

Předběžná sdělení

SHORT ONLINE COMPASSIONATE INTERVENTION BASED ON MINDFUL SELF-COMPASSION PROGRAM

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ABSTRACT

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Objectives. The Mindful Self-Compassion (MSC) program is an empirically-developed group intervention aimed to cultivate self-compassion.

Sample and setting. A randomized control trial was conducted with pre-, post-measurements, and two-month follow-up. A total of 122 participants were recruited from a general community by convenience sampling. They were randomly allocated to the Compassionate intervention (CI) based on MSC and to a control condition with no treatment.

Hypotheses. The authors hypothesised that participation in the CI based on the MSC would decrease self-criticism and increase self-reassurance and self-compassion.

Statistical analysis. SPSS Statistics-20, program R, and the package nparLD for the statistical analysis. Non-parametric rank-based test for longitudinal data (pretest-posttest design) was employed.

Results. This version of the CI based on the MSC significantly increased levels of self-compassion and self-reassurance as reported immediately post intervention and at two-month

follow-up. The CI based on the MSC was also effective at reducing self-uncompassionate responding, which was only present immediately post intervention. Self-compassion is responsive to improvement following a short-term online intervention of CI based on the MSC which suggests that interventions designed to increase self-compassion can be provided online to broader populations without direct involvement of mental health professionals.

Study limitation. Participants allocated to the CI were not exposed to the full experience of the MSC but only to a selected number of exercises from the MSC program.

key words:

self-compassion,
self-criticism,
Compassionate intervention,
Mindful Self-Compassion Program,
randomized controlled trial

klúčové slová:

sebasúcit,
sebakritickosť,
súcitná intervencia,
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INTRODUCTION

The aim of this research study was to explore the efficacy of a short-term, online Compassionate Intervention (CI) using exercises from the Mindful Self-Compassion Program on self-compassion, self-reassurance, and self-criticism in a non-clinical population.

Recent years have seen an increase in interest in compassion, self-compassion, and self-criticism. Neff (2003a, 2003b) referred to self-compassion as the ability to recognise and be motivated to alleviate one's suffering whilst mindfulness is referred to as being attentive to the present moment and experiencing the moment with an open and accepting stance (Bishop et al., 2004). Research suggests that self-critical people have difficulties with self-compassion, self-soothing and self-warmth (Gilbert, 2010) and therefore self-criticism can be reduced by learning compassion and self-compassion. Self-criticism is, according to Blatt and Homann (1992, p. 528), "constant and harsh self-scrutiny and evaluation and a chronic fear of being disapproved of or criticized, and of losing the approval and acceptance of significant others".

Literature in the field of compassion and compassion-based interventions has exponentially grown over the past 20 years resulting in several meta-analyses assessing the relationship between self-compassion and health, with well-being on one hand and psychopathology on the other hand (Macbeth & Gumley, 2012; Kirby, Tellegen, & Steindl, 2017; Zessin, Dickhäuser, & Garbade, 2015). Together, these meta-analyses reviewed 116 papers, included 24,077 participants and demonstrated that there is a strong negative relationship between self-compassion and psychopathology (Macbeth & Gumley, 2012), and a strong positive relationship between self-compassion and well-being (Zessin, Dickhäuser, & Garbade, 2015) and that compassion-based interventions have a significant effect on compassion, self-compassion, mindfulness and well-being (Kirby, Tellegen, & Steindl, 2017). Evidence from studies document the benefits of cultivating compassion and self-compassion and thus encouraging future research to develop and explore efficient and cost-effective methods of teaching people to be self-compassionate in order to improve their health and well-being.

The Mindful Self-Compassion (MSC) program

The Mindful Self-Compassion (MSC) program was developed by Neff and Germer (2013; Germer & Neff, 2013) as a method to cultivate the skills of self-compassion in clinical as well as nonclinical populations. The program involves performing in-class exercises of formal (e.g. loving kindness meditation) and informal (e.g. when distressed placing own hand on own heart and repeating self-compassionate words) practices. In this program, participants meet for 2-2.5 hours once a week for eight weeks; practice home exercises on a daily basis and have the option to attend a half-day silent meditation retreat. Although the program is called the Mindful Self-Compassion program, MSC mainly focuses on teaching self-compassion skills (Neff & Dahm, 2014) with only one session dedicated to teaching mindfulness.

The impact of MSC on self-compassion and other variables

Several studies have explored the effectiveness of MSC on self-compassion. In a pilot study of the MSC, Neff and Germer (2013) found increases in self-compassion, mindfulness and well-being in an adult community. The pilot study ($N = 21$) was followed by a randomised control trial ($N = 25$) which compared the MSC to a waiting list control group (Neff & Germer, 2013). Similar to the pilot study, participants of MSC reported significantly larger increases in self-compassion, mindfulness, and well-being

compared to the control group and these improvements were evident at six-month and one-year follow-ups. In light of continuing discussion regarding the use of the total score of the SCS (Neff Neff, 2003a, 2016) reanalysed the RCT data (Neff & Germer, 2013) to explore the impact of MSC on the six subscales or possibly two distinct factors of self-compassionate and self-uncompassionate responding. The secondary analyses revealed that MSC not only increased self-compassionate responding but also decreased self-uncompassionate responding.

