

A Mindfulness Program

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A lot of research going on the topic of mindfulness more and more scientific articles and results are appearing. Parallel, the method is already used in many hospitals, schools and workplaces. The technique itself can be traced back to Buddhism, where it has been used by humans for more than two and a half millennia. In Buddhism, the fact and treatment of suffering is completely different than in the Western thinking. This different interpretation of suffering, its basic ideas and techniques were used by Jon Kabat-Zinn (American Professor of Medicine, received his Ph.D. in molecular biology). His name is associated with the spread of mindfulness in the Western world. In 1979, following the success of his research, he established a Stress Reduction Clinic, where he began to apply the Mindfulness-Based Stress Reduction Method (MBSR), he had developed. The developed method is free from all kinds of philosophical and religious content.

Its essence is a conscious awareness in the given moments which in one means acceptance and a nonjudgmental attitude, furthermore the development, maintenance and application of this vision in moments of life. It is also a way inwards, a better understanding and acceptance of ourselves and others. This means openness to finding beauty and meaning in the tiny consecutive moments of life, in the present.

At the level of consciousness, is a stairway that can see the world in a different, more pleasant, enjoyable color, a pair of glasses through which everything looks a little better. The need for contemplative knowledge has traversed not through a new era, but has traversed the entire history of mankind, in a true undulating way, where it appears more strongly and where it is pushed into the background.

Outline the purpose of the study

This preliminary study, examine the impact of the mindfulness meditation technique on psychological well-being and psychological flexibility. To conduct the preliminary research, I ran a 10-week mindfulness program. Pretest-posttest design was used, to show the changes.

The goal was to examine the impact of a 10-week mindfulness program on psychological well-being and psychological flexibility, furthermore gathering preliminary data and experience for a planned research. Psychological well-being was measured using the Depression, Anxiety and Stress Scales (DASS).

A lower value on this scale indicates a higher level of psychological well-being and a higher value indicates a lower level of psychological well-being. Psychological flexibility was measured using the Acceptance and Action Questionnaire (AAQ-II). Achieving a higher score for this questionnaire reflects greater psychological flexibility.

The results of the preliminary research on the subject are very encouraging. Bishop et al. (2004) reports the following effects of mindfulness: increased awareness decreased emotional distress, and maladaptive behavior. It increases emotional well-being as well as mental and spiritual health.

Methodological objective is to examine the internal consistency of the used measuring instruments: AAQ-II and DASS-42 scale. Another goal is to introduce participants to a program that can increase psychological flexibility and subjective well-being.

Description of the Preliminary Research

Participants, experimental persons

A total of 10 persons participated in the preliminary research. Regular participation on the 10-week mindfulness program was a condition. In terms of education, graduation was compulsory, but the majority of participants graduated from university. The lower age limit was 20 and the upper 60 years. In terms of gender distribution, the group included 3 men and 7 women. The mean age of participants in the 10-week mindfulness program was 40.50 years. Individuals with a clinical history were excluded from the study. The 10 participants participated in the experiment voluntarily, no reward was promised for their participation.

Table 1. Data from preliminary study participants

<i>Group</i>	<i>Average age</i>	<i>Man</i>	<i>Woman</i>	<i>All</i>
Meditation group	40,50	3	7	10

Tools used in preliminary the research

To measure the results, I used direct questionnaire data collection. Acceptance and Action Questionnaire, AAQ-II, Bond, Hayes, Baer, Carpenter, Orcutt, Waltz and Zettle. The questionnaire is designed to measure individual differences in psychological flexibility. AAQ-II is a 10-item, self-characterizing scale with a 7-point answer option. For items 2, 3, 4, 5, 7, 8, and 9, reverse scoring is used. In the result, a higher score indicates a higher level of psychological resilience. To determine the reliability of the questionnaire, I used the Cronbach's alpha coefficient. Chronbach alpha .80.

Depression, Anxiety and Stress Scales, DASS-42 (Depression Anxiety Stress Scales), Lovibond and Lovibond. The scale is designed to measure three very close negative emotional states: depression, anxiety, and stress. The scale consists of 42 items with a 4-point answer option. It consists of three self-characteristic subscales, each of which contains 14 items. For all three subscales, a higher score indicates higher levels of anxiety, stress, and depression. I also used Cronbach Alpha to check the reliability of the questionnaire. Chronbach's alpha for depression subscale.93; anxiety subscale .80 and stress subscale.86.

