



Self-compassion and negative outgroup attitudes: The mediating role of compassion for others

H. Annie Vu and Luis M. Rivera

Department of Psychology, Rutgers University Newark, Newark, NJ, USA

ABSTRACT

Self-compassion, rooted in common humanity, self-kindness, and mindfulness, is an adaptive self-concept that assuages defensiveness to self-image threats. We hypothesized that self-compassion would buffer the need to express negative intergroup attitudes and that this relation would be explained by compassion for others. In a preregistered study, participants ($N = 163$) with stronger self-compassion rooted in common humanity, but not self-kindness or mindfulness, expressed less negative attitudes toward outgroups than those with lower self-compassion rooted in common humanity. Moreover, this relation persisted even after controlling for self-esteem, a construct related to but distinct from self-compassion. Finally, compassion for others mediated the relation between self-compassion and intergroup attitudes. These findings support the positive and unique role of individual-level self-compassion in intergroup relations.

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1. Introduction

Individuals often express negative attitudes toward outgroup members to achieve and maintain their positive self-image (Crocker et al., 1993; Fein & Spencer, 1997). This research tends to focus on self-esteem, a positive self-concept as good and competent (James, 1890; Rosenberg, 1965), and tests its relation to intergroup attitudes. However, the evidence is mixed – individuals with high self-esteem sometimes exhibit lower levels of negative outgroup attitudes (e.g., Heaven & Rajab, 1983; Valentine, 1998), and other times express higher levels of negative outgroup attitudes (e.g., Aberson et al., 2000; Crocker et al., 1993; Utsey et al., 2002). An alternative way to relate to the self is via self-compassion. Like self-esteem, self-compassion involves one's self-perception, but, in comparison to self-esteem, self-compassion leads individuals to be less defensive and concerned about self-image threats (Breines & Chen, 2012; Leary et al., 2007). Interestingly, empirical investigations on the role of individual-level self-compassion in the expression of negative outgroup attitudes are limited (Fuochi et al., 2018; Verhaeghen & Aikman, 2020). The current research seeks to further test this relation and one possible underlying mechanism, compassion for others.

CONTACT H. Annie Vu  h.annie.vu@rutgers.edu; Luis M. Rivera  luis@psychology.rutgers.edu  Department of Psychology, Rutgers University, Newark, NJ 07102, USA

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1.1. What is self-compassion?

Although the concept of self-compassion has origins in Buddhism (Hanh, 1997), Neff (2003a, 2003b) recently introduced it to psychological research. According to Neff (2003a, 2003b), self-compassion is an individual-level construct defined as a kind, supportive, and nonjudgmental attitude toward oneself when encountering negative thoughts, feelings, or experiences. Furthermore, self-compassion is rooted in three components: *common humanity*, which is thinking of one's sufferings and inadequacies as parts of normal human experiences rather than personal isolating events; *self-kindness*, which is caring for oneself during negative experiences rather than being harsh and judgmental; and *mindfulness*, which is being aware of one's negative thoughts and feelings rather than over-identifying with and dwelling on them. These three components of self-compassion are theorized to operate as a system (Neff, 2003a, 2003b, 2016), as evidenced by their strong interrelations (Dreisoerner et al., 2021; Neff, 2003b) and their mutual influence – that is, increasing one component boosts the other components (Dreisoerner et al., 2021). In addition, self-compassion and its components are associated with compassion for others (Fuochi et al., 2018; Neff & Pommier, 2013; Pommier et al., 2020), empathy (Fuochi et al., 2018; Neff & Pommier, 2013), sense of community (Akin & Akin, 2015), and prosocial behaviors (Lindsay & Creswell, 2014). Although all three components are central to self-compassion and elicit reactions and perceptions of oneself during a personal hardship, common humanity is the only component that involves perceptions of the self in relation to others – namely, the perception of other humans as having personal sufferings and inadequacies similar to those experiences in one's own life (Neff, 2003a, 2003b).

