RESEARCH ARTICLE

The Self-Compassionate Coping Measure (4 items): Psychometric features and relationships with depression and anxiety in adults

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Abstract: Self-compassion refers to a positive, kind attitude of a person toward oneself when confronted with difficulties. A self-compassionate coping style may buffer against the development of psychological problems. Aim was to introduce a new, 4-item measure for Self-compassion and to test its psychometric properties. In addition, its relationships with Neff's Self Compassion Scale (SCS) and with the HADS depression and anxiety scales were studied, in an adult general population sample. The results showed that the SCCM had a high reliability, confirming internal validity. In addition, the SCCM was strongly related to all subscales and total score of the SCS, suggesting construct validity. Finally, also strong relationships were found with symptoms of depression and anxiety, suggesting criterion validity. The SCCM might therefore be considered a valuable and reliable tool in the study of self-compassion associated with mental-health problems, while it also might provide us with targets for intervention.

Keywords: self-compassion, mental health, screening, questionnaire development

1 Introduction

Since third wave therapies, such as Acceptance and Commitment Therapy (ACT) or Mindfulness Based Cognitive Therapy (MBCT) have acquired a prominent place in our society, the concept of self-compassion has received increasing attention. Self-compassion has been described as 'a positive and caring attitude of a person to him- or herself in the face of failures and individual shortcomings'[1] and includes behavioral coping strategies such as being nice to oneself, giving oneself loving attention, being understanding to oneself and saying friendly things to oneself. These strategies are generally considered as adaptive coping strategies that may buffer against psychological problems, when negative life events are experienced[2]. A large number of empirical studies have consistently shown that self-compassion is negatively related to psychopathology and positively related to positive well-being[1,3]. Although the importance of the use of self-compassion as an adaptive coping

strategy in the face of adversity has been established, it is remarkable that as far as we know no coping instruments exist that include a subscale for self-compassionate coping.

Against this background, we have developed a new self-compassionate coping scale, that could be added as a subscale to existing coping measures or be used stand alone. The items of this scale reflect self-compassion in a straightforward, pure and simple way, each item literally referring to one of the four aspects of the definition: 1) being nice to oneself, 2) giving oneself loving attention, 3) being understanding to oneself and 4) saying friendly things to oneself. We called this four-item scale the Self-Compassionate Coping Measure (SCCM). In the present study the psychometric properties of the scale will be studied. For internal validity, we will look at the alpha reliability. For construct validity we will look at the relationships with the 24-item multidimensional Self Compassion Scale (SCS), an instrument consisting of three 'adaptive' subscales (Self-kindness, Self-judgment, Common Humanity) and three 'maladaptive' subscales (Isolation, Mindfulness, and Over-identification). For criterion validity, we will look at relationships with symptoms of depression and anxiety (criterion validity). We expected to find the following: Positive relations with the adaptive subscales of the SCS, negative relations with the maladaptive subscales of the SCS, and negative relations with symptom of depression and anxiety.

2 Materials and methods

2.1 Participants

The sample consisted of 156 adults from the general population, who were recruited from a general practitioner's practice in the Netherlands. The mean age was 52.35 (SD=11.73; range 20-68), 80.1% was female, and 88.5 % had received higher education.

2.2 Procedure

The sample comes from the second measurement of an online survey study started in 2015 by Leiden University among 18-to-65-year-old patients of a general practitioner's (GP) practice. In total, 465 participants had participated in the first measurement (25.1% of the total number of approached participants). An informed consent form had been included in which the participant had been asked whether he or she would allow us to establish contact again for participation in new studies. In total 279 persons had given permission and were approached, of whom 156 agreed to participate and completed the online questionnaire. The participants who participated in the study were guaranteed anonymity. Participants also filled out an informed consent as part of the questionnaire.

2.3 Instruments

2.3.1 Self-Compassionate Coping Measure (SCCM)

This is a newly developed instrument, measuring 'a positive, friendly, caring and understanding coping attitude of a person to him- or herself when experiencing difficulties'. The scale has four items:

(1) I am nice to myself.
(2) I give myself loving attention.
(3) I am understanding to myself.
(4) I say friendly things to myself.

The following instruction was provided: "Everyone gets confronted with negative or unpleasant events now and then and everyone responds to them in his or her own way. By the following questions you are asked to indicate what you generally do, when you experience negative or unpleasant events". Possible answer categories ranged from 1 = *(almost) never* to 5 = *(almost) always*. Individual scale scores were obtained by summing up the items (possible range: 4 to 20). Higher scores refer to higher self-compassionate coping.

