Enhancing *shitsuke*: a planned change intervention model for convenience stores in Japan

Shiro Ito
University of the People, Pasadena, California, USA;
Senshu University, Kawasaki, Japan and
Southeast Asia Interdisciplinary Development Institute, Antipolo The Philippines

Abstract

Purpose – The purpose of this paper is to emphasize the importance of good management and well-disciplined workforce in convenience store operations as well as improve organizational performance using the 5S method. This study would be beneficial to convenience stores in Japan considering that it addresses some of the major issues involved in the maintenance of employee productivity. Specific objectives of the study were: determination of *shitsuke*'s importance in employee behavior; and examination of the effects of *shitsuke* on the performance of convenience stores.

Design/methodology/approach – For this study, three convenience stores in Tokyo, Japan with a total of 23 respondent employees were selected as subjects. A qualitative research method was used, and the responses obtained before and after the 5S implementation were compared.

Findings – The results showed the following: *shitsuke* (discipline) was significantly important in maintaining store cleanliness, especially for toilets; the steps for undertaking a planned change to improve *shitsuke* involved developing a shared outlook for the business and reaching an agreement on basic processes; and enforcement of 5S and development of effective managers were deemed necessary.

Originality/value – The results of this research would provide substantial insights into various human resource management practices necessary to enhance work culture and organizational performance. In addition, this study may also be applicable to other small and medium business enterprises.

Keywords Qualitative research, Convenience stores, Organizational development, Discipline, 5S, Workplace culture

Paper type Case study

Introduction

Every organization has a workplace culture that encompasses many different characteristics of the business. This culture depicts the company in the business world, which helps attract and retain its workforce as well as strengthen its brand advantage. The culture ensures that everyone associated with the organization is professionally competent and can work in a positive manner for the sake of the business. Workplace culture is also the key to a successful business. If the employees in an organization perceive that their workplace culture allows and encourages them to grow, they will definitely work on executing the organization's long- and short-term projects and goals.

According to Dore and Sako (1989), the Japanese employees' productivity is mainly driven by the pride to successfully execute their jobs. This trait was already engraved in the workplace culture of Japanese for many years, which is not commonly observed in other countries. Workplace culture is prominent in the aesthetics of the business area and surroundings, the employee dress code, the basic courtesies and consideration for others, and most importantly, it is manifested in the efficiency of the employees. There is a deliberate intent in Japanese organizations to develop a workplace culture that positively affects performance.

In addition, discipline among employees is imperative. This is not merely about following rules and regulations, since the current working environment calls for more than that. Hence, in order for culture to be embraced in the workplace, employees need to be able to easily relate to the organization's values on both personal and professional levels.

One strong value that is ingrained in the Japanese culture and workplace is 5S. As Hirano and Furutani (1997) explained in their book, *Production and Management: The Story of 5S*, 5S consists of five Japanese words, *seiri* (sort), *seiton* (straighten), *seiso* (clean), *seiketsu* (standardize) and *shitsuke* (discipline/commitment). Factories in Japan started implementing 5S back in 1973. At that time, it was called either "3S" for *seiri*, *seiton* and *seiso*, or "5S" after adding the elements *seiketsu* and *shitsuke*. In Japan, teaching *seiri*, *seiton* and *shitsuke* was considered as an important part of academic education at the elementary and the middle school levels. 5S refers to a method for organizing and ensuring safety and efficiency to enhance the performance of employees through standardized and organized work. In 5S, it is assumed that with proper guidance and training, an organization could be brought to greater heights of success and performance.

In a study conducted by Singh *et al.* (2015), there are several critical success factors for the implementation of 5s in small and medium enterprises in India. These factors were ranked starting with the most to the least importance: file management; teamwork; safety and accident issue; arrangement of items in the stores; cleanliness; comfortable working area; effective utilization of floor space; awareness of 5's; working culture; and time taken for searching item. These factors are vital to convenience stores for these are the common challenges faced in small and medium enterprises.

National reality (Japan)

Japan is known to be traditionally strict with regards to *shitsuke*. However, *shitsuke* has recently been reported as being less enforced in the Japanese workplace (Kayama, 2007). Tardiness and absenteeism are two of the most common and commonly recurring issues in retail store employees, such as convenience stores. In a study by Kolz (1999), these two traits belonged to the common counterproductive behaviors of retail employees. Similar result was observed in the study of Camden *et al.* (2011), wherein grocery store employees had higher number of absences that resulted to frequent rescheduling and impaired productivity.

In particular, this research focused on the problem of *shitsuke* in relation to the management of convenience store employees. Maintaining employee discipline is the lifeline for the continuance of an organization. Maintaining *shitsuke* is not only important in military and schools, but also in large and small businesses, including convenience stores.

Focal reality (Mr A's stores)

In this research, an attempt was made to assist a convenience store owner, Mr A, in improving the standards of *shitsuke* among his employees. It was observed that the store's employees were behaving in an inappropriate manner, which affected the work culture and success of the business. It was decided to use *shitsuke* as the primary tool to make the employees embrace different work rules and regulations, thereby, enhancing the work culture and organizational performance. By intervening in the organization's operations and introducing the 5S business program, the store management was able to establish the discipline needed for day-to-day operations.

This paper was designed to highlight the significance of good management and the importance of a well-disciplined workforce in convenience store operations. This was accomplished through determination of the effectiveness of the 5S program, and development of an association between *shitsuke* (discipline) and organizational culture. On Mr A's point of view, it was necessary to improve the workplace of his convenience stores due to the difficulties in managing the employees. It is crucial for small and large businesses to be well managed, in order to ensure better daily store functions. Economically speaking, since there are approximately 55,000 convenience stores situated in Japan (Statistica, 2018) with a total sales of ¥10.7 trillion in 2017 (*The Japan Times*, 2018), the role of convenience stores in Japan's economy cannot be disregarded.

In the succeeding chapters, a review of literature, background of the study and methodology would be discussed prior to the presentation of the study results and the implications of the research.

Theoretical and conceptual frameworks and related literature

Shitsuke and organizational performance

The origins of 5S could be found on literature regarding the relationship between discipline and organizational performance in Japan's manufacturing industry. A book published by OJT Solutions (2012), *Toyota no Katazuke* (*Cleaning and Organizing the Toyota Way*) discussed how implementing a 5S program could eliminate wasted time while increasing efficiency and sales. Here, the word "clean-up" was not used to convey the mere act of cleaning. Instead, it was used to describe a business tool used to change the work or workplace. Furthermore, Hirano and Furutani's (2003) *Omise no 5S ha Shigoto no Kihon* (*5S is Fundamental for Jobs at the Shop*) mainly discussed the 5S activities, with one chapter focusing on the concept of discipline. According to the authors, scolding must be used to train employees to have discipline.

Effects of the 5S program

When proceeding in an organized manner, it becomes easier to understand the work environment and to adjust as a response to the problems encountered in the workplace (see Figure 1). Solving these problems is linked to business efficiency, prevention of defects and improvement of workplace safety. During the problem-solving process, the aim is to improve motivation as well as discipline for the employees (Basic Management Laboratory, 2012).

By implementing an organization-wide rehabilitation based on the 5S method, all members of the organization are expected to benefit. The association between the emotional, cognitive and behavioral habits of the employees is displayed in Figure 2.