High self-compassion is also strongly related to high self-esteem (Neff, 2003a, 2003b; Neff & Vonk, 2009), which is unsurprising given that they both underlie beliefs and attitudes related to oneself. However, they are theoretically distinct from each other (Neff, 2003a, 2003b; Neff & Vonk, 2009). Self-esteem is a global positive evaluation of oneself ranging from low to high (James, 1890), but such self-evaluations are not fundamental to self-compassion. To be self-compassionate is to view one's negative traits and experiences as normal parts of humanity (common humanity; Neff, 2003a) and to be kind to oneself (i.e., self-kindness; Neff, 2003a), regardless of one's valenced self-evaluations. Moreover, because of its detachment from self-evaluation, self-compassion is not, whereas self-esteem is, associated with narcissism (Locke, 2009; Neff, 2003b). In addition, high self-esteem individuals experience personal failures and flaws as threats to their self-image that, in turn, lead to maladaptive self-defensive behaviors (vanDellen et al., 2011). By comparison, high self-compassionate individuals view personal failures and flaws as normal parts of human experiences (via common humanity), effectively regulate negative emotions after unpleasant self-relevant events, and are motivated to self-improve (Breines & Chen, 2012; Leary et al., 2007).

1.2. Self-compassion and outgroup attitudes

Given that self-compassion helps individuals to cope with self-image threats (Breines & Chen, 2012; Leary et al., 2007), it stands to reason that it may be an important individual-level construct in the expression of intergroup attitudes. Specifically, high self-compassion

individuals should be less likely to express negative attitudes toward outgroups than low self-compassion individuals. Individuals with high self-compassion rooted in common humanity feel connected with others through their personal sufferings (Neff, 2003a, 2003b) and, thus, are less likely to express negative outgroup attitudes. Also, self-kindness, another self-compassion component, should be associated with less negative intergroup attitudes because it involves individuals' inclination to love, care, and support (Neff, 2003a, 2003b). Individuals who are more kind toward themselves might be more kind to others (Neff & Pommier, 2013; Pommier et al., 2020), including outgroup members. And mindfulness, the third self-compassion component, is also linked with less negative attitudes (Gervais & Hoffman, 2013; Salvati et al., 2019) due to its foundation in a nonjudgmental mind-set, attention, and awareness (Brown et al., 2007). Individuals who are less judgmental of themselves might be less judgmental of others. Notably, the role of individual-level (dispositional) mindfulness in the expression of intergroup attitudes has been examined outside of the self-compassion literature. However, the data are mixed. Gervais and Hoffman (2013) found that undergraduate students in the U.S. who are more mindful express less negative attitudes toward women; and Salvati et al. (2019) found that heterosexual men who are more mindful express less prejudice against gay men. However, Nicol and France (2018) found no relation between mindfulness and negative attitudes toward homeless people, individuals with disabilities, and Black people.

To our knowledge, two published studies to date have examined the hypothesized relation between individual differences in self-compassion and its three components and the expression of intergroup attitudes (Fuochi et al., 2018; Verhaeghen & Aikman, 2020). Fuochi et al. (2018) recruited Italian adult participants who completed Neff's (2003b) multicomponent self-compassion measure before reading a story about a 35-year-old homeless man named Marco. Italian participants high on self-compassion rooted in common humanity were more likely to report more compassion for Marco and more positive attitudes toward homeless people than those who were low on self-compassion rooted in common humanity. This relation did not emerge for self-compassion rooted in self-kindness or mindfulness. Verhaeghen and Aikman (2020) also used Neff's measure and found that college students with high self-compassion reported less negative attitudes toward Black people than those with low self-compassion. It was not reported if one or more of the self-compassion components drove this relation.

Although promising, the above two studies have several limitations that we address in the current research. First, they did not test if the relation between self-compassion and intergroup attitudes emerged independently of self-esteem. As reviewed earlier, given their strong interrelation, it is possible that the role of self-compassion in intergroup attitudes is confounded with self-esteem. Second, it is unclear if the studies measured intergroup attitudes because they did not indicate if participants were members of the presumed outgroup. That is, some participants might have identified as Black (in Verhaeghen & Aikman, 2020) or had experienced homelessness (in Fuochi et al., 2018). Third, as noted above, there was a discrepancy between the two studies in reporting the role of the three self-compassion components in intergroup attitudes, leaving unclear if this relation was driven by only the common humanity component and/or the other self-compassion components. And, finally, they did not investigate a potential mechanism of the self-compassion and intergroup attitudes relation.

