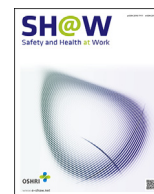




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Original Article

Mystery Shopping and Well-Being of Service Workers in South Korea

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ABSTRACT

Background: Mystery shopping is a method in which a company monitors quality of service and employee conduct and compliance with regulations using an evaluator posing as a customer. It is a typical tool of customer-centered bureaucratic control insofar as it provides overall and standardized evaluation of intangible elements of customer service as well as physical elements of service environments. The purpose of this study is to examine how mystery shopping is related to the health status of service workers in South Korea.

Methods: Data from semistructured interviews with 15 workers were collected from January to April 2019 to obtain information on service worker experiences with mystery shopping. Data were analyzed using the constant comparison method.

Results: Mystery shopping limits worker autonomy and stiffens the workplace environment by standardizing and monitoring labor processes for service workers. In addition, mystery shopping heightens work stress through increased labor intensity. Five mechanisms by which mystery shopping affects service worker health are identified and comprise (1) multifaceted and multilayered surveillance, (2) evaluator subjectivity and irrational requirements, (3) standardized rules combined with high pressure to achieve sales, (4) self-esteem degradation because of evaluator results, and (5) musculoskeletal disorders because of strict adherence to labor processes based on evaluator results.

Conclusion: Mystery shopping as an evaluation method should be reconsidered not only in terms of health problems but also in terms of organizational efficiency and issues of human rights.

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1. Introduction

In recent decades, mystery shopping has been extensively conducted in service jobs worldwide. Mystery shopping refers to an evaluation technique in which a company monitors quality of service and employee conduct using an evaluator—a so-called “mystery shopper”—posing as a customer [1]. The purposes of mystery shopping are to evaluate service processes and service standards of organizations, together with the behavior of service providers, to identify weaknesses such as gaps in compliance with regulations and other areas of quality control in need of improvement. In addition, mystery shopping is used to assess whether customer requirements are met [2], whether events and promotions are being carried out properly, and/or to benchmark competitor performance [3]. Today, mystery shopping surveys are utilized in sectors ranging from traditional service businesses to areas of public service, such as healthcare, post offices, and education.

Research in mystery shopping has mainly focused on how the practice improves quality of service through development of

evaluation tools from the perspective of corporate organizations, such as ensuring reliability or measurement validity or development of ways to heighten professionalism in mystery shopping evaluators [4–6]. In contrast, few studies have explored the impact of mystery shopping on employee work experiences and lives.

Service industries are controlled by customer-centered bureaucracies, which establish customers as another dimension of the rules to which workers must adhere in addition to compliance with bureaucratic authority [7]. Mystery shopping is a typical tool of customer-centered bureaucratic control that provides overall and standardized evaluation of intangible aspects of customer service and physical features of the service environment. Indeed, as a workplace control mechanism, mystery shopping may seriously affect the lives, health, and identity of workers [8]. The Karasek Job Demand Control model, widely used in theories of job-induced stress, explains that workers experience high levels of stress or burnout when they are exposed to excessive job demands but have little control over and autonomy in their work [9–11]. In preparing for assessment by mystery shoppers, service workers have little job

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autonomy because of standardized evaluations. It is a matter of particular concern insofar as workers assessed by mystery shopping are mainly service providers who are expected to manage their own internal emotions according to established rules when dealing with customers [12]. Thus, worker autonomy, which is known to mediate stress caused by high-intensity emotional labor, is undermined by mystery shopping evaluation.

This article examines qualitatively how stress factors from the Karasek model influence labor processes pertaining to mental and physical health of service workers in the context of mystery shopping in South Korea.

2. Materials and methods

2.1. Data collection

For this study, data from semistructured interviews with 15 workers were collected for 4 months from January to April 2019. Interview guidelines were developed based on a review of postings and comments about mystery shopping, going back as far as 2012, from 10 online communities comprising distribution worker unions. Specifically, interview questions were intended to collect information related to (1) worker experiences and feelings about mystery shopping, (2) the extent to which mystery shopping interferes with labor processes, and (3) the impact of the results of evaluation on workers. Before each interview, informed consent was obtained from respondents, and participants were assured that their responses were confidential.

