A Study of the Effects of Active Listening on Listening Attitudes of Middle Managers

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Abstract: A Study of the Effects of Active Listening on Listening Attitudes of Middle Managers: Shinya KUBOTA, et al. Department of Mental Health, Institute of Industrial Ecological Sciences, University of Occupational and Environmental Health—The present study was conducted to clarify the direct effects of active listening (AL) training given to middle managers in a local government. Altogether, 345 middle managers participated in 13 AL training sessions over two years. We developed the Inventive Experiential Learning (IEL) method, and used it as the central training method in this study. To investigate how well the participants learned AL, we asked the middle managers to answer a shorter version of the Active Listening Attitude Scale (ALAS) consisting of two subscales—i.e. “Listening Attitude” and “Listening Skill”—before training, one month after and three months after training. Altogether, 284 middle managers answered the questionnaire three times. The scores of each subscale were analyzed by repeated measurement analysis of variance. The participants were divided into three groups using the percentile values of the original sample of ALAS, i.e. low-score group (~24%), medium-score group (25–75%) and high-score group (76%~), and the proportionate changes were examined. The results showed both the “Listening Attitude” and “Listening Skill” subscales increased significantly after training. Analysis of the percentiles showed that the proportion of the low-score group decreased and that of the high-score group increased in both subscales, from one to three months after training. These changes are considered to indicate that the participants have learned AL although they attended AL training for only one day.

Key words: Active Listening (AL), Active Listening Attitude Scale, Inventive Experiential Learning, AL training, middle managers

Japanese organizations have recognized the importance of mental health activities. In 2000, the Ministry of Labor (the present Ministry of Health, Labor and Welfare) of Japan established “Guidelines for promoting workers’ mental health in organizations” to encourage each organization to develop and implement their own mental health programs. The guidelines require middle managers to play a key role in improving their work environment, and to give counsel to workers who seek their support. This activity is called “Care by line managers”.

The guidelines suggest active listening (AL) which is a useful method that can be used to promote “Care by line managers”. AL was originally an important element of the client-centered therapy developed by C.R. Rogers. It is also used as the foundation of counseling in many different fields. Rogers thought it could be applied to improve human relationships between middle managers and their workers in organizations.

The purpose of using AL as a means of “Care by line managers” described in the guidelines is, “If middle managers listened to and supported their subordinates, workers’ uneasiness and suffering would be reduced, which would positively affect their mental health.” Therefore, AL is a method of managing workers’ stress by improving communication between middle managers and workers.

According to the job stress model made by the National Institute for Occupational Safety and Health (NIOSH) in the United States, work stress is caused by various stressors such as interpersonal relationships, role conflicts and so forth. Based on this model, learning AL would change interpersonal relationships positively and reduce stress. It would also enhance social support, which was considered a buffer factor in the model.

Okubo reported the results of their study on AL
training in the workplace by retrieving relevant information from databases. They concluded that very few studies had been reported regarding AL training in organizations. Mishima et al. pointed out the following reasons for this: Although concern about mental health in organizations was growing, past studies mainly focused on how to deal with workers with mental health problems, as well as informing staff of the importance of mental health activities. It was also suggested that there were no efficient methods of accurately measuring the effects of mental health training.

Another possible reason for the paucity of literature on AL training is that it has been used more actively as part of leadership training and coaching rather than as an intervention in the field of occupational health. For instance, Gordon gave many examples of his Leader Effectiveness Training (LET) that emphasized the use of AL. In Co-active Coaching, developed by Whitworth et al., active listening is considered to be an important coaching skill. Gordon reported that he instructed middle managers of a transportation company, with 17,000 employees, in LET, and that the training improved workers’ job satisfaction, enhanced their job skills and increased productivity. Although AL was used in these activities, researchers have shown little interest in measuring the effects of AL training independently. This may be one reason why AL training has not been widely reported upon in occupational health.

Despite this, over the past few decades several studies have been made on the effects of AL training in the workplace. Ikemi et al., and Kubota et al. found that AL training promoted participants’ conditions of listening attitudes such as empathic understanding, unconditional positive regard and congruence when the attitudes were measured by an inventory of relationships and questionnaires developed by them. Hamaguchi et al., and Kubota et al. showed that the mental health of middle managers and workers improved after AL training. Miyagi reported that after instructing middle managers in counseling education to develop their competencies in an organization, participants indicated positive changes in their communication style such as empathic understanding and positive listening.