The original study by Neff and Germer (2013) led to various adaptations to the intervention. Smeets, Neff, Alberts and Peters (2014) compared the effect of a shortened three-week MSC program ($N = 27$) to a management skills training program on increasing resilience and well-being of university students. The findings highlight that cultivating self-compassion predicts an increase in self-compassion, mindfulness, optimism and self-efficacy.

A further adaptation was by Albertson, Neff and Dill-Shackleford (2015) who designed a three-week online-based program consisting of three guided meditations taken from the MSC to improve women's body satisfaction. The study reported that the MSC group ($N = 98$) reported a significant reduction in their level of dissatisfaction with their body, their sense of shame for their bodies, and a significant increase in their self-compassion compared with a waiting list control group. A three-month follow-up also revealed that these effects were maintained longitudinally, using the two-factor model of the SCS. The findings also revealed that whilst the MSC reduced self-uncompassionate responding, it also improved self-compassionate responding (Albertson, Neff, & Dill-Shackleford, 2015).

Bluth and colleagues (Bluth et al., 2016) tested the feasibility and acceptability of a six-week MSC program designed for teenagers ($N = 34$). The study demonstrated that participating in an MSC program resulted in significantly higher levels of self-compassion, life satisfaction, mindfulness, and lower levels of depression and anxiety compared to those who did not complete MSC exercises. These findings are supported by a more recent study which showed that adolescents who completed an eight-week MSC course ($N = 47$) reported significant increases in self-compassion as well as resilience and positive-risk taking and significant decreases in stress (Bluth & Eisenlohr-Mohl, 2017).

The effectiveness of the MSC in improving self-compassion and psychopathology in a clinical sample has also been explored. Friis, Consedine, Cutfield and Johnson (2016) compared the impact of a standard eight-week MSC program with a waiting list control on self-compassion and distress in a group of diabetic patients. The results showed that participants who completed the MSC program ($N = 32$) reported higher levels of self-compassion and a clinically significant decrease in depression and diabetes distress compared with those in the control group. Importantly, these effects were present three months post intervention. Similarly, these findings were replicated using a videoconference version of the MSC with young survivors of cancer (Campo et al., 2017). The MSC program was delivered as a weekly 90-minute group video-conference session over eight weeks. As a result of the intervention, improvements in self-compassion and other psychosocial outcomes such as depression, anxiety, body image and resilience were reported by participants (Campo et al., 2017).

Most recently, Finlay-Jones, Xie, Huang, Ma, and Guo (2018) analysed the impact of the standard version of the MSC on Chinese women ($N = 35$) without control group. Participants reported significant effects of the intervention on self-compassion, compassion, fears of self-compassion, rumination, depression, anxiety, and stress, which were still present at three-month follow-up.

To our knowledge, no research to date has explored the impact of MSC or a Compassionate Intervention based on its exercises on the level of self-criticism although it is hypothesised that increasing self-compassion might decrease self-criticism (Gilbert & Procter, 2006).

Aims

The primary aim of the current study was to evaluate the immediate and longer-term impact of a 14-day compassionate online-based intervention based on exercises from the MSC program on self-compassion, self-criticism, and self-reassurance in a non-clinical population.

METHODS

Measures

Self-criticism/reassurance was assessed using the Forms of Self-Criticism/Reassuring Scale (FSCRS; Gilbert et al., 2004). The FSCRS is a 22-item measure comprising a selection of positive and negative statements rated on a 5-point Likert scale (“Not at all like me” to “Extremely like me”). Positively formulated items reflect the ability to self-reassure (referred to as reassured self) and negatively formulated items indicate self-critical thoughts and feelings (split into subscales of inadequate self and hated self). This scale has been validated in various research studies in different countries (e.g. Castilho, Pinto-Gouveia, & Duarte, 2015; Halamová, Kanovský, & Pacúchová, 2017; Kupeli et al., 2013). According to these studies, FSCRS has good reliability and validity features. In this study we used Slovak version of the FSCRS (Halamová, Kanovský, & Pacúchová, 2017) which was back-translated and has been shown to have good psychometric properties. Reliability for the subscales of Slovak FSCRS ranged from 0.75-0.85 for Cronbach alphas (Halamová, Kanovský, & Pacúchová, 2017) and its three-dimensional structure was confirmed.

