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Awareness of Job Stressors and Changes in Stress Coping: An Exploratory Study[1]

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A single-case experimental design was used to investigate whether a group discussion about job stressors changed the stress coping strategies of company employees. Male businessmen (n = 3; age = 25, 30 and 31yr.), participated in a group discussion that was designed to increase awareness regarding their job stressors. Participants reported their coping strategies using a Likert-type scale 6 times during the prediscussion period, as well as immediately following, and 1 and 2 weeks after the discussion. The results indicated that, after the discussion, scores for problem-focused copings increased and scores for avoidance copings decreased in all 3 participants. These findings suggest that discussion facilitates problem-focused coping.

Key words: job stress, coping, group discussion, stress management, single-case experimental design

Coping effectively with job stressors is necessary for office workers to maintain their mental and physical health. There are many types of stress coping strategies. These include problem-focused coping strategies that attempt to eliminate stressors, emotion-focused coping strategies that alleviate negative emotions caused by stressors, and avoidance coping strategies that cognitively or behaviorally escape from stressors (Billings & Moos, 1984; Lazarus & Folkman, 1984; Lazarus, 1999). It has been suggested that the best method for resisting stressors in workplaces is for employees to flexibly use different types of coping strategies, according to the situation that is causing the stress responses (Cheng, 2001; Mino & Kanemoto, 2005).

However, copings that overly depend on avoidance strategies may increase stress responses, because avoidance copings do not eliminate stressors. Elimination of stressors requires resorting to problem-focused coping strategies (Billings & Moos, 1984; Tsenkova, Dienberg, Singer, & Ryff, 2008). When employees are not fully aware of the stressors that they face, they cannot use problem-focused copings. Therefore, in order to effectively cope with job stress, employees and organizations must first develop an awareness of their stressors.

Job stressors include daily hassles that happen repeatedly, almost on a daily basis, so long as employees continue working. These include stressors such as the workload and role ambiguity, among others (Hurrell & Mclaney, 1988). Not all workers may be fully aware of these stressors because each hassle is not necessarily very serious, although the accumulations of daily hassles result in poor states of mental health (Delongis, Coyne, Dakof, Folkman, & Lazarus, 1982;

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Erlandsson & Ekulund, 2003).

In the present study, the effect of a task that facilitated the awareness of job stressors (i. e., a group discussion regarding job stressors) on coping strategies in dealing with fatigue at work was examined. D'Zurilla (1986, 1990) suggested that understanding problems in detail is important for solving them efficiently. Therefore, it was hypothesized that a group discussion could increase problem-focused copings and decrease avoidance copings. As an exploratory study, time-series variations of coping strategies in a small number of employees were examined for a relatively long period of time in details using the single-case experimental design (Barlow & Hersen, 1984).

Method

Design

An AB design using the single case experimental method (Barlow & Hersen, 1984) was used.

Participants

Three male employees (#1, age = 25yr.; #2, age = 30yr.; #3, age = 31yr.) participated in the study. They were salesmen working for a company in the Ibaraki prefecture of Japan. It had been confirmed in a preliminary interview study that their coping style inclined heavily toward avoidance ones.

Dependent variables

The participants were asked to report on how they coped with work-related fatigue by using the Coping Scale (Ozeki, Haraguchi, & Tsuda, 1994). The scale consisted of three subscales that measured the three types of coping: *Problem-focused Coping* (5 items, e.g., "try to find causes of the problems."); *Emotion-focused Coping* (3 items, e.g., "look at bright side of things."); and *Avoidance Coping* (6 items, e.g., "try not to think of it."). A survey of 138 people by Masuda (1997) indicated that the three subscales had moderately sufficient internal consistency reliabilities (Cronbach alphas: Problem-focused: α = .75; Emotion-focused: α = .66; Avoidance: α = .72). Participants were asked to rate, on 4-point scales, how often they resorted to each coping strategy during the last three days (1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 = *frequently*).

Procedure

Baseline phase. Participants filled out the Coping Scale after work each third day for 18days (i.e., a total of 6 times).