In order to assess the effects of AL training, we consider that its features should be taken into account. As AL is based in the subject of psychology, we cannot expect everyone who practices AL to acquire all the skills required for AL. Even if stress responses among workers are reduced, and the interpersonal relationships between middle managers and their subordinates improve after AL training, these changes cannot automatically be attributed to the mastery of AL unless demonstrated as such. If the participants’ mastery of AL is insufficient, it must be confirmed whether the changes occurred due to other factors or not. Therefore, it is necessary to measure attitudes relating to AL when assessing the effects of AL training. Nevertheless, to the best of our knowledge, previous studies gave only limited information regarding the direct effects of AL training.

Once the importance of evaluating the effects of AL training is recognized, it is natural to study an effective method of teaching AL in order to enhance the training effects, but little information regarding the method of teaching AL has been provided. Most of the techniques used for stress management were originally developed as methods for clinical psychology. Originally, training was given to students and professionals who wanted to be experts in relevant fields, and did not aim to teach these methods to ordinary workers. Hence, we believe that we need to devise and improve training methods when applying these to workplaces where non-experts are working.

We have made several efforts to solve these problems. Regarding how to teach participants AL, we have invented and practiced a new education method in which middle managers participating in the training are encouraged to utilize their own resources so that they can discover by themselves how to do AL. We have also developed the Active Listening Attitude Scale (ALAS) to measure the direct effects of AL training. The scale has been used to evaluate the effectiveness of training programs in various organizations.

In this study, we report on the results of this new education method for AL training given to middle managers of a local government, and discuss how mental health training in organizations should be conducted in the future.

Subjects and Methods

1. Training method (Inventive Experiential Learning, IEL)

We developed a new method of teaching AL and improved it via the process of teaching AL to middle managers in organizations. The training method used in the AL training in this study is called Inventive Experiential Learning (IEL). When we teach AL, we emphasize the effective use of the knowledge, abilities and resources that participants have acquired in their daily working lives.

As we explained IEL in detail in our previous studies, we will only describe it briefly here.

IEL consists of two parts: role-play and overall discussion. The goal of IEL is to find the conditions and means necessary to let speakers talk about their own ideas at length. Participants are divided into groups of 4 or 5 people. In the role-play part, one person plays the role of speaker, two play listeners and the others are observers. One of the listeners actually does AL, while the other listener just sits and listens. The speaker talks about any topic, not necessarily a problem.

The goal of this role-play exercise is to have the
speakers talk about their topics for as long and as spontaneously as possible. Trainers do not explain how to do AL before IEL starts, but ask the participants playing the role of active listener to follow three conditions: (1) They should not keep asking one question after another. (2) They should not change the topic chosen by the speaker. (3) They should not give advice. When a listener cannot continue, he/she asks the other listener to take over the role of active listener.

After one session of role-play ends, usually within 20 min, one of the observers chairs a group discussion in which they talk about what ways of listening help the speaker to talk comfortably. After a few sessions of role-play exercises, each group summarizes their findings about AL.

After the group exercises, overall discussion starts. In this final discussion, representatives from the groups are encouraged to give detailed reports on their findings, while one of the trainers listens actively to them. By doing this, the trainer not only summarizes their findings, but also demonstrates how to do AL in front of the participants (Fig. 1).

If two trainers are conducting the training, the other trainer, who is not listening, comments on the participants’ findings, and on the interactions between the listening trainer and the representative of each group from the standpoint of AL. We consider that this process helps participants obtain a clear understanding of AL. When there is ample time to practice another session of AL role-play, participants practice another role-play exercise in groups of three.

This method is used as the core of one-day AL training in which there are usually two trainers.

2. Subjects and measurements

In 2000 and 2001, a series of one-day training sessions were conducted to teach AL to middle managers in a local government. The employee training center of the local government requested two of the authors to offer AL training. The number of participants who attended each session ranged from twenty to thirty. Altogether, 345 middle managers (331 males and 14 females) took part in a total of 13 sessions. Their ages ranged from 36 to 60 yr with a mean of 52.3 yr (S.D.=4.02).