Self-compassion was assessed using the Self-Compassion Scale (SCS; Neff, 2003a). The SCS measures six components of self-compassion experienced during perceived difficulty. The scale consists of 26 items rated on a 5-point Likert-type scale (1 = almost never; 5 = almost always). The scale consists of six subscales that measure the degree to which individuals display self-kindness against self-judgment, common humanity versus isolation, and mindfulness versus over-identification. Recent studies demonstrated that negative and positive subscales of SCS should be calculated separately and should not be summed as a single score (e.g. Brenner et al., 2017; Halamová, Kanovský, & Pacúchová, 2018; López et al., 2015; Muris & Petrocchi, 2017). According to these studies, SCS has good reliability and validity features. We used the Slovak version of the SCS (Halamová, Kanovský, & Pacúchová, 2018), which was back-translated and was found to have good psychometric properties. Reliability for the subscales of Slovak SCS ranged from 0.68-0.86 for Cronbach alphas (Halamová, Kanovský, & Pacúchová, 2018). According to the results of factor structure of the Slovak version of SCS, the scale consists of two subscales: Self-Compassionate Responding and Self-Uncompassionate Responding.

Recruitment procedure

Participants were recruited from the general community through social media, social networking sites and health and well-being forums. As a gesture of gratitude, those who completed the study were entered into a prize draw to win an electronic tablet. The data collected was in accordance with the ethical standards of the institutional

research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Participants

A total of 122 participants completed the pre-intervention measures with consent form and from this sample, 69 were randomly allocated to the intervention group and 53 were assigned to the control condition (see Figure 1 for study attrition information). Once the participants completed the pre-intervention measures, to enable equal allocation into the two conditions, the first ten participants were allocated to the intervention condition and the next set of eight participants were allocated to the control condition. This was done until all participants were allocated to the two conditions. From this sample, 36 participants from the intervention group and 23 participants from the control group completed the post-intervention measures. Out of the 36 participants assigned to the MSC group, 34 completed the two-month follow-up and 20 of the 23 participants of the control group completed the follow-up measures. The final control group consisted of 17 women and 3 men with a mean age of 25.35 years ($SD = 6.32$) and the intervention group consisted of 27 women and 7 men with mean age of 32.24 years ($SD = 10.44$).

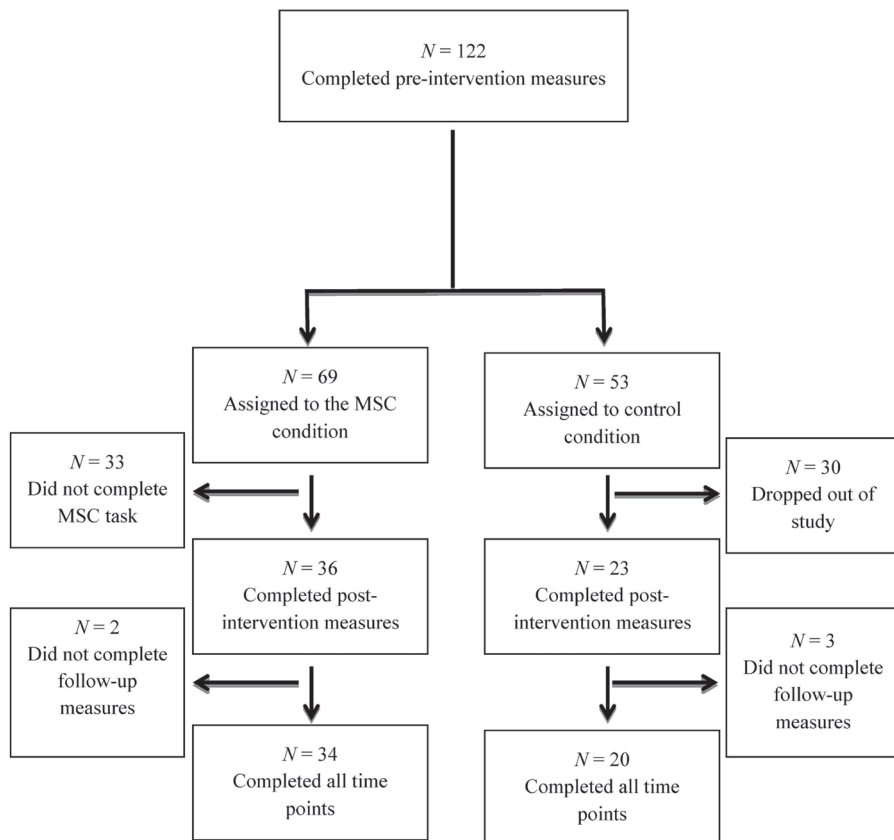


Figure 1 Flow chart for the number of participants who completed each phase of the study and attrition

Procedure

All participants completed demographic information and baseline measures and were then allocated to the intervention and control groups. The control group was not provided with any additional instructions until 14 days after completion of the baseline measures when participants received an email to a link to the online self-report measures and this process was repeated for the two-month follow-up.

