of India, possess a huge number of ‘Eno-gastronomic elements’ that are highly influenced by the cultural traditions of the place. Moreover, the awareness level of tourists about these aspects varies with their demographic profile such as nationality, gender, education, state, age etc. Despite some limitations which are outlined in the paper, this research shows great potential and promising scope for religious food tourism.

Key Words: Culinary tourism, eno-gastronomic, heritage temple food, Mahaaprasaada.

Introduction

Initially, food tourism was regarded as part of a larger segment of cultural tourism but over the last few decades it has created a special market for itself around the globe. Food Tourism (alternatively identified as culinary tourism or gastronomy tourism) revolves around the concept of ‘travelling for food’ and learning about new cultures through local gastronomic delights (Hall and Sharples, 2003). In a nutshell, a culinary tour comprises of several activities like tasting local regional delicacies, tours of plantations / farmlands, winery and brewery tours, attending cookery classes, visiting restaurants and tours of food manufacturing plants etc. According to the UNWTO a third of total tourist spending is dedicated to the food and beverages consumed during travel. Apart from this, food is a key factor in deciding vacation destinations for at least 25% of leisure tourists (UNWTO, 2012; 2017). Corigliano (2002) stated that indigenous food products and resources play a major role in attracting tourists to a destination as they are limited to a particular region and largely influenced by the history and tradition of that place. He called them ‘Eno-gastronomic’ resources and argued that indigenous heritage food products are the major reason behind the growth of food and wine tourism, oleo tourism (based on oil), whiskey tourism, beer tourism etc. Some investigators (Boyne et al., 2002) have argued that, Eno-gastronomic resources apart from being sold as a tourism product can also be used for destination branding and promoting national identity. From the above perspective, ‘religious culinary heritages’ (practiced in ancient Hindu temples) show a huge potential to be marketed as a tourism attraction.

India being the motherland of Hinduism is dotted with numerous ancient Hindu temples and religious destinations. The food preparations offered at these destinations possesses a high degree of religious connotation thus, they tend to differ in terms of
selection of commodities, method of preparation, service, offering and distribution techniques etc (Sahoo, 2015). As the production of these heritage temple foods has been occurring since very ancient times (a few hundred to thousands of years), the Enogastronomic elements along with the heritage aspects make it a unique food tourism product that can be used as a destination attraction, as well as a tool for creating national identity.

One such ‘Ancient Hindu Temple Food’ prepared at Jagannath Temple, Puri (India) is ‘The Divine Mahaaprasaada’. This culinary heritage is believed to be in existence for thousands of years (Pattanaik, 2010). As Jagannath Temple is considered to be a part of the sacred pilgrimage tour of Chaar Dhaam (four Holy abodes of Lord Vishnu-) and moreover, recognised as Bhojana Kshetra (Dining Place of Lord Vishnu), the culinary preparation offered here is regarded as Mahaapprasada, not merely Prasaada (Mahaa- Great, Prasaada-food offered to the deity in the temples) (Mishra, 1986). Lord Jagannath (meaning ‘Lord of the Universe’) is the incarnation of Lord Vishnu, who is worshipped here along with his brother ‘Lord Balabhadra’ and sister ‘Devi Subhadra’ at the small coastal town of Puri in the state of Odisha (India). It is believed that the food is cooked here under the divine guidance and blessings of Goddess Mahalaxmi (consort of Lord Jagannath), therefore, it is considered to be more pious than all other prasaada (Nandy, 2015). These heritage culinary preparations follow the most ancient technique of cooking, i.e. using earthen pots over wood fire hearths. In spite of the consistent increase in the production quantities over the ages, the temple has not altered the divine process of cooking and still the hereditary cooks carry out their jobs manually on a rotational basis.

Hence, the present study tries to identify and analyse the heritage aspects of this culinary tradition (Mahaaprasaada), as well as measure the tourists’ awareness about the same. From the perspective of their demographic characteristics which will be helpful in formulating feasible strategies for promoting ‘Puri’ as a culinary heritage destination.

Objectives

The current research has the following objectives:

To identify and analyse the heritage (Enogastronomic) aspects of the ancient temple food ‘Mahaaprasaada’.

To measure tourists’ awareness of Mahaaprasaada according to their demographic variables.

To provide suggestions for the development and promotion of this culinary heritage as a destination attraction.

Literature Review

The literature for the study are presented under four major segments, i.e. food as an ethnic tourism product, the diversified role of food in tourism, religious food as a tourism product and tourist’s cultural awareness, and perception.

Food as an ethnic tourism product:

It has been stated (Hall & Mitchell, 2000) that though food is a significant component of tourism, its intrinsic relationship has only recently begun to be recognised. Hall and Mitchell argue that the third wave of cuisine change has now been identified where food can also be promoted as an ‘ethnic tourism product’ due to several unique factors associated with it like the Enogastronomic elements. These have resulted in the growth of Food & Wine tourism in France (Frochot, 2003; Gonçalves and Maduro, 2016), Olive Oil tourism in Italy (Corigliano, 2002; Murgado, 2013), Whisky tourism in Scotland (Visit Scotland, 2016) etc. In light of the above, Robinson (2008) highlights the opportunities lying with the local food items in Great Britain and emphasised that ‘local food initiative projects’ can play a major role in the development of rural / local food tourism. Similarly, recent studies (Banerjee, 2015; Kaddi, 2015) underscored the promising scope of food and wine tourism in India as the authors identified several Enogastronomic elements (associated with Food & wine) that can become one of the chief tourist attractions in India.

