

Self-Compassion, Self-Coldness, and Self-Reported Physical Health: Moderating Effect of Gender



Dominique Legros, M.A, Güler Boyraz, Ph.D, Alexis Ferguson, B.A, Emmy Mikelson, M.F.A

Abstract

The purpose of the present study was to examine potential gender differences in the relationships between self-compassion, self-coldness, and self-reported physical health among college students. Using a correlational study design, 747 undergraduate students were recruited.

Results indicated that the relationship between self-coldness and self-compassion was moderated by gender. In addition, both self-compassion and self-coldness were significantly related to self-reported physical health and these relationships did not vary across gender.

Introduction

Self-compassion is characterized as kindness to oneself as well as having a non-judgmental understanding of one's emotions in the face of suffering or hardships (Neff, 2003a). A growing body of evidence suggests that having a compassionate attitude toward oneself enhances emotion regulation and psychological well-being (Barnard & Curry, 2011; Muris & Petrocchi, 2017; Zessin, Dickhäuser & Garbade, 2015), serves as a protective factor in the face of stressful life events (Germer & Neff, 2013; Neff, 2003a), and promotes positive physical health outcomes (Hall, Row, Wuensch & Godley, 2013; Homan & Sirois, 2017).

Neff (2003b), who developed the Self-Compassion Scale (SCS), conceptualized self-compassion as a unitary construct that includes three positive (self-compassion, common humanity, and mindfulness) and three negative factors (self-judgment, isolation, and over-identification). According to Neff's (2003b) conceptualization, the positive and negative factors of the SCS operate as opposite ends on a continuum (the total scale score is obtained by reverse-scoring the negative subscales); however, recent evidence suggests that the positive and negative subscales of the SCS measure two distinct constructs, *self-compassion* and *self-coldness*, respectively (Brenner, Heath, Vogel & Credé, 2017; Kumlander, Lahtinen, Turunen & Salmivalli, 2018). Providing further support for this conceptualization, Brenner, Vogel, Lannin, Engel, Seidman and Heath (2018) found that self-compassion was a stronger predictor of well-being, whereas, self-coldness was a stronger predictor of distress among undergraduate students and community adults.

Previous research suggests gender differences in self-compassion (i.e., women report lower self-compassion than men; e.g., Magee & Upenieks, 2019; Neff, 2003b), as well as the relationship between self-compassion and well-being (see Bluth, Campo, Futch & Gaylord, 2017; Zessin et al., 2015). However, most of these findings are based on the overall self-compassion scores obtained from the SCS. Given the recent evidence that the SCS measures two distinct constructs that distinctly relate to well-being, more research is needed to develop an understanding of the role of gender in the relationships between self-compassion, self-coldness and health.

The purpose of the present study, therefore, was to build on recent literature on self-compassion by examining the following research questions:

- 1) Does the relationship between self-coldness and self-compassion vary across gender?
- 2) Are the effects of self-compassion and self-coldness on self-reported physical health moderated by gender?

Method

Participants and Procedures

As part of a larger research project, participants ($N = 747$; mean age = 20.18, $SD = 3.83$) were recruited from undergraduate classes of a university in the northeast United States (after obtaining approval from the Institutional Review Board). All participants completed an online survey. The majority of the participants were women (72.3%, $n = 540$) and slightly more than half of the participants identified their ethnicity as White/Caucasian (51.7%, $n = 386$).

Instruments

After completing an informed consent form and demographic questionnaire, participants completed the remaining instruments of the study. Self-coldness and self-compassion were measured using the Self-Compassion Scale (SCS, Neff, 2003b), a 26-item instrument with the six subscales described earlier. Self-coldness and self-compassion scores were computed by taking the average of the negative and positive subscales, respectively. Self-reported physical health was measured using a single item which asked participants to rate their overall general health on a five-point scale (1 = poor, 5 = excellent).

Figure 1. Moderating Effect of Gender on the Relationship between Self-Coldness and Self-Compassion

