## What is self-compassion and how do we measure it? : an independent investigation of the Self-Compassion Scale factor structure



Wikipedia describes self-compassion as "extending compassion to oneself in instances of perceived inadequacy, failure, or general suffering"

The relationship between self-compassion and emotional distress has received a lot of research interest. Indeed, recent studies have reported significant associations between greater self-compassion and lower levels of depression, anxiety and stress (for a review see Barnard & Curry, 2011) and these relationships have been confirmed by meta-analyses (MacBeth & Gumley, 2012; Muris & Petrocchi, 2016). So far however, there has been limited research into the relationship between self-compassion and suicide risk. In this blog I discuss the <u>first published paper</u> from my PhD which is addressing this dearth in research by investigating the relationship between self-compassion and suicide risk within the context of the integrated motivational-volitional model of suicidal behaviour.

Although I will report on the self-compassion-suicidality relationship in future blogs (and papers), I have focused on the assessment of self-compassion here.

S Springs

This blog provides an overview of how we assessed the factor structure of the most widely used measure of self-compassion (Self-Compassion Scale (SCS) Neff 2003ab). The SCS (26 items) assesses the 3 positive (self-kindness, common humanity, mindfulness) and 3 negative (self-judgement, isolation, over-identification with thoughts) aspects of compassion. According to Kristin Neff, these components are interconnected. As such, she argues that the SCS can be used to yield an overall self-compassion score, or the scores from the individual subscales can also be used. Due to its composition and possibly because compassion is a relatively abstract concept, the factor structure of the SCS has been repeatedly scrutinized and a variety of alternatives proposed. However, the majority of these studies have been carried out in other languages and the emerging factor structures have been inconclusive. Indeed various factor structures have been cited in the literature leading to concerns that the factor structure of the SCS may not be stable and would benefit from further robust analyses.

Our study in <u>Mindfulness</u> reports an independent replication of Neff and Whittaker's (2017) evaluation of the most common factor structures. These were as follows: the original six-factor correlated and higher-order models; a single-factor; a two-factor; a five-factor model and a bi-factorial model. Bi-factorial modelling accounts for covariance between factors arising from the presence of an overarching factor (in this case self-compassion), but the individual factors are able to retain and account for variance in their own subset of items (Reise, Moore & Haviland, 2010).

This was a repeated measures study in which 526 participants completed the SCS online at time 1 and 332 took part again at time 2. We conducted exploratory factor analysis (EFA) on time 1 data, confirmatory factor analyses (CFA) on time 2 data and then retested the models using the time 1 data. Omega indices ( $\omega$  and  $\omega$ H) were calculated to assess the reliability ( $\omega$ ) of the subscale scores and the total ( $\omega$ H) self-compassion score.

Our findings were consistent with Neff et al.'s (2017) study; the bi-factorial model was the best fit to the data followed by the six-factor correlated model. Our omega indices showed that the subscales ranged from  $\omega$ = .80 to .93 and the scale had an overall  $\omega$  of 0.96 indicating that the subscales represent both self-compassion and the six factors. When we included the overarching compassion factor the subscale  $\omega$ H reduced, indicating that the subscales were loading on to the overarching compassion factor too.

<u>Take home message:</u> Our findings support the use of the SCS to yield either subscale scores or a total self-compassion score. You can access the full paper (open access) here: https://doi.org/10.1007/s12671-017-0803-1

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