Participants assigned to the MSC condition were instructed to complete a daily MSC exercise for 14 consecutive days and spend at least 15 minutes per day practicing each exercise. Each participant assigned to the intervention group received an email prompting them to complete the MSC task and each participant received the same exercise each day. Each email was presented in the same format which consisted of a short introduction in the form of psychoeducation which explained the intended impact of the exercise in order to motivate participants to do the task, the exercise itself, and questions about the exercise practiced designed to encourage participants to reflect on the experience. The additional function of the worksheets following each exercise was to check if participants performed the exercise and it included the same four free-text response items after each exercise:

1. How did you find completing the exercise? (general feedback about the exercise)
2. How did you feel about it? (emotion related feedback)
3. What did you realize during this exercise? (cognition related feedback)
4. What do you take from this exercise into your everyday life? (behavior related feedback)

If the participant had not completed the exercise till the evening, they were sent an email reminder.

The tasks were selected from a selection of different exercises available from previous publications on MSC (e.g., Germer, 2009; Neff, 2011; Neff & Germer, 2013; Rockman & Hurley, 2015). Each exercise was selected by consensus of our research team using the criteria of representativeness of the MSC and the expected motivation of participants to complete them. The intervention was accessible on any computer or smartphone via a link accessed through the email. The exercises selected and presented to participants in the following order were, "How Would You Treat a Friend?", "Self-compassion Break", "Affectionate Breathing", "Loving Kindness Meditation", "Compassionate Letter to Myself", "Compassionate Body Scan", "Compassionate walking", "Discovering Core Values", "Labelling Emotions" and "Soften, Soothe, Allow", "Working with Shame", "Letting Go of Resentment", "Forgiveness – Self and Other", "Compassionate Friend" and on the final day, they were instructed to create a list of things about themselves that they really liked or appreciated in the "Appreciating Yourself" exercise. Following the final exercise, participants were instructed to complete the post-intervention measures and this was repeated at the two-month follow-up.

Data analyses

We used SPSS Statistics-20, program R (Version 3. 4. 0, R Core Team, 2017), and the package nparLD (Noguchi et al., 2012) for the statistical analysis. First of all, we assessed possible differences between completers and non-completers on pretest scores. Furthermore, an analysis of the baseline differences between the three conditions for age, sex and previous experience with meditation or mindfulness, or psychotherapy was conducted. For the main statistical analysis, factorial designs of this type (split-plot design) are usually analysed by means of parametric procedures (ANOVA, paired t-test). However, the assumptions of parametric methods such as homoscedasticity, normality, or absence of outliers are seldom met in practice. Many classical non-pa-

rametric alternatives (Wilcoxon-Mann-Whitney test, Kruskal-Wallis test, Wald-type statistics) perform poorly for small sample sizes, heteroscedasticity and unbalanced designs (when control and experimental sample sizes differ) (see Brunner, Munzel, & Puri, 1999; Brunner, Domhof, & Langer, 2002; Brunner et al., 2016). Mathematically, the dependent variables are raw scores of ordinal items, thus normal distribution cannot be assumed (in fact, many of the variables display non-normal distribution in Shapiro-Wilk tests). Moreover, our intervention design practically excludes equal variances of control and experimental groups (see Tables 2 and 4). Therefore our data are heteroscedastic, as it should be taken into account that the intervention usually decreases variance in the group. There are well-justified statistical reasons to use non-parametric heteroscedastic methods for our statistical analyses. We used non-parametric rank-based test for longitudinal data (pretest-posttest design). This test was specifically developed to deal with factorial experiments. We will report ANOVA-type statistics (Brunner et al., 2016) from this non-parametric rank-based test for longitudinal data, and relative effects which can serve as effect size measures. The relative effect can be regarded as the probability that a randomly chosen observation from the treatment group takes on larger values than an observation randomly chosen from the mean distribution function. Therefore a relative effect significantly higher (for increasing effect) or lower (for decreasing effect) than 0.50 indicates that an intervention was effective. ANOVA-type statistics (ATS) performs well even for small sample sizes and unbalanced designs (Brunner, Domhof, & Langer, 2002).

In most cases when a split-plot design with repeated measures is conducted, it is mainly of interest to investigate an interaction between groups (factor G) and time (factor T). In our split-plot design, there is a control group without intervention (group 1) and the active intervention is given to an intervention group (group 2), therefore the distribution functions at the start of the trial (time point 1) are identical because the participants were randomly assigned to the two groups of factor G. Then, an effect of the active intervention will produce non parallel time curves of the measurements. This means that there should be a significant interaction between factor G and factor T if the intervention is effective. We hypothesize that our intervention will be significantly effective if and only if the interaction between group (control vs. intervention) and time (three time points) is significant: therefore the significant difference between control and experimental group or between time points alone will not suffice for the purpose of this study. Main factorial effects (difference between groups regardless of time, or difference among time points regardless of groups) are not of interest in the present study, so we will not report these.

