



Original Article

Interpersonal counseling versus active listening in the treatment of mild depression: a randomized controlled trial

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Abstract. [Purpose] Healthcare workers, such as physical therapists, need to be equipped in dealing with patients' psychological problems. The three-session interpersonal counseling (three-session IPC) is a constructed counseling method that can be performed even by non-mental health professionals. This study examined the efficacy of the three-session IPC for treating depression. Immediate efficacy and efficacy up to 12 weeks post-intervention were examined. [Participants and Methods] In this randomized controlled trial of the two groups, one group (n=24) received the three-session IPC therapy (IPC group) while the other (n=24) received three sessions of active listening (active listening group). Depression was assessed using the Self-Rating Depression Scale (SDS) at baseline, post-intervention, and at 4, 8, and 12 weeks. [Results] There was a significant difference in total SDS scores between the IPC and active listening groups from baseline to 4 weeks after counseling, although no significant differences were observed at other time points. [Conclusion] The three-session IPC may be effective for 4 weeks after counseling. However, further studies are warranted in this regard.

Key words: Depression, Adolescent, Interpersonal counseling

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INTRODUCTION

In rehabilitation programs such as physical therapy, the psychological condition of patients can lower the effectiveness of treatment¹⁾, and there is a need to equip healthcare professionals such as physical therapists with tools to deal with the psychological problems of patients, even in the absence of clinical psychology specialists^{2, 3)}. In addition, in recent years, there has been a demand for physical therapists to improve their interpersonal skills in addition to their professional therapeutic skills⁴⁾.

An increase in sports injuries has been reported in the adolescent population represented by college students^{5, 6)}, and they often need to undergo physical therapy. In addition, college students often face numerous life challenges such as entering an unfamiliar environment, living independently, striving for good academic performance, and making career decisions⁷⁾. Although the prevalence of depression is high in their age group⁸⁾, they often do not meet diagnostic criteria⁹⁾ and may appear in physical therapy settings without receiving psychotherapy or other treatment.

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Interpersonal counseling (IPC) is a brief and structured psychological intervention adapted from interpersonal psychotherapy. IPC can be administered by various practitioners without a mental health background to treat patients with depressive symptoms¹⁰. IPC aims to develop and acquire practical coping strategies for current stress. In IPC, the onset of depression and its nature is identified to help the patient deal with the associated social and interpersonal issues as “problem areas” occurring “here and now”¹¹. Based on these characteristics, IPC is expected to be particularly effective for undergraduates who have inadequate coping skills for their numerous life challenges¹². The IPC is usually conducted once a week for a total of six to eight sessions, but these parameters can vary¹³. There is an IPC protocol consisting of three sessions (three-session IPC), which was developed as a cost-effective model to improve access to mental health services¹³. The three-session IPC could be highly practical and effective if integrated into physical therapy for adolescents who need physical treatment for depression.

There are some reports on the effectiveness of IPC for depression in adolescents¹⁴ and college students¹⁵. However, the only study on the three-session IPC is the pilot study conducted by us. This study suggested that the three-session IPC might be more effective than active listening immediately post-intervention for depression in undergraduate students, however, the long-term effects were not examined¹⁶. The purpose of this study was to examine whether the three-session IPC was more effective than active listening for treating depression in undergraduate students and how the effects would last by using a larger sample size.

PARTICIPANTS AND METHODS

This randomized controlled trial was performed from May 2016 to December 2020. This study was approved by the Kwansai Gakuin University Regulations for Research with Human Participants (Approval No. 2016-15) and complies with the Declaration of Helsinki.

After obtaining informed consent, eligible participants were assigned alternately in the order of registration to either the IPC or active listening group. The baseline evaluation was performed using the Zung Self-Rating Depression Scale (SDS) one week before the first session of IPC or active listening. SDS scores were evaluated immediately after IPC or active listening at 4, 8, and 12 weeks.

Participants were recruited at the Kwansai Gakuin University. Participation was voluntary, with absolutely no relationship between participation and class grades. The inclusion criteria were 1) undergraduate students aged 18–39 years at the time of participation, 2) those who subjectively complained of distress and depression regardless of the SDS score, 3) those who understood the purpose of the study and provided written consent, and 4) those who were physically and mentally able to receive counseling. The study was designed with 30 participants in each group (60 participants in total), which was calculated by setting a power of 80% based on a previous study¹⁶. However, there were only 54 participants during the recruitment period. Twenty-six and 28 participants were assigned to the IPC group and the active listening group, respectively. Six participants (two and four in the IPC and active listening groups, respectively) did not appear for their scheduled counseling sessions and withdrew from the study. All other participants were followed up for 12 weeks. Therefore, the final number of participants was 48 (24 in each group). [Figure 1](#) illustrates the study design.