The diversified role of food in tourism:

At the present time, food plays a diversified role in tourism for example it functions as : a marketing tool (Rand, Heath & Albers, 2003; Okumus et al., 2007), a means of economic and sustainable development (Williams & Williams, 2015), shaping tourist experience (Chen & Huang, 2016), a travel motivator (Kururatchaikul, 2014), or a tool for destination branding (Lin, Pearson & Cai, 2011). Apart from these, the heritage features of a destination like ‘food and gastronomy’ are major components of tourism development at a regional level and can be used for territorial identity creation (Bessiere, 1998; Chuang, 2009). Similarly, Pratt (2007) states that the ethnic cuisine of an area is deeply rooted in its culture, place, time and highly influenced by unique traditions, and remains immensely helpful in promoting the predominant food image of the destination.

To provide suggestions for the development and promotion of this culinary heritage as a destination attraction.
Religious food as a tourism product:

As argued (Hobsbawn & Ranger, 1983), the renowned gastronomic delights (popular due to their quality and traditional preparation styles) can be developed into tourism products. Thus, the scope of ‘religious culinary heritage’ as a tourism product cannot be overlooked as it has several religious connotations ingrained in it. Furthermore, Moira et al., (2017) highlighted that religious beliefs can be parameters of food choice for tourists at a destination, as it can affect their eating habits. Hence, the demand for religious culinary products gets heightened during a tour. This has resulted in the development of new tourism products in the form of Halal Tourism - that cater for Muslim tourists (Dawidar, 2016; Bilim & Ozer, 2017) and Kosher Tourism - holidays for Jewish tourists (Diamond, 2016). Apart from these, religious food preparations at places of worship have an integral role during pilgrimage as it is considered a form of divine blessing of the Lord and partaken with gratitude (Sahoo, 2015). Therefore, several researchers have investigated the Eno-gastronomic aspects related to the production & distribution of religious food at religious heritage sites in India such as the Golden Temple, Amritsar (Chaudhuri, Sood & Shukla, 2017), Tirupati Temple, Andhra Pradesh (Kondapalli, Rao & Sharma, 2017), Dharamshala Temple, Karnataka (Kondapalli & Rao, 2017).

Tourists’ cultural awareness & perception:

Ehrenberg (1974) stated that for an individual to have an interest in a certain product (cultural / natural / mixed etc), he / she has to be first aware of the product or brand. Some research (Nyaupane and Timothy, 2016) has examined public awareness of cultural tourism products (such as heritage buildings in Arizona, USA) and it concludes that awareness can be created by opening the heritage sites for the public and tourists. Similarly, Roberts (2008) studied the awareness level of US college students about a rich cultural destination like Bulgaria and explored the differences in terms of gender, international travel experience & tourist preference through cross tabulation, percentage analysis, ANOVA & independent sample t-test. The results showed a significant influence of ‘gender’ over the ‘destination awareness’.

From this literature it can be observed that the religious heritage food preparations have a tremendous potential as a tourism product, and knowledge of tourists’ awareness level about the same would be helpful in its marketing and promotion. Moreover, India being a land of ancient heritage temples (with associated culinary delights) promises a great opportunity for the religious food tourism concept, but there is hardly any research about this. Hence, the present research tries to identify the heritage (Eno-gastronomic) elements of ancient temple food ‘Mahaaprasaada’ and measure the tourists’ awareness of the same, to suggest various techniques for its development and promotion.

Research Methods

As there were two clear segments in the research, i.e. (1) the study of the Temple’s heritage gastronomic aspects (Eno-gastronomic elements) and (2) collection and analysis of the tourists’ responses, mixed / multiple research methods were used to achieve the objectives. The first objective of ‘identifying and analysing the heritage (Eno-gastronomic) resources’ required exploratory investigation for which the researcher adopted a qualitative research approach, whereas the 2nd and 3rd objectives were studied through quantitative research techniques’ (descriptive / explanatory research methods).

Qualitative research methods:

For identifying the unique heritage aspect of Mahaaprasaada (related to its origin, types, human resources, cooking mechanisms, service, distribution etc) the researcher followed a Directed Qualitative Content Analysis technique. This approach is recommended when there are few prior studies or theories available about a phenomenon (Hsieh & Shannon, 2005). Since there is hardly any research for understanding the entire process of Mahaaprasaada preparation and distribution, the above method was used. In this technique, first of all the key concepts / terms are identified from previous studies (literature) and these are considered as the initial coding categories (Potter & Levine-Donnerstein, 1999). Based upon this coding, research questions are developed and data are collected via personal interviews, focus groups, observations and so on. From the text / information obtained, data with similar codes are grouped into relevant ‘clusters’ (Coffey and Atkinson, 1996), which can be grouped into fewer ‘sub categories’ (Morse and Field, 1995) or categories depending on their interrelationship (codes - Clusters - sub categories - Categories).

1. Editor’s note- see paper by Hassib & Ibtissem elsewhere in this Journal issue
The research began with the review of available literature from popular Oriya books based on Jagannath culture (25 nos.), monthly publications by the Sri Jagannatha Temple administration (from 2012-15) and contents from the temple website. Later in the winters of 2015 four informal discussions (two with temple priest-scholars and two with temple officials) and a field visit were carried out in order to get more insight into the culinary heritage aspects of Mahaaprasaada and develop the questions for follow up research.