The interview sample was comprised of four participants from the distribution industry, three from multiplex industries, four from franchise stores, two from the finance/banking industry, and two hospital workers. Of the total sample, six were part-time employees, and nine were full-time employees. There were 12 female and three male participants, with age ranging from 20 to 50 (and slightly over) years. The period of work in corresponding industries (or stores, in the case of part-time workers) ranged from 2 months to 2 years for part-timer employees and from 7 to 30 years for full-time employees. Each interview lasted approximately 50–120 minutes. At the stage of interviewee recruitment, the plan was to interview four groups of people by industry and employment status. Interviews commenced with full-time workers in distribution industries; group-specific recruiting stopped when information was saturated for the group. At the point of information saturation by group, the interviewing process moved to the next group. When all information was saturated for each designated group of workers, the interview process was terminated. Institutional Review Board approval was obtained for this study from The Catholic University of Korea.

2.2. Data analysis

Interviews were voice-recorded with participant consent and transcribed immediately following each interview for data analyses in concurrence with interviews. Data analyses began after the third interview so that collected data could be organized and also to determine when to stop recruiting interviewees [13]. Data analysis was conducted using a constant comparison method via the following steps. First, line-by-line coding was conducted, in which each sentence of interviewee statements was coded by repetitious reading of transcripts. Second, coded data were classified into categories by subject. Finally, constructed categories were compared with raw data to confirm and adjust categorizations for validity. This study is based on the constructed category pertaining to health problems related to mystery shopping and comprises five subcategories explaining the mechanisms by which mystery

shopping influences employee health in the workplace: (1) surveillance and service work, (2) evaluator subjectivity and irrationality, (3) the pressures of mystery shopping combined with the pressure to achieve sales, (4) self-esteem degradation because of evaluator results, and (5) musculoskeletal disorders and physical illness because of strict adherence to labor processes based on evaluator results.

3. Results

3.1. Surveillance and service labor

Generally, workers tend to experience greater levels of stress and work pressure when they are aware of surveillance in the workplace [14–16]. Service workers are notified of the assigned mystery shopping period, which generally lasts about 1 month, but the exact day is not revealed. However, many workers—especially experienced workers—can identify mystery shoppers when they present in person. Most participants in this study reported having experienced stress from mystery shopping, primarily because of the presence of mystery shoppers and the strain of having to perform rote services without errors to receive high evaluation scores. Some interviewees compared this process to “taking an exam,” reporting high levels of nervousness.

“No matter how good you are usually, you are at a loss when the person you believe to be a [mystery] shopper comes into the store. Generally, it does not matter if you read the service manual word by word when dealing with a mystery shopper. But, I was so nervous at my first mystery shopping experience that I couldn’t see any of the words in the manual.” (Case 5).

A lack of workplace autonomy is a critical stress factor related to the mystery shopper evaluation process. In the context of service work, job autonomy is the ability to act freely and independently in a manner believed appropriate in customer service situations [17]. However, the scope of worker autonomy is restricted under perceived surveillance. Surveillance in situations of high demand and low control can transform routine tasks into episodes of high stress [14].

In many cases, surveillance through mystery shopping is performed in multifaceted ways. While service workers are already monitored by in-store closed circuit televisions, customer satisfaction surveys, and firm evaluations, mystery shopping allows for much closer and more personal monitoring of workers. Also, in a distribution setting, multitiered surveillance is common because of the nature of store contracts. Typically, global brand stores are operated by agencies that manage distribution and sales in Korea. Accordingly, workers in global brands are under surveillance by two organizations: the agency and brand headquarters. One interviewee said that mystery shopping evaluations were conducted twice a year by brand headquarters in 2018, as well as two times each in the first and second halves of the year by the brand agency. Thus, the workers in that store were subject to six mystery shopping evaluations in that year.

“We are under intense pressure from being judged by someone we don’t know. During the MS [mystery shopping] period, we are very sensitive [around] each other. Sensitive employees can’t really sleep at night.” (Case 2).

Service workers already suffer from emotional dissonance because they must present a professional demeanor in interactions with customers despite their inner feelings, which Hochschild

defined as “maintaining a difference between feeling and feigning [12].” In addition, stricter workplace monitoring and evaluation equate to lower autonomy and fewer channels of expression for workers, which increases stress levels [18,19]. Some workers have experienced sleep disturbance from the stress caused by frequent mystery shopping, as mentioned in the above quote. Studies have shown that as a typical and main psychological reaction to work-related stress [20], sleep disturbance or insufficient sleep increase in those with cardiovascular diseases [21–24]. For these reasons, mystery shopping, insofar as it increases monitoring, is one of the biggest reasons for job dissatisfaction.