As part of the training, participants were requested to answer a set of questionnaires three times, i.e. just before training, one month after and three months after training. The questionnaires included a subjective evaluation of the necessity and ability of participants’ listening besides the ALAS. To fill out the questionnaires before training, it was necessary for the participants to consider their usual listening styles in daily working life. This was considered to be a motivating factor to learn AL. Furthermore, repeating the questionnaires one month and three months after training were planned so that they could recall what they had learned during the sessions. After participants had answered the questionnaires, we analyzed their answers and notified them individually of the results, to
Among the participants, 337 of them completed the first set of questionnaires. Out of 337 participants, 318 answered either or both the second and third sets, and only 19 (5.6%) did not answer either of these. The number of participants who answered all three sets of questionnaires was 284. The age and gender distributions in these groups of participants are shown in Table 1. The requests to the participants and the protection of their personal data were provided according to the ethical standards of the training center.

The original version of ALAS consists of 31 items and three subscales, i.e. “Listening Attitude”, “Listening Skill”, and “Conversation Opportunity.” The first two subscales collect useful information on workers’ listening abilities. These subscales consist of 13 and 11 items respectively. For repeated use, we have developed the shorter version of ALAS that consists of two subscales, i.e. “Listening Attitude” and “Listening Skill”, containing 10 items respectively. We used the shorter version in this study.

The validity and reliability of the original ALAS have been previously reported. The correlation between the original and shorter versions—on a sample of workers whose data was used to standardize the ALAS—was 0.98 for “Listening Attitude”, and 0.99 for “Listening Skill”. The Cronbach’s alpha of the shorter version was 0.79 for “Listening Attitude” and 0.76 for “Listening Skill”.

3. Statistical analyses

284 middle managers answered all three sets of questionnaires and their answers are used mainly in this study. The data was analyzed in two ways. Firstly, we investigated whether or not each subscale changed significantly over time by using repeated measurement analysis of variance (ANOVA). PROC GLM of SAS V8.2 was used to conduct repeated measurement ANOVA. The hypothesis was tested by F-test with Greenhouse-Geisser Epsilon used for adjustments. This was followed by comparisons of the subscale scores for the three measurement times by using the CONTRAST option of this procedure.

To use all eligible answers of each measurement, one way ANOVA was also carried out to examine the differences in ALAS subscales between three measurements. This was followed by Dunnell’s multiple comparison test to examine the difference from the first measurement.

Secondly, we classified each subscale into three groups by using a lower quartile (under 25%) and an upper quartile (over 75%) of the original sample of workers that were used to develop ALAS as mentioned above. The group of managers who scored under 25% was classified as the low-score group. Participants who scored between 25% and 75% were classified as the medium-score group, and those with over 75% were classified as the high-score group. We examined the categorized data via contingency tables, in which a test of symmetry of marginal homogeneity was conducted to test statistical significance by using the AGREE option in PROC FREQ of SAS V8.2.

Because there was no difference in the distribution of ALAS between genders, all of the data were used in the above-mentioned analyses.

Results

Table 2 shows the results of repeated measurement ANOVA that used the data from 284 participants. Both the “Listening Attitude” and “Listening Skill” subscales increased significantly after training. Subsequent analyses revealed that the mean scores for “Listening Attitude” in one month and three months after training were significantly higher than before training ($p<0.001$, $p<0.001$). The mean score at three months was also higher than that at one month ($p<0.05$). On the “Listening Skill” subscale, all comparisons among the three measurements were remarkably significant ($p<0.001$, $p<0.001$, $p<0.001$).

When all the data were used to calculate the averages of the subscales, those of the first, second and third measurements were 17.1 (N=337), 18.1 (N=308) and 18.5 (N=294) for “Listening Attitude”, and 18.7 (N=337), 19.5 (N=308) and 20.1 (N=294) for “Listening Skill”. The analyses of the data by one way ANOVA with Dunnett’s test that revealed almost the same results are explained...
These results indicate that the subscale scores of participants increased gradually but steadily, and that the participants understood AL on the whole. The improvement of listening attitude, however, may not be uniform among the participants, because the first analysis alone cannot refute the possibility that the scores after training might have risen sharply only in a limited number of cases—which resulted in an increase in averages. Hence, we conducted a further analysis using percentile values, as shown in Table 3.

Regarding the “Listening Attitude” subscale, the proportion of the low-score group also decreased gradually from one month through three months after training. The proportion of the high-score group increased in one month, and decreased slightly in three months, although the percentage of this group was larger in three months than before training. The proportion of the medium-score group increased from one month through three months after training. Analysis by test of symmetry indicated that the change from before training to one month after training was significant \( p<0.01 \). The change from before training to three months after training was remarkably significant \( p<0.001 \).