One set of questions was developed for ‘formal in-depth interviews’ (with ‘temple officials’, cooks/ suaara, clay potters association, temple servants) and ‘informal interviews’ (with the local residents of Puri who are associated with the temple). Further questions were developed for focus group interviews with temple cooks, priests and members of the potter community (Table 1). The primary purpose was to collect information about various aspects of Mahaaprasaada like its history and evolution, types, cooking methods, distribution techniques and people associated with the divine phenomenon.

The primary data (qualitative) were collected between January 2015 and July 2017, through formal in-depth interviews (20 nos.), focus group interviews (4 nos. - see Table 1), and informal / unstructured interviews (27 nos.). Apart from these, the data collected via field surveys and personal observations (unstructured observation technique-both covert and overt) were recorded through event sampling, time sampling and instantaneous sampling methods (McLeod, 2015). This range of research was carried out to get a practical understanding of the entire process of food supply chain management, observing at the various stages of operation and taking field notes. The entire findings of the research were then analysed and interpreted through qualitative content analysis and presented under relevant categories.

Finally in order to authenticate the unique characteristics of the heritage religious food preparations (Mahaaprasaada) as an Enogastronomic element, the results were analysed from the perspective of Actor Network Theory (ANT). This theory argues that each and every action in the world is influenced by several factors which create a network among them and ANT can be used to explore and understand the ongoing process within this network. As it is regarded as a ‘material-semiotic’ method, the approach could be used to map the concepts (semiotic) and material elements into a single network. It also states that the ‘stability of the network’ depends upon the alignment of the network which is a result of ‘actors’ interests’ that change with new experience, knowledge and cultural learning (Carroll, 2014; Latour, 2005). As the present study tries to understand the entire phenomenon and find out the unique heritage aspects of the temple food Mahaaprasaada, ANT should be helpful for its analysis.

**Quantitative research methods:**

In order to measure tourist awareness of the various aspects of the culinary heritage (Mahaaprasaada), a questionnaire survey was designed comprising of 20 close-ended statements and the responses were recorded through a Likert scale (1 - ‘not at all aware’ to 5 - ‘extremely aware’). The last section of the questionnaire recorded the demographic profile of the respondents.

<table>
<thead>
<tr>
<th>Detailed features</th>
<th>Focus Group Interview No.1</th>
<th>Focus Group Interview No.2</th>
<th>Focus Group Interview No.3</th>
<th>Focus Group Interview No.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Participants</td>
<td>8</td>
<td>10</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Category of Participant</td>
<td>Pandaa Temple Priests</td>
<td>Suaara Temple Cooks</td>
<td>Kumbhara (Pot makers &amp; suppliers)</td>
<td>Suaara (involved in selling Mahaaprasaada)</td>
</tr>
<tr>
<td>Age Group</td>
<td>40-50</td>
<td>25-65</td>
<td>40-55</td>
<td>20-55</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>Male</td>
<td>Male</td>
<td>Male</td>
</tr>
<tr>
<td>Issues / Topic discussed</td>
<td>Mahaaprasaada: origin, types, offering time, dishes etc.</td>
<td>cooking mechanism: kitchen, equipment, utensils, tools</td>
<td>cooking pots: types, capacity, uses etc.</td>
<td>selling and distribution, serving mechanism, rules, pricing etc</td>
</tr>
<tr>
<td>Duration</td>
<td>1 Hr</td>
<td>1 Hr</td>
<td>1 Hr</td>
<td>1 Hr</td>
</tr>
</tbody>
</table>
Data were collected from 402 domestic tourists via convenience sampling methods standing in front of the main entrance of the Temple, between May to August 2017. As the annual tourist arrivals at Puri were more than 11 million in 2016 (DoT-Govt of Odisha, 2015), the sample size of 402 was considered adequate for the study (Yamane, 1967).

Initially for checking the reliability of the instrument and the adequacy of the sample, the value of Cronbach’s Alpha & ‘KMO & Bartlett’s test’ were measured, respectively. Later, keeping in mind the large number of awareness variables (20 nos.) the data were subjected to factor analysis to reduce them into a smaller number of reliable dimensions. These awareness dimensions were studied with respect to the demographic variables of the tourists (age, state, and education) through the use of one way ANOVA / robust tests like Welch and Brown-Forsythe depending on the homogeneity of Variances that was obtained through Levene statistics. Later, the dimensions which gave significant results for ANOVA/ Welch & Brown Forsythe are applied with Post Hoc tests. If the data were adhering to the assumption of homogeneity of variance (Levene sig. > 0.05) then Post Hoc tests like Bonferroni, Scheffe, LSD were applied or else popular tests like Tamhane’s T2, & Dunnett’s T3 were considered suitable for application (Kim, 2014).

Analysis and Interpretation of Objective 1:
Heritage (Eno-Gastronomic) Aspects of Mahaaprasaada

The initial content analysis coding identified clusters and sub-categories which are presented in Table 2, followed by a subjective representation of the identified heritage (Eno-gastronomic) aspects of ancient temple food ‘Mahaaprasaada’.

The findings of the content analysis were summarised under the following three final Coding Categories namely; heritage (religious) gastronomic practices, human resource management of the temple kitchen and mechanism behind the holistic food preparation and distribution. These findings are summarised in Table 3.

