Research Article

Sociocultural Factors Influencing Eating Practices Among Office Workers in Urban South Korea

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ABSTRACT

Objective: To understand the sociocultural factors affecting the eating behaviors of South Korean employees.

Design: In-depth individual interviews.

Setting: Two metropolitan areas of South Korea.

Participants: Thirteen male and 9 female office workers.

Phenomenon of Interest: The effects of sociocultural factors on office workers' eating behaviors.

Analysis: The researchers transcribed and analyzed audio-recorded interviews using thematic analysis.

Results: Among social and economic factors, participants with a family described a connection between female employment and lower frequency of home-cooked family meals. Working parents felt guilty about their need to depend on eating outside the home and eating processed foods because of their schedules. In addition, competitive and stressful working environments negatively affected workers' nutritional choices. Regarding cultural factors, given the powerful influences of collectivism and Confucianism on daily life, hierarchy and group harmony clearly had an important role in workers' everyday food choices. These included choosing menus that were most suitable for group meals and having to miss dinnertime while waiting until higher-position workers to leave work in the evening.

Conclusions and Implications: In this sociocultural setting, targeting office workers and changing social norms for healthy eating may be more effective than providing individualized interventions. These findings may be transferable to other, similar Asian countries.

Key Words: social influences, cultural influences, eating behavior, food intake, qualitative research, family meals (*J Nutr Educ Behav*. 2017;49:466-474.)

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INTRODUCTION

South Korea has experienced a drastic epidemiological transition since the 1970s as the country's income level has increased.[1] Formerly prevalent undernutrition and different infectious diseases have been replaced with obesity, diabetes, hypertension, cancer, and coronary heart disease.[2] Recent data have shown that 1 in 3 adults is overweight or obese and that approximately 30% of adults are hypertensive.[3] Furthermore, changes in nutritional intake and dietary behaviors have emerged: the consumption of animal-based foods and fat has increased as the consumption of plant-based foods has decreased.[1] In addition, the prevalence of skipping breakfast continues to increase, with a quarter of working South Koreans reporting skipping breakfast in 2014.[2]

These changes in eating practices provide opportunities for improving the diet and health behaviors of the South Korean population. However, few studies have sought to understand the underlying causes of unhealthy eating practices or ways to promote a healthier diet among South Korean workers. Previous studies specifically examined a few aspects of office worker nutrition and health

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behaviors.[3-7] For instance, 1 study showed that >30% of office workers in metropolitan areas had engaged in binge drinking >4 times in the past month.[3] Individual factors such as gender and one's position at work and organizational factors such as the size of one's company and the drinking climate at work dinners were shown to be associated with the prevalence of drinking and binge drinking among employees.[3,4] Another study showed that perceived stress was related to preferences for spicy, salty, and sweet foods.[5] Furthermore, a few small-scale cross-sectional studies among workers explored food intake practices such as skipping breakfast, consuming healthy foods, and participating in family meals.[6,7]

Studies on workers' health from other countries identified organizational influences on employees' nutritional behaviors.[8-10] In addition, a few intervention studies examined the physical and social environments that affect workers' food choices.[11-14] These previous studies showed several positive results of modifying the nutritional environment at worksites; however, few of them specifically explored social and cultural influences on workers' nutritional behaviors.[9,15] Environmental interventions that mainly target the physical environment may be less successful because they do not account for important facilitators and barriers in the social environment.[9] This lack of understanding of the social and cultural aspects of eating may hinder the development of more appropriate, efficient, and sustainable nutrition interventions.

Cultural factors that influence worker food choices were not well explored. The principles of Confucianism have long influenced the East Asian cultural sphere, including South Korea.[16] Since the 20th century, its influence has decreased as society and cultures have changed; however, the emphases on respect for the elderly and on social harmony continue to have an important role in forming modern South Korean customs and culture.[17] Another key influence on South Korean culture is collectivism, which emphasizes the group and its interests over individuals.[18] These influences shape modern Korean society and corporate culture, in which workers make daily behavioral choices that can affect their health.