1.3. The mediating role of compassion for others

The present research tests if compassion for others – a desire to care for and relieve others' sufferings (Pommier et al., 2020; Underwood, 2002) – is a mediator of the self-compassion and intergroup attitudes relation (Fuochi et al., 2018). Individuals who are more compassionate toward themselves are also more compassionate toward others (Neff & Pommier, 2013; Pommier et al., 2020). Self-compassion and compassion toward others both underlie individual differences in general care during, and the desire to alleviate, experiences of suffering and feeling inadequate (Neff & Pommier, 2013; Pommier et al., 2020). In addition, individuals with high self-compassion are theoretically more likely to perceive others as similar to themselves (via common humanity) and, thus, be more compassionate toward them. Indeed, and consistent with this literature, individuals who are compassionate and kind to others are more likely to include outgroup members in the self and, in turn, hold less negative attitudes toward multiple outgroups (Sinclair et al., 2016). Finally, Neff and Germer (2013) demonstrated that a self-compassion intervention increases compassion for others, an effect that was stable after one year. Taken together, it stands to reason that compassion for others is a mechanism explaining the relation between self-compassion and intergroup attitudes.

1.4. Main hypotheses

Our *a priori* and preregistered hypotheses are (1) higher self-compassion will be associated with less negative attitudes toward outgroups, and (2) compassion for others will mediate the self-compassion and negative outgroup attitudes relation.

2. Method

The method and *a priori* hypotheses of the present research are preregistered at OSF (<https://osf.io/8bj5w>).

2.1. Participants

Using G*Power 3 (Faul et al., 2009), an *a priori* power analysis that set an effect size at $r = .25$, alpha at .05, and power at 95% yielded a minimum sample size of 164. We selected our effect size based on Fuochi et al. (2018), who reported a correlation coefficient of $r = .27$, for the relation between self-compassion rooted in common humanity and outgroup attitudes. Two hundred and seven participants from a Northeastern university received course credit for completing the study. Participants who failed the attention check ($n = 44$; described under Procedure) were excluded from data analyses, yielding a final sample size of $N = 163$. Table 1 reports participants' demographics. Participants ($M_{\text{age}} = 22.36$, $SD = 6.13$, age-range = 18–50) were mostly female (76.70%), Hispanic (30.10%), unemployed (53.40%), Christian (51.60%), and had not experienced homelessness (93.9%).

2.2. Measures

All internal consistency coefficients reported below are for measurement item responses from participants in the current study.

Table 1. Sample demographics (N = 163).

Variable	
Age (mean years)	22.4 (<i>SD</i> = 6.13; range = 18–50)
Gender	
Male	23.3
Female	76.7
Ethnic-Racial Group	
White/Caucasian	11.0
Black/African American	20.2
Hispanic	30.1
Asian	17.2
Multiracial	9.8
Other Identity	11.7
Religion	
Christian Denomination	51.6
Mormon	0.0
Greek or Russian Orthodox	0.0
Jewish	1.2
Muslim	13.5
Buddhist	0.0
Hindu	8.0
Atheist or agnostic	11.0
Other	14.7
Multiple	2.4
Homelessness Experience	
Yes	6.1
No	93.9

Figures represent percentages unless otherwise noted in parentheses after the variable.

2.2.1. Self-compassion

Neff's 26-item Neff (2003b) contains three subscales that capture the three components of self-compassion: common humanity (e.g., "When things are going badly for me, I see the difficulties as part of life that everyone goes through"; "When I'm down, I remind myself that there are lots of other people in the world feeling like I am"; "I try to see my failings as part of the human condition"; $\alpha = .77$), self-kindness (e.g., "I try to be loving towards myself when I'm feeling emotional pain"; "I'm tolerant of my own flaws and inadequacies"; "I'm kind to myself when I'm experiencing suffering"; $\alpha = .90$), and mindfulness (e.g., "When something upsets me, I try to keep my emotions in balance"; "When something painful happens I try to take a balanced view of the situation"; "When I fail at something important to me I try to keep things in perspective"; $\alpha = .81$). Participants responded to each item on a 5-point scale ranging from *almost never* (1) to *almost always* (5). Higher mean scores indicate stronger self-compassion on each subscale and the overall scale ($\alpha_{\text{overall}} = .93$).

2.2.2. Self-esteem

Rosenberg's Rosenberg (1965) contains 10 items that measure global self-esteem (e.g., "I am able to do things as well as most other people"). Participants responded to each item on a 4-point scale ranging from *strongly disagree* (1) to *strongly agree* (4). Higher mean scores indicate higher self-esteem ($\alpha = .89$).

2.2.3. Compassion for others

Pommier et al.'s (2020) Compassion Scale contains 16 items that measure general compassion for others (e.g., "I like to be there for others in times of difficulty"). Participants responded to each item on a 5-point scale ranging from *almost never* (1) to *almost always* (5). Higher mean scores mean stronger compassion for others ($\alpha = .85$).