### Heritage gastronomic practices (Mahaaprasaada) & Actor Network Theory (ANT)

From Table 3 it can be understood that there are various ‘actors’ who built a cohesive ‘network’ among them in order to achieve the set objective of preparing *Mahaaprasaada* for the devotees (as argued by ANT). The *Mahaaprasaada* is a true combination of both ‘concepts’ (religious belief / faith, mystical Vedic rituals, sacred fire, divinity & blessings of Lord Jagannath) & ‘material things’ (food commodities, cooking process, human resource, utensils, *Mahaaprasaada* etc). Hence, from the prospect of ANT, it can be regarded using the ‘material-semiotic’ method, that the divine concepts (semiotic) have been mapped with the material things into a single network. Finally ANT states that the ‘stability of the network’ is highly dependent upon the actors’ interest which changes with new experience. But in the case of *Mahaaprasaada* it was observed that in spite of the developments in the modern era, the unique method of preparing, offering and distributing *Mahaaprasaada*, has not changed since it was first initiated thousands of years ago. Hence, it can be concluded that these unique aspects are truly the Eno-gastronomic elements of *Mahaaprasaada* that have withstood the test of time and in fact have flourished.

### Table 2: Initial Codes-Clusters-Sub/Final categories of the directed content analysis

<table>
<thead>
<tr>
<th>Initial Coding Categories</th>
<th>Clusters (Usually 10-15)</th>
<th>Sub-Categories/Final Coding Categories</th>
</tr>
</thead>
</table>
| Religious food preparations | History of *Mahaaprasaada*  
Categorisation of *Mahaaprasaada*  
The rituals associated with *Mahaaprasaada*  
Heritage foods of *Mahaaprasaada* | Heritage (religious) gastronomic Practices                     |
| Manpower Involved in cooking | Types of sevak / servants  
Duties and responsibilities of different sevak  
Organisational hierarchy | Human resource management of the temple kitchen                |
| Food preparation method | Kitchen-history, architecture, layout  
Equipment, tools and utensils  
Preparation mechanism *Ananda Bazaar: The largest open air restaurant* | Mechanism behind the holistic food preparation and distribution |

~ 64 ~
Table 3 : Main findings of Qualitative Research

**Heritage (religious) gastronomic practices:**

The origin of Mahaaprasada was identified to be from the era of Satya Yuga (at least 7000 years ago) due to its mention in Hindu religious texts like Srimad Bhagavad-Gita (Sahoo, 2015). Apart from this historical evidences also notes its existence prior to 8th-9th century and thus it has been prepared uninterruptedly for the last 217 years.

There are two basic categorisation in Mahaaprasada i.e. Raja Bhoga/Kotha Bhoga (daily ritual) and Bhoga Mandap Bhoga (for devotees-made as per demand).

The unique Vedic rituals (Niti) associated with Mahaaprasada are extensive and followed as per the mention of ‘Jagannath Temple Record of Rights-ROR’ (Panda, 1954) prepared and administered since 1960.

The heritage food preparation of Mahaaprasada is commonly pronounced as Chhapan Bhoga (56 varieties of Bhoga or food), though presently 62-64 varieties are served every day as a part of Raja Bhoga.

The festive dishes and their combinations are significantly different from other days, which may go up to a maximum of 84 varieties of dishes on the occasion of Makar Sankranti (14th January every year).

The Bhoga Mandap Bhoga (meant for devotees) mainly comprises of 5 to 6 varieties of dishes each from rice, dal, curry, side dishes, sweets, cakes etc. These unique preparations are basically of two different types i.e. Sankhudi Bhoga (cooked food) and Sukhili Bhoga (dry food preparations).

**Human resource management of the temple kitchen:**

There are 36 categories of staff involved in Mahaaprasada preparation. This system was enacted in the 13th century AD by King Anangabhima Deva-III, and is still in place.

More than 2000 staff work relentlessly to accomplish the huge task of Mahaaprasada preparation and distribution as a part of their hereditary profession.

In spite of the huge diversity of staff in terms of cast, creed and responsibility, ‘Everybody is considered Equal’ when they are at the service of the supreme deity i.e. the concept of Saamyabaada.

**Mechanism behind the holistic food preparation and distribution:**

The ancient kitchen (6th Century) spread over 24000 sq. ft. is considered as the world’s largest kitchen with 240 wood fire hearths that can cook for more than 1 lakh (100,000) devotees on a single day.

There are three different types of hearths, i.e. (a) Anna Chuli-for cooking rice, (b) Ahiaa Chuli-for making dal (lentils) & curries and (c) Pitha Chuli-for preparing cakes, which are very unique in terms of their architecture and operation (Figure 1).

The fire used in the kitchen comes from a sacred source i.e. Rosha Homa (Fire rituals of the Kitchen) and is known as Vaishnav Agni (Fire of Lord Vishnu). This fire is never doused and is continuously in use for thousands of years.

The Kitchen uses traditional kitchen ‘tools and utensils’ and moreover fresh earthen pots for cooking every day (Figure 2).

The ancient technique of cooking in earthen pots over wood fire hearths (by placing nine pots one above the other in ‘6+3’ or ‘5+3+1’ pattern) is a treat to watch as it is a combination of Vedic ritual and ancient science (Figure 3).

Post preparation, the food is carried to the inner sanctum via traditional bamboo carriers and then offered to the deities in golden plates through unique Vedic rituals by chanting of specific mantras (sacred utterance). The food post offering, is considered to be blessed by the divine powers and is termed as Mahaaprasada.