The procedure used in the preliminary research

The meditation group had two test periods, a pre-test and a post-test period, before and after the 10 week mindfulness program. At the beginning of the preliminary research, was held a 30-minute presentation (outlined the course of the research, the frequency of planned encounters, the duration of the one-off encounter, and a brief introduction to the mindfulness technique). Then the pre-test was recorded (AAQ-II and DASS-42). This was followed by a 10-week meditation program. There was once a joint meditation, its duration was around 25-30 minutes. A guided meditation was used in the intervention. During the penultimate meditation, self-suggestion cards were distributed. The self-suggestion sheet contained the more important thoughts used in meditation. The sheet, designed to take participants home and read and become aware of these thoughts at least once every day (preferably in the morning). After the tenth week of meditation, a post tests (AAQ-II and DASS-42) was performed.

The Hypothesis of the preliminary research:

Meditation increases psychological flexibility and psychological well-being. I. Among participants in the 10-week meditation program, we will observe higher levels of psychological flexibility and psychological well-being (lower values of depression, anxiety, and stress, on the DASS scale) compared to the pre-meditation state.

Expected results

Based on the hypotheses, our expectation would be to find a higher value of psychological well-being and flexibility after the 10-week meditation in the posttest results.

Presentation and interpretation of results

A t-test was used to examine the effect of the intervention (meditation). Let's look how the values of the mindfulness group changed during the research. Using a paired t-test, we compared the pre-test results of the group with the results of the post-test to determine the change in the psychological well-being and psychological flexibility of the group members, which the 10-week meditation used brought. Let us first look at the values of the depression subscale of the DASS questionnaire. The data in Table 2. indicate that the posttest has much lower scores on the depression scale than the pretest.

Table 2. Comparison of pretest and posttest results of the mindfulness group

	<i>Participants</i>	<i>Average</i>	<i>Variance</i>	<i>Paired t-test</i>	<i>Significance</i>
DASS – depression subscale					
Pretest	10	11,50	7,52	2,79	0,02
Posttest		6,20	5,03		
DASS – anxiety subscale					
Pretest	10	6,50	5,04	2,88	0,02
Posttest		2,30	2,26		
DASS –stress subscale					
Pretest	10	16,00	5,19	6,61	0,00
Posttest		8,00	4,94		
DASS – all					
Pretest	10	34	10,38	4,59	0,00
Posttest		16,5	14,48		
AAQ-II					
Pretest	10	45,20	8,92	-2,22	0,05
Posttest		52,90	7,00		