Most workers have additional roles in their family and other social groups, and these various roles interact. Working parents were shown to employ food choice–coping strategies to manage competing demands at work and home.[19,20] Time scarcity is 1 reason for the observed corresponding decreases in family meals and both the consumption of processed foods and eating out among employed mothers.[21] Those previous studies found that job conditions and working environments may influence food intake practices at home. Because parents have a key role in shaping their children's eating habits, the underlying factors that affect food choices inside and outside the workplace deserve further examination to improve nutritional problems not only among adults but also in younger populations.

The purpose of this research was to understand the social and cultural factors affecting the food choices and eating patterns of employees. Specifically, in-depth interviews were conducted to answer the main research question: How do office workers describe sociocultural factors associated with their dietary intake? The following subquestions were also addressed: What key social influences are related to office workers' food choices? What cultural factors are associated with participants' food choices?

METHODS

Participants and Recruitment

Using purposive sampling to maximize variability,[22] the researchers recruited a convenience sample of 22 office workers (13 male and 9 female) from 12 companies for the interviews, which were conducted in January to June, 2014. All participating companies were part of 1 corporate group. A flyer was posted on the company's Web bulletin boards that explained the objectives of the research and the brief interview process. The inclusion criterion regarding job characteristics was office-based work, regardless of field. From approximately 40 volunteers, 20 workers were selected based on their age, sex, and job characteristics. Because 2 volunteers were unavailable for the scheduled interviews, a total of 18 workers ultimately participated in the one-on-one interviews. Using snowball sampling,[23] an additional 4 participants were recruited who had higher job grades, were in their forties, and had flexible working hours. These participants, footnoted in Table 1, were underrepresented among the initial volunteers and were included to maximize the variability of the experiences collected. Participant recruitment was discontinued when the data that were gathered reached saturation. All participants lived in metropolitan areas and were full-time office workers with at least a college degree. Participants received $10 (US) gift certificates to local stores and a pedometer. All participants signed consent forms and the study protocol was approved by the institutional review board of Gangbuk Samsung Hospital.

Study Design

Qualitative in-depth interviews were the primary data collection method used. An ecological perspective based on the bioecological model[19] was used to develop the interview guide (Table 2). Applying a constructivist approach, participants were asked open-ended questions that mainly addressed various environmental influences on daily eating behaviors and focused on how they perceived these environments. The data collection and analysis process used emerging design, context-dependent inquiry, and inductive data analysis.[24] In this way, it was possible to explore various influences on workers' eating behaviors that had not been documented in previous studies.

Data Collection

Most interviews occurred at or near the participant's workplace during lunch hours or directly after work. Two interviews were conducted at cafes near participants' homes during the weekend. Interviews lasted approximately 50–60 minutes and were digitally recorded with the approval of participants. A trained interviewer with a graduate degree in qualitative methods (the lead author, SP) conducted the interviews in

Table 1. Descriptive Information on Convenience Sample (n = 22) Interviewed Regarding Sociocultural Factors Influencing Eating Patterns

Interview No.	Sex	Age	Company	Job Role	Marital Status	Household Members	Wife's Employment Status	External Help for Domestic Work and Child Care
1	M	36	Information technology	Technician	Married	Wife, girl (aged 5 y)	Full-time	No (daughter stayed with sister-in-law during week)
2	M	52	Credit card	General administration	Married	Wife, 2 boys in high school	Stayed at home	No
3	F	39	Credit card	General administration	Married	Husband, 1 boy in elementary school and 1 boy in middle school	–	No (used to get help from mother when children were younger)
4	F	30	Insurance	In-house attorney	Married	Husband	–	No
5	F	32	Insurance	Contract reviewer	Single	None	–	–
6	M	39	Information technology	Technician/ programmer	Married	Wife, 2 girls (aged 1 and 5 y)	Full-time	Live-in nanny
7	M	39	Information technology	Technician/ programmer	Married	Wife, 2 girls in elementary school	Full-time	No
8	F	33	Outsourcing online education	Customer service representative at call center	Single	Parents	–	–
9	F	30	Engineering	Engineer	Married	Parents, husband	–	–
10	M	37	Heavy industry	General administration	Married	Wife, girl (aged 3 y)	Stayed at home	No
11	M	33	Material industry	Sales	Married	Wife, expecting first child	Full-time student	No
12	F	34	Credit card	Information technology technician	Single	None	–	–
13	F	29	Hotel	Sales planning for duty-free shops	Single	None	–	–
14	M	29	Security solution	Researcher	Single	None	–	–
15	M	35	Electronics	Production planning for semiconductor division	Married	Wife, boy (aged 1 y)	Temporarily stayed at home for child care	No
16	M	32	Electronics	Researcher[a]	Married	Wife	Full-time	No