Finally Mahaaprasada is distributed (sold) to the devotees at Ananda Bazaar - The Pleasure Mart (open air food serving area) and due to its capacity to cater more than 1 lakh devotees; it is regarded as the ‘largest open air restaurant of the world’.
Figure-1: Artistic representations of the ‘Kitchen Hearths’
(From left to right: Hearth for Rice, Dal and Cakes)

Figure-2: Various types of earthen cooking pots and other utensils

**HAANDI**
- Basai Haandi
- Samaadhi Haandi
- Daashia
- Emaara

**KUDUAA**
- Bada Matha
- Saana Matha
- Numberi
- Dhalaa
- Bhaata

**PALAMA**

**TAHI**
the maximum and minimum value of factor loading stood at 0.807 and 0.449 respectively. Therefore, the resulting factors (awareness dimensions) are considered suitable for further analysis (Walker and Maddan, 2013).

The three awareness dimensions that came out as a result of factor analysis were (1) Basic information about Mahaaprasaada, (2) Mahaaprasaada preparation and (3) Utilisation of Mahaaprasaada (Table 5).

Analysis and Interpretation of Objective-2: Tourists’ Awareness of Mahaaprasaada

In order to measure the tourists’ awareness based on their demographic profile, the survey instrument was initially checked for reliability by employing Cronbach’s Alpha, which was found to be 0.927, hence this proved the instrument a reliable one (Tavakol & Dennick, 2011). As there were a total of 20 statements (Variables) for measuring knowledge about various aspects of Mahaaprasaada, the data were subjected to factor analysis. In order to measure the sample’s adequacy for applying ‘factor analysis’, the ‘KMO’ and ‘Bartlett’s Test’ were carried out, which gave significant results, i.e. the value of KMO was greater than 0.60, the Bartlett’s significance value resulted below 0.50, (Dumitrescu et al., 2013). (Table 4)

<table>
<thead>
<tr>
<th>Table 4 : KMO &amp; Bartlett’s Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of sampling adequacy</td>
</tr>
<tr>
<td>Bartlett's test of Sphericity (Sig)</td>
</tr>
</tbody>
</table>

Factor analysis for awareness dimensions:

When factor analysis was applied to the twenty statements/variables measuring the awareness level of the tourists about Mahaaprasaada, it resulted in three factor solution depicting the awareness dimension of the tourists (Table 4). While the total variance explained by the factor solution was found to be 56 %,
The third and final awareness dimension was ‘Utilisation of Mahaaprasaada’, which represents the various questions related to the post preparation usages of Mahaaprasaada. It included five statements for measuring the awareness level of the devotees about the offering ritual of Mahaaprasaada, types, timing and places to avail it etc. These respondents are the ones who are completely informed of the two basic categorisation of Mahaaprasaada, the timings of the temple rituals, as well they have purchased and partaken Mahaaprasaada at Ananda Bazaar.

For completing the second objective of the research, the above three awareness dimensions were analysed against the demographic variables of the respondents through the application of One way ANOVA / Robust
For 'Basic information about Mahaaprasaada’ the mean value is 3.896, which means the tourists from all age groups are ‘moderately aware’ of the basic aspect of Mahaaprasaada. On the contrary, the mean value for the third dimension, i.e. ‘Utilisation of Mahaaprasaada’ was found to be 2.350, so it can be concluded that irrespective of their age, tourists possess very slight information about the post-preparation usages of Mahaaprasaada. Moreover, as it was observed that the awareness level of tourists regarding ‘Mahaaprasaada preparation’ varies with age, Post Hoc testing was applied for analysing this difference more significantly.

The results of Post Hoc testing (Table-7) illustrates that tourists below the age of 20 years are significantly different (in terms of their awareness level), from those who are between 31 to 60 years of age. Similarly, the people in the 21-30 years age group of are also found to be different from those who are between the age group of 41-60 years. Though analysis of mean values shows that the awareness of ‘Mahaaprasaada preparation’ is lowest (2.318) among the younger age group (below 20 years), it was found to increase gradually with age until 60 years. So, one aspect which can be concluded from the above fact is that tourists do not prioritize exploring the post-preparation usages of Mahaaprasaada until they are older than 20 years.

ANOVA on awareness dimensions for ‘age’:

There were six categories of age groups (i.e. below 20 years, 21-30, 31-40, 41-50, 51-60, ‘61 years and above’) which were analysed against the three awareness dimensions and the results were presented in Table 6. Application of ANOVA revealed that the Levene Statistic was significant only for the third dimension i.e. utilisation of Mahaaprasaada, whereas for the rest of the two dimensions the value was above 0.05. So the mean difference of the ‘third dimension’ was assessed using the Welch & Brown-Forsythe test, and the significance value of ANOVA was used for checking the difference of means for the initial two dimensions. The test results depicted that, only the second dimension, i.e. ‘Mahaaprasaada preparation’ is showing significant difference in its values for different age groups. The other two dimensions, namely ‘Basic information about Mahaaprasaada’ and ‘Utilisation of Mahaaprasaada’ remains unchanged across the various age groups.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Levene Sig.</th>
<th>ANOVA / Robust Test</th>
<th>Sig. difference among groups</th>
<th>Age group means for significant differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic information about Mahaaprasaada</td>
<td>.293</td>
<td>ANOVA</td>
<td>0.806</td>
<td>Non Significant (3.896)</td>
</tr>
<tr>
<td>Mahaaprasaada preparation</td>
<td>.390</td>
<td>ANOVA</td>
<td>0.026</td>
<td>Yes</td>
</tr>
<tr>
<td>Utilisation of Mahaaprasaada</td>
<td>.049</td>
<td>Welch Brown-Forsythe</td>
<td>0.120</td>
<td>No</td>
</tr>
</tbody>
</table>