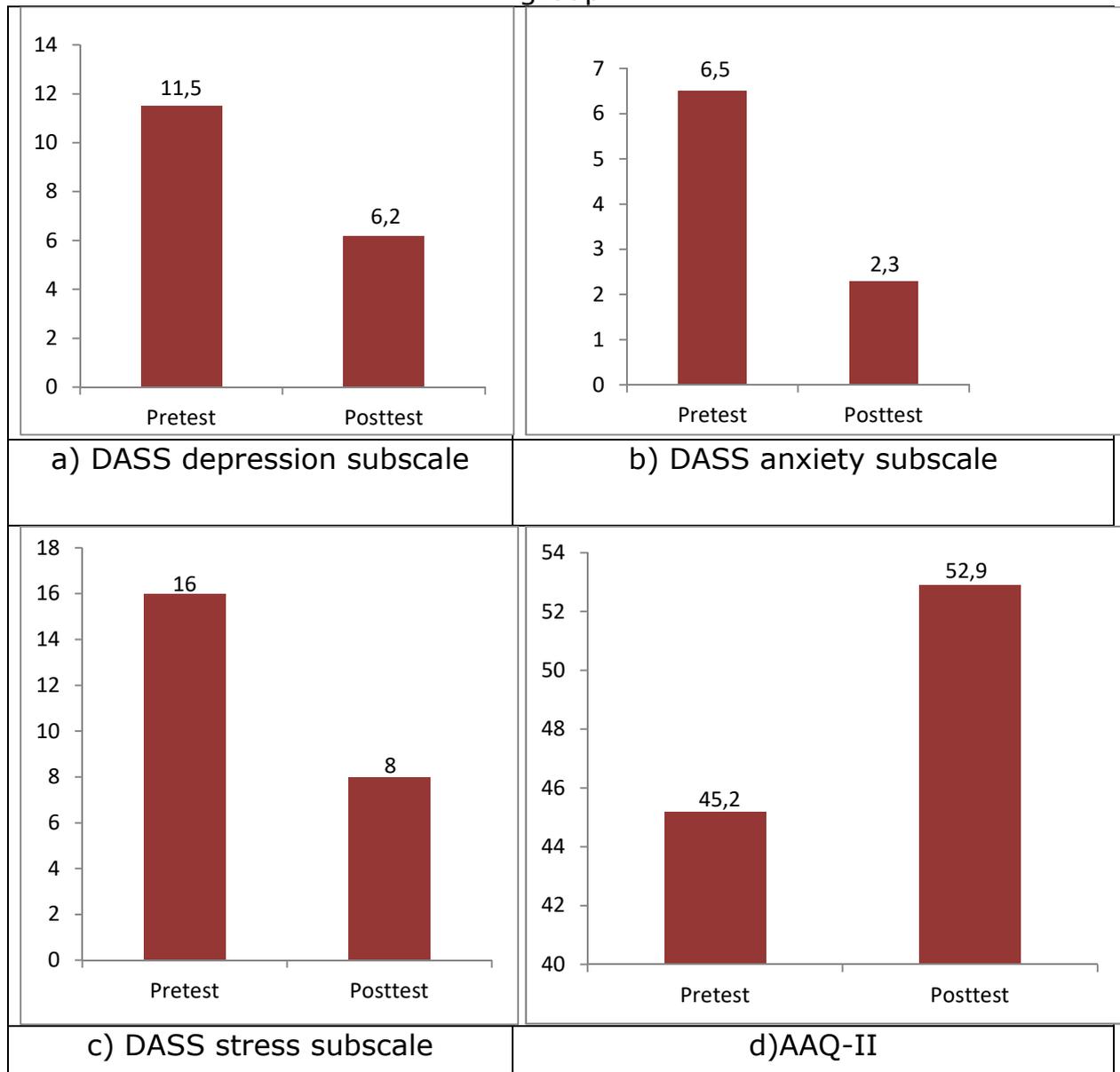
That is a large shift towards psychological well-being can be observed (indicated here by the low score on the depression subscale). This difference is also statistically significant.

Examining the values of the anxiety subscale of the DASS questionnaire, we can also discover a large change. Compared to pretest, anxiety values are much lower in the posttest. The fact that there was indeed a significant decrease is emphasized by the statistically significant difference ($t = 2.88$; $p = 0.02$).

The third subscale of the DASS questionnaire, stress, shows the largest change. The stress levels of individuals in the mindfulness group were halved.

The change in DASS questionnaire scores used to examine the level of psychological well-being shows that individuals in the mindfulness group made a significant shift toward higher psychological well-being. Because they scored lower on the Depression, Anxiety, and Stress Scale, they have higher psychological well-being rates. We can also see that the total score of the DASS questionnaire was significantly lower in the posttest compared to the pretest. The changes in the group are well illustrated in Figure 1. Graphs.

Figure 1. Comparison of pretest and posttest results of the mindfulness group



The change in psychological flexibility is indicated by the analysis of scores obtained for the other questionnaire, AAQ-II. Compared to the pretest, individuals in the mindfulness program achieved higher values in

the posttest. The values of psychological flexibility also showed a statistically significant increase.

Thus, we can see that the participants in the 10-week mindfulness program showed a significant improvement in all three indicators of psychological well-being: their depression, anxiety, and stress values were better than they were at the beginning of the research, and there was a significant increase in psychological flexibility.

Therefore the summary of the results discussed above is: among participants in the 10-week mindfulness program, all three indicators of psychological well-being changed in a statistically significant positive direction.

As far as psychological flexibility is concerned, there was a statistically significant increase here, a change in a positive direction. Thus, there was a statistically significant positive change compared to the pretest.

Conclusions and discussion

After the 10-week meditation intervention, we experienced higher values of psychological well-being and psychological flexibility among the participants. The positive effect of meditation on the four factors is well illustrated. The hypothesis of the preliminary research was confirmed, with a significant change in depression, anxiety, and stress factors. All three indicators showed a large improvement. Participants were scoring lower in the posttest, on the scale of depression, anxiety, and stress, which in our case indicates higher psychological well-being. The most significant change occurred for the stress factor. As previous research has shown, full consciousness meditation results in a more adaptive response to stress.