Figure 1.
How implementation of 5S leads to improved customer satisfaction
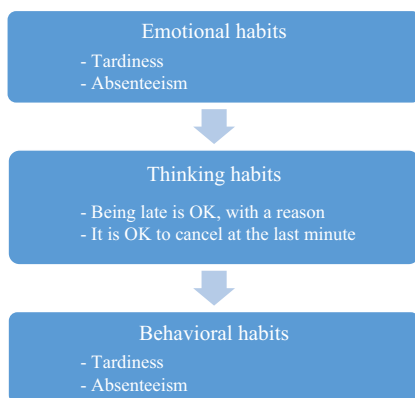
Source: Miyagawa (2011)

Figure 2.
Employee behavior
flowchart

Emotional habits such as arriving late or last-minute cancellations are linked to thinking habits such as "being late is OK if there is a reason." These habits form a vicious cycle. Therefore, an intervention to rehabilitate these habits is mandatory.

In his book *The Fifth Discipline*, P. Senge (1990) stated that in order to deal with complex internal situations, business organizations must first become learning institutes. To achieve this result, he developed five study regimes: systems thinking, common vision, mental model, team learning and self-realization.

Organization development (OD) perspective
Lewin's (2014) three-phase change management model involves unfreezing of current practices, transitioning to new behaviors and freezing of changes into place. This model was implemented in this study to guide the process of changing the stores' practices.

Methodology
Background of the study
Mr A opened his first convenience store (store no. 1) in the residential areas of Tokyo, Japan by 2000. His business grew steadily, and by 2010, he had 40 employees in his workforce. As his business expanded, the hiring and proper management of capable personnel became problematic. Since a trusting relationship was developed with Mr A over a long period of time, consent was granted to the researcher to act as a volunteer (complimentary) OD consultant.

At the time the study began, Mr A had two convenience stores (stores no. 1 and no. 2), which individually had approximately 20 employees (40 in total). During the course of this study, a third store (store no. 3) has opened. The existing labor force was reallocated to accommodate the new store. Hence, there were 36 part-time and 3 full-time employees, supervised by a full-time manager (see Figure 3). The employees' salaries were based on the length of employment within the organization, which also reflected each store's evaluation system.

His employees come from various backgrounds. Many are high school students, college students or housewives. The majority belonged to the relaxed generation, while the store managers are from the lost generation. Oftentimes, employees who quit as soon as they are critiqued or reprimanded may be exhibiting the general characteristic behavior of the relaxed generation.

In Figure 4, the general organizational map of Mr A's convenience store was presented. The owner, managers and staff are under the scope of parent stores. The competitors or other
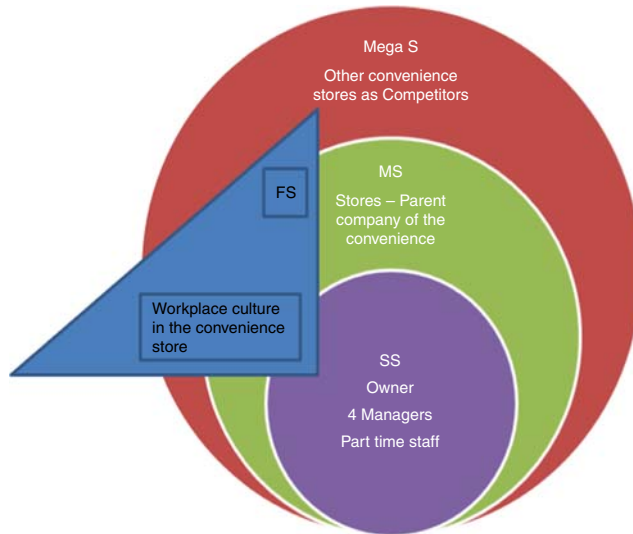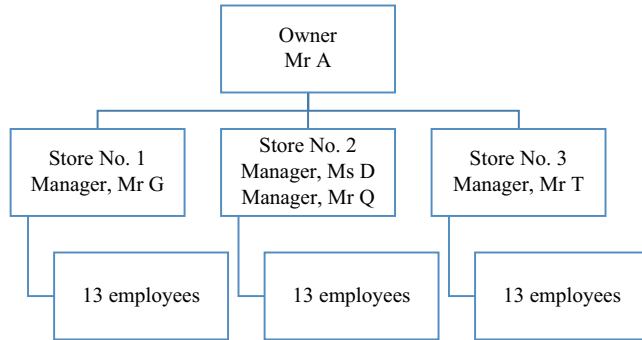
Notes: SS, Subsystem that is the elements of systems of the focal
system; FS, Focal System, which is a study or interest; MS, Macro
System indicating total organization; Mega S, Mega system
Source: Fuentes (2011)

convenience stores are encompassing them. However, even though they are within different
sets of system, all of them are affected by the workplace culture of the convenience stores.

Findings from the initial interview with the business owner
An itemized list of the issues found within the organization was developed after conducting
a five-hour face-to-face interview with the business owner. The following points of concern
about the employees and store appearance became apparent by the end of the initial
interview with Mr A. It appeared that the two biggest problems that Mr A's convenience
store managers encountered were lack of employee discipline and poor store cleanliness.
   Employee attitudes and behavior:

- Many employees canceled their shifts unexpectedly, which caused scheduling gaps.
  When such gaps occurred, Mr A would often act as a last-minute substitute.

This caused a situation where a managerial employee was urgently required to carry out non-managerial work.

- Employee absenteeism occurred frequently. Under such circumstances, the question of employee discipline often arises, which could be demonstrated by employee gossiping, morale and arriving to work unsuitably prepared (e.g. clothing choices, inappropriate hairstyles).

- Customers frequently complained about inappropriate employee behavior. Complaint resolution consumed a large amount of the business owner's time.

- Employee absenteeism and frequent customer complaints exhausted the owner to the point where he had started to reflect symptoms of the burnout syndrome.

Store tidiness and cleanliness:

- merchandise was not properly organized; and

- store cleanliness was not maintained in line with the acceptable Japanese standards.

Research design
In this research, the need was identified at the beginning point of the study. Once this was defined, the study continued to look at possible interventions to address the need. These identified interventions were tested and evaluated. Finally, the results pointed out what needs to be done in order to improve the situation.

For this research, qualitative method was utilized. The qualitative data were derived from structured interviews and focus group discussion that was conducted between the business owner and the employees. Score sheets used contained descriptive statistics. Separate statistical tests were not performed.

Research locale
The study was conducted at Mr A's three convenience stores located at the residential areas of Tokyo, Japan. Employee interviews were often conducted at a nearby restaurant or café, in addition to the convenience stores, to provide a more relaxed environment. At the time of the study, Mr A had three stores.

Research population
Each of Mr A's convenience stores had 13 employees. The number of employees within the organization (including Mr A) totaled to 40. The majority of the employees:

(1) were between the ages of 20 and 24;

(2) had less than one year of work experience; and

(3) were university students.

The manager to staff ratio was 1:9. There were 4 managers, 35 staff members and 1 president of the organization. Out of the 40 employees within the organization, 23 people participated in the study. These included 22 staff members and the owner. The remaining 17 were part-time employees with minimal hours, who were not included in the study. The minimal working hours of these part-time employees were subjective. Hence, it would be very difficult and limiting to have them interviewed together with the other employees. Since the working hours of the part-time employees greatly vary and usually take only a few hours, the conduct of the interviews and focus group discussions was not possible. The process would have consumed their working hours at the store. The demographics of the respondent employees were shown in Table I.