3.2. Evaluator subjectivity and irrationality in monitoring processes

Companies uniformly establish evaluation criteria for mystery shopping. Regardless, subjectivity on the part of evaluators is inevitably involved in evaluation processes. Accordingly, evaluation scores for worker service performance may vary depending on the propensities and personalities of the shoppers they encounter. Some shoppers, for example, evaluate the kindness of workers by the quantity of free skincare samples that the staff provides. Thus, service workers face the dilemma of having to quickly adjust to various situations that arise because of the subjective nature of individual shoppers, while simultaneously complying with strict institutional standards.

Most interviewees complained of stress because of evaluator subjectivity in processes that emphasize strict adherence with set rules of conduct.

“It’s hard to be perfect, although you follow the manual exactly, because the [mystery] shopper may say that, let’s say, your voice tone was bad even if the shopper did not have a specific problem ... And yet, the company tells us not to be too customer-centric, not to buy a customer’s silence with a reward, or not to say “it is not our responsibility” to customers about what we can take responsibility of. I think many workers leave because of associated stresses.” (Case 11).

Customer-centered bureaucratic control prevents workers from exercising discretion in their relationships with both corporations and customers. That is, because workers are required to maintain a specific emotional state that corporations have designated as desirable, they do not have agency in their direct interactions with customers [25]. In other words, “companies have norms to organize and manage emotional labor that workers should follow, but it is the individual workers who bear the responsibilities for the results of the norms” [26].

In addition, the majority of interview participants stated that it felt unfair for the entirety of their work abilities to be assessed according to a single interaction with a mystery shopper. They reported experiencing emotional burnout from evaluations made based only on fragments of their work life or unrealistic and unreasonable evaluation items despite feeling that, in general, they were good service employees.

It is known that monitoring and evaluation tend to increase stress levels in workers. However, some studies show that monitoring may not negatively impact the mental health of workers in terms of depression, job dissatisfaction, or emotional exhaustion if it is conducted around the essential contents of a task, is performed according to convincing criteria, or is accompanied by positive feedback. Instead, workers feel that such affirmative monitoring helps improve their professional lives and careers [27]. Therefore, mystery shopping, a process that, for workers, is characterized by evaluator subjectivity and irrational assessment, leads to great levels of job stress in service workers.

3.3. Pressures of mystery shopping combined with pressure to achieve sales

Workers are paid for productivity, which, in service workers, is measured by various activities to increase sales [28]. According to previous research, salespeople employed by boutique beauty brands with contractual relationships for space in Korean department stores receive differential support and unequal treatment depending on sales. Worker with good sales are allowed to preempt the dates of promotional events or claim desirable in-store locations. If sales are sluggish, however, the department store may increase pressure to achieve sales along various punitive lines. For example, the boutique may be repositioned to a corner of the store that is less noticeable, management may conduct frequent sales checks, and/or employees may be replaced without notice or transparency [29]. Under such pressure to achieve sales, workers who are under the scrutiny of mystery shoppers have the added stress of compensating for revenue deficit because of time lost in responding to mystery shoppers.

“A [mystery] shopper buys things and returns them later because that is what they are supposed to do. But, we have a sales goal to achieve each day, which is disrupted by the shopper ... I mean, I could sell things to actual customers, [but instead] I deal with a shopper. Then the day is ruined ... spent exhausted and worried about how to achieve the sales goal. We begin the day with a sales deficit on shopper days.” (Case 4).

In beauty brand boutiques, employees are burdened with deficits against sales goals because of mystery shopping because of the nature of the evaluation. Mystery shopping requires workers to walk through every step of customer service—that is, to introduce each item, to provide information, to recommend other products, and to offer demonstrations of skin care and makeup application. An employee’s interaction with a mystery shopper can thus be as long as 1–1.5 hours. In addition, employees often fail to achieve daily sales allotments because of addressing product returns by mystery shoppers, exacerbating the stress and emotional exhaustion. During an evaluation period, workers must provide all visiting customers with comprehensive services in accordance with the employee handbook, as they do not know which customer is the evaluator. Workers usually have flexibility around their time and manner of customer service to meet sales expectations. In contrast, they often do not hit their sales targets during mystery shopping periods because of spending longer amounts of time on customer service.