2.3.2 Hospital Anxiety and Depression Scale (HADS)

Symptoms of depression and anxiety were measured by subscales of the HADS[4]. Both subscales consist of 7 items, assessing whether and to what extent the partic-

ipants reported symptoms of depression and/or anxiety. Answer categories of the items range from 0 to 3 (with varying category labels). Scale scores are obtained by recoding some of the items and subsequently summing the items belonging to the scale (range 0-21 for both subscales with higher scores reflecting more symptoms). In addition, a total score is obtained (range 0-42). Previous studies have reported good psychometric properties for both subscales and the total scale[5, 6].

2.3.3 Self-Compassion Scale (SCS)

The 24-item Dutch version of the SCS was used[7, 8]. The SCS consists of six subscales: Self-kindness, Self-judgment, Common Humanity, Isolation, Mindfulness, and Over-identification. Each subscale has 4 items with answering categories ranging from 1=(almost) never to 5=(almost) always. Scale scores are obtained by summing the items belonging to the subscale (range 4-20). The items of the subscales Self-kindness, Common Humanity and Mindfulness contain positively formulated items; therefore higher scores reflect more self-compassion. The items of Self-judgement, Isolation and Over-identification contain negatively formulated items; for these scales higher scores reflect less compassion. Also a total scale score is obtained after recoding the negatively formulated items (range 24-120). Previous studies have reported good psychometric properties for subscales and total scale[7].

2.3.4 Statistical analysis

First, descriptives of the study variables were provided, including means, standard deviations, and range of the new SCCM and the other study variables. In addition, SSCI - inter-item correlations and item-total correlations were given. Finally, Pearson correlation were calculated among the SCCM and the other study variables. Alpha reliability was used to determine internal validity. Construct validity was studied by looking at the relationships between the SSCI and the related concepts of the Self Compassion Scale (SCS). Criterion validity was studied by the relationships between the SSCI and the HADS Depression and Anxiety subscales and total score.

3 Results

Table 1 presents the means, standard deviation, actual ranges and alpha reliabilities. It could be noticed that lower means were observed for the three negatively formulated SCS subscales SJ, I, and OI than for the positively formulated subscales, including the SCCM. The alpha reliability of the SCCM was high (0.91). The alpha reliabilities of most SCS subscales and the total score were high as well. The lowest alpha was found for CH,

but it was still acceptable (0.74). High alpha reliabilities were also found for the HADS scales.

Table 1. Scale properties of the instruments: Means and Standard deviations, Range of scores, Cronbach's alpha reliabilities

Instruments	M (SD)	Actual range	α
SCCM	11.50 (3.68)	4-20	0.91
SCS: Self-kindness	12.32 (4.44)	4-20	0.79
SCS: Self-judgment	10.80 (4.55)	4-20	0.81
SCS: Common Humanity	12.15 (4.10)	4-20	0.74
SCS: Isolation	10.03 (4.74)	4-20	0.81
SCS: Mindfulness	14.05 (3.91)	4-20	0.82
SCS: Over-identification	10.75 (4.19	4-20	0.77
SCS: Total score	75.85 (17.72)	30-110	0.90
HADS Depression	10.60 (3.53)	7-24	0.85
HADS Anxiety	13.40 (3.63)	7-24	0.84
HADS Total score	24.05 (6.52)	14-48	0.90

Table 2 presents the characteristics of the four SCCM items. Without exceptions, inter-item correlations and item-total correlations were positive and high.

Pearson correlations between the new SCCM and the SCS subscales and total scale can be found in Table 3. The strongest correlation (>0.70) was found between the SCCM and Self-kindness. Other (moderately) strong correlations (>0.50) were found between the SCCM and Mindfulness and the total SCS score. The correlations with the other SCS subscales were lower, but still higher than 0.30, significant and in the expected directions: correlations with the positive subscales had a positive sign and correlations with the negative subscales had a negative sign. Table 3 also shows the correlations between the SCCM and the HADS scales, which were all significant and in the expected direction. Correlations were -0.43, -0.49 and -0.52 with HADS Depression, Anxiety, and total score, respectively. Correlations between the SCCM and the other (sub)scales are comparable, with regard to significance, sign, and strength, to the correlations between Self-kindness and the same (sub)scales (see first two columns of Table 3).