**Discussion**

This study focused on the direct effects of our AL training program in which the IEL method was used to teach AL to middle managers of a local government. According to the changes in the managers’ listening attitudes measured by ALAS, both the “Listening Attitude” and “Listening Skill” subscale scores had increased significantly one month and three months after training. When the subscale scores were divided into high, medium and low-score groups, the proportion of

| Table 2. Comparisons of the scores of ALAS subscales before and after AL training |
|-------------------------------|------------------|-------------------|---------------------|-------------------|
| Subscale                      | N    | before training | 1 month after training | 3 months after training | P       |
| Listening Attitude            | 284  | 17.3 ± 4.1      | 18.2 ± 4.2          | 18.6 ± 4.4          | \( p<0.001 \) |
| Listening Skill               | 284  | 18.7 ± 3.3      | 19.4 ± 3.2          | 20.0 ± 3.4          | \( p<0.001 \) |

Values are the mean ± S.D. Each subscale ranges from 0 to 30. The data were analyzed by repeated measures ANOVA.

a: The mean score was significantly higher than that of pre-training \( (p<0.001) \).
b: The mean score was significantly higher than that of the second measurement \( (p<0.05) \).
c: The mean score was significantly higher than that of the second measurement \( (p<0.001) \).

| Table 3. The proportion of low, medium and high-score groups before and after AL training |
|-------------------------------|------------------|-------------------|---------------------|-------------------|
| Sub-scale                     | N    | under 25% | 25%–75% | over 75% | under 25% | 25%–75% | over 75% | under 25% | 25%–75% | over 75% | under 25% | 25%–75% | over 75% | under 25% | 25%–75% | over 75% |
| Listening Attitude            | 284  | 95     | 33.5%  | 141    | 49.7%     | 48      | 16.9%    | 57      | 20.1%    | 67      | 23.6%    | 160     | 56.3%    | 52      | 10.2%    | 152     | 36.3%    | 22      |
| Listening Skill               | 284  | 48     | 16.9%  | 149    | 52.5%     | 87      | 30.6%    | 103     | 36.3%    | 29      | 10.2%    | 152     | 53.5%    | 22      | 7.8%     | 160     | 35.9%    | 102     |

Each subscale is classified into three groups by using a lower quartile (25%) and an upper quartile (75%) of the sample used to standardize ALAS. The left, middle and right columns show the number (upper) and percentage (lower) of participants who were classified into low, medium and high-score groups, respectively. a: The test of symmetry of marginal homogeneity revealed that the proportions of the three groups were significantly different pre-training and one month or three months after training \( (p<0.01, \ p<0.001 \) in “Listening Attitude”, and \( p<0.01, \ p<0.001 \) in “Listening Skill”). The difference between one month and three months after training was not significant.
the low-score group decreased and that of the high-score group increased after training, in both subscales. The test of symmetry of marginal homogeneity revealed that these changes were statistically significant.

These results imply that participants with high scores at the beginning either maintained or improved their levels of listening after training, and that the number of participants with low scores at the beginning decreased. Because most of the participants seemed to improve their listening abilities regardless of their starting level, we believe the changes were not caused by regression to the mean.

As well as analyzing changes statistically, we consider the participants’ opinions concerning the training to be very important in evaluating its usefulness. For this purpose, shortly after the training was completed, the employee training center staff who were in charge of planning the training collected information on participants’ subjective evaluations via a different questionnaire.

Ninety-six percent (256 out of 266) of the participants replied “very meaningful” or “meaningful” to the question of “How do you evaluate this training?” To the question of “Do you think that you can fully utilize AL at work?” 95% participants answered “I think so.” and only 4% answered “I don’t think so.” Only 1% answered “I don’t know.” Hence, in general, the training was accepted favorably by the participants.

Thus, this study indicates the participants’ listening attitudes and skills improved significantly as shown by the scores of ALAS obtained from the questionnaires given to the managers. At the same time, more than 90 percent of the participants recognized the training to be meaningful, and thought they could utilize AL in the workplace. We believe that the results of this study indicate that our training program using IEL can be effectively practiced in the workplace.

Incidentally, we have also taught AL by the traditional education method-in which a trainer encouraged learners to listen to a speaker in a role-play exercise in the manner instructed by the trainer. This experience showed us that the participants paid a lot of attention to the listening style explained by the trainers. In a sense, this listening style represents the ideal and is not easy for beginners of AL to practice in the way explained by the trainer. As a result, many participants found it difficult to do AL, and as a result felt they were poor listeners. This experience may have discouraged them from learning and practicing AL.