17	F	27	Broadcasting company for corporate group		Single		–	–	
18	M	43	Heavy industry	General manager of legal team[a]	Married	Wife, 3 girls (aged 5 y, in elementary school and in middle school), mother	Full-time	Mother	
19	F	38	Food catering	Sales	Married	Husband, twins (7-year-old boy and girl)	–	Mother	
20	M	41	Information technology	Technician/ programmer	Married	Wife	Full-time	No	
21	M	47	Insurance	General administration (department head)[a]	Married	Wife, 2 girls in high school, 1 boy in elementary school	Stayed at home	No	
22	M	45	Insurance	General administration (deputy department head)[a]	Married	Wife, 1 girl in high school, 1 boy in middle school	Stayed at home	No	

F indicates female; M, male.
[a]These participants were asked to join the interviews through a snowball sampling method.

Korean. An interview guide was used that contained various open-ended and probing questions to explore participants' food intake routines on both weekdays and weekends. The study used a qualitative emergent design approach. This guide was first pilot-tested with 3 volunteers. After the pilot interviews were conducted, additional social, economic, and cultural influences on eating behaviors were identified; therefore, the guide was modified (Table 2). During the interviews, when the participants mentioned social, economic, and cultural influences on their nutritional behaviors, additional probing questions were asked to obtain an in-depth understanding of participants' thoughts and perceptions. Individual-level factors and employers' social and physical environments were identified but are not included in this article.

Data Analysis

Once the interviews were complete, the digital records were transcribed verbatim and the interviewer checked the transcripts for accuracy. Data analysis began as the interviews were conducted, and stories that emerged during earlier interviews were confirmed in later interviews. A codebook was developed according to constructs that were preselected from the theoretical model.[25] Two independent coders coded data using the codebook and added *in vivo* codes when these codes were considered important for preserving the participant's language and expressions.[26] Key constructs were used to develop *a priori* codes such as social, economic, and cultural influences. *In vivo* codes were later added to the codebook as subcodes while the data were analyzed. These *in vivo* codes were more appropriate for cultural influences because they reflected the cultural meaning of certain terms among participants. After the transcripts were coded, any discrepancies in coding were checked and discussed until agreement was reached, thereby establishing the final codes and themes. The researchers used a text-based data analysis package to manage and analyze the data (version 6.0, ATLAS.ti, Scientific Software Development, Berlin, Germany, 2015). After

Table 2. Interview Guide for In-depth, One-On-One Interviews to Understand Environmental Factors Affecting Food Intake Among Office Workers: Physical and Social Environments in the Workplace and Social and Cultural Factors in Society

Question	Ecological Model Constructs
Please describe a typical day during the week and the weekend.	Individual
Please tell me about your typical meals, including eating out and meals at get-togethers.	Individual
Please tell me about the company that you are working for and the job that you do.	Community
Can you explain some aspects of the social and physical environments that are related to your daily eating practices (worksite cafeterias, meetings, workload, etc)?	Community
Can you think of any changes in your diet since you started working for this company or as you moved from position to position?	Community
Can you come up with some suggestions for your work environment that can help you eat healthier?	Community
Can you explain your roles in your family and how you perceive associations between these roles and food preparation and eating behaviors?	Relationship
Please describe any circumstances or situations at family and social gatherings where food is involved?	Relationship, Societal
Can you tell me about any social norms or cultural practices that you follow when eating?	Societal

coding, data were condensed into a matrix for each theme using Microsoft Excel for Mac 2011 (Redmond, WA). Using these frameworks,[27] the researchers drew comparisons across and within participants to summarize the emerging themes. The themes were primarily developed through the constructs: namely, social, economic, and cultural influences.