In franchise cafes, where mystery shoppers mainly target part-timer employees, performance comparisons occur among stores based on the results of assessment. Strictly following service procedures (as required by mystery shopping) often leads to longer wait times for customers, which results in reduced store sales. Unfortunately for the workers, they bear the burden of this sales pressure. In addition, labor intensity increases as workers are expected to provide full service for mystery shopping evaluations while still achieving target sales.

3.4. Self-esteem degradation in employees because of evaluator results

Service workers spend more time interacting with customers than do workers in any other profession. They assess the quality of their own service and base their identity as service workers based on customer responses and assessment of the services they provide [30]. Mystery shopping is performed by an evaluator posing as a customer based on previously established service procedures. Evaluation results are relayed to individual workers, and workers

accept the results of mystery shopping evaluations as representative of their capabilities as service workers. Workers with low scores from mystery shoppers tend to have negative opinions of their work performance and, as a result, often suffer a decline in their sense of accomplishment as service workers.

"Once, I was too busy to help the [mystery] shopper and was given a low evaluation score. The atmosphere of the branch got really bad after that. I felt like I was doing something really wrong and like I was failing regardless of the branch's performance ... When I am criticized [for the low score], it hurts my self-esteem. And I get to believe that I should be kinder and more polite to customers than I am now since I am a service worker anyway." (Case 6).

"The managers review all of the employees' performances once a year. First, the managers review themselves. The review includes items like [quality of service] QOS, sales skills, and workmanship. Well, a manager I know well who would have given herself an A rating in QOS underestimated herself this time. I asked her why she rated herself so low, and she said, 'I got a bad [mystery shopping] MS score.' She rated her entire year's performance as very low overall based on a single MS assessment." (Case 1).

Workers in the service sector who experience emotional depletion when interacting with customers tend to be generally negative about their peers, careers, and external environments. While this may increase worker intentions to change jobs, it also prevents them from having confidence in the people and society around them [31–33]. Achievement decline appears to be a more common phenomenon among experienced workers than in part-time workers at franchises. This is because the longer a person has worked in the same industry, the more likely they are to recognize themselves as professionals (this is particularly true among service workers). Low scores from mystery shopping, however, are indicators, they think, of their own low levels of professionalism.

In addition, some studies have found that monitoring and comparing employee performance of tasks is more likely to cause depression, anger, and fatigue among them [16], as in the case of mystery shopping. Companies put pressure on sales staff to adhere to required work guidelines through store-by-store scoring competitions and a system of rewards. This system produces high stress in store managers. The constant emphasis on certain expectations, such as store cleanliness and employee kindness, together with the pressure of evaluation scores causes sales workers to internalize emotional rules and daily demand for sincerity.

3.5. *Physical illness in employees because of strict adherence to labor processes based on evaluator results*

Occupational musculoskeletal disorders are associated with worker organization of work processes. Excessive job demands and lack of control over labor processes are major causes of stress in workers. These environmental factors can cause physical health problems for workers by inducing forced and repetitive movements or by requiring employees to work in ergonomically poor positions [34,35].

Service workers in South Korea have reported many health problems caused by poor working environments. They suffer from musculoskeletal disorders such as lower limb disorders, toe disorders, knee and joint diseases, and back pain because of disk diseases from causes including standing for long periods of time, lack of rest areas, or inflexibility in break times [36,37]. In the case of mystery shopping, workers often notice physical health problems because of limited autonomy in body movements or increased labor intensity from strict adherence to the rules of service.

"Normally, I can adjust the amount of ice cream I scoop or the way I put it in the cups, so my hands and arms hurt less. However, I have to follow the instructions strictly during the MS period. For example, if you need to put four scoops in the cup, the manual directs you to put a few on the bottom and put a few on the top. If you want to make a properly shaped cup of ice cream, you should scoop it a lot at a time and trim it several times, so your hands and arms hurt ... you have to follow the instructions anyway. Once, my wrist hurt, and I got acupuncture every day for two weeks. I spent all my money I earned from this job on doctor bills." (Case 15).

This interview excerpt is from a part-time worker at a large ice cream franchise who developed a physical health problem because of labor. This part-time worker was unable to perform self-protective ice cream serving practice during periods of mystery shopping because of required adherence to serving rules. Instead of decreasing overloads by scooping ice cream several times and shaping it later, the workers are directed to provide as much ice cream as possible in a single scoop to produce the desired shape. Beauty brand workers (suffering from improper work environment as revealed in previous research) and most of the part-time workers interviewed in our sample complained of musculoskeletal disorders. Workers are unable to exercise flexibility in manual habits to reduce the physical burdens of their labor during mystery shopping assessments. Accordingly, they are regularly exposed to unhealthy working conditions.