Table 6: ANOVA on awareness dimensions for ‘age’

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Post Hoc Test</th>
<th>Age group</th>
<th>Age group</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic information about Mahaaprasaada</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Mahaaprasaada preparation</td>
<td>LSD (Least Square difference)</td>
<td>Below 20 yrs</td>
<td>31-40 years</td>
<td>.035</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>41-50 years</td>
<td>.022</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>51-60 years</td>
<td>.007</td>
</tr>
<tr>
<td>Utilisation of Mahaaprasaada</td>
<td>NA</td>
<td>21-30 years</td>
<td>41-50 years</td>
<td>.047</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>51-60 years</td>
<td>.013</td>
</tr>
</tbody>
</table>

Table 7: Post Hoc Tests: in-depth analysis of age with awareness dimensions

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not know much about Mahaaprasaada preparation, as the minimum and maximum values of mean vary between 2.318 to 2.925. Therefore, overall it can be stated that, in general ‘awareness levels of the tourists (about Mahaaprasaada) is not very much affected by their age and they possess very less information about Mahaaprasaada preparation and usages’.

ANOVA on awareness dimensions for ‘state’ of the respondents:

The states have been grouped into three different categories namely Odisha, Other East Indian States and Rest of India, for analysis purpose. The test results (Table 8) revealed that the Levene statistic is significant for all the three dimensions, which suggest the non-homogeneous nature of the variances among different groups. Thus, mean differences for all these dimensions were assessed using Welch & Brown-Forsythe tests.

According to the test results, there are significance differences in the awareness level of the tourists from different state groups, for all the three dimensions. So they were again subjected to Post Hoc Tests for identifying the difference in the mean values, within the various state groups. As the data did not synchronise with the assumptions of homogeneity of variances across different groups, a popular Post Hoc Test ‘Tamhane’s T2’ was applied, which gave significant results for all the three dimensions (Table 9). From this table it can be observed that the awareness level of the Odisha tourists (about basic aspects of Mahaaprasaada, its preparation methods and utilisation), is significantly different from the tourists of ‘other East Indian states’ as well as the ‘rest of the states of India’.

The mean values also depicted that the tourists from Odisha are highly aware (4.665) of the ‘basic information related to Mahaaprasaada’ whereas the tourists from the other state groups carry a low level of awareness regarding the same (3.056 and 2.860). But as far as the second awareness dimension is concerned it was found that while the tourists from Odisha are somewhat aware (2.954) about preparation methods of Mahaaprasaada, the other tourists possess slight information (2.289 and 2.214) about the intricacies of Mahaaprasaada preparation. Similarly, awareness level of the tourists regarding the utilisation of Mahaaprasaada is found to be average in the case of Other East Indian States and Rest of India.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Levene Sig.</th>
<th>ANOVA/Robust Test</th>
<th>Sig. difference among groups</th>
<th>State Means for significant differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic information about Mahaaprasaada</td>
<td>0.000</td>
<td>Welch</td>
<td>Yes</td>
<td>Odisha: 4.665, Other East Indian States: 3.056, Rest of India: 2.860</td>
</tr>
<tr>
<td>Mahaaprasaada preparation</td>
<td>0.002</td>
<td>Welch</td>
<td>Yes</td>
<td>Odisha: 2.954, Other East Indian States: 2.289, Rest of India: 2.214</td>
</tr>
<tr>
<td>Utilisation of Mahaaprasaada</td>
<td>0.000</td>
<td>Welch</td>
<td>No</td>
<td>Odisha: 2.875, Other East Indian States: 1.737, Rest of India: 1.684</td>
</tr>
</tbody>
</table>

Table 9: Post Hoc Tests: in-depth analysis of ‘state’ with awareness dimensions

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Post Hoc Tests</th>
<th>State</th>
<th>Other East Indian States</th>
<th>Rest of India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic information about Mahaaprasaada</td>
<td>Tamhane’s T2</td>
<td>Odisha</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Mahaaprasaada preparation</td>
<td>Tamhane’s T2</td>
<td>Odisha</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Utilisation of Mahaaprasaada</td>
<td>Tamhane’s T2</td>
<td>Odisha</td>
<td></td>
<td>.000</td>
</tr>
</tbody>
</table>
Mahaaprasaada. Hence, the mean difference for this dimension was assessed from the results of Welch & Brown-Forsythe tests. The remaining two dimensions for which the Leven statistics gave non-significant result, ANOVA were used for checking the difference of means. These two dimensions are ‘Mahaaprasaada preparation’ and ‘Utilisation of Mahaaprasaada’.

From the test results, it was found that all three dimensions show significant differences in their values across various education groups, thus Post Hoc tests (Tamhane’s T2 and Bonferroni) were applied for analysing this difference among the tourists. The results of Post Hoc testing (Table 11) suggest that awareness regarding the basic information about Mahaaprasaada significantly varies between the illiterate tourists and the ones with ‘matriculation and Post Graduate degree’. Similarly the tourists with matric (10th) level education are significantly different from the graduate tourists and the graduates vary from the post graduate ones. The other education groups do not show any significant difference between them.