RESULTS

To confirm that the random allocation of participants was successful, we computed preliminary analyses to check for possible differences in the pre-intervention scores between completers and non-completers, control and intervention groups, gender and age. Since distributions and variances of groups are almost equal, we can use the non-parametric Wilcoxon-Mann-Whitney test for group comparisons (completers/non-completers, control/experimental, gender), and nonparametric Spearman correlations for comparisons of age and outcome variables. There were no significant differences between completers and non-completers on pre-test scores (p-values ranged between 0.13-0.79 for SCS variables and 0.42-0.71 for FSCRS variables). For the difference between control and experimental group, results showed that the two groups did not differ on any of the variables of interest (p-values ranged between 0.08-0.64 for SCS variables and 0.11-0.60 for FSCRS variables). For the difference between gender

groups, results showed that there was no significant difference on any of the variables of interest (p-values ranged between 0.23-0.92 for SCS variables and 0.66-0.99 for FSCRS variables). There was no significant correlation of age and any of variables of interest on pre-test (Spearman's rho ranged between -0.19-0.08, and p-values ranged between 0.18-0.97 for SCS variables; Spearman's rho ranged between -0.07-0.12, and p-values ranged between 0.39-0.93 for FSCRS variables).

Only one participant (randomly assigned to the control group) declared previous experience with MBSR, and only two other participants declared previous experience with a compassionate intervention (one of them was randomly assigned to the control group, another to the experimental group). Therefore, their influence on outcome variables is statistically negligible.

There was a significant effect of the intervention on the SCS scale, but this effect was only significant for the total score and positive items (Table 1). The intervention did demonstrate some effect on the negative items, but this effect was only present immediately post-intervention and not evident at the two-month follow-up. Relative effects with their confidence intervals for each group and time point (Table 2) allow a more detailed insight: for example, if we compare relative effects on positive items (Figure 2) with negative items (Figure 3), we can clearly see the significant and persistent change on Figure 2, which presents the effect of the intervention on the positive variables of the SCS and some effect of the intervention on the negative items but this effect diminishes by the two-month follow-up as seen in Figure 3.

Table 1 Results for interaction effects of the SCS scale

	ATS		
	F	df	p
SCS sum score	5.52	1.87. ∞	0.005*
SCS positive	4.87	1.90. ∞	0.009*
SCS negative	2.14	1.93. ∞	0.120
SCS self-kindness	3.95	1.92. ∞	0.021*
SCS self-judgement	2.66	1.85. ∞	0.098
SCS common humanity	8.61	1.91. ∞	0.001*
SCS isolation	1.55	1.71. ∞	0.215
SCS mindfulness	7.61	1.90. ∞	0.001*
SCS over-identification	2.93	1.97. ∞	0.073

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, SCS – The Self-Compassion Scale, ATS – Anova Type Statistics, F – F-ratio, df – degrees of freedom.

The effect of the intervention on the FSCRS scales also demonstrated similar results with one exception that the intervention was not effective on the total score. There was a significant effect of the intervention on Reassured Self (Table 3). The intervention did not have significant effect on the Inadequate self or Hated self subscales of the FSCRS. Again, relative effects with their confidence intervals for each group and time point provide a more detailed insight (Table 4).

DISCUSSION

The present study examined the immediate and enduring effects of a 14-day internet-based version of Compassionate Intervention (CI) based on exercises from the Mindful Self-Compassion Program (MSC) on self-compassion and self-criticism. To our knowledge, this is the first study of its kind to examine the impact of MSC or interventions based on the MSC on self-criticism.

Table 2 Relative effects, their confidence intervals and variances of the SCS scale