4. Discussion

Although mystery shopping has been rarely examined, it is important to study its effects on the lives and well-being of workers for several reasons. While mystery shopping has been scaled down in some industries, the method requires higher levels of professionalism from service workers than ever before. Service workers in duty-free shops, for example, are expected to learn foreign languages in preparation for foreign mystery shoppers. Employees in stores that carry foreign brands are required to have a wide range of cultural knowledge, such as history of brands and other details. To fulfill these requirements, workers must spend additional time taking language classes or participating in educational programs, which results in less time for their private lives. In addition, more industries and stores are employing mystery shoppers for assessment of service quality. The Mystery Shopping Professionals Association (MSPA), a global association of marketing companies, comprises approximately 450 registered organizations whose members conduct mystery shopping. Furthermore, a countless number of other companies also engage in mystery shopping worldwide. In South Korea, most consulting and marketing companies operate their own mystery shopping programs, and many franchises, hospitals, hotels, and public organizations recruit and train their own monitoring personnel. Mystery shopping has become a very common and widely applied way of assessing quality of service worldwide.

Understanding the scope of mystery shopping, this study aimed to investigate how mystery shopping affects labor processes and the well-being of workers. Mystery shopping is a specific mechanism of control in consumer capitalistic societies that relies on service workers internalizing organizational rules. Mystery shopping is not just a method to evaluate quality of service in workers; it plays an active role in shaping service processes because of direct intervention therein. By standardizing and monitoring labor processes in service workers, mystery shopping limits worker autonomy, stiffens workplace environments, and increases labor intensity of workers. Most service workers under mystery shopping surveillance experience emotional burden because of customer

interactions. In particular, these types of service providers experience high levels of stress because of limited autonomy in their labor processes caused by mystery shopping, compounded by exhaustion from routine emotional labor of customer service.

The findings of this study show that mystery shopping deprives workers of autonomy and perception of workplace control, heightening work stress in various ways. First, surveillance in the form of mystery shopping increases stress for workers by adding to labor burdens and limiting employee autonomy. Also, in the context of mystery shopping, monitoring is multifaceted and is often combined with other types of surveillance. Second, a distressing contradiction of mystery shopping is that while the method emphasizes strict adherence to standards, actual evaluations are conducted with high subjectivity on the part of evaluators. Evaluation items are irrational and unrealistic, disregarding the individual conditions of workers or the differing environments of stores. Third, mystery shopping requires workers to perform a full range of services, which undermines sales in the context of high employer expectations. This leads workers to face the dilemma of focusing on sales targets or providing time-consuming customer service. Fourth, the results of mystery shopping assessments are compared among stores, and workers and stores that have been evaluated are notified of results. Workers who receive low evaluation scores experience decreased feelings of achievement and tend to develop negative feelings around their own competence. Fifth, service evaluation according to strict criteria in mystery shopping can lead to musculoskeletal disorders in employees who feel pressure to comply with standards. These workers refrain from modifying their manual work habits to improve physical comfort and health and instead engage in repetitive and ergonomically poor physical regimens.

Many meaningful studies have been conducted on job stress in various service sectors arising from interaction with customers since Hochschild coined the concept of ‘emotional labor’ to describe service work. Much research on service workers focuses on emotional labor in interactions with customers by workers in frontline service jobs [38,39], even though service work involves both organizational controls and interactions with customers that limit worker autonomy and cause various labor problems in addition to emotional labor. This study extends the scope of research on service workers and their multidimensional health issues by introducing mystery shopping as a typical example of workplace surveillance and control in the service industry and examining how it combines with customer factors. Also, while previous studies on occupational stress and health problems pertaining to job demands and autonomy have examined chronic work experience such as the effects of general working condition on health issues, this study explores a specific type of control mechanism and its acute work stress experienced by service workers by examining mystery shopping.