2.2.4. Attitudes toward outgroups

Participants completed an index of attitudes toward outgroups that included semantic differentials, warmth and competence ratings, and emotion-based evaluations. The index targeted four outgroups – homeless people, senior citizens, Asians, and Christians – all chosen based on the group's varying degrees of perceived warmth and competence (e.g., homeless people are low, while Christians are high, on both warmth and competence; Fiske, 2018). Semantic differentials were four 7-point scales ranging from -3 to $+3$ anchored by *awful–nice*, *bad–good*, *unpleasant–pleasant*, and *negative–positive* (Osgood et al., 1957). Warmth and competence ratings were captured with two items – "What is your general feeling about [outgroup]?" and "How competent and intelligent do you think [outgroup] are?" – on a 7-point scale from *extremely unfavorable* (1) to *extremely favorable* (7) (adapted from Cuddy et al., 2007). Emotion-based evaluations were provided on six emotions – anger, fear, disgust, pity, envy, and admiration – on a 5-point scale from *not at all* (1) to *extremely* (5) (adapted from Cuddy et al., 2007).

To create the index of attitudes toward outgroups, we first standardized the scores of all items in the index (described above) from participants who did not identify with one of the four outgroups (e.g., for participants who identified as Asian and not with any of the other three groups, we only used their scores targeting homeless people, senior citizens, and Christians, and not their scores targeting Asians), then submitted them to internal consistencies. The internal consistencies ranged from good to excellent ($\alpha s = .87-.93$).¹ Second, we calculated mean scores on the semantic differentials, warmth and competence ratings, and emotion-based evaluation measures. To confirm that the three measures of the index loaded onto a single latent construct of attitudes toward outgroups, we submitted the data to a principal component analysis with an oblique rotation. The analysis yielded a single factor (eigenvalue = 1.84) and the three-factor loadings were strong ($.85_{\text{semantic differentials}}$, $.77_{\text{warmth\&competence}}$, $.73_{\text{emotions}}$). Finally, we averaged all standardized scores into an index. Higher mean indexes indicate stronger negative attitudes toward, or more prejudice against, outgroups. (As noted under Results, we also report data for each outgroup in Table 2.)

2.2.5. Demographics

Participants completed a demographics questionnaire that included gender, age, race/ethnicity, religion, and homelessness experience. Age (in years) was continuous, and all remaining demographics were categorical (e.g., participants selected "Yes" or "No" to whether they had experienced/were experiencing homelessness). All categorical responses are listed in Table 1.

Table 2. Descriptives of Measured Variables ($N = 163$)

Variable	<i>M</i>	<i>SD</i>
Self-compassion	3.09	.74
Common humanity	3.12	.77
Self-kindness	2.96	.87
Mindfulness	3.18	.79
Self-esteem	3.54	.62
Compassion for others	4.26	.52
Attitudes towards homeless people		
Semantic differentials	.58	1.34
Warmth and competence ratings	4.71	1.17
Emotion-based evaluations	2.18	.51
Attitudes towards Asians		
Semantic differentials	1.23	1.49
Warmth and competence ratings	5.51	1.21
Emotion-based evaluations	1.55	.50
Attitudes towards senior citizens		
Semantic differentials	1.35	1.38
Warmth and competence ratings	2.56	1.20
Emotion-based evaluations	1.57	.44
Attitudes towards Christians		
Semantic differentials	.62	1.43
Warmth and competence ratings	3.44	1.26
Emotion-based evaluations	1.79	.63

2.3. Procedure

All participants were recruited via Sona System (<https://www.sona-systems.com>), an online participant pool management platform, and completed all measures and an informed consent form via Qualtrics (<https://www.qualtrics.com>), an online survey platform. The self-compassion measure always appeared first, followed by the self-esteem and compassion for others measures in a counterbalanced order, then the index of attitudes toward outgroups measures (four groups randomly presented), and, finally, the demographic questionnaires. We included three separate attention check items throughout the online study (e.g., “For this item, please select ‘Occasionally’ to demonstrate your attention”).

