Effects of a Self-management Program (Mind Stretching) on Well-being

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Abstract

Mind stretching, a self-management program particularly addressing well-being as primary prevention to maintain mental health, consists of three techniques in positive psychology that are considered to promote people’s well-being: the three good things diary, the discovery and utilization of strengths, and self-compassion. To clarify how mind stretching influences its practitioners’ physical, mental, and social levels of happiness (well-being), 20 participants were surveyed for this study. Results revealed that although practicing mind stretching did not alleviate depressed mood, it increased well-being significantly immediately after the implementation, with effects persisting for a month afterward. Because the program is very simple, participants were able to incorporate it into everyday life and continue the practice after the program ended, which presumably supported its medium-term effects. Implementing the program can be helpful to people to acquire skills for a better life and can enhance their well-being.

Keywords: Depression; Mental Health; Mind stretching

Introduction

Positive psychology, proposed by Seligman [1], aims at achieving people’s everlasting happiness by emphasizing the strengths and excellent aspects that people possess, not from the conventional perspective of treating people’s illnesses and problems. Nowadays, methods emphasizing people’s positive aspects are used in various fields, not only in psychology but also in other disciplines, including economics, pedagogy, psychiatry, and neuroscience. Positive psychology proposes interventions based on strengths, exercises for gratitude, and the three good things diary as simple techniques to promote people’s happiness levels [2].

Reportedly, positive psychology interventions are effective at improving the quality of life and the level of happiness and at reducing stress and depression because those interventions help find positive thinking and action and positive meaning in life overall by fostering positive emotions [3].

Self-compassion, as proposed by Neff [4], is defined as “being kind to oneself, being sympathetic, and being humane.” Self-compassion is said to enable people to improve their mental health by mitigating stress, critical voices against themselves and fostering acceptance of oneself [4]. Compared to people in the United States, where Neff and others conducted research, people in Japan culturally widely share and approve of the process of self-improvement that identifies their shortcomings, weaknesses, and problems by becoming self-critical and correcting these vulnerabilities through constant daily effort [5]. It has been pointed out that such cultural differences make Japanese people apt to have more self-blame and less self-acceptance than people in Thailand, the United States, or Taiwan [6]. For Japanese people’s mental health, it is crucially important to boost self-compassion more actively than in other countries because of particular aspects of the Japanese culture and social background.

Intervention reports have described that self-compassion effectively reduces stress, enhances mindfulness and well-being, and improves stress management and psychological health [7].

Positive psychology interventions specifically emphasize hopes and growth orientation by promoting positive emotions and thinking. By contrast, self-compassion specifically emphasize enhancement of self-acceptance and self-esteem not by criticizing oneself under negative circumstances but by giving a compassionate mind to oneself, as one might care about others; the two adopt different approaches. Based on Japanese cultural and social background characteristics, it is important in primary prevention for mental health to implement a program that combines self-compassion with conventional positive psychology-style interventions.

In recent years, intervention studies combining positive psychology with self-compassion have been started. Some have reported improved indicators for well-being and mindfulness [7].

Nevertheless the typical intervention period is between 8 and 12 weeks. Some programs require a more extended period. Consequently, this study was conducted to develop a two-week short program that combines positive psychology with self-compassion and to clarify the program effects.

Methods

Study design

This before-and-after trial for intervention design was conducted to evaluate the effectiveness of a self-management program (mind stretching).
Participants

Participants were 20 healthy Japanese adults who received yoga training and who consented to the study.

Program content

The following are contents of the two-week program to be implemented.

<table>
<thead>
<tr>
<th>Program content</th>
<th>First week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1</td>
<td>Take a strength test to know own strengths.</td>
</tr>
<tr>
<td>Section 2</td>
<td>Keep the three good things diary for a week.</td>
</tr>
<tr>
<td>Section 3</td>
<td>Practice the behaviors that use the strengths for a week.</td>
</tr>
<tr>
<td>Section 4</td>
<td>Practice one program to enhance self-compassion a day.</td>
</tr>
</tbody>
</table>

During the two weeks, briefly write the things done on a recording sheet every day.