Store No.	Manager info	Staff member	Sex	Age (yrs)	Experience (yrs)	Education level
1	Mr G	Mr L	M	20–24	4	University student
	Male	Mr V	M	20–24	0	University student
	Age: 30–39	Mr N	M	20–24	4	University student
	4 years' exp.	Ms C	F	25–29	1	University student
	Bachelor degree	Ms S	F	Under 20	0	High school student
		Mr J	M	20–24	0	University student
2	Ms D	Ms H	F	20–24	2	University student
	Age: 30–39					
	9 years' exp.	Mr R	M	Under 20	0	University student
	High school grad.					
	Mr Q	Ms O	F	Under 20	1	High school student
	Male					
	Age: 25–29	Mr I	M	Under 20	0	University student
	1 year's exp.	Ms U	F	30–39	2	Bachelor degree
	2 years' college grad.	Ms B	F	Under 20	0	High school student
3	Mr T	Ms E	F	Under 20	1	High school grad.
	Male	Ms P	F	20–24	0	University student
	Age: 25–29	Ms M	F	20–24	0	University student
	4 years' exp.	Ms F	F	20–24	2	High school grad.
	High school grad.	Ms W	F	20–24	0	University student
		Mr Y	M	Under 20	–	–

Table I.
Profiles of the
participant employees
in the study

With respect to the age structure, 30 percent were under 20 years old. The majority of the staff were in their 20s, and most of the managers were in their 30s. The under 20 and 20-29-year-old staff members had little work experience and, therefore, needed thorough guidance and training. The percentage of staff with less than one year work experience was 40 percent. College graduates constituted just 10 percent of all the employees. Since the staff had very little experience, a significant effort was needed in order to implement the 5S system. It was extremely important to enforce 5S due to the staff's lack of experience.

Research objectives
This research study was intended to accomplish the following objectives:

- to determine the significance of *shitsuke* in informing employee behavior; and

- to explore the effects of *shitsuke* on the performance of convenience stores.

Research questions
This research was undertaken with a focus on the following three research questions:

RQ1. What was the significance of *shitsuke* in the behavior of employees, and what was the effect of *shitsuke* on the performance of the convenience stores?

RQ2. What were the steps required to craft a planned change intervention to improve the *shitsuke* of employees through the 5S program?

RQ3. How were the stores reorganized based on the results of the planned change intervention?

Instrumentation process of the study and the first survey

- Phase 1 – identify the strengths and weaknesses of each employee. (Research Instrument No. 1).

- Phase 2 – inform each employee of their perceived strengths and weaknesses.
- Phase 3 – explain the purpose of the 5S program and teach the importance of 5S to all employees.
- Phase 4 – conduct focus group discussions. (Research Instrument No. 2).
- Phase 5 – complete the final survey questionnaire after the six-month intervention. (Research Instrument No. 3).

The surveyed was patterned from the original study of Hirano and Furutani (1997). All of the questions used in the structured interviews are close-ended questions, except in Research Instrument No. 2 with seven open-ended questions.

Data gathering
The data were collected from individual interviews with the staff members. The employees were informed of the importance of the 5S program, the types of questions that would be asked and how their responses would be used to improve the organization. The process began with the identification of each employee's strengths and weaknesses. The data collection phase culminated during focus group discussions.

Six-month intervention period
The researcher used Research Instrument No. 1, the 5S checklist, to evaluate the improvement of *shitsuke* and the behaviors of staff members. This was done twice during the six-month intervention period.

Evaluation using Research Instrument No. 1 (5S checklist)
Pretest. Prior to the intervention, a pretest was conducted to ensure that the questionnaire was appropriate for staff use.
   First evaluation. It was conducted before the first month of the intervention began.
   Second evaluation. It was performed when the final (sixth) month of the intervention ended.

Treatment of data
Qualitative data were derived from summaries of the interviews, and responses of the employees before and after the 5S intervention were noted. Modified pre-existing score sheets were also used. The score sheets consisted of responses made by the staff members and were used as the foundation of the research conclusion.

Scope and limitations of the study
This study was carried out in Mr A's convenience stores and focused on determining the inappropriate behavior of the employees and afterwards, establishing *shitsuke*. Accordingly, an attempt was made to address the causes behind the inappropriate behavior through the rehabilitative training of the employees and creation of an environment desired by the business owner. The study aimed to provide an adequate solution to remedy the current issues, such as discipline problems. However, it does not cover the financial structure of the convenience store.

Significance of the study
The research and findings would provide significant insights into numerous human resource management practices generally required to enhance work culture and organizational performance. In addition, the investigation regarding working culture and organizational performance in convenience stores may be applicable to other small business enterprises. The study highlighted the prime features of the Japanese management style with regard to employee development. By conducting an intervention within an

organization using the 5S program, the researcher assisted the business owner in establishing discipline, which was severely lacking. This effort contributed a change in the behavior of the employees and improved the services in the convenience stores.

Results and discussion

This section presents the results of the surveys and questionnaires, following the order of the research questions. The surveys and questionnaires that were conducted and answered include the store 5S questionnaire, wherein the first survey was conducted before the intervention; the second survey was conducted after the intervention; the focus group discussions; the first evaluation and second evaluation of the managers conducted by the president before and after the intervention, respectively.

To guide the research, three research questions were developed. These are as follows:

RQ4. What is the significance of *shitsuke* (discipline) to the employees' behavior and what are the effects of *shitsuke* on the performance of the convenience stores?

Table II shows the respondents' awareness of the 5S checklist. It is evident that the respondents did not regularly practice 2 out of the 13 criteria of store awareness of 5S. These include questions of "Do you work together with your colleagues and superiors to keep the store clean and orderly?" and "Do you share ideas on how to keep the store clean and organized?" This suggests that teamwork among the store staff and owners, with respect to keeping the store clean, was not properly managed and executed. Furthermore, the staff were evenly divided on the criterion, "Do you voluntarily wipe the washbasins?" Other than these three criteria, it was found that the respondents positively fulfilled the rest of the criteria for store awareness of 5S. The overall 5S awareness scores from the first survey are shown in Table II.

Table III shows the range of the central tendencies of the scores obtained from the 23-point 5S checklist, which are divided into five categories. The grand total score obtained from the checklist had a mean score of 15.4 and a standard deviation of 3.0. In addition, the minimum and maximum scores obtained from the 5S checklist were 8 and 20, respectively.

As shown in Table IV and Figure 5, most of the respondents gained a score of 2 in the *seiri* category. This suggests that the respondents were neither compliant nor resistant to the guidelines regarding store sorting. In terms of *seiton*, as shown in Table IV and Figure 6, majority of the respondents received a score of 5. This means that they were doing their job in terms of the orderliness of the stores. Meanwhile, Table IV and Figure 7 show that the majority of the respondents received a score of 3 for the *seiso* category. A score of 3 reflects an average or middle score, which means that the respondents did not practice cleanliness in the stores to the fullest extent. Also, Table IV and Figure 8 show that the majority of respondents received a score of 4 in the *seiketsu* category. This implies that *seiketsu* was highly maintained by the respondents in the stores. Finally, as seen in Table IV and Figure 9, the majority of the respondents received a score of 5 in the *shitsuke* category, which means that they were somewhat disciplined in terms of their work in their respective stores at the early intervention stage. As shown in Figure 10, among the five categories of the 5S checklist, the respondents received the highest score in the *shitsuke* category.

When the study began, Mr A was operating two stores. During the course of the study, a third store was opened. Since an additional store was opened, some employees were relocated, but they were not made familiar with all of the employee duties and responsibilities at the new store. Therefore, some of them frequently experienced situations where individual guidance was needed. Due to the additional training and guidance requirements, Mr A began working extremely long hours and became overwhelmed by the additional workload.