Group	Time point	Relative effect	SCS sum score	
			Confidence Interval	Variance
Control	Pretest	0.41	0.34 – 0.51	0.106
	Posttest	0.42	0.33 – 0.52	0.125
	Follow-up	0.40	0.31 – 0.51	0.118
Intervention	Pretest	0.47	0.40 – 0.54	0.063
	Posttest	0.58*	0.51 – 0.64	0.063
	Follow-up	0.63*	0.56 – 0.69	0.065
SCS positive				
Control	Pretest	0.41	0.32 – 0.51	0.118
	Posttest	0.41	0.31 – 0.52	0.117
	Follow-up	0.40	0.31 – 0.51	0.128
Intervention	Pretest	0.44	0.38 – 0.51	0.065
	Posttest	0.59*	0.52 – 0.65	0.061
	Follow-up	0.64*	0.57 – 0.71	0.067
SCS negative				
Control	Pretest	0.44	0.34 – 0.54	0.133
	Posttest	0.44	0.34 – 0.53	0.128
	Follow-up	0.43	0.34 – 0.53	0.133
Intervention	Pretest	0.50	0.43 – 0.57	0.064
	Posttest	0.57*	0.51 – 0.63	0.060
	Follow-up	0.54	0.48 – 0.60	0.059
SCS Self-kindness				
Control	Pretest	0.41	0.32 – 0.51	0.132
	Posttest	0.41	0.32 – 0.50	0.113
	Follow-up	0.42	0.32 – 0.52	0.136
Intervention	Pretest	0.45	0.39 – 0.52	0.066
	Posttest	0.57*	0.51 – 0.64	0.066
	Follow-up	0.63*	0.56 – 0.70	0.065
SCS Self-judgement				
Control	Pretest	0.46	0.40 – 0.53	0.135
	Posttest	0.44	0.42 – 0.55	0.112
	Follow-up	0.46	0.39 – 0.54	0.131
Intervention	Pretest	0.50	0.43 – 0.57	0.064
	Posttest	0.54*	0.51 – 0.57	0.059
	Follow-up	0.49	0.42 – 0.56	0.058
SCS Common humanity				
Control	Pretest	0.40	0.31 – 0.51	0.135
	Posttest	0.41	0.32 – 0.52	0.132
	Follow-up	0.40	0.31 – 0.51	0.131
Intervention	Pretest	0.43	0.35 – 0.52	0.071
	Posttest	0.62*	0.54 – 0.69	0.069
	Follow-up	0.65*	0.57 – 0.72	0.070
SCS Isolation				
Control	Pretest	0.41	0.32 – 0.52	0.137
	Posttest	0.42	0.33 – 0.54	0.133
	Follow-up	0.42	0.32 – 0.55	0.135
Intervention	Pretest	0.49	0.43 – 0.54	0.062
	Posttest	0.56*	0.51 – 0.61	0.057
	Follow-up	0.49	0.43 – 0.54	0.063
SCS Mindfulness				
Control	Pretest	0.43	0.34 – 0.52	0.140
	Posttest	0.42	0.33 – 0.53	0.135
	Follow-up	0.42	0.33 – 0.53	0.137
Intervention	Pretest	0.44	0.35 – 0.53	0.067
	Posttest	0.56*	0.51 – 0.61	0.059
	Follow-up	0.61*	0.55 – 0.67	0.057
SCS over-identification				
Control	Pretest	0.40	0.31 – 0.51	0.130
	Posttest	0.41	0.32 – 0.52	0.129
	Follow-up	0.42	0.34 – 0.54	0.131
Intervention	Pretest	0.47	0.40 – 0.54	0.068
	Posttest	0.59*	0.53 – 0.65	0.056
	Follow-up	0.53	0.48 – 0.58	0.069

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, SCS – The Self-Compassion Scale.

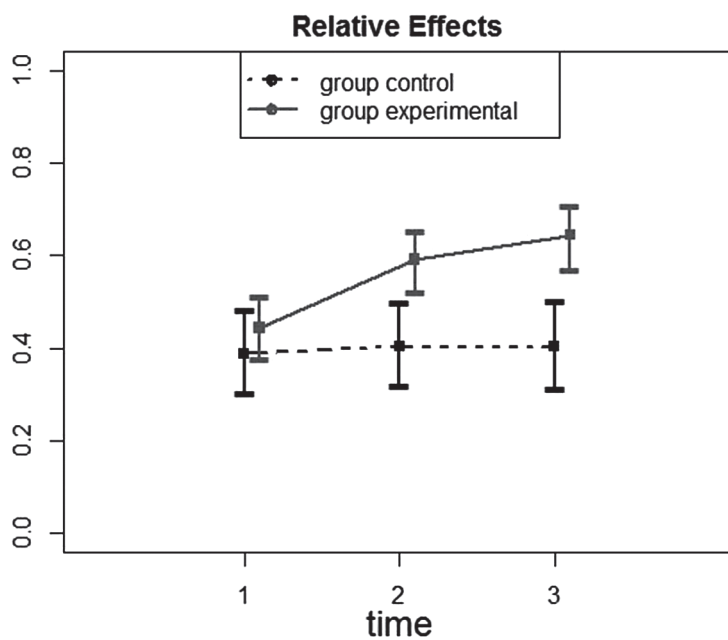


Figure 2 Relative effects for positive items of the SCS scale (Self-compassionate responding)

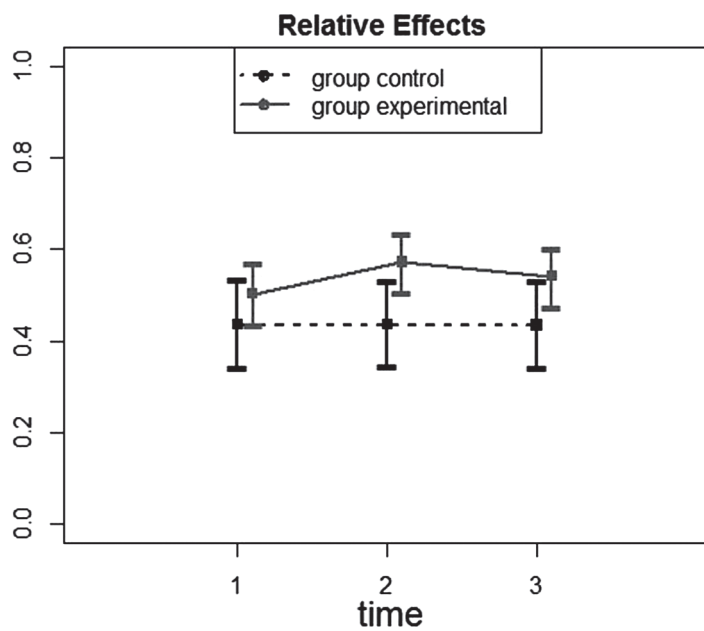


Figure 3 Relative effects for negative items of the SCS scale (Self-uncompassionate responding)