3. Results

Table 2 and Table 3 list all descriptives and zero-order correlations among all measured variables. Consistent with the literature reviewed above, stronger self-compassion rooted in common humanity, but not in self-kindness nor mindfulness, and stronger compassion for others were both associated with less negative attitudes toward outgroups (also see, Fuochi et al., 2018; Sinclair et al. (2016). Also, self-compassion components were associated with stronger compassion for others (also see, Neff & Pommier, 2013; Pommier et al., 2020), but the relation was strongest for common humanity compared to mindfulness, $z = 1.71, p = .044$, and, to a lesser extent, to self-kindness, $z = 1.50, p = .067$ (also see, Fuochi et al., 2018). Finally, higher self-esteem was associated with less negative attitudes toward senior citizens, but it was not related to attitudes toward the other outgroups or the index of outgroup attitudes. These results are in line with the

inconsistent literature on the relation between self-esteem and outgroup attitudes (e.g., Aberson et al., 2000; Valentine, 1998; also see review above).

Hypothesis 1: Higher self-compassion will be associated with less negative attitudes toward outgroups.

We used hierarchical regression analysis with 10,000 bootstraps² to test the relation between self-compassion and attitudes toward outgroups. Table 4 provides a summary of the results. We entered gender of participants (1 = female, 2 = male) in the first step, because men tend to report stronger negative attitudes toward outgroups than women (Altemeyer, 1998; Sidanius & Pratto, 1999), a finding we replicate, $\beta = .17, p = .008, 95\% \text{ CI } [.05, .30]$. Next, the three self-compassion components were entered in the second step. Participants with higher self-compassion rooted in common humanity expressed less negative outgroup attitudes than those with weaker self-compassion rooted in common humanity, $\beta = -.30, p = .007, 95\% \text{ CI } [-.53, -.09]$. The self-compassion components of self-kindness and mindfulness were not related to outgroup attitudes.

Consistent with our introduction, we sought to control for the influence of self-esteem in the relation between self-compassion and outgroup attitudes, so we re-ran the above hierarchal regression but entered self-esteem in the third and final step. As summarized in Table 4 (under the dashed line), self-esteem did not emerge as a predictor of outgroup attitudes when controlling for the three self-compassion components, $\beta = -.03, p = .774, 95\% \text{ CI } [-.26, .19]$, but the relation between common humanity and outgroup attitudes persisted after controlling for self-esteem, $\beta = -.30, p = .008, 95\% \text{ CI } [-.52, -.08]$.

Although the three self-compassion components are theoretically distinct, their strong intercorrelations (see, Table 3, as well as their strong correlation with self-esteem, raise multicollinearity concerns. Therefore, we ran collinearity diagnostics to test if the data met the assumption of collinearity. Following Hair et al. (2010), the findings indicate that collinearity was not a concern (common humanity: Tolerance = .43, VIF = 2.35; self-kindness: Tolerance = .29, VIF = 3.41; mindfulness: Tolerance = .36, VIF = 2.75; and self-esteem: Tolerance = .47, VIF = 2.14).

Hypothesis 2: Stronger compassion for others will mediate the relation between higher self-compassion and less negative attitudes toward outgroups.

Consistent with our introduction, next we tested if the role of self-compassion's common humanity in attitudes toward outgroups is explained by compassion for others. We used Hayes (2018) PROCESS macro (Model 4) for mediation with 10,000 bootstraps because it is a rigorous statistical method for testing mediation that addresses several limitations of traditional approaches (e.g., Baron & Kenny, 1986). Hayes (2018) PROCESS macro tests the effects of the predictor, mediator, and covariates on the outcome simultaneously, and the mediation model is significant when the bootstrap analysis indicates the indirect effect's 95% confidence intervals (CIs) do not include zero. Importantly, researchers (Hayes, 2009; Zhao et al., 2010) have demonstrated that a significant direct effect between the predictor and the outcome is not a prerequisite for mediation – that is, the predictor can exert its influence on the outcome through a mediator in the absence of a direct effect.

Table 3. Zero-Order Correlations among Measured Variables ($N = 163$)

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Gender	-										
2. Self-compassion	.07	-									
3. Common humanity	.10	.87***	-								
4. Self-kindness	.04	.93***	.71***	-							
5. Mindfulness	.08	.90***	.69***	.77***	-						
6. Self-esteem	-.02	.72***	.60***	.71***	.61***	-					
7. Compassion for others	-.33***	.21**	.26***	.17*	.16*	.35***	-				
8. Attitudes towards homeless people	.14*	-.06	-.11	-.02	-.03	-.01	-.23**	-			
9. Attitudes towards Asians	.10	-.08	-.18*	-.01	-.04	-.01	-.34***	.56***	-		
10. Attitudes towards senior citizens	.19**	-.11	-.18**	-.09	-.06	-.19**	.33***	.42***	.59***	-	
11. Attitudes towards Christians	.04	-.08	-.16	-.06	.01	-.03	-.16	.58***	.67***	.57***	-
12. Index outgroup attitudes	.17*	-.12	-.19**	-.09	-.07	-.11	-.34***	.79***	.85***	.79***	.85***

Note. Gender coding: 1 = female, 2 = male. Scores for variables 7-11 were all standardized (see 2.2.4 Attitudes toward outgroups).