To increase the credibility of the findings, a peer debriefing was performed with research team members after 4–5 interviews, and participants also checked the interpretation of findings.[23,24] Specifically, once the findings had been summarized into major themes, the initial interpretations were sent to 5 participants, who affirmed the interpretations via e-mail. To ensure the credibility of the data further, discussions were held with the physicians and dietitians regularly consulting with the workers at participating companies.

RESULTS

Various social, economic, and cultural factors were associated with participants' food intake practices (Table 2).

Social and Economic Influences

Wife's employment status, long working hours, and decreased consumption of home-cooked meals. In interviews with married participants, most mentioned their wife's or their own employment status when discussing food intake practices. Typical initial answers regarding their breakfast or dinner routines were "my wife is working … so I come to the office and eat breakfast here" and "my wife usually prepares meals because she does not work outside the home." More specifically, male workers with working wives coped with their wife's long working hours by eating out or eating prepackaged processed food,

> *I tried to eat dinner at home, but my wife is also working … so she doesn't have time to prepare dinner. When I get home, it's approximately 8:30 … How could we cook something at that time? So we just end up eating out.* (Interview 7, male, aged 39 years)

However, when there was an external helper who could prepare meals at home, eating at home with the family in the evening was not perceived to be a difficult task.

> *For dinner, I usually eat at home, just an ordinary home meal. My wife is an elementary school teacher, and she's having a good life … I mean, a comfortable one (laughs). The kids' grandma is doing all [the housework]. Dinners… grandma also prepares …* (Interview 18, male, aged 43 years)

Most of the help that participants mentioned came from the children's grandparents, but they occasionally had hired help. When there was no help available, many workers depended on food outside the home for weekday dinners and for at least 1 or 2 meals on the weekend.

Most participants who could not avoid out-of-home eating were not content with their situations. The most frequently mentioned reasons for this discontent were that food outside the home was perceived as less tasty or containing too much salt and too many artificial seasonings, and that participants were simply bored with restaurant foods.

High educational costs for children, inflexible job market, and lack of support for working mothers. A key factor driving employment was the high cost of raising children:

> *… It is extremely difficult (to eat healthy) if you have to eat out so often … but my wife loves her work and is proud of what she does … so she doesn't want to quit. I also want her to continue her work as long as she can because it costs a lot of money to educate kids … to send them to private academies. It costs a lot … and it is difficult to reenter the job*

market once you are out. You might not be able to find a job after you raise your kids … you know. (Interview 7, male, aged 39 years)

These social and economic issues were intertwined with the work conditions of female workers, and many participants perceived that their and their children's diets were closely associated with the employment status of the mother of the household. This perception did not differ by participants' gender.

Structural issues were also identified. If there were working mothers in the households, all of the family members either ate out or ate processed food.

Competitive working environment. Given the competitive economic environment in South Korea, many workers stated that their working conditions were becoming harder, requiring them to start their day early and finish late. Occasionally they had to work through lunches. These long working hours and the social pressure caused by the expectation that workers stay late at work in the evening affected employees' food intake patterns:

I get to work at 7:30 in the morning and take off between 8:00 and 9:00. Sometimes I have to skip lunch because I have so much work to do. So when I get home late at night, I just nibble on ice cream or snacks or grab some fast food on the way home. (Interview 5, female, aged 32 years)

Because of economic hardships in South Korea, which had a low gross domestic product growth rate and a weakening manufacturing industry, certain companies were experiencing difficult times. A 30-year-old female working at the headquarters of a company in declining status said that there was social pressure to not leave work on time:

My company is not doing well nowadays, so the overall atmosphere is very … heavy. Even though I leave work at 6:00, which is [the] normal leaving time, there is this subtle pressure saying, 'Why are you leaving so early?' (Interview 9, female, aged 30 years)

Cultural Influences

Eating as a social act. During the interviews, many cultural factors were associated with workers' daily eating routines. The first concept that emerged was the social role of eating lunches and dinners with team members. There were certain exceptions, but most workers said that lunches were expected to be a group activity. Specifically, a group of workers consisting of either all team members or a subgroup of the team usually spent lunch time together, eating and drinking coffee afterward. This social aspect of eating could affect individual food choice. For example, when left alone at the office, workers might tend to skip lunches because they found it uncomfortable to eat alone. One male worker in his thirties stated that:

I was repositioned to a different team awhile ago, and then sometimes, I was left alone (during lunchtime) … then, I just skipped meals because it's somewhat uncomfortable eating all by myself. (Interview 10, male, aged 37 years)

A female worker stated that although she wanted to follow a special diet for weight control, she was required to eat what the other team members ate. She was afraid that others might judge her if she was seen eating something different:

If I eat from a lunch box in the cafeteria, whereas all the others eat regular meals sold there, I am afraid that people might consider me as someone with a troubling personality. (Interview 19, female, aged 38 years)

Office workers reported considerable social pressure to participate in meal gatherings. One worker described how she wanted to lose weight, but she followed the group's plan for lunch because she "did not want to break the happy atmosphere, something that team members share while eating delicious (and also heavy) meals together." She thought that eating meals together was closely related to "building teamwork" (Interview 19, female, aged 38 years).

Go with the flow: we want to blend in with the group. Informants tended to eat and drink as others did because they did not want to stand out from the group. Following others' opinions regarding the type of food they should eat or whether they should drink alcoholic beverages was part of workplace culture. In particular, when workers were invited by other coworkers to eat, it was more socially acceptable for them to join and enjoy meals together. These acts of sharing meals and drinking together showed that the employee had a good personality and was likeable:

After all, people don't want to stand out … basically. In this society, when someone is invited to lunches or dinners, it is really hard to say 'no' unless you really hate that person. Most of the time, accepting the invitation gives the good impression that you are a well-rounded person. That's important in this society to be successful … (Interview 1, male, aged 36 years)

Influences of Confucianism: hierarchy matters. In a society in which Confucianism continues to have an important role, workers' ages and job levels within teams were important in deciding when to leave work and what to eat and do during lunch. In this hierarchical society, workers tended to wait until workers in a higher position (bosses) left work in the evening. There was a set leaving time for all companies, but there were also unspoken rules about when to leave work, which were influenced by more senior team leaders.

In many cases, certain younger or lower-position workers could not leave the office before their bosses. However, if they waited until their bosses left work, they would miss meal times or have late dinners:

Officially, it's 8 to 5. However, there is this unspoken rule that you have to be at the office at least until 6 PM. Some older bosses think that is just the way it is. And in this country … there is the notion that you leave work in order … from the oldest (highest position) to the youngest (lowest position). (Interview 10, male, aged 37 years)

This excerpt shows that age remained an important factor in the work dynamic and that younger

workers (who were usually in lower positions) did not have the autonomy to decide when to leave work. Several participants mentioned that this hierarchical culture was changing, with a greater number of younger workers at companies in general and with more open-minded, younger bosses. However, to be more successful at work, staying late at the office to accomplish tasks or to impress older bosses remained the norm.

Parties and social events: importance of attending colleagues' family events. Culturally, South Korea emphasizes affection-based human relations. Those interviewed often mentioned attending the family events of colleagues; the most popular events were weddings and the first birthday parties of coworkers' children. In contrast to other cultures, in South Korea these family events are open to colleagues, and all of these events have abundant food for sharing. In most cases, these foods are served in an all you can eat style. One interviewee described these events thus:

> *Weddings and children's first birthday parties are endless. And all these parties have buffet-style serving. The foods are delicious … so I tend to overeat. Well, that's what happens during weekends.* (Interview 6, male, aged 39 years)

DISCUSSION

Korean office workers described how social and economic conditions, customs, and culture affected their eating practices both directly and indirectly. Previous studies often acknowledged the importance of understanding the social and cultural environments in which food choices are made.[17,28] This study demonstrated that South Korean culture, in which collectivism and Confucianism maintain powerful influences on daily life, clearly had an important role in workers' everyday food choices. These factors were more complex than the influences previously discussed in the literature and were also interrelated.