Table 3 Results for interaction effects of the FSCRS scale

	ATS		
	F	df	p
FSCRS total score	1.38	1.68. ∞	0.250
FSCRS reassuring	5.45	1.85. ∞	0.005*
FSCRS inadequate + hated	0.38	1.77. ∞	0.660
FSCRS inadequate	1.58	1.73. ∞	0.208
FSCRS hated	1.97	1.67. ∞	0.147

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, FSCRS - The Forms of Self-Criticism/ Reassuring Scale, ATS – Anova Type Statistics, F – F-ratio, df – degrees of freedom.

Performing exercises to cultivate the skills of self-compassion for 14 days were found to improve self-compassion and self-reassurance as measured by the SCS (Neff, 2003a) and FSCRS (Gilbert et al., 2004), respectively. The findings suggest that the CI based on the MSC has an immediate effect on self-compassionate responding and self-reassurance and these changes persist after two months. In contrast, practicing self-compassion by means of CI based on the MSC was effective in reducing self-uncompassionate responding in the short term but this effect did not last when assessed longitudinally.

The present findings also support the idea that the total score of the SCS (Neff, 2003a) may not be useful. It seems that self-compassionate responding (positive items of the SCS) and self-uncompassionate responding (negative items of the SCS) are related but are still different psychological constructs and thus should be measured separately. In our study, total score of the SCS showed significant increase but this effect was due to an increase in self-compassionate responding. In summary, using the total SCS score to assess the effect of an intervention does not distinguish whether increases in the total SCS score are due to improvements to self-compassion or a reduction in self-uncompassionate responding. For research and practical reasons, the use of the total score of the SCS cannot be recommended for researchers or practitioners. In addition, our study shows that it is important not to rely on the total score when measuring the effect of interventions on outcomes because negative and positive parts of SCS perform differently.

The main goal of MSC is to cultivate self-compassion, so it is not surprising that the results of our CI based on the MSC showed main and lasting effect on self-compassionate responding. Also the majority of the selected exercises for the short form of the CI based on MSC are designed to increase self-compassion and although some exercises (How Would You Treat a Friend?, Compassionate Letter to Myself, Forgiveness - Self or Working with shame) in the CI based on MSC may indirectly influence self-uncompassionate responding, they do not directly target self-uncompassionate responding or self-criticism. It is possible that the limited number of exercises developed to indirectly alleviate self-uncompassionate responding and self-criticism were responsible for the short-term effects of this version of the CI based on MSC on self-uncompassionate responding and no effect on self-criticism. The short-term effects of self-uncompassionate responding could be also attributed to the limited mindfulness training. Participants may not have completed enough practice to learning the mindful approach to own self-criticism, which is to observe it without emotional engagement.

Table 4 Relative effects, their confidence intervals and variances of the FSCRS scale

FSCRS total score				
		Relative effect	Confidence Interval	Variance
Control	Pretest	0.59	0.49 – 0.67	0.118
	Posttest	0.57	0.47 – 0.66	0.139
	Follow-up	0.57	0.47 – 0.66	0.132
Intervention	Pretest	0.50	0.44 – 0.57	0.065
	Posttest	0.46	0.39 – 0.53	0.062
	Follow-up	0.41	0.34 – 0.50	0.077
FSCRS Reassured Self				
Control	Pretest	0.57	0.47 – 0.67	0.135
	Posttest	0.57	0.46 – 0.66	0.152
	Follow-up	0.57	0.46 – 0.67	0.154
Intervention	Pretest	0.56	0.49 – 0.62	0.129
	Posttest	0.45	0.39 – 0.52	0.088
	Follow-up	0.37*	0.31 – 0.44	0.080
FSCRS Inadequate + Hated Self				
Control	Pretest	0.58	0.48 – 0.67	0.128
	Posttest	0.56	0.47 – 0.66	0.134
	Follow-up	0.57	0.48 – 0.65	0.113
Intervention	Pretest	0.49	0.42 – 0.56	0.070
	Posttest	0.45	0.39 – 0.52	0.054
	Follow-up	0.43	0.36 – 0.51	0.077
FSCRS Inadequate Self				
Control	Pretest	0.55	0.45 – 0.66	0.159
	Posttest	0.55	0.45 – 0.65	0.140
	Follow-up	0.57	0.48 – 0.66	0.105
Intervention	Pretest	0.50	0.43 – 0.57	0.070
	Posttest	0.47	0.41 – 0.54	0.059
	Follow-up	0.43	0.36 – 0.50	0.076
FSCRS Hated Self				
Control	Pretest	0.54	0.45 – 0.62	0.106
	Posttest	0.50	0.40 – 0.59	0.123
	Follow-up	0.54	0.44 – 0.64	0.145
Intervention	Pretest	0.47	0.41 – 0.54	0.066
	Posttest	0.46	0.41 – 0.52	0.049
	Follow-up	0.45	0.38 – 0.52	0.071