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

In PROCESS, we submitted self-compassion's common humanity as the predictor variable, compassion for others as the mediator, and outgroup attitudes as the outcome variable, and included gender, self-esteem, self-kindness, and mindfulness as covariates. As per Figure 1, strong common humanity was associated with strong compassion for others ($\beta = .27, p = .012, 95\% \text{ CI } [.06, .48]$), and strong compassion for others was associated with less negative outgroup attitudes ($\beta = -.29, p < .001, 95\% \text{ CI } [-.46, -.12]$). Importantly, analysis confirmed that compassion for others mediated the relation between common humanity and negative outgroup attitudes ($\beta = -.08, 95\% \text{ CI } [-.16, -.02]$).³

We also tested an alternative mediation model in which self-compassion rooted in common humanity mediates the compassion for others and outgroup attitudes relation. It is plausible that individuals with strong compassion for others might express less negative outgroup attitudes because of their strong self-compassion rooted in common humanity. Hayes (2018) PROCESS macro (Model 4) for mediation with 10,000 bootstraps

Table 4. Hierarchical Regression Analysis with 10,000 Bootstrap Samples Predicting Negative Outgroup Attitudes ($N = 163$)

Predictor	ΔR^2	β	95% CI	t	p
Step 1	.03				.029
Gender		.17	[.05, .30]	2.24	.008
Step 2	.05				.042
Gender		.19	[.07, .32]	2.55	.003
Common humanity		-.30	[-.53, -.09]	-2.65	.007
Self-kindness		.05	[-.23, .32]	.41	.709
Mindfulness		.08	[-.14, .31]	.65	.466
Step 3	.01				.800
Gender		.19	[.06, .32]	2.51	.004
Common humanity		-.30	[-.52, -.08]	-2.55	.008
Self-kindness		.07	[-.24, .37]	.49	.662
Mindfulness		.08	[-.13, .31]	.67	.453
Self-esteem		-.03	[-.26, .19]	-.30	.774

Note. Gender coding: 1 = female, 2 = male. β = standardized coefficients. 95% CI = 95% confidence interval using standardized coefficients.

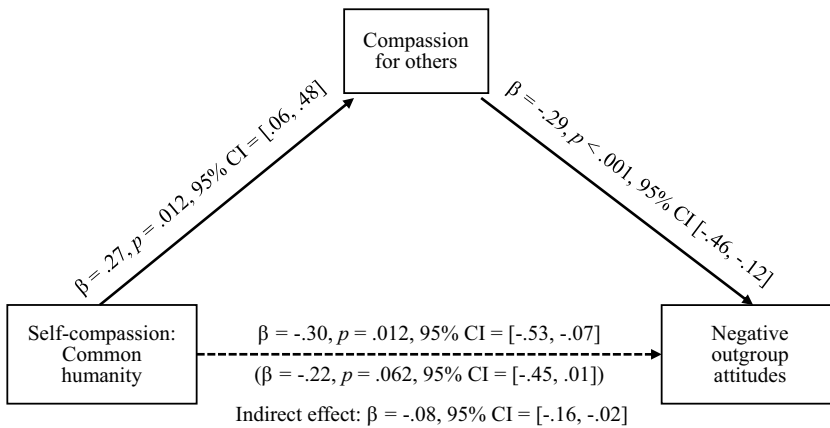


Figure 1. Hypothesis 2 mediation model. All β s are standardized coefficients. Above and below the dashed line, the non-parenthetical β represents the total effect, and the parenthetical β represents the direct effect, respectively. 95% CI = 95% confidence interval using standardized coefficients.

analysis indicated that common humanity did not mediate the relation between compassion for others and negative outgroup attitudes ($\beta = -.03, 95\% \text{ CI} [-.08, .01]$).