Store awareness of 5S	Yes	No	No answer	Total
Do you voluntarily pick up trash in the store?				
Frequency	20	1	2	23
%	87.0	4.3	8.7	100.0
Do you voluntarily replace products that are misplaced?				
Frequency	22	0	1	23
%	95.7	0.0	4.3	100.0
Do you voluntarily wipe the washbasins?				
Frequency	11	11	1	23
%	47.8	47.8	4.3	100.0
Do you voluntarily report damages, repairs of breakdowns, or repairs performed?				
Frequency	18	4	1	23
%	78.3	17.4	4.3	100.0
Do you voluntarily take out the garbage?				
Frequency	21	1	1	23
%	91.3	4.3	4.3	100.0
Do you voluntarily keep your garments in order?				
Frequency	22	0	1	23
%	95.7	0.0	4.3	100.0
Do you voluntarily listen to what customers have to say?				
Frequency	18	4	1	23
%	78.3	17.4	4.3	100.0
Do you work together with your colleagues and superiors to keep the store clean and orderly?				
Frequency	8	14	1	23
%	34.8	60.9	4.3	100.0
Do you share ideas on how to keep the store clean and organized?				
Frequency	6	16	1	23
%	26.1	69.6	4.3	100.0
Regarding your store's cleanliness, would you say it is comparable to other stores' cleanliness?				
Frequency	14	8	1	23
%	60.9	34.8	4.3	100.0
Do you recognize when customers have a good or bad visit to the store?				
Frequency	19	2	2	23
%	82.6	8.7	8.7	100.0
Are you aware of when sales are made?				
Frequency	17	5	1	23
%	73.9	21.7	4.3	100.0
Are you conscious of costs while doing your work?				
Frequency	16	6	1	23
%	69.6	26.1	4.3	100.0

Table II.
First survey results on
the staff's attitude
toward store
awareness: 5S
questionnaire for
employees (before
intervention)

Examining the 5S checklist scores
RQ2 focuses on the effects of *shitsuke* on the performance of convenience store employees.
The employees were asked pertinent questions linked to *shitsuke*. After analyzing the
results, the effects of *shitsuke* on the performance of the convenience stores were discussed.
The 5S checklist had a total of 23 questions related to 5S. They were subdivided into the
categories *seiri*, *seiton*, *seiso*, *seiketsu* and *shitsuke,* which had their own subtotals.

Seiri discussion
There were three questions related to *seiri*. If "Yes" was given as an answer, the subtotal score was 3 points. A "No" meant 0 points.

The average *seiri* score was 1.5 points. The questions about *seiri* were as follows:

(1) Question 18. Are you aware of unneeded goods in the store?

(2) Question 19. Are you aware of unnecessary equipment or tools in the store?

(3) Question 20. Is there an established standard for necessary/unnecessary store goods?

Check detail scores	Average	SD	Minimum	Maximum
Seiri (sorting)	1.5	1.1	0	3
Seiton (straightening)	3.7	1.3	1	5
Seiso (cleaning)	2.8	1.2	1	5
Seiketsu (standards)	2.9	1.1	1	4
Shitsuke (discipline)	4.9	0.4	4	5
Grand total	15.4	3.0	8	20

Table III.
Descriptive statistics of the 5S checklist scores: data presentation of Instrument No. 1 and analysis

	Score							
	0	1	2	3	4	5	No answer	Total
Seiri (sorting)								
Frequency	5	6	7	4	–	–	1	23
%	21.7	26.1	30.4	17.4	–	–	4.3	100
Seiton (straightening)								
Frequency	0	1	4	4	5	8	1	23
%	0.0	4.3	17.4	17.4	21.7	34.8	4.3	100
Seiso (cleaning)								
Frequency	0	3	6	7	4	2	1	23
%	0.0	13	26.1	30.4	17.4	8.7	4.3	100
Seiketsu (standards)								
Frequency	0	3	4	6	8	0	2	23
%	0.0	13.0	17.4	26.1	34.8	0.0	8.7	100
Shitsuke (discipline)								
Frequency	0	0	0	0	3	18	2	23
%	0.0	0.0	0.0	0.0	13.0	78.3	8.7	100

Table IV.
Frequency and percentage distribution of the 5S scores: 5S checklist

Figure 5.
Percentage distribution of *seiri* scores

www.
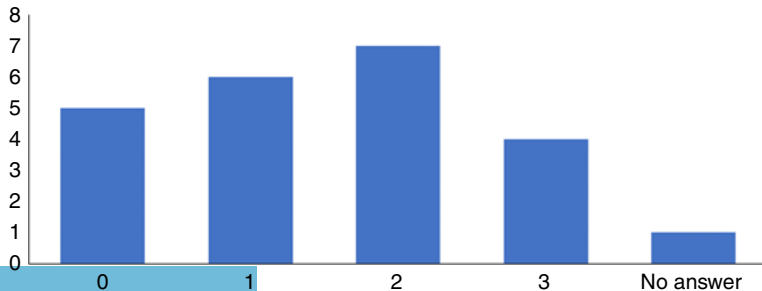
Many of the staff answered "Yes" to the questions "Are you aware of unneeded goods in the store?" and "Are you aware of unnecessary equipment or tools in the store?" However, for the question "Is there an established standard for necessary/unnecessary store goods?" Mostly answered "No." This suggests that the common rules related to *seiri* had not fully penetrated the stores' daily operations.

Although Mr A's stores had rules related to *seiri* already in place, the leadership had not thoroughly implemented them, and the managers may not have provided enough guidance. In order to thoroughly make the common rules related to *seiri* known, intervention was necessary.
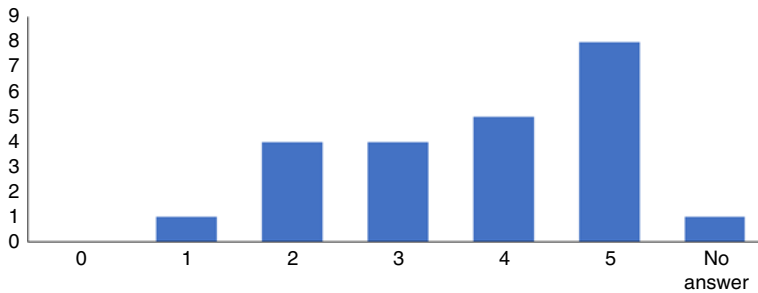
Figure 6.
Percentage
distribution of
seiton scores
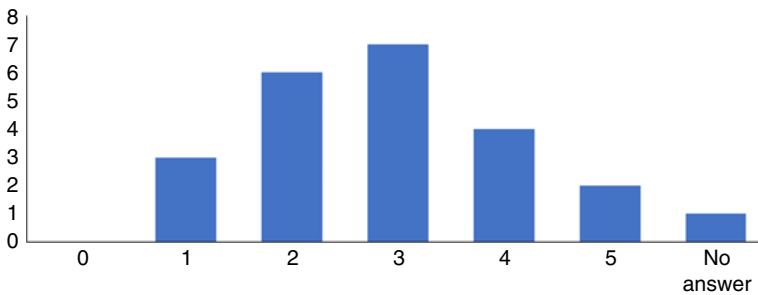
Figure 7.
Percentage
distribution of
seiso scores
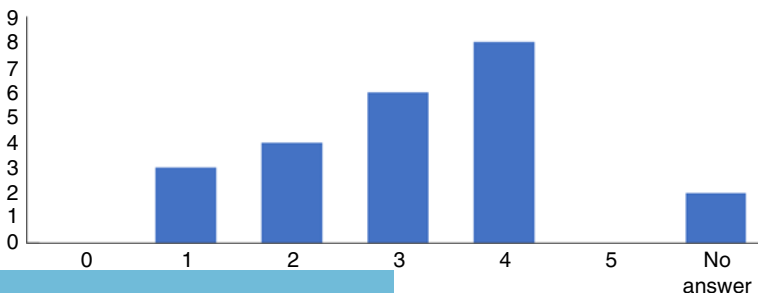
Figure 8.
Percentage
distribution of
seiketsu scores

Seiton discussion

There were five questions related to *seiton*, and the subtotal for this category was five points. These were as follows:

(1) Question 21. Are goods displayed for customers to see?