Treatment phase. On the 21st day after starting the study, the three participants and a coordinator took part in a one-hour group discussion in the office. The goal of the discussion was to facilitate awareness regarding the participants' stressors. The coordinator was an undergraduate psychology student who had been a part-time employee of the company for over three years. The participants were asked to list as many causes of work-related fatigue as possible, and to consider the relationships between the causes. During the discussion, the coordinator encouraged the participants to speak. In addition, the coordinator wrote down the listed stressors on a whiteboard, and drew charts to illustrate the relationships between the stressors. To test the effects of the experimental manipulation, the participants responded to the Coping Scale three times: immediately following the discussion, one week after the discussion, and two weeks after

the discussion. After finishing all the tasks, each participant was interviewed by the coordinator and was asked to report how their coping strategies had changed through the discussion.

Results and Discussion

Figure 1 shows the chart that the coordinator wrote down the whiteboard. The stressors listed by the participants were overwork caused by undertaking jobs with little value, and inefficiency of their works because they had to do the work of part-time employees who had resigned, and so forth.

As can be seen in Figure 2, all participants had hardly ever resorted to problem-focused copings before the discussion. After the discussion, problem-focused copings increased in all three participants, although the Participant 1's score decreased two weeks later. Moreover, avoidance copings decreased in all three participants. Emotion-focused copings did not change with the exception of Participant 1. These results supported the hypothesis that group discussion could facilitates problem-focused copings and decrease avoidance copings.

Mean scores for each participant for each coping subscale during the baseline phase and the treatment phase were calculated and compared between the two phases using the Busk & Serlin's (1992) effect-size index[4] (ES). In comparison to the baseline phase, in the treatment phase, Problem-focused Coping scores were found to be markedly higher (effect sizes: #1, ES = 2.73; #2, ES = 5.67; #3, ES = 8.55), and the Avoidance Coping scores were found to be

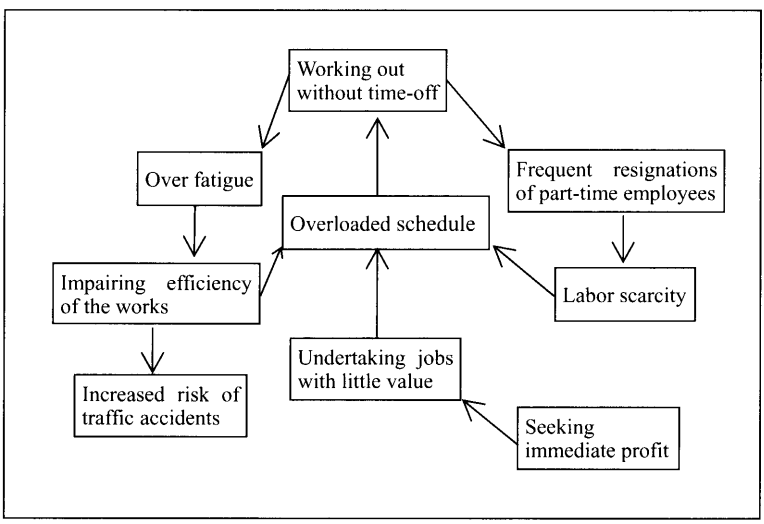

Figure 1. The stressors listed by the participants.

4 The effect-size index = $|(Ma - Mb)|/SD_{pooled}$. (Ma = mean in the baseline phase, Mb = mean in the treatment phase, SD_{pooled} = pooled standard deviation across the baseline- and the treatment phase). The value above 2.71 indicates that the experimental manipulation has a relatively large effect (Takahashi & Yamada, 2008).