Finally, because a mediation model can be significant without a significant direct effect of the predictor on the outcome (Hayes, 2018), we tested if self-kindness and mindfulness had an indirect effect on outgroup attitudes via compassion for others. Hayes (2018) PROCESS macro (Model 4) for mediation with 10,000 bootstraps indicated that compassion for others did not mediate the relations between self-kindness and outgroup attitudes ($\beta = .07, 95\% \text{ CI} [-.01, .16]$) and mindfulness and outgroup attitudes ($\beta = .02, 95\% \text{ CI} [-.05, .09]$).

In sum, the above analyses suggest that self-compassion rooted in common humanity – but not self-kindness nor mindfulness – boosts compassion for others that in turn decreases negative attitudes toward outgroups.

3.1. Exploratory analyses

Although our preregistered *a priori* hypothesis was that compassion for others mediates the relation between self-compassion and outgroup attitudes, it is plausible that compassion for others moderates the relation between self-compassion or self-esteem and outgroup attitudes. Strong self-compassion or self-esteem may be related to lower negative outgroup attitudes among individuals with high compassion for others, but not among those with low compassion for others. We tested four different moderation models in which outgroup attitudes was the criterion, gender was a covariate, and compassion for others interacted with one of the three self-compassion components or self-esteem. For all analyses, none of the interaction terms were significant, $.03 \leq \beta_s \leq .09, .262 \leq p_s \leq .646$. All information for these four moderation models is included in the Supplementary Materials.

Finally, we explored the potential moderating role of gender in the relations of self-compassion, compassion for others, or self-esteem to outgroup attitudes because extant research exhibits gender differences in all these psychological constructs (Altemeyer, 1998;

Pommier et al., 2020; Yarnell et al., 2015; Zuckerman et al., 2016). Women tend to have higher compassion for others, lower self-compassion, lower self-esteem, and lower negative attitudes toward outgroups than men (Altemeyer, 1998; Pommier et al., 2020; Yarnell et al., 2015; Zuckerman et al., 2016). We tested five moderation models by regressing outgroup attitudes on gender and one of five predictors – common humanity, self-kindness, mindfulness, compassion for others, or self-esteem – in Step 1. In Step 2, we added the interaction term between gender and one of the five predictors from Step 1. All analyses yielded no significant interaction terms, $-.18 \leq \beta_s \leq .26$, $.287 \leq p_s \leq .958$. All information for these exploratory moderation models is included in the Supplementary Materials.

3.2. Summary

Our main hypotheses received support when self-compassion was rooted in common humanity. That is, high self-compassion rooted in common humanity (but not in self-kindness nor mindfulness) was a significant predictor of low negative attitudes toward outgroups (Hypothesis 1), and this relation was mediated by high compassion for others (Hypothesis 2). Furthermore, although most of the research on the self and outgroup attitudes tends to focus on self-esteem, which is another positive aspect of one's self-concept, our results suggest that self-compassion rooted in common humanity operates differently than, and independently from, self-esteem in the expression of intergroup attitudes. And, finally, alternative mediation (self-compassion as mediator) and moderation (the role of participants' gender) models were not statistically supported, suggesting that self-compassion is a robust antecedent to improving intergroup relations.

4. General discussion

Self-compassion is an adaptive self-concept that is associated with reduced defensiveness to self-images threats (Breines & Chen, 2012; Leary et al., 2007), so it stands to reason that high self-compassion individuals would exhibit lower levels of negative outgroup attitudes. Our results support this hypothesis when self-compassion is rooted in common humanity, which conceptually replicates Fuochi et al. (2018). Our data suggest that individuals who view their inadequacies and sufferings as common experiences of humanity are not motivated to express negative outgroup attitudes. Common humanity has both intrapersonal and interpersonal components as it is how one views themselves in relation to others (Neff, 2003a, 2003b). Moreover, self-compassion rooted in common humanity is the cognitive perception of shared (a) human identity and (b) experiences of common struggles and imperfections (Neff, 2003a, 2003b). Thus, common humanity blurs the intergroup social categorizations that underlie intergroup attitudes, yielding less negative outgroup attitudes.

Self-compassion rooted in self-kindness and mindfulness, however, were not related to intergroup attitudes. This was likely because both self-kindness and mindfulness spotlight the self, with the former as a kind approach to the self and the latter as a balanced perspective of one's emotions during hardships (Neff, 2003a, 2003b). While the present data suggest that individuals can focus on the self without implications for outgroup attitudes, they also show that high levels of self-kindness and mindfulness (along with common humanity) were both associated with stronger compassion for

others in general. In sum, while all three self-compassion components appear to be beneficial to *interpersonal* relations, only common humanity is beneficial to *intergroup* relations.