<p>| Table 10: ANOVA on awareness dimensions for ‘education’ |
|----------------|----------------|----------------|-----------------|----------------|----------------|</p>
<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Levene Sig.</th>
<th>ANOVA/Robust Test</th>
<th>Sig. difference among groups</th>
<th>Educations Means for significant differences</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic information about Mahaaprasaada</td>
<td>.000</td>
<td>Welch</td>
<td>0.000</td>
<td>Illiterate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brown-Forsythe</td>
<td></td>
<td>Under matric.</td>
<td>3.031</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(&lt;10th)</td>
<td>4.189</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Matric. (10th)</td>
<td>4.307</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Intermediate (+2)</td>
<td>3.859</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Graduate (+3)</td>
<td>3.684</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P.G &amp; above</td>
<td>4.264</td>
</tr>
<tr>
<td>Mahaaprasaada preparation</td>
<td>.802</td>
<td>ANOVA</td>
<td>0.007</td>
<td>Illiterate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Under matric.</td>
<td>2.513</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(&lt;10th)</td>
<td>2.834</td>
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<td></td>
<td></td>
<td>Matric. (10th)</td>
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<td></td>
<td></td>
<td>Intermediate (+2)</td>
<td>2.558</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Graduate (+3)</td>
<td>2.490</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P.G &amp; above</td>
<td>2.988</td>
</tr>
<tr>
<td>Utilisation of Mahaaprasaada</td>
<td>.170</td>
<td>ANOVA</td>
<td>0.001</td>
<td>Illiterate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Under matric.</td>
<td>1.866</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(&lt;10th)</td>
<td>2.523</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Matric. (10th)</td>
<td>2.506</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Intermediate (+2)</td>
<td>2.298</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Graduate (+3)</td>
<td>2.176</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P.G &amp; above</td>
<td>2.851</td>
</tr>
</tbody>
</table>

Local (Odisha) tourists (2.875) followed by the ones from other East Indian states (1.737) and Rest of the states of India (1.684). So, it can be concluded that even the local tourists from Odisha are not fully aware of several aspects of Mahaaprasaada like its preparation techniques, categories, utilisation and distribution mechanism etc. As all three dimensions of awareness show significant difference in their mean values across most of the state groups, it can be stated that ‘the awareness of the respondents is highly affected by their state of residence’.

ANOVA on awareness dimensions for ‘education’:

The education variable had six categories (i.e. Illiterate, under matriculation, Matriculation, Intermediate, Graduate and ‘Post Graduate and above’) which were tested against the three awareness dimensions. The results of ANOVA are depicted in Table 10. Initially the Levene statistic was applied, testing the homogenous nature of variances among the different education groups, which gave significant results for the first dimension i.e. Basic information about Mahaaprasaada. Hence, the mean difference for this dimension was assessed from the results of Welch & Brown-Forsythe tests. The remaining two dimensions for which the Leven statistics gave non-significant result, ANOVA were used for checking the difference of means. These two dimensions are ‘Mahaaprasaada preparation’ and ‘Utilisation of Mahaaprasaada’.

| Table 11: Post Hoc Tests: in-depth analysis of ‘education’ with awareness dimensions |
|---------------------------------|----------------|----------------|----------------|----------------|
| Dimensions                      | Post Hoc Test | Education     | Education     | Sig           |
| Basic information about Mahaaprasaada | Tamhane’s T2  | Illiterate    | Matriculation (10th) | .027          |
|                                  |               |               | P.G. and above | .035          |
|                                  |               | Matriculation (10th) | Graduate (+3) | .005          |
|                                  |               | Graduate (+3) | P.G. and above | .002          |
| Mahaaprasaada preparation       | Bonferroni    | Intermediate (+2) | P.G. and above | .043          |
|                                  |               | Graduate (+3) | P.G. and above | .001          |

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As far as Mahaaprasaada preparation is concerned, the Graduate tourists showed significant difference in their awareness level from the tourists with Post Graduate education and above. Similarly, the Post Graduate tourists were found to be significantly different from the graduate and intermediate ones, in terms of their knowledge regarding the utilisation of Mahaaprasaada. The analysis of mean values shows that the respondents with matriculation degrees are highly aware (4.307) of the basic information related to Mahaaprasaada followed by the graduates (4.264) and the under matric ones (4.189) whereas all other groups were moderate to somewhat aware of this aspect. However, awareness regarding ‘Mahaaprasaada preparation and its utilisation’ was found to be low, across all education groups. In a nutshell, the tourists from all education segments are more aware of the ‘basic information related to Mahaaprasaada’ in comparison to its preparation methods and utilisation procedure. Hence it can be argued that ‘the awareness level of tourists is significantly associated with their level of education’.

Findings of Objective-2: From the above analysis it can be stated that tourists’ awareness of Mahaaprasaada significantly varies with certain demographic characteristics like state and education, whereas it is not much affected by the age of the tourists.

Results And Discussions

The content analysis of the texts collected, clearly depicts the existence of several Heritage (Eno-gastronomic) aspects related to the culinary heritage of Mahaaprasaada. Be it the 7000 years old history; or the extensive varieties of unique food preparations; or the 800 year old heritage and manpower distribution system; or the ethnic tools, equipment and utensils; or the ancient method of cooking in fresh earthen pots over unique wood fire hearths, each of them is very much indigenous to this place. Similar results were obtained by other authors (Chaudhuri et al., 2017; Dash & Pankaj, 2017; Kondapalli et al., 2017; Lenka, 2014; Mallebrein, 2004) during their research at various Hindu and Sikh religious ‘places of worship’ in India. Derivatively, it can be generalised that ‘religious gastronomic practices’ across the heritage temples of India, have a huge number of ‘Eno-gastronomic elements’ that are highly influenced by the culture and tradition of the place.