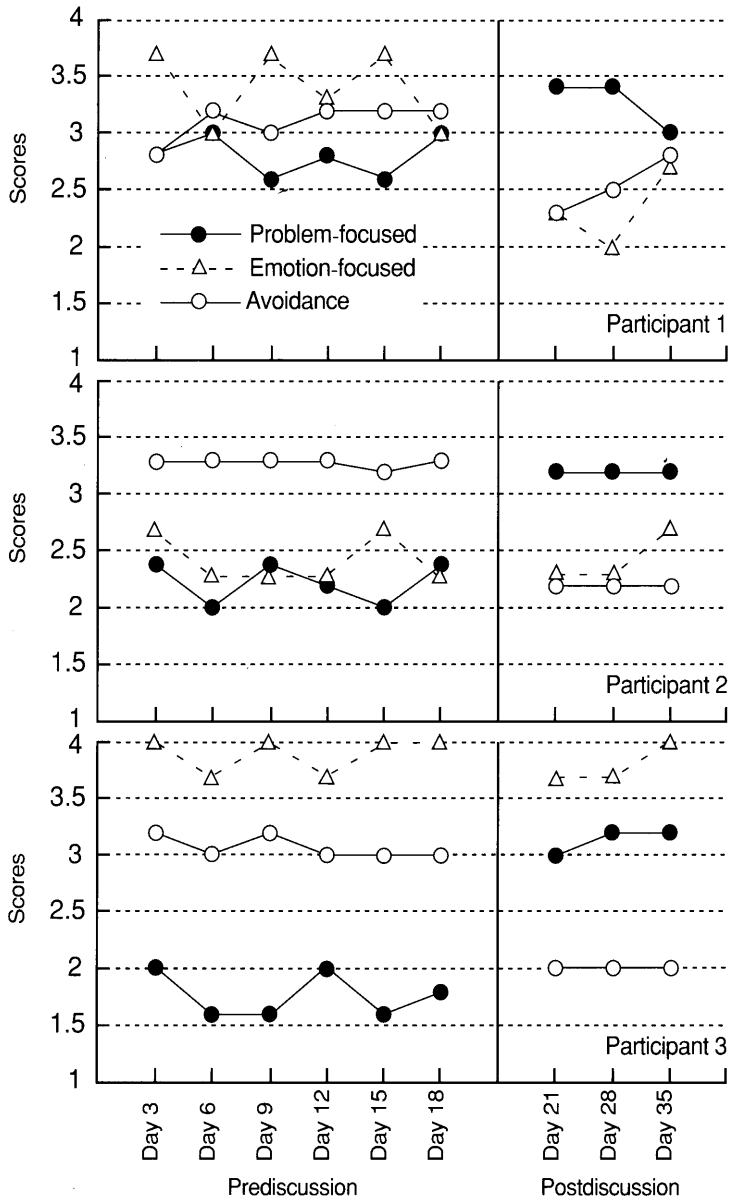

Figure 2. Coping scores by three participant (#1, upper ; #2, middle ; #3, lower) in the prediscussionphase (from Day 3 to Day 18) and immediately following (Day 21), a week after (Day 28), two weeks after (Day 35) the discussion.

markedly lower (effect sizes: #1, ES = 3.19; #2, ES = 34.39; #3, ES = 10.88), on the Emotion-focused Coping, only the Participant 1's score was found to be lower (effect sizes: #1, ES = 3.46; #2, ES = 0.00; #3, ES = 0.71). These results are consistent with the interpretations from the above visual inspection.

The present study used only self-report measures, which have several limitations, as discussed by Dewe (2001). Firstly, this study could not rule out the possibility that the results were affected by experimenter effects, or social desirability bias. However, in the interview, participant 2 and participant 3 reported that their scores on Problem-focused Coping increased after the discussion, because they considered how they could eliminate their stressors. In addition, Participant 1 reported that his score on Problem-focused Coping returned to the baseline level two weeks after the discussion, because he could not terminate his stressors due to practical reasons, even though he had intended to do so. Based on these reports, it is suggested that observed variation in the coping scores reflected actual changes in the participants' effort for problem solving, and that these results were not simply caused by experimenter effects.

Secondly, the present study could not definitively determine whether the group discussion changed the actual stress responses, as well as the coping behaviors. Further research measuring physiological indexes of the stress responses are required to clarify this issue.

In spite of these limitations, however, the present study produced new information related to stress management at the work place. D'Zurilla (1986, 1990) has proposed that problem-focused coping skills involve three processes, definition of problems and goal setting, development of multiple solutions, and the selection of the best solutions. The results of the present study suggest that the group discussion facilitates the definition of problems and the goal setting through enhancing the awareness of job stressors.

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