Section 1

To discover strengths, the VIA Survey (240 items), developed by the VIA Institute on Character in the U.S., was implemented. The 24 character strengths, including love, honesty, curiosity, creativity, leadership, and prudence, are ranked and extracted. Participants write their top five strengths (signature strengths) in a diary.

Section 2

Participants keep their three good things diary for a week. The three good things diary is a positive psychology technique based on well-being theory. It has been pointed out that the simple task of recording three good things at the end of the day enables people to have positive emotions.

Section 3

Participants use the five strengths (signature strengths) which characterize them in their daily lives for a week. Well-being is said to be enhanced by 9.5 times by knowing one’s own strengths, 19 times using those strengths, and further by consciously using them in different ways. After discovering their strengths (signature strengths), participants are asked to use those strengths in their daily life for a week every day and write the contents and results on a recording sheet.

Section 4

A program to boost self-compassion is implemented for a week. In this study, participants are asked to choose the easier one of the following to practice: (1) Offering kind words to oneself, or (2) Supportive touching, which have been established as techniques, and practice at least one every day. (1) Offering kind words to oneself is a practice by which one talks to oneself gently as if talking to loved ones when they feel depressed or sad. (2) Supportive touching is a practice that touches to oneself with sympathy and kindness when one gets exhausted or at the end of the day. Participants write the results of those practices on the recording sheet, making it an opportunity to feel a sense of accomplishment.

The program was run by the principal investigator. The first round was held to explain the program. The subsequent rounds were implemented as a homework-based program. Questions raised during the program’s implementation were answered online via e-mail or Zoom teleconferencing, as appropriate.

Data collection period
September 2022 – December 2022

Data collection method

A yoga instructor, who is also a joint researcher for this study, asked yoga students to participate in this study via e-mail after yoga training. The principal investigator explained the study online or using a video to those who indicated their consent after listening to the yoga instructor’s talk. Mind stretching was a homework-style practice by which participants wrote the content done on the day for two weeks every day on a recording sheet and shared the contents with the principal investigator. A questionnaire was conducted using an online tool before and after the implementation. Data were collected at three points: before an intervention, immediately after the intervention, and one month after the intervention.

Survey items

The attributes asked were age, sex, occupation, living environment, and the experience of psychosocial programs to date. The effects of implementing mind stretching were evaluated using a subjective well-being scale. The scale, which was developed by Ito et al. [8], included 15 items in five factors: satisfaction, accomplishment, confidence, euphoria, and disappointment. A higher score is inferred as reflecting higher well-being. The scale’s reliability and validity have been verified. In addition, to assess the level of depression, a self-rating depression scale (SDS) was used. The scale, developed by Zung [9], includes 20 items in three factors: the primary emotion in depression, somatic symptoms, and psychological symptoms. For the scale, a higher score reflects a more intense state of depression. The scale’s reliability and validity have been verified.

Data analysis methods

With regard to basic attributes, descriptive statistics values were calculated. An intergroup comparison was performed using the Kruskal-Wallis test to compare the values obtained before and after the program. When a significant difference was inferred, Bonferroni’s multiple comparison test was applied to the results.

Ethical considerations

This study was implemented with the approval of the ethical review board of the university to which the researchers belonged (approval number 151). Participants provided informed consent after receiving the following explanations orally and in writing: participation was on a voluntary basis; there was no disadvantage for not participating in the study or for revoking the consent given; careful consideration was given so that individuals were not identified; and data were managed strictly.

Results

Participant attributes

Participants were one man (5.0%) and 19 women (95.0%), with average age of 42.0 years (SD 8.9). All participants were employed. Four participants (20%) lived alone, whereas 16 (80%) lived with family members. Of the participants, 12 (60%) had experienced psychosocial programs, but 8 (40%) had not. The main psychosocial programs experienced were mindfulness and counseling. We confirmed that no participant was implementing any other program when implementing this program.
Effects of the self-management program (mind stretching)

The levels of well-being and depression were compared by attribute before implementing the program, but none was found to have a significant difference. Consequently, the 20 participants were analyzed altogether.