Studies in service organizations argue that many problems are not because of poor service by workers but because of inefficient operation of organizations. The work of Cook et al. points out that mystery shopping is often systematically misused, stressing that it is inappropriate to penalize workers with low evaluation scores. Instead, data collected by evaluators should be used to develop systems that can positively contribute to labor processes or enhance customer purchases [30]. In other words, mystery shopping should be aimed at identifying problems in management processes of organizations rather than at workers in service positions. Moreover, it would be desirable for collected data to be used for organizational reform rather than to control labor processes.

Ethical issues around mystery shopping are controversial. Mystery shopping involves elements of human rights violations insofar as it uses deception to evaluate people without their

knowledge. For this reason, some studies emphasize that workers should be aware of concealed observation by employers and that acceptance of mystery shopping by employees is important if the tool is to be effective, without causing organizational problems [1]. On the other hand, it has been argued that mystery shopping does not produce ethical issues insofar as the “concealed” observation is performed in public settings [1]. As mentioned, however, transparent monitoring is even more stressful for service workers than concealed observation. Also, it should be taken seriously that service workers are not able to decline mystery shopping experiences because of their relationships of subordination to employers.

Thus, in its current iteration of monitoring the labor processes of service workers in various industries, mystery shopping needs to be reconsidered not only in terms of social, psychological, and physical health of workers but also in terms of efficient operation of organizations and organizational ethics.

Conflicts of interest

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.shaw.2019.10.001>.

References

- [1] Wilson AM. The use of mystery shopping in the measurement of service delivery. *Serv Ind J* 2006;18:148–63.
- [2] Cobb R. Isn't it just common sense. *Marketing* 1997 Jul;31:16–7.
- [3] Finn A, Kayande U. Unmasking a phantom: a psychometric assessment of mystery shopping. *J Retail* 1999;75:195–217.
- [4] Van Der Wiele T, Hesselink M, Iwaarden JV. Mystery shopping: a tool to develop insight into customer service provision. *Total Qual Manage Bus* 2005;16:529–41.
- [5] Ahn BO, Lee HK. A study on the development of mystery shopping checklist for quality measurement of quality of service - focusing the convenience store. *Acad Cust Satisf Manage* 2017;19:39–65 [in Korean].
- [6] Kim YG, Lee HR, Kim YJ. A scale development study for mystery shopping of restaurant – focused on Korean restaurant. *J Foodserv Manage* 2014;17:307–28 [in Korean].
- [7] Korczynski M. The contradictions of service work: call centre as customer-oriented bureaucracy. In: Sturdy A, Grugulis I, Willmott H, editors. *Customer service: empowerment and entrapment*. Basingstoke Palgrave Macmillan; 2001. p. 79–101.
- [8] Kim JJ, Song MJ. A study on emotional labor and improvement of labor environment in South Korea. Seoul: the Korea Tripartite Commission; 2014 [in Korean].
- [9] Kain J, Jex S, Karasek's. Job demands-control model: a summary of current issues and recommendations for future research. In: Perrewe PL, Ganster DC, editors. *New development in theoretical and conceptual approaches to job stress*. Bingley(UK): Emerald Group Publishing; 1979. p. 237–68. 2010.
- [10] Baillien E, De Cuyper N, De Witte H. Job autonomy and workload as antecedents of workplace bullying: a two-wave test of Karasek's Job Demand Control Model for targets and perpetrators. *J Occup Organ Psych* 2011;84: 191–208.
- [11] Kim H, Stoner M. Burnout and turnover intention among social workers: effects of role stress, job autonomy and social support. *Admin Soc Work* 2008;32:5–25.
- [12] Hochschild AR. *The managed heart*. Berkeley, CA: University of California Press; 1983. 90 p.
- [13] Mirriam SB, Tisdell EJ. *Qualitative research: a guide to design and implementation*. 4th ed. New Jersey(US): John Wiley & Sons; 2015. 368 p.
- [14] Aiello JR, Kolb KJ. Electronic performance monitoring and social context: impact on productivity and stress. *J Appl Psychol* 1995;80:339–53.
- [15] Davidson R, Henderson R. Electronic performance monitoring: a laboratory investigation of the influence of monitoring and difficulty on task performance, mood state, and self-reported stress levels. *J Appl Soc Psychol* 2000;30:906–20.
- [16] Carayon P. Effects of electronic performance monitoring on job design and worker stress: results of two studies. *Int J Hum Comput Interact* 1994 Apr 1;6: 177–90.