Consistent with previous work (Neff, 2003a, 2003b; Neff & Vonk, 2009), we found a strong association between self-compassion's components and self-esteem and, thus, we sought to disentangle these two self-concepts in the expression of intergroup attitudes. When doing so (statistically), individuals with high self-compassion rooted in common humanity expressed lower levels of negative outgroup attitudes than those with low common humanity, above and beyond any role of self-esteem. In fact, self-esteem was unrelated to negative outgroup attitudes in our study.

There are two potential explanations for why self-compassion was, while self-esteem was not, associated with intergroup attitudes. First, although both self-compassion and self-esteem share an underlying positive approach to self, the former heightens one's human connection to others while the latter heightens attention to the self (Neff, 2003a, 2003b; Neff & Vonk, 2009). This also explains why high self-esteem, but not high self-compassion, is part of a narcissistic personality profile (Locke, 2009; Neff, 2003b). Second, negative self-relevant information and experiences threaten self-esteem, but they have no such role in self-compassion (Breines & Chen, 2012; Leary et al., 2007). Individuals with high self-compassion rooted in common humanity view negative personal characteristics and experiences as normal human experiences and, thus, are not likely to engage in defensive actions such as outgroup derogation.

In addition, we hypothesized and found that individuals with higher self-compassion exhibit lower levels of negative outgroup attitudes because they were more compassionate toward others. These data suggest that compassion for others is one underlying mechanism in the role of self-compassion in intergroup attitudes.

Finally, exploratory analyses of the role of gender found that women participants exhibited higher compassion for others and expressed lower negative attitudes toward outgroups than men, findings that are consistent with past research (Altemeyer, 1998; Pommier et al., 2020). However, there were no gender differences in self-compassion and its subcomponents, and the mediating role of compassion for others in the relation between self-compassion rooted in common humanity and outgroup attitudes held for both women and men participants. These data exhibit that while women and men show group-level (i.e., on average) differences on some of the main constructs, the role of common humanity in lowering intergroup attitudes and its underlying process (via compassion for others) operate similarly for both women and men.

4.1. Limitations and future directions

The current study is not without limitations. Our cross-sectional design is unable to establish causality, so the mediation results should be interpreted with caution. Experimental and rigorous longitudinal research designs are needed to establish the causality suggested by our data. Notably, experimentally boosting mindfulness is effective in reducing intergroup bias (Oyler et al., 2021), but future researchers should investigate whether boosting common humanity also reduces intergroup bias. Related, while the goal of our research was to focus on trait-level self-compassion and its relation to outgroup attitudes in general, future researchers

should further investigate the contexts in which self-compassion plays a functional role in the expression of outgroup attitudes. For example, contextual cues that threaten one's self- and group-image increase biases (e.g., Fein & Spencer, 1997; Rivera & Dasgupta, 2018). One possibility is that self-compassion buffers these effects through reduced defensiveness. Finally, since our participants are college students in the U.S. northeastern region, we are unable to generalize to the general population. We note, however, that the relation between individual differences in self-compassion and outgroup attitudes was also found in Italy (Fuochi et al., 2018) and in U.S. southern region (Verhaeghen & Aikman, 2020).

5. Conclusion

Self-compassion is a self-concept construct that may benefit intergroup relations. Accordingly, self-compassion, specifically the component of common humanity, is a promising ingredient to be incorporated into individual-level interventions seeking to decrease outgroup prejudice and other intergroup biases such as the expression of stereotypes and discriminatory actions.

Notes

1. We report a range of Cronbach alphas because the number of items submitted to internal consistency analyses varied by participants. For example, participants who identified as Asian but not as Christian, homeless, and senior citizens, had more items submitted to analyses than participants who identified as Asian and Christian but not as homeless and senior citizens.
2. We used bootstrapping in the regression models because it yields more accurate estimates relative to standard estimations like those resulting from ordinary least squares (Fox, 2016; Kulesa et al., 2015).
3. Interested readers should see Supplementary Material for mediation tests using Baron and Kenny's (1986) approach. In sum, results suggest that compassion for others completely mediated the relation between self-compassion rooted in common humanity and outgroup attitudes.

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Ethics Approval

This study was approved by the Rutgers University Institutional Review Board (#Pro2018001768).

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