In Table 3 also the correlations among the SCS scales are depicted, as well as the correlations between SCS scales and HADS scales. Most SCS subscale intercorrelations were medium to high and in the expected directions: correlations between two 'positive' subscales and between two 'negative' subscales had a positive sign and correlations between a 'positive' and 'negative' subscales had a negative sign. Also most correlations between SCS subscales and HADS scales were significant and in the expected directions: 'positive' subscales showed negative correlations and negative subscales showed 'positive' correlations with the HADS scales. An exception was found for the subscale Common Humanity: with none of the HADS scales significant correlations were found.

4   Discussion

The present study investigated the psychometric properties of a new 4-item scale to measure self-compassion, called the Self-Compassionate Coping Measure (SSCI). The SSCI intends to measure 'a positive, friendly, caring and understanding attitude to oneself in the face of difficulties'. This nicely fits in with the definition of self-compassion as formulated by Zessin et al (2015, p. 4): 'a positive and caring attitude of a person to him- or herself in the face of failures and individual shortcomings'. Internal validity, construct validity and criterion validity were all shown to be good. The alpha reliability was 0.91. With regard to construct validity: high, positive correlations were found between the SSCI and the related concepts of the Self Compassion Scale (SCS): Self-kindness, Mindfulness and the total score. With regard to criterion validity, moderately high and significant correlations were found between the SSCI and the HADS Depression and Anxiety subscales and total score, all in the expected directions. Advantages of this new scale are that it is short, the items are straightforward and easy to grasp, and that the items intuitively fit the concept and its definition. Furthermore, it is an important addition to existing coping instruments, that do not include an important concept as self-compassion yet.

The strong correlations between the SSCI and Depression and Anxiety confirmed that self-compassion is negatively related to psychopathology, also confirming that self-compassion might be an important subject for interventions. At present the concept is included in third wave therapies, such as Acceptance and Commitment Therapy or Mindfulness Based Cognitive Therapy, but the results suggest that it might be worthwhile to adopt self-compassion based interventions in other therapies like CBT and coping skills training as well.

The study also had some limitations. Although the relationships with the HADS have provided initial support for the criterion validity of the SSCI, to draw more firm conclusions in future, relationships with additional outcome measures should be studied. In addition, more studies have to be done, by investigating the validity in other populations and by using other research methods like face to face interviews and prospective designs.

Although some future validation steps still have to be taken, the present study has shown that the SSCI might be a valuable and reliable tool that can be easily included in assessment or self-report research, without overloading participants.

Table 2.   SSCI - Inter-item correlations, item-total correlations, item Means and Standard deviations

Item	1 r	2 r	3 r	Item-total r	M (SD)
1. I am nice to myself	-			0.79	3.13 (1.03)
2. I give myself loving attention	0.74***	-		0.82	2.78 (1.02)
3. I am understanding to myself	0.77***	0.75***	-	0.82	2.98 (1.05)
4. I say friendly things to myself	0.65***	0.73***	0.71***	0.76	2.61 (1.03)

Table 3.   Pearson correlations of SCCM, SCS and HADS subscales and total scores

Item	1	2	3	4	5	6	7	8	9	10	11
1. SSCI	-										
2. SCS: Self-kindness	0.74***	-									
3. SCS: Self-judgment	-0.48***	-0.57***	-								
4. SCS: Common Humanity	0.36***	0.51***	-0.25**	-							
5. SCS: Isolation	-0.32***	-0.31***	0.55***	-0.17*	-						
6. SCS: Mindfulness	0.54***	0.63***	-0.35***	0.63***	-0.27***	-					
7. SCS: Over-identification	-0.32***	-0.32***	0.59***	-0.08	0.67***	-0.32***	-				
8. SCS: Total score	0.63***	0.75***	-0.78***	0.59***	-0.72***	0.72***	-0.71***	-			
9. HADS Depression	-0.43***	-0.37***	0.23**	-0.12ns	0.35***	-0.32***	0.29***	-0.39***	-		
10. HADS Anxiety	-0.49***	-0.45***	0.43***	-0.15ns	0.44***	-0.38***	0.46***	-0.54***	0.65***	-	
11. HADS Total score	-0.52***	-0.46***	0.38***	-0.15ns	0.43***	-0.39***	0.42***	-0.51***	0.91***	0.91***	-

Note: * p<0.05, ** p<0.01, *** p<0.001

Ethical statement

Ethical approval had been obtained from the ethics committee of Leiden University. The study has been performed in accordance with the ethical standards laid down in the 1964 declaration of Helsinki and its later amendments. In addition, all participants gave their informed consent prior to their inclusion in the study.

Conflict of interest

The authors declare that they have no conflicts of interest.

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