Note. * p < 0.05, ** p < 0.01, *** p < 0.001, FSCRS - The Forms of Self-Criticism/ Reassuring Scale.

Originally, the MSC program was developed and implemented as a group-based course (Neff & Germer, 2013). However, similar to the present study, Albertson et al. (2015) and Campo et al. (2017) adapted and delivered the original MSC as an online program and Albertson et al. (2015), Bluth et al. (2016) and Smeets et al. (2014) shortened the original MSC. Our research supports the idea that it is possible to shorten and adapt the MSC to be delivered in two weeks and for individuals to practice self-compassion at home. Therefore, the present study takes this research forward and these findings are promising as interventions can be developed using a similar, easy-to-administer format to target more people.

LIMITATIONS

The current study did not involve certified MSC teachers in adapting and implementing the intervention. Therefore, we do not imply that the experimental participants were exposed to the full experience of the MSC. However, the aim of the current study was to assess the impact of an online, abbreviated version of the CI based on MSC on self-criticism, self-compassion and self-reassurance for the general population. In addition, we specifically used exercises from the original MSC. This study also used a no-treatment control group which may not be suitable for making comparisons with an active treatment group. Research should aim to compare this intervention with an active control, which has been designed to control for common factors to ensure that any changes in outcomes are a result of the active ingredients of the intervention (Safer & Hugo, 2006). Also, as this study recruited a sample from the general population, these findings cannot be generalised to a clinical population and thus, this adaptation to the CI based on MSC needs to be evaluated with people with psychological morbidity.

The high attrition rate suggests that a small selection of highly motivated people completed all CI based on MSC exercises, thus making the findings applicable to individuals interested in the research or the specific topic and leading to bias of self-selection in measurement. Nevertheless, this is not surprising as the intervention required commitment over a 14-day period and online-based interventions have been suggested to be at high risk of attrition (Eysenbach, 2005).

CONCLUSION

An abbreviated and web-based version of the CI based on Mindful Self-Compassion program has significantly increased self-compassion, self-compassionate responding and self-reassurance with effects lasting at least two months. It also decreased self-uncompassionate responding, but these effects were short-lived. These results are promising and posit that interventions can be provided using cost-effective methods and be accessible for broader populations without direct involvement of mental health professionals. This is particularly relevant to those who might be unable or reluctant to contact a mental health care provider and at a time when funding for psychological services is limited.

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SÚHRN

Krátkodobá online Súcitná intervencia založená na Programe Vnímavého sebasúcitú

Program Vnímavého sebasúcitú (The Mindful Self-Compassion program – MSC) je empiricky vytvorená skupinová intervencia zameraná na kultiváciu sebasúcitú. Randomizovaná kontrolná štúdia sa uskutočňovala s tromi meraniami pred a po intervencii a s dvojmesačným follow-up. Celkovo sa výskumu zúčastnilo 122 participantov. Boli náhodne rozdelení do súcitnej intervencie (CI) na základe MSC a do kontrolnej skupiny bez intervencie. Cieľom bolo preskúmať vplyv krátkodobej online verzie CI založenej na programe MSC na sebasúcit, sebakritickosť a sebaoprotvrdenie v neklinickej populácii. Autori predpokladali, že účasť v CI na základe MSC zníži sebakritickosť a zvýši sebaoprotvrdenie a sebasúcit. Na štatistickú analýzu bol použitý program SPSS Statistics-20, program R a knižnica nparLD. Data boli analyzované neparametrickým testom založeným na poradí pre longitudinálne dáta (pretest-posttest design). Táto verzia CI na základe MSC signifikantne zvýšila úroveň sebasúcitú a sebaoprotvrdenia okamžite po intervencii a aj po dvoch mesiacoch. Intervencia bola tiež účinná pri znižovaní nesebasúcitného reagovania okamžite po intervencii. Úroveň sebasúcitú sa dá zlepšiť krátkodobou online súcitnou intervenciou založenou na MSC, čo naznačuje, že intervencie zamerané na zvýšenie sebasúcitú sa môžu poskytovať širšiemu obyvateľstvu bez priameho zapojenia odborníkov v oblasti duševného zdravia. Hlavným limitom výskumu je, že participanti v intervenčnej skupine neabsolvovali celý program MSC ale iba jeho vybranú časť.

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