(2) Question 22. Is there a list of items on display?

(3) Question 23. Is the amount of available stock on display?

(4) Question 24. Are there indicators for where the registers and bathrooms are?

(5) Question 25. Do you place goods in such a manner that they are easy for customers to buy?

The average *seiton* score was 3.7 points. Approximately 70 percent of the staff answered "Yes" to the question "Are goods displayed for customers to see?" This means that 30 percent of the respondents had not been paying attention to product placement.

In Japanese society, toilet cleanliness is very important. The toilet is generally located in an inconspicuous location at the back of the store. Still, the guests pay attention to the state of the toilet and will use it to judge how well a store is managed. If the toilet is dirty, it is likely that customers will go away from the store for that reason alone. Therefore, it is of critical importance to keep the toilet clean and in top condition. All staff members had been made aware of the toilet cleanliness issue. In total, 90 percent of the respondents answered "Yes" when asked "Are there indicators for where the registers and bathrooms are?"

Seiso discussion

There were five questions related to *seiso*, and the subtotal was five points. These were:

(1) Question 26. Do you make sure the floor is always shiny?

(2) Question 27. Do you clean the shelves and windows?

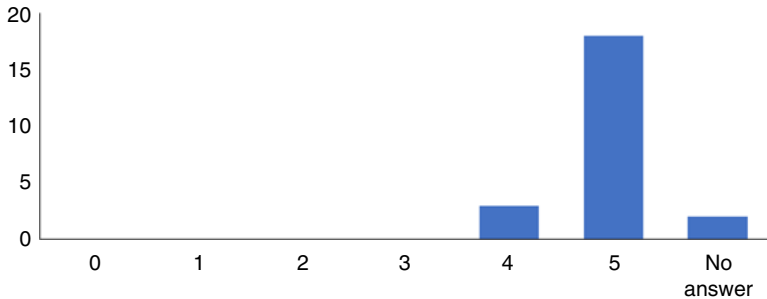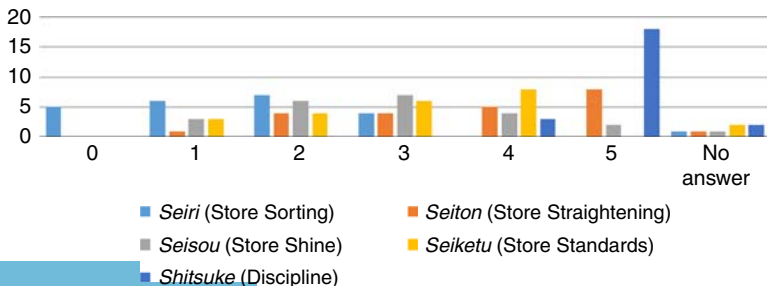**Figure 9.**
Percentage
distribution of
shitsuke scores

Figure 10.
Percentage
distribution of
the 5S scores

Legend:
■ *Seiri* (Store Sorting)   ■ *Seiton* (Store Straightening)
■ *Seisou* (Store Shine)   ■ *Seiketu* (Store Standards)
■ *Shitsuke* (Discipline)

(3)   Question 28. Is a cleanliness inspection conducted?

(4)   Question 29. Have cleaning duties and expectations been clearly decided?

(5)   Question 30. Do you make a habit of sweeping, wiping and picking up things?

These questions were used to verify that cleaning was properly performed. In the Japanese society, companies that cannot properly clean will not be successful. An unclean store gives the impression that the company is failing. Customers are always on the lookout to see if the shop is properly cleaned, and the owner feels this pressure constantly. Therefore, the store must be cleaned regularly. In fact, cleanliness is stressed so strongly in Japan that the company owner and/or president will lend their assistance to help with the morning cleaning tasks in order to demonstrate the importance of cleaning to the employees. Observing the president's hands-on attitude toward cleaning would hopefully encourage and inspire the employees into thinking that "I should be cleaning too." However, if cleaning is not properly performed, it is necessary to strictly coach the staff on proper business hygiene.

In this category, half of the staff answered "Yes" and half answered "No." As a summary, cleaning had not been properly performed. This can be absolutely fatal to the store/customer relationship and, thus, an intervention was required.

Seiketsu discussion
There were five questions related to *seiketsu*, with a subtotal of six points. These were as follows:

(1)   Question 31. Is the air in the store dirty?

(2)   Question 32. Do you make sure the lighting angle and illumination is sufficient and dead bulbs are replaced?

(3)   Question 33. Are your hair and uniform properly groomed and kempt?

(4)   Question 34. Is there a system in place by which dirt can be immediately identified in the store?

(5)   Question 35. Is there a system in place to maintain cleanliness and tidiness in the store?

Over 30 percent answered "Yes" to four out of five questions. Although this was based on self-evaluation, many of the employees seemed to keep cleanliness standards in mind.

Shitsuke discussion
There were five questions related to *shitsuke*, with a subtotal of five points. These were:

(1)   Question 36. Are your clothes neat?

(2)   Question 37. Are you greeting customers properly?

(3)   Question 38. Are you observing proper reporting-in and break times?

(4)   Question 39. Are you making thorough reports of written and other communications?

(5)   Question 40. Are you observing the rules and regulations of the store?

In total, 80 percent of the employees replied "Yes" to all five questions, which demonstrated that most of the employees were capable of disciplining themselves.

Results after the six-month intervention
The results listed above were measured before the six-month intervention was conducted. In this section, the changes in staff attitudes after the intervention would be presented. Table V shows the respondents' awareness of the 5S checklist.

Store awareness of 5S	Yes	No	No answer	Total
Do you voluntarily pick up trash in the store?				
Frequency	22	1	0	23
%	95.7	4.3	0.0	100.0
Do you voluntarily replace products that are misplaced?				
Frequency	22	0	1	23
%	95.7	0.0	4.3	100.0
Do you voluntarily wipe the washbasins?				
Frequency	16	7	0	23
%	69.6	30.4	0.0	100.0
Do you voluntarily report damages, repairs of breakdowns, or repairs performed?				
Frequency	21	2	0	23
%	91.3	8.7	0.0	100.0
Do you voluntarily take out the garbage?				
Frequency	21	1	1	23
%	91.3	4.3	4.3	100.0
Do you voluntarily keep your garments in order?				
Frequency	23	0	0	23
%	100.0	0.0	0.0	100.0
Do you voluntarily listen to what customers have to say?				
Frequency	19	4	0	23
%	82.6	17.4	0.0	100.0
Do you work together with your colleagues and superiors to keep the store clean and orderly?				
Frequency	11	12	0	23
%	47.8	52.2	0.0	100.0
Do you share ideas on how to keep the store clean and organized?				
Frequency	9	14	0	23
%	39.1	60.9	0.0	100.0
Regarding your store's cleanliness, would you say it is comparable to other stores' cleanliness?				
Frequency	16	7	0	23
%	69.6	30.4	0.0	100.0
Do you recognize when customers have a good or bad visit to the store?				
Frequency	21	1	1	23
%	91.3	4.3	4.3	100.0
Are you aware of when sales are made?				
Frequency	18	5	0	23
%	78.3	21.7	0.0	100.0
Are you conscious of costs while doing your work?				
Frequency	19	4	0	23
%	82.6	17.4	0.0	100.0

Table V.
Second survey results on staff's attitude toward store awareness: 5S questionnaire for employees (after six-month intervention)

It is evident from the data shown in Table V that of the 13 criteria for store awareness of 5S, the staff members successfully performed 11 tasks. However, there were still two non-compliant criteria: "Do you work together with your colleagues and superiors to keep the store clean and orderly?" and "Do you share ideas on how to keep the store clean and organized?" This only shows that teamwork among store staff, managers and owner with regard to keeping the store clean was still not being properly managed and performed, although the situation improved after the intervention.