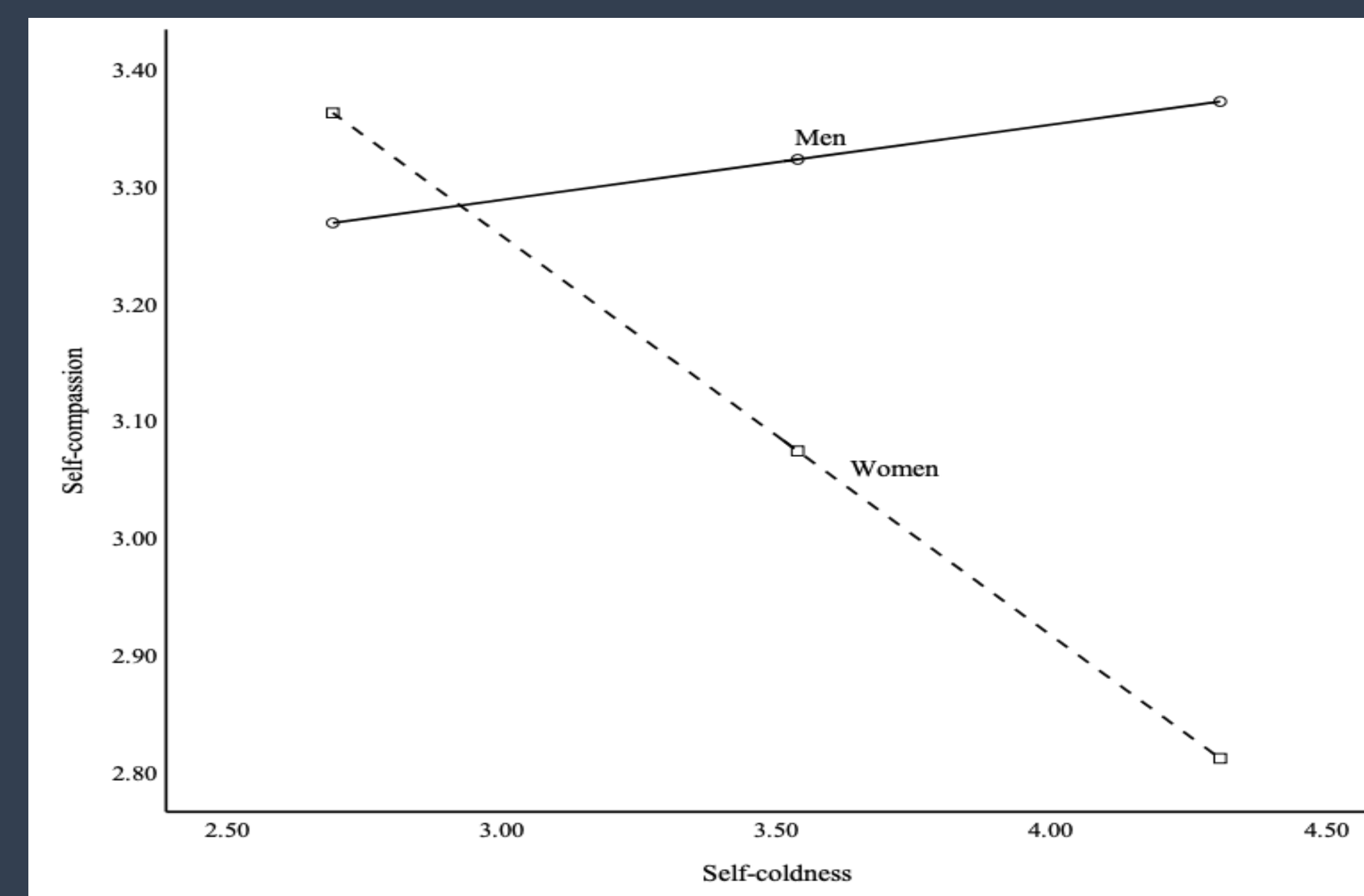


Table 1. Means, Standard Deviations, Cronbach's Alpha's and Bivariate Correlations among Study Variables

Predictors	1	2	3	4	M	SD	Alpha
1. Gender	-	-.167**	.151**	.082*	-	-	-
2. Self-coldness		-	-.252**	-.201**	3.499	.794	.906
3. Self-compassion			-	.204**	3.128	.732	.893
4. Physical health				-	3.350	.942	-

Note. $N = 747$. Gender is coded as: 0 = women, 1 = men

* $p < .05$, ** $p < .001$

Table 2. Moderating Effect of Gender on the Self-Coldness – Self-Compassion Relationship

Predictors	B	SE	t	p	95% CI
Self-coldness	-.341	.039	-8.762	< .001	-.417, -.264
Gender	-1.183	.242	-4.885	< .001	-1.659, -.708
Self-coldness X gender	.405	.070	5.806	< .001	.268, .541

Note: $N = 747$. Gender is coded as: 0 = women, 1 = men.

$R^2 = .116$, $p < .001$. ΔR^2 due to the self-coldness X gender interaction = .040, $p < .001$

Results

First, we conducted a moderation analysis using PROCESS macro for SPSS (Version 3; Hayes, 2018) to examine our first research question. Self-coldness was used as the predictor variable, self-compassion as the dependent variable and gender as the moderator variable. Results indicated that the gender X self-coldness interaction explained a significant amount of variance in self-compassion ($\Delta R^2 = .040$, $p < .001$). The examination of the conditional effects of self-coldness on self-compassion indicated that self-coldness was significantly and negatively related to self-compassion among women ($B = -.34$, $p < .001$), however, self-coldness was unrelated to self-compassion among men ($B = .06$, $p = .268$).

Next, we conducted a moderation analysis using PROCESS macro (Version 3; Hayes, 2018) to examine our second research question. Results indicated that self-coldness negatively ($B = -.19$, $p < .001$) and self-compassion positively ($B = .206$, $p < .001$) predicted self-reported physical health. After controlling for self-compassion, the interaction between self-coldness and gender did not explain a significant amount of variance in self-reported physical health ($\Delta R^2 = .000$, $p = .948$). In addition, after controlling for self-coldness, the interaction between self-compassion and gender did not significantly predict perceived physical health ($\Delta R^2 = .004$, $p = .082$). These findings suggest that the relationships between predictors (i.e., self-coldness and self-compassion) and self-reported physical health did not vary as a function of gender.

Discussion

Our study has three important conclusions:

- 1) self-coldness is significantly and negatively related to self-compassion among college women; however, these two variables are not significantly related among college men,
- 2) self-coldness is negatively associated with perceived physical health and self-compassion is positively related with perceived physical health among college students, and
- 3) the effects of self-coldness and self-compassion on perceived physical health do not vary across men and women.

Although causal inferences can not be made based on our findings due to the correlational nature of our study, our findings suggest that helping college women reduce self-criticisms, isolation, and overidentification (i.e., self-coldness) may increase their self-compassion and contribute positively to their health. On the other hand, self-coldness may not necessarily reduce self-compassion among college men. Our findings also suggest that interventions that target self-coldness and self-compassion may contribute positively to college students' perceived health.

Limitations and Future Directions

Given the limitations of the present study (e.g., correlational study design, representativeness of the sample); more research with diverse samples and different research designs (e.g., experimental and longitudinal designs) would help develop a more in-depth understanding of how to integrate these constructs into prevention and intervention programs that focus on improving college students' health outcomes.