- [17] Hackman JR, Oldham GR. Development of the job diagnostic survey. *J Appl Psychol* 1975;60:159–70.
- [18] Chung MS. The buffering effect of autonomy between emotional labor and job stress in childcare teachers. *Korean J Counsel Psychother* 2014 Feb;26:pp147–66 [in Korean].
- [19] Diefendorff JM, Gosserand RH. Understanding the emotional labor process: a control theory perspective. *J Organ Behav* 2003;24:945–59.
- [20] Mai QD, Hill TD, Vila-Henninger L, Grandner MA. Employment insecurity and sleep disturbance: evidence from 31 European countries. *J Sleep Res* 2019;28:e12763.
- [21] Van Amelsvoort LG, Kant IJ, Bultmann U, Swaen GM. Need for recovery after work and the subsequent risk of cardiovascular disease in a working population. *Occup Environ Med* 2003;60(Suppl. 1):83–7.
- [22] Kivimäki M, Leino-Arjas P, Kaila-Kangas L, Luukkainen R, Vahtera J, Elovainio M. Is incomplete recover from work a risk marker of cardiovascular death? prospective evidence from industrial employees. *Psychosom Med* 2006;68:402–7.
- [23] Ayas NT, White DP, Manson JE, Stampfer MJ, Speizer FE, Malhotra A, Hu FB. Prospective study of sleep duration and coronary heart disease in women. *Arch Intern Med* 2003;163:205–9.
- [24] Eaker ED, Pinsky J, Castelli WP. Myocardial infarction and coronary death among women: psychosocial predictors from a 20-year follow-up of women in the Framingham study. *Am J Epidemiol* 1992;135:854–64.
- [25] Abercrombie N. The privilege of the producer. In: Keat R, Abercrombie N, editors. *Enterprise culture*. London(UK): Routledge; 1991. p. 171–85.
- [26] Shin KA. The structural cause and individualized effect of the emotional labor: the cases of women workers in call-centers. *Korean J Labor Stud* 2009;15:223–56.
- [27] Holman D. Phoning in sick? an overview of employee stress in call centres. *Leadersh Org Dev J* 2003;24:123–30.
- [28] Lee HS. An empirical approach to the impact of emotional labor strategy on emotional dissonance - focused on sales pressure -. *J Tour Manage Res* 2013;56:305–18 [in Korean].
- [29] Lee HJ, Choo TG. Fashion product Salesperson's perception of department store in department store middle management system. *Fashion & text. Res J* 2013;15:22–34 [In Korean].
- [30] Cook LS, Bowen DE, Chase RB, Dasu S, Stewart DM, Tansik DA. Human issues in service design. *J Oper Manage* 2002;20:159–74.
- [31] Yagil D, Luria G, Gal I. Stressors and resources in customer service roles: exploring the relationship between core self-evaluations and burnout. *Int J Serv Ind Manage* 2008;19:575–95.
- [32] Judge TA, Erez A, Bono JE. The power of being positive: the relation between positive self-concept and job performance. *Hum Perform* 1998;11:167–87.
- [33] Judge TA, Locke EA, Durham CC, Kluger AN. Dispositional effects on job and life satisfaction: the role of core evaluations. *J Appl Psychol* 1998;83:17–34.
- [34] Carayon P, Smith MJ, Haims MC. Work organization, job stress, and work-related musculoskeletal disorders. *Hum Factor*. 1999;41:644–63.
- [35] Malchaire J, Roquelaure Y, Cock N, Piette A, Vergracht S, Chiron H. Musculoskeletal complaints, functional capacity, personality and psychosocial factors. *Int Arch Occup Environ Health* 2001;74:549–57.
- [36] Kim KS, Park JK, Kim DS. Status and characteristics of occurrence of work-related musculoskeletal disorders. *J Ergon Soc Korea* 2010;29:405–22 [in Korean].
- [37] Hwang JJ, Jung MC, Kim HJ, Jung Choi KH, Bahk JW, Lee IS. Evaluation of risk factors of musculoskeletal disorders in cashier work activities. *J Korean Soc Saf* 2011;26:75–82 [in Korean].
- [38] Van Dijk PA, Kirk-Brown A. Emotional labour and negative job outcomes: an evaluation of the mediating role of emotional dissonance. *J Manag Organ* 2006;12:101–15.
- [39] Karatepe OM, Aleshinloye KD. Emotional dissonance and emotional exhaustion among hotel employees in Nigeria. *Int J Hosp Manag* 2009;28:349–58.