Table VI shows the range of scores obtained from the 23-point 5S checklist, divided into five categories. As shown in this table, the grand total score obtained from the checklist had a mean score of 16.7 (first survey total = 15.4) and a standard deviation of 2.7. In addition, the minimum and maximum scores obtained from the 5S checklist were 11 and 22, respectively (Figure 11).

In terms of *seiton*, as shown in Table VII and Figure 12, the majority of respondents received a score of 5, which means that they were keeping the store in order. In addition,

Check detail scores	Average	SD	Minimum	Maximum
Seiri	1.7	1.1	0	3
Seiton	4.0	1.2	1	5
Seiso	3.0	1.2	1	5
Seiketsu	3.3	1.1	1	5
Shitsuke	4.8	0.5	3	5
Grand total	16.7	2.7	11	22

Table VI.
Descriptive statistics
of the 5S
checklist scores
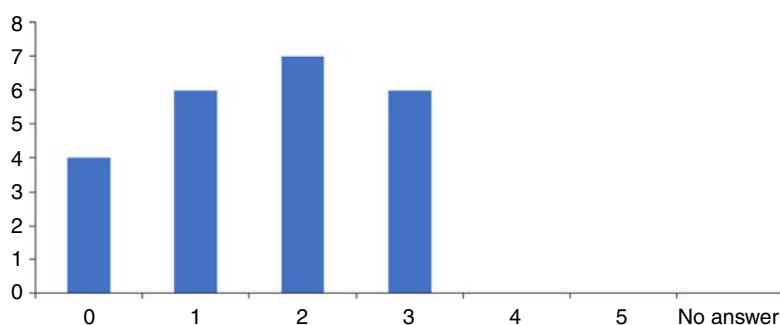
Figure 11.
Percentage
distribution
of *seiri* scores
(after six-month
intervention)

	Score							
	0	1	2	3	4	5	No answer	Total
Seiri								
Frequency	4	6	7	6	0	0	0	23
%	17.4	26.1	30.4	26.1	0.0	0.0	0.0	100
Seiton								
Frequency	0	1	2	4	6	10	0	23
%	0.0	4.3	8.7	17.4	26.1	43.5	0.0	100
Seiso								
Frequency	0	2	7	5	6	3	0	23
%	0.0	8.7	30.4	21.7	26.1	13.0	0.0	100
Seiketsu								
Frequency	0	2	3	7	9	2	0	23
%	0.0	8.7	13.0	30.4	39.1	8.7	0.0	100
Shitsuke								
Frequency	0	0	0	1	3	19	0	23
%	0.0	0.0	0.0	4.3	13.0	82.6	0.0	100

Table VII.
Frequency and
percentage
distribution of the 5S
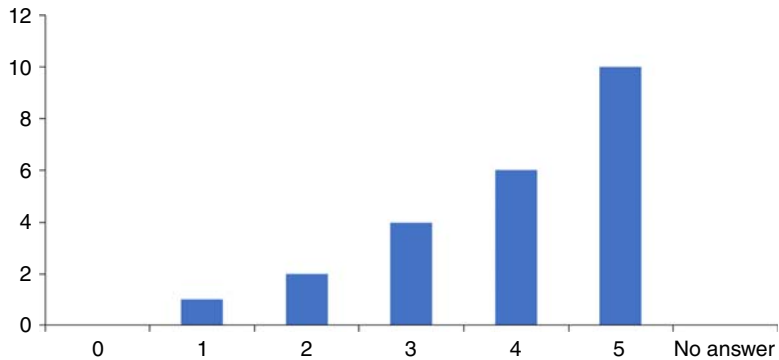scores (after six-month
intervention): 5S
checklist

Table VII and Figure 13 demonstrate that most of the respondents received a score of 2 in the *seiso* category. This implies that cleanliness in the stores was not practiced by the respondents to the fullest extent possible.

Meanwhile, Table VII and Figure 14 show that the majority of the respondents received a score of 4 in the *seiketsu* category, implying that *seiketsu* in the stores was highly maintained. Finally, Table VII and Figure 16 show that most of the respondents obtained a score of 5 in the *shitsuke* category. This means that they were somewhat disciplined in terms of their work at their respective stores (Figure 15).
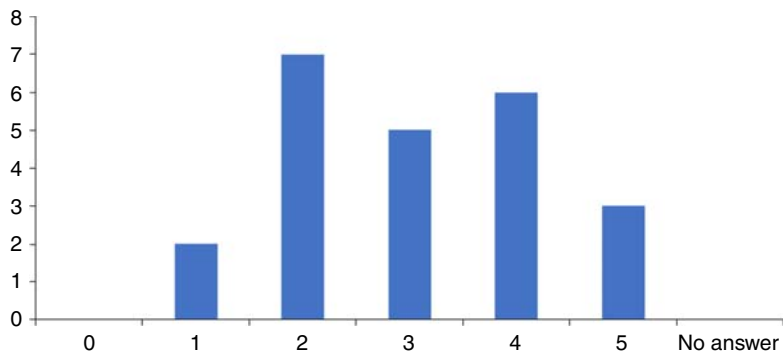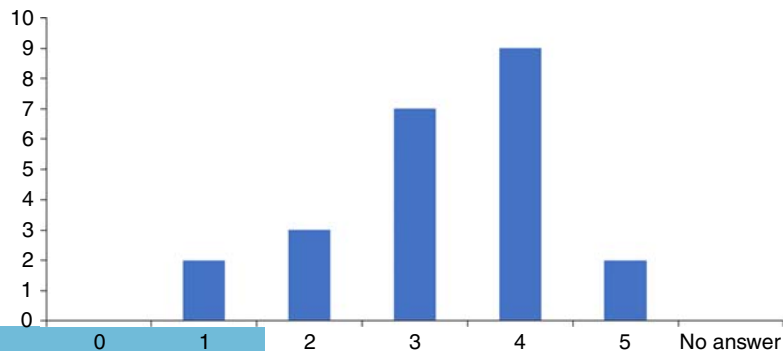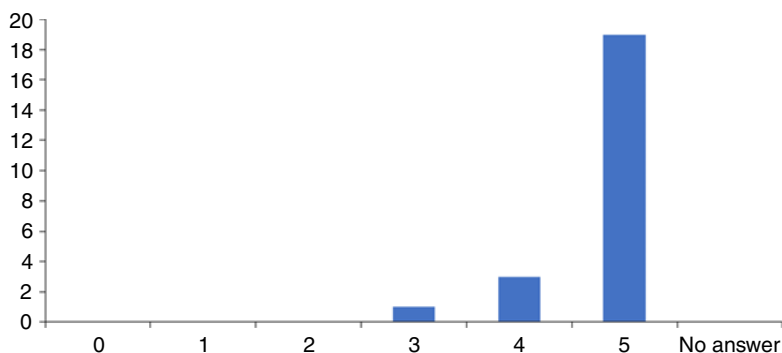
Figure 15.
Percentage
distribution of *shitsuke*
scores (after six-month
intervention)