Further, it was found that tourists’ awareness of Mahaaprasaada significantly varies with certain demographic characteristics like their state of origin education, whereas it is not much affected by the ‘age’ of the tourists. Some scholars (Lawson et al., 1995) noted similar findings during their research on tourists’ awareness of various attractions and their prices. Overall there was significant difference in the awareness level of tourists depending on their nationality, group size and gender. Similarly, Aminrad et al. (2011), examined Iranian students’ awareness of environment (tourism products) and found that higher level of awareness is associated with higher level of education. Resultantly, it can be concluded that the awareness level of tourists is quite affected by their demographic profile such as nationality, gender, education, state, age etc.

Objective 3 : Recommendations

On the basis of the research findings and data analysis, certain recommendations are made which will be helpful in promoting the culinary heritages of Mahaaprasaada as a destination attraction. These recommendations fulfil the final objective of the research and are as follows:

Tourists’ awareness of Mahaaprasaada is found to be least affected by age, however, it was observed that the younger tourists (below 20 years age) are least conscious of various aspects of Mahaaprasaada preparation (2.318) and the awareness level of Utilisation of Mahaaprasaada is minimal across all age groups (2.350). So, tourists from all age groups should be targeted for marketing & promotion of this culinary heritage.

While Odisha tourists are different from the rest in terms of their awareness levels, except ‘basic information about Mahaaprasaada’ (4.665), their knowledge is also quite limited regarding its preparation methods (2.985) and usages (2.875). Moreover, as rest of the tourists have very little information about Mahaaprasaada, there is a greater scope for its promotion within and outside the state.

The awareness of tourists significantly varies with their education but except for graduate, matriculated and under-matric tourists who had a higher awareness level (about basic aspect of Mahaaprasaada), the rest were highly unaware of each and every aspect of religious food preparations (3.031 to 1.866). This signifies the need for awareness campaigns.

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During the research it was found that there are several Enogastronomic elements associated with Mahaprasaada, these would be helpful in developing these culinary heritages as destination attractions. A few suggestions in this regard would be as follows:

(1) A dedicated website and logo for Religious Culinary Heritage Tourism (RCHT),
(2) E-brochure, pamphlets, kitchen handbooks
(3) Develop a comprehensive itinerary for culinary tours,
(4) appoint multilingual ‘kitchen guides’
(5) install multilingual signage
(6) shoot a special kitchen documentary
(7) G.I. Certification of Mahaprasaada
(8) inclusion of Jagannath temple in UNESCO W.H.S. list etc.

Research limitations:
The major limitation of the research was the scarcity of available literature regarding the gastronomic aspects of the Jagannath Dhaam (Temple), Puri. Apart from these, the inability to visit the kitchen premises during the actual operation (due to religious beliefs) was a major hindrance in understanding the entire phenomenon and identification of unique characteristics (Enogastronomic elements). Due to inappropriate behaviour of certain temple staff, sufficient data could not be extracted from the cooks, priests, food sellers etc and moreover the verbal reference in the form of folk legends as they relate to the majority of the data (tasks performed in the temple) was another limitation of the study. Further, the tourists’ unwillingness to give their actual feedback keeping in mind the religious aspects of the place and their devotion towards the deity, can be considered as a major limitation of the research. Finally, the analysis of tourists’ awareness according to selected demographic variables keeps the research gap open as other dimensions like gender, marital status, nature of residence and income were not taken into account for the research purpose.

Conclusion

The primary purpose of the current research was to identify the Enogastronomic aspects of Hindu temple food Mahaprasaada and to analyse the tourists’ awareness of the same from their selected demographic characteristics. The research revealed that there are several unique ‘heritage culinary aspects’ associated with Mahaprasaada such as its ‘7000 year old history’, the complex ‘heritage manpower distribution system’, ‘the preparation of 84 varieties of ancient food’, ‘ethnic tools and utensils’, ancient cooking practices in earthen pots over 240 wood fire hearths and the world’s largest ancient kitchen etc. It was also observed that awareness level of tourists about Mahaprasaada varies significantly with their demographic factors such as state of origin and education. Overall awareness was found to be low across tourists from all segments. The above findings related to culinary heritages of Mahaprasaada could be passed on to the temple administration (SJTA) as well as the Department of tourism, Govt. of Odisha to promote the stakeholders to take necessary steps in view of development & future promotion. As the tourists were reluctant to give feedback in view of their religious beliefs, there is a need to develop opportunities for the treatment of grievances and continuous research for devising future strategies for the destination.

Finally, certain scholars (Son and Xu, 2013) have identified that the ‘temple food’ plays a pivotal role in shaping the tourist experience and argued that it would be helpful in creating an experience-based tourism attraction. They have studied the role of Buddhist temple food in Western tourists’ experience and explained about its potential as a culinary tourism attraction. Hence, the scope for developing the ancient Hindu temple food ‘Mahaprasaada’ as a culinary heritage attraction seems quite relevant. Further, if the given suggestions are taken into account, it would certainly help in promoting and market positioning of this unique culinary heritage as well as its development as a heritage (religious) food tourism brand.
References