The Kruskal–Wallis test was applied to examine whether well-being and depression changed before and after implementing the self-management program (mind stretching). Although no significant difference was found in the levels of depression before and after implementing the program, the well-being scores were found to be significantly different ($F(2,36) = 69.44, P < .001$). By factor, significant differences were found for the second factor (accomplishment) ($F(2,36) = 4.83, P < .001$) and the fourth factor (euphoria) ($F(2,36) = 69.44, P < .001$) (Table 1).

For that reason, multiple comparisons (Bonferroni’s method, significant level 5%) were performed. Results revealed significant differences between scores obtained before and immediately after the implementation ($P < .001$) and between those obtained before and one month after the implementation ($P < .001$). However, no significant difference was found between results obtained immediately after and one month after the implementation (Figure 1).

Table 1: Well-being before and after program implementation.

<table>
<thead>
<tr>
<th></th>
<th>Well-being score</th>
<th>F Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Before</td>
<td>44.68</td>
<td>0.91</td>
<td></td>
</tr>
<tr>
<td>Immediately after</td>
<td>48.89</td>
<td>0.847</td>
<td>18.74</td>
</tr>
<tr>
<td>One month after</td>
<td>49.05</td>
<td>1.86</td>
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</table>

Figure 1: Well-being before and program implementation.

Discussion

Despite the short implementation period of just two weeks, the findings clarified that the program examined for this study improved well-being. The fact that the effects persisted for one month without diminution suggests the possibility of the program’s medium-term effects. The program is very simple and is easily incorporated into daily life without difficulty. Moreover, participants can feel its effects directly. We infer that the use of this program led to participants’ independent, continuous behavior modification and improved self-management and well-being.

Numerous reports have described that positive-psychological and self-compassion interventions reduce the level of depression [10]. Nevertheless, the program examined for this study showed no influence on the levels of depression. Because participants in this study had very low baseline depression scores and high levels of mental health, they might not have exhibited differences in those scores before and after implementing the program.

Self-management requires that a person make a habit of these program practices and that the person continues to use them. The rate of discontinuation of self-management programs that have been implemented to date is approximately 20%, which indicates that a certain number of dropouts can be expected to exist among the participants. Meaningful programs must be offered for participants. This study had one dropout (5%), which is a much smaller number than those reported from many earlier studies.

It has been pointed out that the elements necessary to continue self-management include the enhancement of social support and support systems and the Plan-Do-Check-Act cycle (self-monitoring and feedback, acquisition of skills, self-assessment) practiced by participants themselves [11]. This program had few dropouts, probably because we prepared a follow-up system by which questions related to the program were answered online, anytime, via e-mail or Zoom teleconferencing.

The reasons that this program produced immediate effects are inferred as the following. First, the program included content that boosted self-compassion and which actively fostered one’s positive emotions. Although the implementation period was short, just two weeks, as the program advanced, participants had fewer negative experiences and more positive experiences, including a decrease in negative emotions, an increase in positive emotions, and an improvement in self-respect. Those successful experiences might serve as self-feedback [12]. The second reason is the use of a recording sheet. In this program, participants wrote the content practiced and its effects on the recording sheet every day. By doing so, they made a habit of self-monitoring. Moreover, they were able to visualize connections between behaviors and results, which might have led to reinforcing the behaviors.

The study program effects persisted even one month after its implementation. The continuation of the program’s medium-term effects might be attributable to participants’ feelings of a virtuous cycle by having a perspective of finding good things in everyday life and a trend of being considerate to oneself and of emphasizing one’s strengths and practicing those strengths. The virtuous cycle of one’s entire life, in addition to one’s emotions, can engender further reinforcing behavior and can lead to improved self-management ability.

Because this study evaluated the results of a program implemented with 20 participants using before-and-after comparisons, this study was inadequate to identify a cause–effect relation. Future research must be undertaken to evaluate the cause–effect relation through randomized controlled trials. Still, participants felt well-being by implementing the self-management program (mind stretching) and incorporated the program into everyday life, which led to the reinforcement and continuation of the behaviors. The program can enable people to acquire skills for improving daily life. Moreover, independent self-management can enhance one’s feelings of well-being.

References