As shown in Figure 16, among the five categories of the 5S checklist, the respondents earned the highest score in the *shitsuke* category:

RQ5. What are the steps required to craft a planned change intervention to improve the *shitsuke* of employees through the 5S program? (Table VIII).
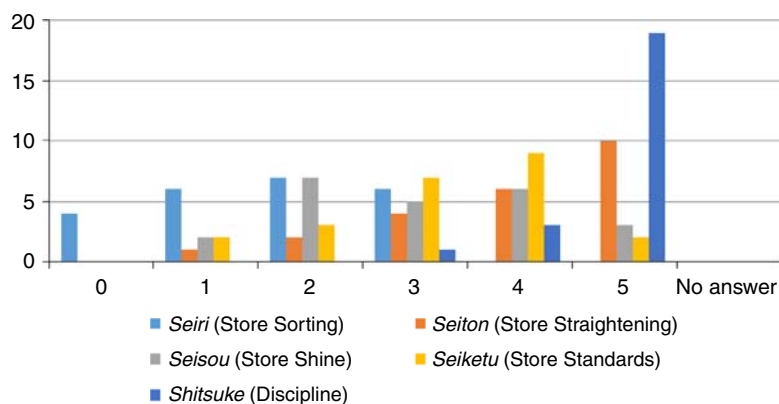

Figure 16.
Percentage
distribution of
the 5S scores
(after six-month
intervention)

Categorized answer	Frequency
Store located in a residential area	2
Conversations with customers	3
Cleaning	1
Communicating with fellow staff members	1
Inspection	1
Making the counter foods	1
Meal time	1
Enjoy using the cash register	4
Giving guidance to staff members	2
Smoking during breaks	1
Nothing to feel happy about working at the store	1
Total	18

Table VIII.
Interview question:
what is your favorite
thing about working
at the store?

Results of focus group discussions (Research Instrument No. 2)

The following section would discuss the answers provided during the employee job satisfaction measurement interview. The key objective of the interview was to determine if the employees were happy and contented while performing their job responsibilities. Each employee had an opinion and there were many opinions and answers obtained. Based on the result, job satisfaction is closely related to reward, which can be financial or non-financial in nature. The rewards in the present case were not monetary, but took in the form of employment. The answers to the second question (see Table IX) regarding the most rewarding job in the store were diverse. On the other hand, Table X lists the responses given to the question "What do you feel your strengths are?"

Additional questions and responses used to measure the employees' job satisfaction levels are shown in Table XI.

Based on the interview results, it can be concluded that some employees were satisfied with their jobs. Although it can be clearly observed that job satisfaction perspectives differed, in general, the results were good for the organization's growth and employee empowerment. Nonetheless, the organization must try to adopt and implement different

Categorized answer	Frequency
Communicating with customers	4
Displays and placing orders in response to sales	2
Planning	1
Serving customers	1
Staff development	1
Conversing with a smile with customers	1
Selling the products	1
Selling a recommended product	1
Working the cash register and talking with customers	6
Nothing is rewarding about working at the store	1
Total	19

Table IX.
Interview question: of the jobs in the store, which do you feel is most rewarding?

Categorized answer	Frequency
Eagerness and good communication ability	2
Getting good responses	1
Doing the job quickly over a long period of time	1
Being polite	2
Loud voice	2
Past experience and thinking capability	1
Obedience	1
Smile and cheerfulness	6
I have no strengths	1
Total	17

Table X.
Interview question: what do you feel your strengths are?

Categorized answer	Frequency
Advertising or sales capability and way of greeting the customers	12
Competence in customer service and diligence in abiding by the norms of the job task	2
Have no idea how my strengths contribute to the job	1
Total	15

Table XI.
Interview question: what sort of job do you feel your strengths are suited to?

methods of job satisfaction measurement on a regular basis. By doing so, the managers will be able to easily provide the desired support and guidance to the employees to improve their competencies and skills.

Table XII provides the survey results regarding the respondents' answer on how they communicate with their supervisors and colleagues.

When the respondents were asked for suggestions on how they could strengthen cooperation and allow better communication among colleagues and superiors, they offered the following recommendations:

- make a habit of holding meetings;
- emphasize communication in order to preserve the atmosphere, and keep information, dialogue and communication flowing;
- regular meals together;
- use LINE (an electronic communication application) more often;
- collect communications into sets of notes;
- have places to talk that are provided by superiors;
- would rather be at work 30 min early than show up right on time;
- making time to work together or have meetings would be good;
- do not be late; and
- weekly staff meetings.

Finally, when asked regarding how customer satisfaction could be improved in order to create a better store, the employees suggested:

- Divide roles among people to reduce role sharing and increase the overall quality of each individual task.
- It is important for each person to take more interest in the products and make them appealing to the customers. Some good products also get overlooked. They want to keep their sales up so as not to lose out to other stores, clarify what we sell to customers, differentiate ourselves from other stores and become a better store.
- For all the staff to have the same outlook.
- If there is something concerning the staff, no matter how trivial, he or she must bring it up.
- It is a 24 h job, so proper greetings are important. When the staff do not know something, ask the boss while taking notes, even if it is something that you have taken for granted. Also, proper sleep is important for everyday functioning.
- Keep each individual staff member motivated. Implement small goals and final goals for that purpose. To make the shop more cheerful, implement a week full of high praise.
- Listen to the customers' opinions. Get some more interesting/fun products.

	Yes	No	No answer	Total
Are you able to communicate with your supervisor and colleagues?				
Frequency	9	6	8	23
%	39.1	26.1	34.8	100.0

Table XII.
Percentage distribution of the respondents' perception of whether they have enough communication with bosses and colleagues

- Make goods easy to see and categorize them. When customers seem lost or restless, ask them "Are you looking for something?" If you see an elderly person with a basket headed toward the register, help them out with their basket.

- Show more concern for the passing customers. If the staff did their job carefully and politely, customers would take notice of it.

- Cheerful greetings and communication. Saying things in a clear voice. The customer will not hear you if you just mumble. Provide service with a smile. Cleaning dust on top of products – products that do not move much tend to end up with a lot of dust on them. Do not let important items go out of stock. Get new products and unusual things and make product explanations pop.

Table XIII exhibits the results of the second communication survey after the six-month intervention period:

RQ6. How will the store be reorganized in accordance with the results of the planned intervention?

In order to successfully answer *RQ3*, the results of the first and second evaluations of the managers should be reviewed. The managers would be evaluated by the owner, and they would be notified regarding what areas of staff management need improvement.

Results of the first evaluation of managers by the owner (Instrument No. 3)
President/business owner. The president, Mr A, is a male university graduate between 30 and 39 years old. He has been working primarily at store no. 1 for nine years.

Managers. Mr Q manages Store No. 1, Mr T manages Store No. 2 and Mr G and Ms D co-manage Store No. 3. The results of the first manager evaluation are shown in Table XIV.

Analysis of the manager evaluation results
Before Mr A purchased and established his three stores, he worked for five years at a store on a part-time basis. He developed a hands-on understanding of the part-time staff. He was one of the few college graduates in the group, having studied economics and law in a university.