The first factor that emerged was participants' perceived linkage between working women and family meals. Male employees with working wives tended to eat out and consume processed foods more often than did those whose wives did not work, unless they had external support from either paid help or family members. Previous studies on diet quality and nutritional status with regard to maternal employment stressed the risk of overweight or obesity, the lower frequency of family meals, and lower intake of nutritious foods such as fruits and vegetables among children.[29,30] The current qualitative study revealed that female employment could have various influences on food intake, with a mostly negative effect, among not only children but all family members. These influences were primarily spillover, defined as "positive and negative feelings, attitudes, and behaviors that are carried over from 1 role into another."[19,31]

Economic difficulties in society and psychosocial working conditions can influence workers' health through various pathways.[9,32] The findings suggested that companies' economic difficulties could translate into social pressure in the workplace, leading to employees working through their lunches and missing meals because they stayed at work late in the evening. Past and ongoing layoffs at workplaces were tied to stress-related eating and skipping meals,[9] and job strain was associated with weight gain and obesity among workers.[32,33]

Previous work by Herman[34] presented 3 pathways of social influence on eating: (1) social facilitation of eating, (2) modeling, and (3) impression management. The current study found some evidence for these social influences on eating among office workers, particularly the modeling pathway: that is, employees tended to eat the same or similar dishes as those of their coworkers. This modeling mechanism was reinforced by the local culture, in which people did not want to stand out when they were in groups and would rather follow a group's overall preferences when deciding what to eat. This cultural practice could be explained by the influence of Confucian principles, which emphasize social harmony.[16]

In addition, employees tended to show respect for older people by accepting older team members' meal invitations. Studies on the cultural characteristics of modern South Korean society showed that South Koreans paid more attention to groups than to individuals (collectivism rather than individualism), embraced affection-based relationships (representing the core cultural value of *cheong*, which can be roughly translated as *affection*), and have a hierarchical culture.[18] These cultural characteristics were found to be applicable and valuable in explaining workers' eating practices in South Korea.

Despite this study's unique contributions, certain limitations should be acknowledged. All informants were workers who were part of a single large corporate group, which should be taken into account when interpreting the findings. On the other hand, participants came from 12 different companies within that group. Moreover, relatively young employees in lower job grades volunteered more often for the study, and few participants were in their forties and fifties, particularly among female employees. This distribution reflects the fact that few female employees were in higher positions at these participating companies. Therefore, the current analyses lacked the input of female employees with older children.

IMPLICATIONS FOR RESEARCH AND PRACTICE

More qualitative research could be conducted with different types of professionals in different regions of the country to further develop the understanding of these social and cultural influences. It might be interesting to compare these influences on workers' eating behaviors among regions that either share economic and cultural characteristics or do not share them.

Participants were all office workers who had at least a college degree and were from companies that paid relatively well compared with other companies in the country. Future research could include employees from other companies who had different educational backgrounds and income levels.

From the perspective of intervention, programs that aimed to lower the barriers to providing healthy meals to families might be innovative and encompass multilevel approaches in

this setting, where working hours are long with limited support for working women. Certain examples may be found at companies that provide employees with take-away meals that are professionally prepared. These take-home meals are considered a convenience and a family-friendly benefit and to the best of the authors' knowledge, no studies have investigated the nutritional effects of this type of benefit.[35]

Working to change social norms by improving the workplace culture to appreciate work-life balance may also be considered to allow for more family meals among employees.

In addition, for future worksite nutrition programs in cultural settings with an age hierarchy, it would be more effective to target senior employees, who often make meal-related decisions for team members. Moreover, because of the emphasis on social and group meals, intervention and policy strategies to modify social norms about healthy eating at worksites, rather than individualized counseling for better nutritional behaviors, may resonate more with workers.

Future intervention studies targeting workers could consider various influences of workers' nutritional behaviors instead of solely providing knowledge and changing the physical environments of workplaces. Changing social and cultural norms might be more difficult and time-consuming, but the current findings suggested that social and cultural factors may be important in promoting healthier eating behaviors among office workers. East Asian countries that share Confucian influences could also consider these cultural factors when developing future interventions or policies to improve the working population's eating behaviors.

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CONFLICT OF INTEREST

The authors have not stated any conflicts of interest.