In spite of these difficulties however, we found a number of participants had been listening actively to their subordinates before attending the training. Through interactions with those participants we noticed some managers had devised their own methods of communicating, and their own listening style. Their style was very similar to AL. From these experiences, we developed the IEL method to fully utilize the skills middle managers already possessed.

Since mastering standard AL requires a lot of work and experience, it is not realistic to expect participants to acquire the necessary listening skills after attending only one training session. But the participants in this study showed significant changes in “Listening Attitude” and “Listening Skill” after training. We believe that IEL contributed substantially to this improvement in the following ways:

Firstly, teaching AL by IEL allows participants to notice the attitudes of listening they already have that are similar to AL, and to summarize their findings and experiences freely. This process allows them to feel that their behavior is positive. They can also clearly recognize the “dos and don’ts” in the workplace. As most of their findings and knowledge related to AL come from their own experiences, they rarely have a negative impression of AL and are more likely to use AL in the workplace after training.

Secondly, because of the open and free atmosphere provided by IEL, some participants disclose their experiences of listening in different work situations. Their disclosures confirm that some managers are listening in a very similar way to AL. For instance, the manager at a local government who was in charge of the expropriation of land, reported that he usually started negotiations after listening carefully to the complaints of citizens who would be affected by it. Managers who had to deal with customers’ complaints often said their first task was to listen patiently to the customer and allow them to talk freely. Although these managers knew what to do when they needed to listen, they did not recognize that their listening was close to AL, and that AL was also useful in helping workers maintain good mental health.

Besides the changes during the listening training, some participants reported a number of subsequent behavioral changes such as improvements in their interpersonal relationships, and their application of AL in the workplace. One manager, for instance, explained his experience of doing AL with a subordinate who had had difficulty maintaining good mental health. After the manager started listening to him about what he thought of his work and interpersonal relationships, and his medical treatment in clinics, the subordinate became calmer at work and could remain calm when dealing with citizens.

Despite these important findings, the present study has limitations. Firstly, there were no control groups available to compare with participants who attended the training, so that we can not deny the possibility that the changes were caused by such factors as the work environments and social desirability. Secondly, there were no data available on the actual mental health of participants. Because of this, we do not have any information regarding
changes in social support from supervisors and their influence on the mental health of subordinates.

Because training sessions explained in this study were conducted at the request of the employee-training center, who should attend the training and when was decided by their staff, but we were free to decide the content of the training itself. As non-members of the organization, we had limited access to information on participants' health conditions, work, and so forth.

A control group is important in studies like this. However, as the center wanted all eligible managers to participate in the AL training, it was not possible in this study. For similar reasons, we could not obtain data from the regular medical examinations undergone by participants that might have shown changes in their mental health.

In spite of these limitations, we believe the changes in listening attitudes reported by participants did not occur coincidentally. There are other facts besides the reasons offered above that support our conclusions. Data analyzed in this study was collected over two years. When we carried out the same analyses separately each year, similar results were obtained. When we repeated the analyses separately after each of the 13 sessions, similar trends were also observed, although some of them were not statistically significant due to the small sample size. We also noted similar changes in middle managers at different organizations. We believe that this reproducibility warrants our interpretation of the results.

Some of the above limitations, especially relating to private information pertaining to staff in any organization, can be solved by having the occupational health care staff of each organization give workers in-house AL training using IEL as the central method. When staff both plan and teach the AL training sessions, it may not be difficult to have control groups and use data from medical records, so we hope that occupational health care staff learn how to train workers in the AL training by using IEL.

IEL has a clear advantage over traditional methods of educating trainers in that it is not necessary to be an expert in psychology to learn IEL. This method does not require expertise in AL. It only requires the ability to listen. Interestingly, Ito has reported her experience of using IEL in the mental health training of middle managers in her organization10. She showed that more than 70 percent of participants had listened to others by putting themselves in their shoes. We have written a manual to teach IEL to trainers, and plan to provide inexperienced staff with training for the above mentioned purpose.

We also believe that we should provide participants with support that would help them maintain or enhance the knowledge and the skills they acquire in the training. For this purpose, we continue to accumulate experience in applying AL to the workplace, details of which will be provided in the future.

In conclusion, we believe that our AL training improved participants' listening attitudes and skills, measured by the ALAS, and that these changes indicated they had learned AL. Furthermore, IEL improves participants' levels of satisfaction with AL training programs, further encouraging them to apply AL in the workplace. We believe subsequent studies and further refining of our research methods will support this conclusion.

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