Table XIII.
Percentage distribution of the respondents' perception of whether they have enough communication with bosses and colleagues (after six-month intervention)

	Yes	No	No answer	Total
Are you able to communicate with your supervisor and colleagues?				
Frequency	18	5	0	23
%	78.3	21.7	0.0	100

	Store manager			
	Mr Q	Mr T	Mr G	Ms D
Areas of evaluation	Store No. 1	Store No. 2	Store No. 3	Store No. 3
Store awareness	8	4	9	9
Seiri	1	1	2	0
Seiton	4	4	4	2
Seiso	2	2	2	3
Seiketsu	3	3	3	3
Shitsuke	2	2	3	3

Table XIV.
First manager evaluation by the store owner

After the first survey, a new intervention and *kaizen* (improvement) plan was developed to deal with the issues uncovered in the first survey. In addition to the intervention process described in the methodology section, the following goals were achieved:

- Staff members were encouraged to engage more in contacting, reporting and consulting. The staff also confirmed that, at a regular fixed intervals, they were engaging in mandatory usage of LINE and that they were responding immediately when contacted.

- A system was established wherein the managers and owner come in earlier than scheduled to listen to staff concerns and to respond promptly.

- When staff members encounter unforeseen situations or have concerns, they may contact the owner via cellphone. Problems could then be solved quickly and efficiently.

- In response to the 5S checklist issues that the managers did not convey thoroughly to employees, the managers provided additional guidance to the staff.

- The information on problems found in each store on the 5S checklist was shared with the respective store employees.

Results of the second evaluation of managers by the owner (Instrument No. 3)
The results of the second manager evaluation are shown in Table XV. A comparison of the results from the first and second surveys could be found in Table XVI. It demonstrated that the performance of managers (Mr Q, Mr T and Ms D) improved in many aspects after the six-month intervention.

Conclusions
There is always a great competition among convenience stores. In Mr A's location alone, there are a number of nearby competing stores. Hence, differentiation is critical. Due to this, the 5S activities are very essential and fundamental. The intervention paved way for the improvement of staff awareness and activity. Using Mr A's stores as an experimental test facility for this study, the intervention activities have exhibited a degree of success. However, as Mr A said, this does not necessarily mean that the implementation of the 5S activities was finished. Therefore, these must be carried out on a daily basis for as long as the stores remain open. After this study, it is recommended for Mr A to also focus on the education and the development of the store management.

This study had also revealed a problem outside of 5S: improving staff communication. In the future, it may be necessary to make sure that the management is aware of this issue.

Recommendations
Even though the improvement of staff communication is indirectly related to 5S, it was discovered that the staff were somewhat dissatisfied with their ability to directly communicate

	Store manager			
Areas of evaluation	Mr Q Store No. 1	Mr T Store No. 2	Mr G Store No. 3	Ms D Store No. 3
Store awareness	9	7	10	9
Seiri	1	2	2	1
Seiton	4	4	4	4
Seiso	2	3	2	3
Seiketsu	4	3	3	4
Shitsuke	4	4	4	5

Table XV.
Second manager evaluation by the store owner

Store manager	Area of evaluation	1st evaluation	2nd evaluation	Score change (±)
Mr Q	Store awareness	8	9	+1
Store 1	*Seiri*	1	1	0
	Seiton	4	4	0
	Seiso	2	2	0
	Seiketsu	3	4	+1
	Shitsuke	2	4	+2
Mr T	Store awareness	4	7	+3
	Seiri	1	2	+1
	Seiton	4	4	0
	Seiso	2	3	+1
	Seiketsu	3	3	0
	Shitsuke	2	4	+2
Mr G	Store awareness	9	10	+1
	Seiri	2	2	0
	Seiton	4	4	0
	Seiso	2	2	0
	Seiketsu	3	3	0
	Shitsuke	3	4	+1
Ms D	Store awareness	9	9	0
	Seiri	0	1	+1
	Seiton	2	4	+2
	Seiso	3	3	0
	Seiketsu	3	4	+1
	Shitsuke	3	5	+2

Table XVI.
Comparison of the
first and second
manager evaluations
by the store owner

with the owner due to time and schedule restraints. Despite the increased burden it may place on the owner, it may be desirable for him to be available to the staff before the regular workday begins. However, due to the owner's schedule limitations, it may be necessary to develop a problem-solving managerial class. By training the managers in problem resolution, the owner will no longer be required to personally resolve all the issues that may arise.

References

Basic Management Laboratory (2012), "5S katsudou toha (What is 5S?)", available at: www.basicm.jp/about_5s/ (accessed May 21, 2014).

Camden, M.C., Price, V.A. and Ludwig, T.D. (2011), "Reducing absenteeism and rescheduling among grocery store employees with point-contingent rewards", *Journal of Organizational Behavior Management*, Vol. 31 No. 2, pp. 140-149.

Dore, R.P. and Sako, M. (1989), *How the Japanese Learn to Work*, 2nd ed., Routledge, London.

Fuentes, R.O. (2011), *The Blondin-Organizational Planning System (OPS) Training Manual*, Southeast Asia Interdisciplinary Development Institute, Antipolo.

Hirano, H. and Furutani, M. (1997), *5S no hanashi. Seisankanri poketto bukku (The Story of 5S. Pocketbook for Production Management)*, Nikkankougyo Shinbun Publishing, Tokyo.

Hirano, H. and Furutani, M. (2003), *Omise no 5S ha Shigoto no Kihon (5S is Fundamental for Jobs at the Shop)*, Chukei Publishing, Tokyo.

Kayama, R. (2007), *Naze nihonjin ha rekka shitaka (Why are Japanese being Downgraded?)*, Koudansha Publishing, Tokyo.

Kolz, A.R. (1999), "Personality predictors of retail employee theft and counterproductive behavior", *Journal of Professional Services Marketing*, Vol. 19 No. 2, pp. 107-114.

Lewin, K. (2014), "Change management consultant", available at: www.change-management-consultant.com/kurt-lewin.html (accessed May 20, 2014).

Miyagawa, M. (2011), *Soshikikaihatsu riron to jissen no kiso. 5tsu no manejimento kadai to taisaku (Basics for Theory and Practice. Five Tasks of Management and Measures)*, Sangyo Noritsu University Press, Tokyo.

OJT Solutions (2012), *Toyota no katazuke (Cleaning and Organizing the Toyota Way)*, Chukei Publishing, Tokyo.

Senge, P. (1990), *The Fifth Discipline: The Art & Practice of the Learning Organization*, 1st ed., Doubleday Business, New York, NY.

Singh, S., Mistry, N., Chavda, J., Patel, T. and Patel, N. (2015), "Identification of factors which are affecting for effective implementation of 5S technique in SMEs of Vadodara region", *International Journal on Theoretical and Applied Research in Mechanical Engineering*, Vol. 4 No. 3, pp. 29-33.

Statistica (2018), "Number of convenience stores (konbini) in Japan from 2007 to 2016 (in 1,000s)", available at: www.statista.com/statistics/810901/japan-convenience-store-numbers/ (accessed September 4, 2018).

The Japan Times (2018), "Japan's convenience store sales slipped 0.3% in 2017", *The Japan Times*, January 23, available at: www.japantimes.co.jp/news/2018/01/23/business/japans-convenience-store-sales-slipped-0-3-2017/#.W5Eqzy-B3MI (accessed September 4, 2018).

Further reading

Beckhard, R. (1969), *Organization Development: Strategies and Models*, Addison-Wesley Longman, Boston, MA.

Burke, W.W. (1982), *Organization Development: Principles and Practices*, Little Brown & Co., New York, NY.

Drucker, P.F. (1993), *Management: Tasks, Responsibilities, Practices*, Harper & Row Management Library, New York, NY.

EESemi.com (2003), "The 5 'S' Process: Seiri, seiton, seiso, seiketsu, shitsuke", available at: www.siliconfareast.com/5S.htm (accessed May 19, 2014).

Corresponding author
Shiro Ito can be contacted at: shiro.ito@upd.edu.ph