In IPC group, three-session IPC was performed in accordance with the 2013 updated IPC manual¹³. Three 50-minute sessions were held weekly. The first session included discussions on the depressive symptoms of distress, and the problem area was identified. In the second session, the symptoms and problem areas were reviewed, and patients’ clinical needs and triage preferences were discussed. Subsequently, the strategies for dealing with the problem area were discussed, and role-play was conducted. In the third session, symptoms and progress with the resolution of problems were reviewed, and opinions at termination were discussed. In the active listening group, the active listening intervention also comprised three 50-minute sessions. In this study, active listening is a communication technique that involves careful and attentive listening to what the participant has to say, showing empathic understanding, giving positive attention to the participant, and revealing the true meaning of the content. IPC and active listening were provided by eight graduate students majoring in clinical psychology. They had participated in a training held by the Interpersonal Therapy Research Committee in Japan for at least one day but were not yet licensed clinical psychologists.

Depression was evaluated using the Japanese version of the SDS^{17, 18}. The reliability and validity of the SDS have been previously established¹⁷. The SDS comprises 20 items assessing a depressive state, each rated on a 4-point response scale (1=a little of the time, 2=some of the time, 3=a good part of the time, or 4=most of the time). The total score on the SDS ranges from 20 to 80, with higher scores indicating higher depression levels¹⁷. The total SDS scores (raw scores) were classified as normal (20 to 39), mild depression (40 to 47), moderate depression (48 to 55), or severe depression (≥ 70)¹⁸.

The efficacy endpoint was the difference between the IPC and the active listening groups in the change in total SDS score from the baseline to post-intervention and all other time points (4, 8, and 12 weeks). Safety was evaluated by adverse events.

All analyses were performed on a full analysis set. A mixed model for repeated measures (MMRM) analysis was performed. Model-based point estimates (i.e., least-squares means: LSM) and p-values were reported. An independent-samples t-test with Bonferroni correction was performed to compare the difference between the two groups in the change in total SDS score from baseline to each measurement point. We set a statistical significance level of 0.05 (two-tailed). All statistical analyses were performed using JMP Pro 16.1 (SAS Institute, Cary, NC, USA).

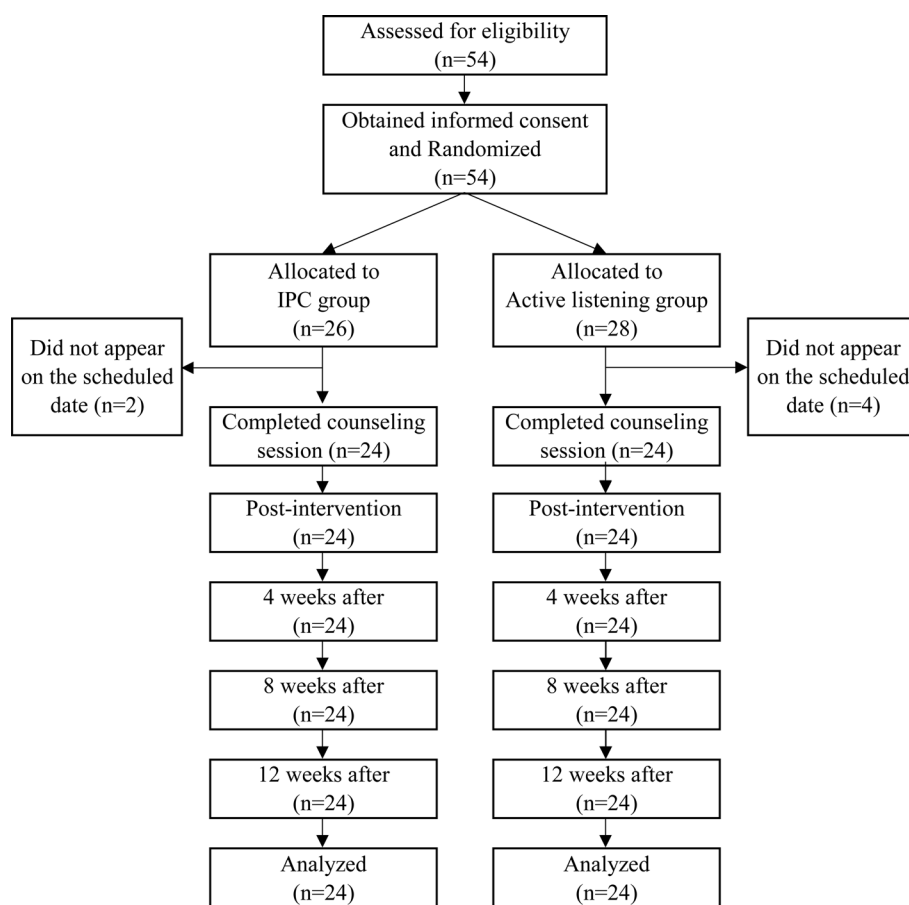


Fig. 1. Flow-chart of the participants throughout the study.
IPC: interpersonal counseling.

RESULTS

In this study, we examined whether the three-session IPC (n=24) was more effective than active listening (n=24) for treating depression in undergraduate students up to 12 weeks post-intervention. [Table 1](#) shows the characteristics of the participants. We observed no significant differences in the demographic characteristics between the two groups.

[Table 2](#) shows the change in the total SDS scores from the baseline to each point of measurement. Regarding the change from baseline to four weeks post-intervention, a significant difference was found between the two groups in the change of the total SDS score from baseline to four weeks after the counseling, and the decrease in the total SDS scores was greater in the IPC group than in the active listening group ($p < 0.05$). There were no significant differences between the IPC and the active listening groups in the change of the total SDS score from baseline to post-intervention, 8 and 12 weeks post-intervention. No adverse events were observed in either group.

DISCUSSION

To the best of our knowledge, this is the first study of the effect of three-session IPC up to 12 weeks after intervention in undergraduate students with mild depression. The result of the study showed that the three-session IPC might be more effective for mild depression than active listening from baseline to four weeks after counseling, however no significant differences were observed between the two counseling methods at other observation time points.

The results of this study showed that three-session IPC was more effective than active listening for depression only four weeks after counseling ended. We conclude that three-session IPC takes four weeks from the end of counseling to show the effect because participants apply the skills acquired through counseling to solve their daily problems. The present study did not support the result of the previous preliminary study that suggested an immediate post-intervention effect¹⁶. This suggests that, although some cases may show the effect immediately after three-session IPC, when considered as a whole, the effectiveness of overcoming active listening appears after a certain amount of time has passed rather than immediately after.

Table 1. Participant characteristics

	All	IPC group	Active listening group
Number of participants	48	24	24
Gender			
Male	11	6	5
Female	37	18	19
Age (years)			
Mean	20.29	20.21	20.38
SD	1.24	1.19	1.28
Recent stressor			
Interpersonal relationships	13	6	7
Schoolwork	14	6	8
Extracurricular activities	11	7	4
Anxiety about the future	3	2	1
Health problems	5	3	2
Job hunting	2	0	2
Total SDS score			
Mean	40.83	40.46	41.21
SD	6.50	6.54	6.44

No significant differences were identified between the IPC and Active listening groups. IPC: interpersonal counseling; SDS: Self-rating Depression Scale; SD: standard deviation.

Table 2. The change in total SDS scores from baseline

	The change in the total SDS scores from baseline			
	IPC group (n=24)		Active listening group (n=24)	
Time	LSM	SE	LSM	SE
Post-intervention	2.13	1.15	1.10	1.16
4 weeks after*	3.83	1.14	0.29	1.14
8 weeks after	2.81	1.15	2.46	1.14
12 weeks after	4.22	1.16	2.04	1.14

*A significant difference was observed between the IPC and active listening groups in the change of the total SDS score from baseline to 4 weeks after the counseling. SDS: Self-rating Depression Scale; IPC: interpersonal counseling; LSM: least-squares means; SE: standard error.

On the other hand, prior studies in primary care¹⁹⁾ and educational settings¹⁴⁾ have suggested the long-term effects of IPC, but this study did not show efficacy beyond eight weeks. This may be since the IPC conducted in this study was a three-session IPC, whereas previous studies have conducted IPC consisting of four to six sessions. Therefore, the effect of IPC may be sustained if several additional sessions are included after four weeks, and this should be verified as well.

This study has some limitations. We did not compare the efficacy of the three-session IPC with non-intervention. The three-session IPC might have an effect compared to non-intervention immediately after the counseling up to 12 weeks. Randomized controlled trials with non-intervention will be also necessary. In addition, this study did not include young adults undergoing physical therapy but general students. It would be desirable to examine the effects of IPC by physical therapists on the psychological problems of patients who need physical therapy. Although this study has some limitations, three-session IPC may be easier for non-mental health specialists such as physical therapists to practice than active listening to deal with patients' psychological problems. There is a possibility that IPC conducted by physical therapists could motivate patients with psychological problems to engage in physical treatment.

In conclusion, three-session IPC might be more effective for mild depression in adolescents than active listening four weeks after counseling. A comparison with the non-intervention group and examination of the effects of three-session IPC by physical therapists on students who need physical therapy also necessary.

Conference presentation

A part of the study was presented at the 16th annual meeting of the Japanese Society of Mood Disorders (July 5 and 6, 2019; Tokushima, Japan), 17th annual meeting of the Japanese Society of Mood Disorders (January 25 to 31, 2021; web), 18th annual meeting of the Japanese Society of Mood Disorders/ 21st annual meeting of the Japanese Association for Cognitive Therapy (July 8 to 10, 2021; web), 19th annual meeting of the Japanese Society of Mood Disorders/ 5th annual meeting of the Japanese Association of Rework for Depression (July 14 to 17, 2022; web).

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Conflicts of interest

The authors declare that there is no conflict of interest regarding the publication of this article.

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