



This is a repository copy of *Negative life events and suicide risk in college students: Conditional indirect effects of hopelessness and self-compassion.*

White Rose Research Online URL for this paper:
<https://eprints.whiterose.ac.uk/155013/>

Version: Accepted Version

Article:

Hirsch, J.K., Hall, B.B., Wise, H.A. et al. (3 more authors) (2019) Negative life events and suicide risk in college students: Conditional indirect effects of hopelessness and self-compassion. *Journal of American College Health*, 69 (5). pp. 546-553. ISSN 0744-8481

<https://doi.org/10.1080/07448481.2019.1692023>

This is an Accepted Manuscript of an article published by Taylor & Francis in *Journal of American College Health* on 25 Nov 2019, available online:
<http://www.tandfonline.com/10.1080/07448481.2019.1692023>.

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk
<https://eprints.whiterose.ac.uk/>

Negative Life Events and Suicide Risk in College Students: Conditional Indirect Effects of
Hopelessness and Self-Compassion

Jameson K. Hirsch, Ph.D.¹, Benjamin B. Hall, M.A.¹, Haley A. Wise, B.S.¹, Byron D. Brooks,
M.A.¹, Edward C. Chang, Ph.D.², and Fuschia M. Sirois, Ph.D.³

Department of Psychology, East Tennessee State University, Johnson City, TN¹

Department of Psychology, University of Michigan, Ann Arbor, MI²

Department of Psychology, University of Sheffield, Sheffield, UK³

Manuscript submission to the *Journal of American College Health*

Word Limit: 6,000 words; Current Word Count: 4,959

Abstract

Objective: Suicide risk is a significant public health concern for college students and may be exacerbated by hopelessness resulting from negative life events (NLE), yet may be ameliorated by self-compassion. We examined the mediating role of hopelessness in the relation between NLE and suicidal behavior, and the moderating influence of self-compassion on all model paths.

Participants: Participants were 338 undergraduates (89% white; 67% female). Data were collected from December 2014 to December 2015. **Methods:** Participants completed the Life Events Checklist for College Students, Beck Hopelessness Inventory, Self-Compassion Scale, and Suicidal Behaviors Questionnaire – Revised. **Results:** Negative life events were related to greater hopelessness and, in turn, to more suicidal behavior, yet self-compassion attenuated this effect. **Conclusions:** Self-compassion may buffer the NLE–hopelessness linkage, thereby reducing suicide risk among college students. Therapeutic promotion of self-compassion, and reduction of hopelessness, may be important suicide prevention strategies on college campuses.

Key Words: Negative life events, self-compassion, suicide, hopelessness

Negative Life Events and Suicide Risk in College Students: Conditional Indirect Effects of Hopelessness and Self-Compassion

Increasing suicide rates over the past decade confirm suicide as a major public health concern, with nearly 45,000 suicides annually in the U.S.¹ Young adults of college age may be at particular risk for suicide, which is the second leading cause of death among individuals ages 15-34 in the United States.² On college campuses, about 8% of full-time college students report experiencing suicidal thoughts, more than twice the national average of 3.9%.³

The development of successful suicide intervention and prevention strategies is predicated on the identification of risk and protective factors that may be targeted for treatment,⁴ and a growing body of research has focused on collegiate-related transitional risk factors.⁵ Stressors, including changes in responsibilities, increased academic demands, new financial obligations, increased opportunity for consumption of drugs and alcohol, and separation from one's primary support group, are often components of the college experience,^{6,7} and the distress arising from such negative life events is related to suicidal ideation and attempts in this population.^{8,9} This finding is particularly alarming, as college students report more life stressors than their non-collegiate peers.¹⁰

Negative, and potentially traumatic, life events may contribute to psychopathology and suicide risk by exacerbating cognitive vulnerabilities, including negative beliefs and expectations about the future, or hopelessness, and a sense of futility to escape their stressors, or helplessness, which are well-established suicide risk factors.¹¹⁻¹² Given the prevalence of negative life events among college students, hopelessness may be an important target for intervention. Indeed, in an annual assessment of college students' perceptions, health behaviors, and habits, the American College Health Association found that, within the 12 months prior to reporting, 48% of college

students felt that things were hopeless, suggesting that negative life events may seem inescapable to this population.¹³

Not all college students who experience stressful life events manifest distress or suicidal behavior as a result¹⁴ perhaps due to individual-level protective characteristics, such as self-compassion, which may buffer against the development of cognitive dysfunction and transition to suicide risk.¹⁵ Self-compassion, originally devised from Buddhist principles, is comprised of self-kindness, mindfulness, and a sense of common humanity,¹⁶ and promotes the perspective that everyone is deserving of compassion, including oneself.¹⁷

Self-kindness may be defined as the act of being kind and understanding to oneself, during times of distress, in contrast to harsh judgment and negative self-criticism (e.g., blaming self for stressors).^{16,17} Common humanity includes viewing one's experiences, including stressful ones, as a part of the larger human condition, and the realization that feelings of inadequacy are shared by most people.¹⁷ Finally, mindfulness may be conceptualized as having a balanced awareness of one's thoughts and feelings and not over-identifying with them;^{17,18} as such, mindful individuals may be better able to observe and process thoughts and feelings (e.g., hopelessness) arising from stress, in the present moment, rather than being overwhelmed by them. Together, the components of self-compassion may contribute to emotional resilience when negative life events occur,¹⁷⁻¹⁸ perhaps reducing suicide risk.

In addition to the components of self-kindness, common humanity, and mindfulness, Neff¹⁸ highlights three characteristics in opposition to these adaptive self-compassion factors, which include self-judgment, isolation, and over-identification. Neff¹⁹ suggests that these maladaptive elements of self-compassion entail “lessened self-judgment, isolation, and over-

identification;” importantly, these dimensions marked by a lack of self-compassion are related to suicide risk factors (e.g., depressive symptoms).²⁰

In the context of the collegiate experience, self-compassion mediates the association between negative life events and depressive symptoms, between perfectionism and depressive symptoms, and between negative life events and suicide risk among college students.^{21,22} Additionally, self-compassion influences students’ perspectives on academic and social stressors while transitioning to college life.²³ For example, self-compassion is associated with adaptive coping styles (i.e., positive reframing), and negatively linked to maladaptive coping styles (i.e., self-blame) and perceived stress, perhaps because self-compassionate individuals tend to view stressors as less threatening.²⁴ Self-compassion may also foster resilience after a negative life event, perhaps countering an overly catastrophic perception of the event, which may otherwise lead to greater hopelessness.²⁵

In our current study, we examined hopelessness as a mediator of the relation between negative life events and suicidal behavior. Further, we investigated the potential role of self-compassion as a moderator of the associations between negative life events and hopelessness, and between hopelessness and suicide risk, and between negative life events and suicide risk. At the bivariate level, we hypothesized that negative life events, hopelessness, and suicidal behavior would be positively related, and that each of these variables would be negatively related to the self-compassion total score and adaptive sub-components and negatively related to the maladaptive elements of self-compassion. At the multivariate level, we hypothesized that hopelessness would mediate the relation between negative life events and suicidal behavior, such that more negative life events would be related to greater hopelessness and, in turn, to increased suicide risk. Finally, we hypothesized that self-compassion would moderate the mediating effect

of hopelessness; specifically, the presence of self-compassion would mitigate the mediating role of hopelessness on the linkage between negative life events and suicide risk.

METHODS

Participants

A sample of 338 college students from a mid-size public university was recruited, from December 2014 to December 2015, to participate in a confidential online survey approved by our University Institutional Review Board. Each student provided informed consent and was awarded course credit or extra credit points for survey completion. The mean age of participants was 21.8 years old ($SD = 5.3$), and the sample was predominantly White (89%; $n=294$) and female (67%; $n=225$). Participants were mostly first-year undergraduates (35.3%; $n = 119$), followed by second-year undergraduates (22%; $n =74$), third-year undergraduates (21.7%; $n = 73$), fourth-year undergraduates (17.5%; $n = 59$), and other (3.6%; $n =12$).

Measures

Suicidal behavior was assessed using the Suicidal Behaviors Questionnaire-Revised (SBQ-R).²⁶ The SBQ-R is a self-report inventory composed of four items which measure several aspects of suicidality including: lifetime suicide ideation and attempts (e.g., "Have you ever thought about or attempted to kill yourself?"); frequency of suicidal ideation over the past year (e.g., "How often have you thought about killing yourself in the past year?"); threat of suicide (e.g., "Have you ever told someone that you were going to commit suicide, or that you might do it?"); and, likelihood of suicidal behavior in the future (e.g., "How likely is that you will attempt suicide someday?"). Item responses vary by question and reflect a Likert-style scale. Consistent with prior reports, including in college students,^{9,27} the SBQ-R demonstrated adequate internal consistency ($\alpha = .81$) in the present study.

Negative life events were assessed using the Life Events Checklist for College Students.¹⁰ The LECCS is a 46-item self-report inventory, which asks participants to endorse various life events experienced in the past 12 months. The LECCS yields two scores representative of the number of positive and negative life events experienced in the past year. The current study focused solely on the negative life events (NEG) score of the LECCS. Some LECCS-NEG items include, "I failed an exam," "I had financial difficulties," and "I was arrested." Previously, the LECCS-NEG has demonstrated sound psychometric properties. In the current study, the internal reliability of the LECCS-NEG was acceptable ($\alpha = .75$). Given the unrelated nature of negative life events, low reliability coefficients are common for this measure.

Hopelessness was assessed using the Beck Hopelessness Scale, which measures negative expectancies about one's future (BHS).²⁷ The BHS is a 20-item self-report inventory for which participants categorize statements as true or false (e.g., "I might as well give up because there is nothing I can do about making things better for myself"). Previously, in college populations the BHS has yielded excellent internal consistency ($\alpha = .91$).²⁸ In the current study, internal consistency was good ($\alpha = .86$).

Self-Compassion was assessed using the Self-Compassion Scale (SCS).¹⁶ The SCS 26-item self-report inventory which participants respond on a 5-point Likert scale from *almost never* (1) to *almost always* (5). The SCS produces an overall self-compassion score as well as yields six subscale scores of the components of self-compassion and their negative counterparts including: self-kindness (e.g., "I try to be loving towards myself when I'm feeling emotional pain"), self-judgment (e.g., "I'm disapproving and judgmental about my own flaws and inadequacies"), common humanity (e.g., "When things are going badly for me, I see the difficulties as part of life that everyone goes through"), isolation (e.g., "When I think about my inadequacies, it tends to

make me feel more separate and cut off from the rest of the world"), mindfulness (e.g. "When something upsets me I try to keep my emotions in balance"), and over-identification (e.g. "When I'm feeling down I tend to obsess and fixate on everything that's wrong"). The SCS has demonstrated excellent internal consistency in college student samples, for the total score ($\alpha=.93$).²⁹ Moreover, each subscale of the SCS has demonstrated good reliability with Cronbach's α ranging from .75 to .81.¹⁷ In our study, the SCS demonstrated adequate internal consistency for overall self-compassion ($\alpha= .80$), as well as for each subscale of the SCS (self-kindness, $\alpha = .85$; self-judgment, $\alpha = .82$; common humanity, $\alpha = .78$; isolation, $\alpha = .83$; mindfulness, $\alpha = .76$; and over-identification, $\alpha = .80$).

Statistical Analyses

Using SPSS Version 23, we conducted bivariate correlations, mediation, and conditional indirect analyses, consistent with Hayes³⁰, covarying age, ethnicity, and sex. Bivariate analyses were used to examine independence of, and associations between study variables. Simple mediation was used to determine if hopelessness mediated the relation between negative life events and suicidal behavior. Lastly, conditional indirect analyses were used to determine if self-compassion moderated the mediating effect of hopelessness on the relation between negative life events and suicidal behavior; separate models were developed to test self-compassion and its six subscales as moderators.

Results

At the bivariate level, negative life events were positively related to hopelessness ($r = .18$) and suicidal behavior ($r = .13$), and negatively related to overall self-compassion ($r = -.14$). Hopelessness was positively related to suicidal behavior ($r = .42$) and negatively related to

overall self-compassion ($r = -.41$). Overall self-compassion was negatively related to suicidal behavior ($r = -.35$; see Table 1).

At the multivariate level, a significant total effect of negative life events on suicidal behavior was observed (TE=.17, SE=.06, 95% CI [.05, .28], $p = .01$); however, after accounting for hopelessness, negative life events was no longer associated with suicidal behavior in a model of the direct effect (DE=.07, SE=.06, 95% CI [-.04, .18], $p = .20$) indicating mediation. That is, greater occurrence of negative life events within the past year was associated with greater hopelessness and, in turn, with increased suicide risk (see Figure 1).

When tested as a moderator, self-compassion, as an overall construct, significantly moderated the mediating effect of hopelessness on the relation between negative life events and suicidal behavior. Specifically, self-compassion attenuated the “a path” between negative life events and hopelessness (self-compassion: $\beta = -.05$, SE=.02, $t(306) = -2.69$, $p < .01$, 95%CI=[-.08, -.01]), weakening this association and, in turn, reducing suicide risk (See Figure 1). Self-compassion did not moderate the “b path,” between hopelessness and suicidal behaviors, or the direct effect between negative life events and suicidal behaviors.

When the individual components of self-compassion were assessed as independent moderators, both self-kindness and common humanity significantly moderated the “a path,” the linkage between negative life events and hopelessness (self-kindness: $\beta = -.05$, SE=.02, $t(306) = -3.13$, $p < .001$, 95%CI=[-.08, -.02]; common humanity: $\beta = -.06$, SE=.02, $t(306) = -3.06$, $p < .001$, 95%CI=[-.10, -.02]), thereby reducing suicide risk. Mindfulness was not a significant moderator, when assessed independently.

In separate models, self-judgement, isolation, and over-identification were significant moderators of the mediating effect of hopelessness on the negative life events-suicide association

(self-judgement: $\beta=.05$, $SE=.02$, $t(306)= 2.96$, $p<.001$, $95\%CI=[.02, .09]$; isolation: $\beta=.04$, $SE=.02$, $t(306)= 2.04$, $p=.04$, $95\%CI=[.00, .08]$; over-identification: $\beta=.04$, $SE=.02$, $t(306)= 2.27$, $p=.02$, $95\% CI=[.01, -.08]$), exacerbating the relation between negative life events and hopelessness, thereby increasing suicide risk (See Figure 2).

Comment

Our hypotheses were supported at the bivariate and multivariate levels. At the bivariate level, negative life events, hopelessness, and suicidal behavior were all positively related to each other and inversely related to self-compassion, consistent with previous literature.^{28,14,31} In multivariate models, hopelessness mediated the relation between negative life events and suicidal behavior, such that more negative life events were associated with increased hopelessness and, in turn, greater suicidal behavior. These findings support previous literature linking stressful events and hopelessness to suicidal ideation in the college student population.^{8,28,14,31-32} The inability to resolve stressors, perhaps because of deficits in problem solving and interpersonal skills^{33,34}, may lead to difficulties envisioning positive resolution to stressors or attainment of goals (i.e., hopelessness), and consequent suicide risk.³⁵⁻³⁶

In our examination of conditional indirect effects, overall self-compassion, as well as its subcomponents of self-kindness and common humanity, buffered the association between the experience of negative life events and feelings of hopelessness, thereby reducing suicide risk. This mitigating effect of self-compassion may be due, in part, to self-compassion's influence on cognitive-emotional factors. For instance, self-compassionate individuals are less likely to have a negative attributional style in response to aversive situations (e.g., blame self, belief things will not get better), a perspective that often leads to the development of hopelessness and depression.^{37,38} Self-compassionate individuals may also be able to avoid catastrophizing a negative life

event (e.g., perceiving a worst-case scenario), have reduced emotional reactivity (e.g., anxiety) in response to negative life events, and are better able to cope adaptively with stressors.^{18,24,39}

Specific components of self-compassion may be particularly relevant to students experiencing stress; for instance, we found that self-kindness buffered the negative life events-hopelessness linkage. In times of stress, individuals able to engage in self-kindness may be able to view their situation in a more adaptive manner, avoiding self-blame for experiences for which they are not responsible.¹⁹ Common humanity also buffered the relation between potentially traumatic events and hopelessness, with consequent beneficial effects on suicide risk. For college students, embracing the concept of shared humanity (e.g., acknowledging that all students experience stressors) and the realization that fears of inadequacy and disappointment are ubiquitous, may engender a perspective of interconnectedness that reduces suicide risk¹⁹; further, realizing that many students are able to effectively resolve stressors, may be both comforting and encouraging.

Of note, in our analyses, mindfulness was not a significant moderator, which opposed our hypothesis, and which is surprising, given previous findings indicating an association between mindfulness and psychopathology, including reduced depressive symptoms and suicidal behavior.^{40,41} Similar results have been previously documented by Chesin, Sommez, Benjamin-Phillips, Beeler, Brodsky, and Stanley,⁴² who found that mindfulness was not associated with hopelessness, although their study had limited power to detect effects. Interestingly, the negative counterpart of mindfulness, over-identification, significantly exacerbated the relation between negative life events and hopelessness, suggesting that characteristics that are in opposition to mindfulness (i.e., over-identification) may be more harmful than the benefits of mindfulness, in the context of negative life events.

We also found that the maladaptive components of self-judgment and isolation were significant moderators of our model, exacerbating the deleterious linkage between negative life events and hopelessness which, in turn, was associated with increased suicide risk. In times of stress, these negative components of self-compassion may contribute to rumination about stressors, feelings of inadequacy, an overly-critical sense of self, and feelings of disconnection from others.¹⁷ Greater self-condemnation may also reduce overall psychological resiliency, thereby limiting self-efficacy to overcome stressors.^{17,19}

Overall, our findings replicate previous research implicating negative life events and hopelessness as risk factors for suicide, but are among the first to note the protective effects of self-compassion on suicide risk.²⁸ Negative and potentially traumatic life events may seem overwhelming and inescapable, resulting in a sense of hopelessness about the self and the future; however, self-compassion may serve as a significant buffer against the development of hopelessness after negative life events, promoting better emotional reactivity to stressors and the sense that one is not alone (e.g., that others have also experienced similar circumstances).¹⁹ Conversely, the psychological features that mark the absence of self-compassion - self-judgment, over-identification and isolation - were associated with a strengthening of the deleterious association between negative life-events and hopelessness, with consequent greater suicide risk. This finding is a novel contribution to the literature and highlights the need for further attention devoted to the effects of the negative facets of poor self-compassion. Toward this end, previous research suggests that the relation between self-compassion and hopelessness is mediated by a negative cognitive style,³⁸ and it may be that poor self-compassion is marked by negative and maladaptive patterns of cognition which could, perhaps, be altered therapeutically to reduce suicide risk.

Limitations

Although novel, our findings should be interpreted in the context of minor limitations. First, the use of a cross-sectional design inhibits causal inference, and future, longitudinal and prospective studies are needed to substantiate our findings. Second, our sample was predominantly white and female college students, which may limit generalizability of our findings to other demographic groups or clinical samples; our findings should be replicated, in future studies with diverse, clinical and community samples.⁴³ Given that our sample was largely female, sex differences may also be important to examine, as women tend to have lower levels of self-compassion than men.^{17,44-45} Despite these limitations, our study suggests that being compassionate toward oneself in the face of stressful, and potentially traumatic, life events may reduce the likelihood of the emergence of hopelessness, thereby preventing consequent transition to engagement in suicidal behavior.

Conclusions

Our findings are consistent with current literature examining the buffering effect of self-compassion in reactions to negative life events.^{18,39} However, our study extends the literature by being among the first to note the protective impact of self-compassion on the negative cognitive-emotional sequelae of stressful and traumatic life events. Importantly, our findings suggest that reducing hopelessness, via the promotion of self-compassion, may reduce suicide risk in college students who have experienced a stressful and potentially traumatic life event.

Hopelessness may be targeted directly through cognitive-behavioral strategies such as reframing (e.g., reducing self-blame) and addressing cognitive distortions, such as catastrophizing (e.g., believing one bad grade thwarts an entire academic career).⁴⁶ Alternatively, preliminary evidence suggests that hope therapy can foster psychological wellbeing and increase

hopefulness, for instance through the establishment of meaningful, attainable goals and development of problem-solving strategies to achieve them.^{47,48}

The promotion of self-compassion is also emerging as a robust contributor to better physical and mental health outcomes⁴⁹⁻⁵⁰), in the extant literature. Acceptance and Commitment Therapy or Compassion-Focused Therapy, which both employ techniques that foster self-compassion (e.g., self-soothing, visualization⁵¹), are also suggested therapeutic approaches to reduce psychological distress and suicide risk in students experiencing difficult life circumstances.^{52,53}

In sum, in our sample of college students, negative life events were associated with greater feelings of hopelessness and, in turn, to greater risk for suicide. However, to the extent that students were able to report the presence of self-compassion, the association between the experience of negative life events and the development of hopelessness was ameliorated. As such, our study highlights three specific areas that may be targeted by campus-level interventions. First, the identification of college students at high risk for suicidal behaviors is central to the prevention of suicide. Negative life events are a potential “marker” of suicide risk, and should be a target of screening, informally by gatekeepers (e.g., teachers) and, formally, by healthcare professionals when students seek treatment. Second, addressing hopelessness is a critical point of intervention, given its robust contribution to suicide risk.⁵⁴ Finally, our finding indicating self-compassion as a potential buffer of suicide risk following negative life events offers numerous avenues for treatment, via promotion of healthy views of the self, facilitating a focus on present-moment goals and emotions, and normalizing collegiate stress and its successful resolution. Taken together, our findings inform a framework for reducing suicide risk

in a vulnerable campus group – those in crisis due to negative life events and trauma – and offer a positive psychological approach to suicide prevention via the promotion of self-compassion.

References

1. Centers for Disease Control. Suicide rising across the US | VitalSigns | CDC. <https://www.cdc.gov/vitalsigns/suicide/>. Published 2018. Accessed November 8, 2018.
2. Centers for Disease Control. *Leading Causes of Death by Age Group United States 2016*; 2016. https://www.cdc.gov/injury/wisqars/pdf/leading_causes_of_death_by_age_group_2016-508.pdf. Accessed November 8, 2018.
3. Center for Behavioral Health Statistics. *Results from the 2013 National Survey on Drug Use and Health: Mental Health Findings*. <http://store.samhsa.gov/home>. Accessed October 30, 2018.
4. Kraemer HC, Kazdin AE, Offord DR, Kessler RC, Jensen PS, Kupfer DJ. Coming to terms with the terms of risk. *Arch Gen Psychiatry*. 1997;54(4):337-343. doi:10.1001/archpsyc.1997.01830160065009
5. Lee H-S, Kim S, Choi I, Lee K-U. Prevalence and risk factors associated with suicide ideation and attempts in Korean college students. *Psychiatry Investig*. 2008;5(2):86-93. doi:10.4306/pi.2008.5.2.86
6. Hirsch JK, Barton AL. Positive social support, negative social exchanges, and suicidal behavior in college students. *J Am Coll Heal*. 2011;59(5):393-398. doi:10.1080/07448481.2010.515635
7. Arria AM, O'Grady KE, Caldeira KM, Vincent KB, Wilcox HC, Wish ED. Suicide ideation among college students: a multivariate analysis. *Arch Suicide Res*. 2009;13(3):230-246. doi:10.1080/13811110903044351
8. Hirsch JK, Wolford K, LaLonde SM, Brunk L, Morris AP. Dispositional optimism as a moderator of the relationship between negative life events and suicide ideation and attempts. *Cognit Ther Res*. 2007;31(4):533-546. doi:10.1007/s10608-007-9151-0
9. Rowe CA, Walker KL, Britton PC, Hirsch JK. The relationship between negative life events and suicidal behavior. *Crisis*. 2013;34(4):233-241. doi:10.1027/0227-5910/a000173
10. Tomoda A. Correlations between ratings of experienced and imagined life events by first-year university students in Japan. *Psychol Rep*. 1997;81(5):187. doi:10.2466/PRO.81.5.187-193
11. Abramson LY, Alloy LB, Hogan ME, et al. The hopelessness theory of suicidality. In: Joiner T, Rudd M, eds. *Suicide Science: Expanding Boundaries*. Boston, MA: Kluwer Academic Publishing; 2000:17-32. doi:10.1007/0-306-47233-3_3
12. Wilcox HC, Arria AM, Caldeira KM, Vincent KB, Pinchevsky GM, O'Grady KE. Prevalence and predictors of persistent suicide ideation, plans, and attempts during college. *J Affect Disord*. 2010;127:287-294. doi:10.1016/j.jad.2010.04.017
13. American College Health Association (ACHA). *Spring 2015 Reference Group Executive Summary*. Hanover, MD; 2015. https://www.acha.org/documents/ncha/NCHA-II_WEB_SPRING_2015_REFERENCE_GROUP_EXECUTIVE_SUMMARY.pdf. Accessed October 30, 2018.
14. Konick LC, Gutierrez PM. Testing a model of suicide ideation in college students. *Suicide Life-Threatening Behav*. 2005;35(2):181-192. doi:10.1521/suli.35.2.181.62875
15. Hjemdal O, Friberg O, Stiles TC, Rosenvinge JH, Martinussen M. Resilience predicting psychiatric symptoms: a prospective study of protective factors and their role in

- adjustment to stressful life events. *Clin Psychol Psychother*. 2006;13(3):194-201. doi:10.1002/cpp.488
16. Neff KD. The development and validation of a scale to measure self-compassion. *Self Identity*. 2003;2(3):223-250. doi:10.1080/15298860309027
 17. Neff KD. Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self Identity*. 2003;2(2):85-101. doi:10.1080/15298860309032
 18. Leary MR, Tate EB, Adams CE, Batts Allen A, Hancock J. Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *J Pers Soc Psychol*. 2007;92(5):887-904. doi:10.1037/0022-3514.92.5.887
 19. Neff KD. Does self-compassion entail reduced self-judgment, isolation, and over-identification? A response to Muris, Otgaar, and Petrocchi (2016). *Mindfulness (N Y)*. 2016;7(3):791-797. doi:10.1007/s12671-016-0531-y
 20. Soysa CK, Wilcomb CJ. Mindfulness, self-compassion, self-efficacy, and gender as predictors of depression, anxiety, stress, and well-being. *Mindfulness (N Y)*. 2015;6(2):217-226. doi:10.1007/s12671-013-0247-1
 21. Chang EC, Yu T, Najarian AS-M, et al. Understanding the association between negative life events and suicidal risk in college students: Examining self-compassion as a potential mediator. *J Clin Psychol*. 2017;73(6):745-755. doi:10.1002/jclp.22374
 22. Mehr KE, Adams AC. Self-compassion as a mediator of maladaptive perfectionism and depressive symptoms in college students. *J College Stud Psychother*. 2016;30(2):132-145. doi:10.1080/87568225.2016.1140991
 23. Terry ML, Leary MR, Mehta S, Henderson K. Self-compassionate reactions to health threats. *Personal Soc Psychol Bull*. 2013;39(7):911-926. doi:10.1177/0146167213488213
 24. Allen AB, Leary MR. Self-compassion, stress, and coping. *Soc Personal Psychol Compass*. 2010;4(2):107-118. doi:10.1111/j.1751-9004.2009.00246.x
 25. Neely ME, Schallert DL, Mohammed SS, Roberts RM, Chen Y-J. Self-kindness when facing stress: The role of self-compassion, goal regulation, and support in college students' well-being. *Motiv Emot*. 2009;33(1):88-97. doi:10.1007/s11031-008-9119-8
 26. Osman A, Bagge CL, Gutierrez PM, Konick LC, Kopper BA, Barrios FX. The suicidal behaviors questionnaire-revised (SBQ-R): Validation with clinical and nonclinical samples. *Assessment*. 2001;8(4):443-454. doi:10.1177/107319110100800409
 27. Beck AT, Weissman A, Lester D, Trexler L. The measurement of pessimism: The Hopelessness Scale. *J Consult Clin Psychol*. 1974;42(6):861-865. doi:10.1037/h0037562
 28. Chang EC, Sanna LJ, Hirsch JK, Jeglic EL. Loneliness and negative life events as predictors of hopelessness and suicidal behaviors in hispanics: evidence for a diathesis-stress model. *J Clin Psychol*. 2010;66(12):1242-1253. doi:10.1002/jclp.20721
 29. Sirois FM, Kitner R, Hirsch JK. Self-compassion, affect, and health-promoting behaviors. *Heal Psychol*. 2015. doi:10.1037/hea0000158
 30. Hayes AF. *Introduction to Mediation, Moderation, and Conditional Process Analysis : A Regression-Based Approach*. Guilford Press; 2013.
 31. Hirsch JK, Rabon JK. Optimistic explanatory style and suicide attempt in young adults. *Int J Ment Heal Addict*. 2015;13:675-686. doi:10.1007/s11469-015-9570-1
 32. Dixon WA, Heppner PP, Anderson WP. Problem-solving appraisal, stress, hopelessness, and suicide ideation in a college population. *J Couns Psychol*. 1991;38(1):51-56. doi:10.1037/0022-0167.38.1.51
 33. Grover KE, Green KL, Pettit JW, Monteith LL, Garza MJ, Venta A. Problem solving

- moderates the effects of life event stress and chronic stress on suicidal behaviors in adolescence. *J Clin Psychol*. 2009. doi:10.1002/jclp.20632
34. Nezu AM, Ronan GF. Social problem solving as a moderator of stress-related depressive symptoms: A prospective analysis. *J Couns Psychol*. 1988;35(2):134-138. doi:10.1037/0022-0167.35.2.134
 35. Joiner TE. Negative attributional style, hopelessness depression and endogenous depression. *Behav Res Ther*. 2001;39:139-149. doi:10.1016/S0005-7967(99)00160-6
 36. Klein SB. *Learning : Principles and Applications*. Thousand Oaks, CA: Sage Publications; 2015.
 37. Giollabhui N Mac, Hamilton JL, Nielsen J, et al. Negative cognitive style interacts with negative life events to predict first onset of a major depressive episode in adolescence via hopelessness. *J Abnorm Psychol*. 2018. doi:10.1037/abn0000301
 38. Zhou L, Chen J, Liu X, Lu D, Su L. Negative cognitive style as a mediator between self-compassion and hopelessness depression. *Soc Behav Personal an Int J*. 2013. doi:10.2224/sbp.2013.41.9.1511
 39. Neff KD, Hsieh Y-P, Dejjitterat K. Self-compassion, Achievement Goals, and Coping with Academic Failure. *Self Identity*. 2005;4(3):263-287. doi:10.1080/13576500444000317
 40. Collins KRL, Stritzke WGK, Page AC, Brown JD, Wylde TJ. Mind full of life: Does mindfulness confer resilience to suicide by increasing zest for life? *J Affect Disord*. 2017;226(2018):100-107. doi:10.1016/j.jad.2017.09.043
 41. Deng Y-Q, Li S, Tang Y-Y. The relationship between wandering mind, depression and mindfulness. *Mindfulness (N Y)*. 2014;5(2):124-128. doi:10.1007/s12671-012-0157-7
 42. Chesin MS, Sonmez CC, Benjamin-Phillips CA, Beeler B, Brodsky BS, Stanley B. Preliminary effectiveness of adjunct mindfulness-based cognitive therapy to prevent suicidal behavior in outpatients who are at elevated suicide risk. *Mindfulness (N Y)*. 2015;6(6):1345-1355. doi:10.1007/s12671-015-0405-8
 43. Lockard AJ, Hayes JA, Neff K, Locke BD. Special section: Self-compassion among college counseling center clients: An examination of clinical norms and group differences. *J Coll Couns*. 2014;17. doi:10.1002/j.2161-1882.2014.00061.x
 44. Bluth K, Campo RA, Futch WS, Gaylord SA. Age and gender differences in the associations of self-compassion and emotional well-being in a large adolescent sample. *J Youth Adolesc*. 2017. doi:10.1007/s10964-016-0567-2
 45. Yarnell LM, Stafford RE, Neff KD, Reilly ED, Knox MC, Mullarkey M. Meta-analysis of gender differences in self-compassion. *Self Identity*. 2015;14(5):499-520. doi:10.1080/15298868.2015.1029966
 46. Voelz ZR, Haeffel GJ, Joiner TE, Dineen Wagner K. Reducing hopelessness: the interation of enhancing and depressogenic attributional styles for positive and negative life events among youth psychiatric inpatients. *Behav Res Ther*. 2003;41:1183-1198. doi:10.1016/S0005-7967(03)00030-5
 47. Cheavens JS, Guter MM. Hope therapy. In: Gallagher MW, Lopez SJ, eds. *The Oxford Handbook of Hope*. New York, NY: Oxford University Press; 2018:133-142. <https://web-b-ebscobhost-com.iris.etsu.edu:3443/ehost/detail/detail?vid=33&sid=1723e5cd-74d3-4a4e-8d0a-50f84e872f2e%40sessionmgr103&bdata=JkF1dGhUeXBIPWNvb2tpZSxpcCxlcmwsdWlkLGF0aGVucyZzaXRIPWVob3N0LWxpdmU%3D#AN=2017-55500-012&db=psyh>. Accessed November 1, 2018.

48. Shekarabi-Ahari G, Younesi J, Borjali A, Ansari-Damavandi S. The effectiveness of group hope therapy on hope and depression of mothers with children suffering from cancer in tehran. *Iran J cancer Prev.* 2012;5(4):183-188. <http://www.ncbi.nlm.nih.gov/pubmed/25352968>. Accessed October 30, 2018.
49. Dunne S, Sheffield D, Chilcot J. Brief report: Self-compassion, physical health and the mediating role of health-promoting behaviours. *J Health Psychol.* 2018;23(7):993-999. doi:10.1177/1359105316643377
50. Woodruff SC, Glass CR, Arnkoff DB, Crowley KJ, Hindman RK, Hirschhorn EW. Comparing self-compassion, mindfulness, and psychological inflexibility as predictors of psychological health. *Mindfulness (N Y).* 2014;5(4):410-421. doi:10.1007/s12671-013-0195-9
51. Neff K, Tirsch D. Self-Compassion and Act. In: Ciarrochi J, Kashdan TB, eds. *Mindfulness, Acceptance, and Positive Psychology: The Seven Foundations of Well-Being.* Oakland: New Harbinger Publications; 2013:78-106. doi:10.1037/t10178-000
52. Gilbert P. *Compassion Focused Therapy : Distinctive Features.* New York, NY: Routledge; 2010.
53. Hayes SC, Strosahl K, Wilson KG. *Acceptance and Commitment Therapy : An Experiential Approach to Behavior Change.* New York, NY: Guilford Press; 1999.
54. McMillan D, Gilbody S, Beresford E, Neilly L. Can we predict suicide and non-fatal self-harm with the Beck Hopelessness Scale? A meta-analysis. *Psychol Med.* 2007. doi:10.1017/S0033291706009664

Table 1.

Means, Standard Deviations, and Correlations.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Suicidal Behavior	-	.14*	.43***	-.35***	-.25***	.28***	-.21***	.28***	-.21***	.28***
2. Negative Life Events		-	.18**	-.16**	-.16**	.08	-.10	.10	-.12*	.13*
3. Hopelessness			-	-.42***	-.33***	.26***	-.38***	.31***	-.29***	.28***
4. Self-Compassion				-	.77***	-.77***	.55***	-.80***	.67***	-.76***
5. Self-Kindness					-	-.42***	.55***	-.41***	.68***	-.33***
6. Self-Judgment						-	-.07	.77***	-.24***	.76***
7. Common Humanity							-	-.13*	.60***	-.10
8. Isolation								-	-.26***	.78***
9. Mindfulness									-	-.25***
10. Over-Identification										-
Mean	2.20	10.12	5.16	17.88	14.45	15.80	12.58	12.37	12.71	12.31
Standard Deviation	3.25	3.13	3.99	3.52	3.87	4.05	3.25	3.52	2.92	3.49

Note: Negative Life Events = