Dietary practices and gender dynamics: understanding the role of women

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Abstract
The culturally embedded habitus forms esthetic sensibilities; that is, the culture of a specific community group is internalized through the process of socialization. Habitus extends to our sense of taste for cultural objects such as art, food, and clothing. In a traditional society like in India, the family is an institution with norms and values attached to it. Furthermore, it is a woman who usually cooks in a traditional society. Therefore, the sociocultural belief system and customs play a crucial role in shaping dietary practices. Hence, discussing the choices and decisions that women make related to food could unravel the gender dimensions. Exploring the dynamics of gender could help policymakers, legislators, and other stakeholders to adopt an integrated approach to amalgamate the element of inclusivity while framing the schemes and policies related to food security. The present study has used the QDA Miner Lite software for the grounded theory approach to conclude that women are the center of food choices. Moreover, food selection depends upon religious inclinations, the belief system, relative position and status in society, cultural traditions and customary laws, etc.

Keywords: Sociocultural belief system, Gender inequality, Nutritional security, Grounded theory, Traditional knowledge

Introduction
Bourdieu’s idea of cultural capital is the accumulation of skills, tastes, clothing, etc., that an individual acquires through being part of a social group. In addition, the concept of habitus refers to the way a person comprehends the societal world around them due to their life experiences, including their sense of taste for cultural objects such as art, food, and clothing. Therefore, the sociocultural belief system and customary norms and values play a significant role in the selection of food and hence, in gender equality in society [1].

Thus, analyzing the multiple linkages between food, gender, and traditional belief system could help understand society and communities better. Thus, answering the sociocultural dimension (refers to the point of view that is built upon the idea that society and culture are significant factors influencing personal development) can be fruitful for policymakers, legislators, and other stakeholders in recognizing the importance of gender. Hence, integrating the women’s perspective could help in bringing the element of inclusivity.

Considering the underlying dimension of social differentiation, food has a strong symbolic meaning. It plays an essential role in symbolizing and signifying social distinction. Hence, seeing through the lens of society, sociologists tried to explore, analyze, and understand the various dimension associated with dietary habits like class, ethnicity, and gender. Associating the particular food choice with class and status has become society’s norms; for example, the superior quality of food with esthetic tastes for the high class. Conversely, the inferior quality of food symbolizes the lower class, that is, lower status in society. The other important factor is gender; even in western culture, food is often associated with feminine and masculine. It is based upon the conception of strength: ‘strong’ food for men or for masculinity and ‘weak’ for women or feminine [2, 3].
Moreover, the modification in dietary culture is the result of different geographical and climatic conditions, besides the social, national, and historical aspects. Hence, food culture can be defined as the food traditions and eating habits of individuals in a collective context, including identity, politics, morality, and language. Further, food choices and the culture of food get influenced by ethos, cultural beliefs, and community norms [4]. Additionally, food choice, including ethical food choices, always happens in a social context [5–7].

Thus, based on the existing literature and grounded theory approach, the present study discusses food choices and gender dynamics. Generally, a woman usually prepares foods in most traditional families, and family is an institution with some norms and values attached to it. Therefore, discussing the decisions women make related to food could possibly reveal a lot about gender dimensions in society.

**Methodology**

A thematic approach is used to develop the themes based on the literature on QDA Miner Lite version 2.0.8. A combination of keywords has been chosen to search the scientific documents, published and unpublished work, reports, conference proceedings, etc., related to food choice from a gender perspective. The keywords used for related searches are “cultural norms,” “gender,” and “food choices.” These keywords are entered into Google Scholar and the ScienceDirect database to retrieve the relevant data.

The ScienceDirect database is used because of the accessibility. Besides this, the current article is more inclined toward a sociological approach; therefore Google Scholar database is preferred because of its reliability and decent coverage of studies from social sciences and humanities perspectives [8]. Other reputed databases like the Web of Science and Scopus are not used due to their weaker coverage of the articles written from Social Sciences and humanities perspectives [9]. Initially, seventy-three studies were collected for literature review, but after finding the redundancy, thirty-four studies were excluded. And finally, only thirty-nine studies were considered for the current article, as shown in Fig. 1.

For the purpose of text mining and analysis, the title, abstract, and keywords of the paper were entered into QDA Miner Lite version 2.0.8, which is freely available software [10]. The articles, numerals, and prepositions that were irrelevant are excluded. Further, the WordStat feature of the QDA Miner Lite software is used, which returned the (i) codes (defined keywords), (ii) count (number of times a keyword or code appeared in uploaded text files), (iii) cases (the number of text files where the entered keywords appeared), and (iv) percent cases represents the relative percentage of the files where the defined keywords appeared from the total number of text files [11]. The outcomes are shown in Table 2. For the data analysis, the grounded theory is used where firstly, relevant text files (cases) are uploaded and secondly, keywords are decided, i.e., codes are entered. Finally, broad themes are defined by combining the related codes [12, 13]. Moreover, the defined keywords or codes appeared together most of the time in the same case or file. Therefore, after analyzing the outcomes, two broad themes are decided for the current article, i.e., (i) gender and (ii) food choices.

**Results and Discussion**

In the current study, we tried to explore the gender dimensions of food in society through the lens of the sociocultural belief system. Because culture determines...
the kind of food choices a person makes, dietary habits are among the most effective ways of investigation to bring forward the gender dynamics in traditional society. Two broad themes were identified, which are (i) gender and (ii) food choices, where we have focused upon the sociocultural aspects (norms, cultural beliefs, and tradition) related to dietary habits from a gender perspective. Furthermore, for each of the themes, particular examples are quoted to substantiate the discourse further.

Food choice and nutritional security
Food choice is not solely based on people’s biological needs but also on psychological and emotional needs [14]. Nevertheless, it is not always the case of hunger and favorite food choice but sometimes the societal norms and beliefs. Because food choice is a complex human behavior, it is influenced by various factors ranging from biological needs of the body and genetic profiles to social and cultural factors [15].

Furthermore, the debate around food and nutritional security ranges from hunger and lack of food to malnutrition and obesity [16]. The World Food Summit (1996), in which provision of food and nutrition security were committed and accepted, also defined the four dimensions of food security viz. availability, access, quality, and stability/absorption [17]. Similarly, the Beijing Platform for Action (1995) supported gender equality and women empowerment. The forum ascertained the technological and financial support like access to land, water, credits, etc., to member nations. Nevertheless, the goal of gender equality never turned into reality. The very reason is the ignorance of the fact of unequal gender-defined roles in society, i.e., division of labor and normative social expectations [18].

The irony is, the majority of the stakeholders are girls and women. The matter of nutritional security is a political, economic, and environmental issue, but most importantly, it is a gender issue. The evident gender biasedness and inequality are both a cause and result of unjust access to food, consumption, and production. Therefore, removing the deeply entrenched gender inequalities could be the possible solution for a just society where women and girls can live with dignity, free from hunger, poverty, and discrimination in society. Also, women and their daughter’s nutritional needs are often neglected at the household level due to prevailing discriminatory social and cultural norms. For example, despite India’s rapid economic growth, the female suffers the norms in terms of food security because of their lower status than men and boys [19].

Furthermore, it is not only women’s participation essential but also how and how much they participate in the work. And because women often show more concern for the environment, support pro-environmental policies, and vote for pro-environmental leaders, their involvement in politics and the nongovernmental organization could result in environmental gains, with multiplier effects across the Millennium Development Goals [20].

For millennia, traditional knowledge of agricultural production and harvesting existed and evolved over the years [21]. It was possible due to the domestication of animals and plants. Besides that, men and women have a different level of traditional knowledge related to agriculture and food productivity. Therefore, integrating gender-based traditional knowledge would contribute to food and nutritional security to agricultural biodiversity.

Furthermore, both individual and communities’ food choices are greatly affected by norms of the gender concerning both the male and female. To some extent, food-related activities constitute a relationship between gender and identity across different cultures [22]. Also, the context of food security is defined by market volatilities (rise and fall) of food prices, regional storage capacity, unequal power dynamics in trade, and domestic market situations—besides, the shift in cropping pattern from food crops to commercial biofuel [23].

In addition to daily household chores and maintenance activities such as food preparation and firewood to water collection, women also manage the care work, farming, farm-related activities, etc. That consists of seed selection and preservation, threshing, cleaning and harvesting of crops, maintaining livestock, and planting vegetables in kitchen gardens. Sometimes, women also do small trades or home-based commodity production [24]. For example, in a developing country like India, the burden of domestic water collection, food preparation, and other daily chores are borne by girls and women of the household because of the cultural construct and gender-defined role [25–27].

Gender: Sociocultural beliefs and women
Culture can be defined as the symbol, which gives meaning to expressions through sociocultural beliefs, rituals, art, and stories [28]. Even nutrition anthropologists have observed the element of gender biases, i.e., pro-male culture in food consumption and dietary habits in south Asia. An early study done in India noted that gender inequality is a fundamental indicator, which inhibits the growth of the girl child. For example, the time period for breastfeeding varied for both boy and girl child; that is, boys’ duration is longer compared to the girl child [29].

As per the World Health Organization’s guidelines, breastfeeding should be started from the first hour of childbirth [30]. But in India, breastfeeding is a means of providing nutrition to the child and is also associated with several cultural practices. Even in some parts of India, in West Bengal, various norms and traditions are
observed during the lactation period. For example, breastfeeding was delayed because of the belief that the mother’s milk is not ready until 2 to 3 days of postpartum. Also, colostrum was disposed of before feeding the child, contrary to ‘World Health Organizations’ guidelines [31].

Further, according to traditional beliefs, colostrum is considered witch’s milk, hence not offered to the child. Therefore, a newborn child is fed with alternative foods with the belief that the food would cleanse their intestine. Still, contrary to that, this act exposes the child to infection that results in malnutrition. Therefore, breastfeeding programs should also integrate families’ and mothers’ cultural beliefs and concepts about dietary practices [31].

Additionally, the sociocultural norms also prohibit the consumption of papaya and jackfruits to pregnant women. The belief that the papaya could induce heat to the body may harm the women and fetus. Also, cultural belief restricts the consumption of certain kinds of food considered hot or sour in nature because of the traditional view that it would enhance bleeding and pain in the abdomen during menstruation [32].

Furthermore, dietary habits are also influenced by the belief system of local communities about mind, body, and soul. The choice of food may reflect the influence of the neighboring community’s customary norms and belief system. For example, Rasam, a traditional curry of mixed vegetables, tamarind, and various spices, is believed to have medicinal properties and is not a tribal but Tamil cuisine. Therefore, due to the positive impact of Rasam, it was included in postpartum healing. Also, the properties to treat stomach problems, fever, digestion-related problems, milk production, and support to baby’s health are attributed to Rasam that gets reflected in their sociocultural and physiological significance [33].

The role of cultural beliefs and practices is inevitable for the successful dissemination of messages to the community. Traditionally, women, especially lactating mothers, were given exceptional attention in the Indian state of Sikkim. A specific kind of food is served to pregnant women so that they could gain energy and resume work post-delivery. For example, the use of local beverages is widespread for women post-pregnancy. High-energy food beverages have traditionally been considered rich in nutrition [34].

Likewise, every community has its own sociocultural beliefs and practices for health care in general and especially for pregnant women. Therefore, the food that one community may consider good may not have the same belief as other communities. Opinions may not fit into the modern biomedical norms of maternal nutrition, growth of the fetus, and safe delivery [35]. Contrary to the culture of consumption of local beverages by some communities in the state of Sikkim by lactating mothers, there are various taboos and prohibitions associated with the consumption of local alcoholic drinks in other organizations after post-pregnancy.

Evidence from various studies shows a strong correlation between gender and inequality, especially at the time of shortage of resources, which further hamper the nutritional status of women [36–38]. Although women are responsible for food preparation and food distribution in most traditional families, it is still the male member who controls the women. Therefore, women’s weaker bargaining power in household decision-making leads to the ignorance of what they think is good for them and hence left with little choice, especially during food scarcity. Most of the time, their voice gets little attention in decision-making around food and differential eating habits that favor the males in the society. The issues get further exacerbated at the time of scarcity of resources.

Moreover, because of patriarchal norms and male-biased institutions, women’s role as ‘farmers’ has hardly been recognized despite their growing role in food and cash crop production [39]. The very reason can be seen in women’s limited control over resources and bargaining power. Since women have a critical role from farm to plate as producers, managers, and servers of food, access to material resources and status recognition could enable an equal opportunity and environment for a gender-neutral society [40].

In a traditional society, norms and values dominate the institutions. Household hierarchies stipulate that women, especially the younger one, should feed other first, consume less, or eat leftover or remains of others. Because of that, sometimes women experience deprivation and hunger linked to traditional diets. At the time of shortage, women skip meals or subsist on wild green harvested in the fields and preserve the desirable goods for the family’s male member. Additionally, status and power dynamics in a family have always been essential factors. For example, younger women and daughter-in-law were not served the food, which was considered better, until the male member ate. Thus, women also experienced malnutrition and hunger when the supply of food was not sufficient. Adding to the misery was the defined gender role, where women had to spend entire days in the forest, for collection of woods, etc. But during pregnancy, younger women were served what was considered better food [41].

Food beliefs consist of the ideas of individuals and society about food. This shows the socially and culturally gained knowledge of food taken care of by various generations and reproduced by transmitting to the next generation. Therefore, beliefs are crucial factors in
determining food choice [42]. For example, Kala Bhat or black soybean belongs to the Leguminosae family. Soybean (Glycine max) has seeds of many colors; the black one is not rich in iron and protein. So due to lesser nutrient quality, it used to be served to women and daughters-in-law at times of food insecurity. There is gender bias in this because giving ‘good food’ to man is a tradition, and black soybean is not considered acceptable and, therefore, served to females [43].

Another case in point is the women in the Southern states of India. They hold a tremendous amount of indigenous knowledge of types of seeds and their uses, planting and harvesting particular species, nutritional values, qualities of various foods, and cooking style [44]. However, changing dietary habits, mainly due to environmental degradation, climate change, and the introduction of high-input industrialized agriculture practices, had led to the reliance on saved seeds [45]. The result is the replacement of subsistence crops with commercial crops and market-based foods and the loss of significant cultural and traditional knowledge related to farming and eating practices [46, 47]. Therefore, due to changing traditional dietary habits and indigenous knowledge, females are left with lesser food choices, which makes the situation unfavorable.

Contrarily, in some South Indian regions where women suffer due to traditional dietary shifts, the women in Northeastern regions feel empowered. For example, tribal women of the region have a wide range of options in ethnic food made of soybean, bamboo shoot, lai patta, tree beans, etc. Traditional food plays a significant role in festivals, ceremonies, and various cultural occasions (like the Etar, Solung, and Aran festival in the Adi tribe). The food used in cooking is rich in nutrition and has cultural significance. Because of their accessibility and availability throughout the year, such foods ensure an equitable and balanced share of food for women [48].

| Table 1 Summary table of the literature reviewed |
|------------------------------------------------|
| Themes                      | Major ideas                                                                 | Description                                                                 | Authors |
| Food choice                             | Important factors                                                                 | Psychological, cultural, genetic, and biological factors are also significant. Dietary habits are influenced by the norms, values, and beliefs of the communities. | [14, 15] |
|                                | Food security                                                                 | Availability, accessibility, quality, and stability are the four dimension of food security. | [16–18] |
|                                | Dietary shifts                                                                 | Societal norms and beliefs are the critical factors at the macro level. Geopolitics and economics are also responsible for the shift in dietary patterns. | [19–24] |
|                                | Power dynamics                                                                 | At the micro level, i.e., at the household level, gender-defined roles are critical from seed selection and preservation, threshing, cleaning and harvesting of crops, maintaining livestock, and planting vegetables in kitchen gardens household level. | [25–27] |
| Gender                      | Discrimination                                                                 | Girls and women are very often discriminated due to prevailing customary beliefs that are more inclined toward male members in a family. Gender is an essential factor in traditional society for making the choice of food. | [28, 29] |
|                                | Contradictions                                                                | Very often, cultural norms prevail over medical norms due to customary beliefs and misbeliefs. | [30, 31] |
|                                | Pregnancy                                                                    | For a certain period of time, pregnant women are told to avoid certain kinds of food and vegetables. Most of the time, the cultural norms are against modern practices. | [32, 33] |
|                                | Difference in beliefs                                                         | The consumption of alcoholic beverages has a special place in Sikkim, unlike other parts of India. | [34, 35] |
|                                | Inequality                                                                   | Nutritional insecurity, especially at the time of food scarcity. Women face discrimination because of prevailing gender defined roles and cultural construct. | [36–38] |
|                                | Role of institutions                                                         | Institutions like family and marriage favorable to the male member of a community. | [39, 40] |
|                                | Gender-based food                                                            | For example, black soybean. Due to the beliefs that it is inferior in quality, hence served to females for some time. | [41–43] |
|                                | Loss of traditional knowledge                                                 | Women suffer the most due to the loss of indigenous and traditional knowledge of dietary habits. | [44–47] |
|                                | Traditional food                                                             | The customary dietary habits and foods are significant. | [48–50] |
|                                | Taboos in fishing                                                            | In Southern parts of India, fishing by women is not considered good. | [51] |

| Table 2 The returned outcomes of the QDA Miner Lite |
|--------------------------------------------------|
| Code (keywords) | Count (frequency) | Cases (studies) | % Cases (% of studies) |
|-----------------|------------------|----------------|------------------------|
| Cultural norms | 16               | 8              | 33.30                  |
| Gender         | 14               | 7              | 29.20                  |
| Food choices   | 2                | 2              | 8.30                   |
Similarly, there are many customs and rituals associated with millets in India. Possibly due to the health benefits of it, the Indians usually incorporate the millets into their diets. For example, Barnyard Millet or Sanwa, known in the local language, was consumed fast because it is light, is easy to digest, and provides energy for a longer time. Another example is the finger millets or Madua roti, as known in Bihar and Jharkhand are compulsory for women to eat before starting a fast of 3 days for their children. The reason being it would not cause bloating and acidity during fast and as a source of energy. Besides, food grains are also used during marriage and various ceremonies in India [49].

Also, certain taboos are associated within fishing communities of Kerala, India, where women play a significant role in the conservation of the cultural and social foundation of fishing with the various sociocultural and socioeconomic articulations. But, still, there are taboos associated with the involvement of women in fishing. For example, women are not allowed to catch fish because fishing is considered “polluting.” Women are only allowed to collect shells and cockles that too from the seafronts. The Muslim Mappila fishing community women are expected to confine themselves in their respective homes as mothers and provide basic needs to the family [50, 51]. The summary of the reviewed literature is shown in Table 1.

**Conclusion**
The whole discussion proved that women are still at the receiving end in a traditional community due to the very reason of gender-defined sociocultural beliefs system. Even the analysis of secondary material showed in Table 2 that there is less than 10% of studies conducted from the cultural perspective of food choices. The dominance of technological innovation and rationality factors of economics has often suppressed or neglected society’s sociocultural aspects in gender, women in particular, since sociocultural norms, values, and beliefs are the binding factors in a society, which regulate it. Additionally, due to entrenched gender-specific roles and duties, unfortunately, women suffer more. Therefore, while making the gender-sensitive and -specific policy, women’s perspectives should be integrated. For that matter, the only possible way is the multidisciplinary, comprehensive, and holistic approach for a genuinely inclusive society.

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**Authors’ contributions**
Mr. SD developed the idea for the current review paper and reviewed the relevant literature. Dr. AJM helped in every step from the formatting, proofreading to the finalization of the draft. The authors read and approved the final manuscript.

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