William et al. (2001) in a controlled trial where they used a wellness-based mindfulness stress reduction intervention, found a reduction in stress and an increase in psychological well-being. The method Mindfulness Based Stress Reduction (MBSR) launched by Kabat-Zinn also supports this. Of the three factors, which determine the psychological well-being, stress is the one that is most easily to be modified. Depression and anxiety, however, are much harder to modify. Williams et al. (2001), describe that in the case of recurrent depression, the connections between behavior, thinking, and mood are tightly bounded, and they have strong connectivity which is established in the brain. Patients who have experienced already episodes of major depression have a heightened cognitive vulnerability and this can lead more easily to a relapse. This cognitive vulnerability is proposed to be a consequence of increased connectivity between depressed mood and depressive cognition (Kuyken et al., 2012; Segal et al., 2013). Of course, these connections are not so strong in a healthy population, but we can talk about a similar process, in this case as well. There are stiffnesses between thinking, behavior, and mood. The rupture or rewriting of these stiffnesses, between behavior, thinking, and mood takes longer, but the effectiveness of meditation in

rewriting them is very spectacular. Bishop et al. (2004) propose a two-component model of mindfulness. One element of this is self-regulation of attention. This involves maintaining attention, concentrating on one thing. It is a kind of focused attention to the present, and it also includes the flexibility of attention, the ability to switch. In this sense, we divert the stray attention back to the present, to the moment we are in. As much as possible, we direct our attention to the here and now, and we try to maintain this state for as long as possible and extend it to all our actions so that we can live each moment more fully. What else includes self-regulation of attention is a kind of presence in the moment that is not evaluative, free from value judgment, living events rather than evaluating them. Another element of the model is openness to experience. This includes curiosity and acceptance. This two elements mainly affects the development of psychological flexibility.

Both elements proposed from Bishop et al. (2004) are very effective to break the close bond that was formed during the Depression between behavior, thinking, and mood. When vigilance is exercised, thoughts and feelings appear only as vanishing events on the horizon of consciousness.

They just come and go. They hadn't been there in the previous moment, and in the next one they were already far away and more were coming instead. This is the true nature of thoughts and feelings. They are only contemplated, and that is why they do not have such a great impact on us. This kind of perspective creates a kind of distance from this feelings and thoughts, between perception and response. This perspective allows that the strong connections between behavior, thinking, and mood to be broken and new more adaptive connections to emerge. As acceptance and openness increase, Costa and McCrae's (1987) research suggests that over time, a curious and accepting attitude towards new events develops a kind of open acceptance. By increasing acceptance, it is easier to cope with unwanted, unpleasant personal experiences.

The hypothesis of the preliminary study was confirmed, also with regard to psychological flexibility. We also measured a significant positive change in the case of the flexibility factor, in the posttest, compared to the pretest. We can say that members of the mindfulness group gained significantly higher psychological flexibility as a result of the intervention, starting from a lower psychological resilience value. So, in terms of psychological flexibility, we can also say that it has changed in a positive direction as a result of the meditation program.

The interaction of the factors is not negligible either, psychological well-being is accompanied by higher psychological flexibility, and conversely, lower results of psychological well-being suggest a lower level of flexibility.

We have successfully achieved our methodological objective. Examination of the internal consistency of the measuring instruments used, performed For AAQ-II, Chronbach alpha .80. On the DASS-42 scale, the following results were obtained: Chronbach alpha, for the depression subscale.93; anxiety subscale .80 and stress subscale.86. The results reflect high internal consistency.

Our practical goal is to introduce participants to a program that can increase psychological flexibility and subjective well-being is fully realized. Not only have the results of the research, indicate the same, but also the short reports from the participant. Participants in the meditation program will continue to use the technique and will apply, in their everyday lives, the benefits of the meditation technique.

One of the shortcomings of the research is that we don't use a control group. Furthermore, regarding the gender distribution of participants, it should be noted that it was not possible to recruit an equal proportion of female and male participants in the meditation program. Would have been more expedient, to distribute already from the second week, the self-suggestion cards. Each week, participants could have received an important idea related to the topic, which they could have repeated on every day and tries to apply throughout the week.

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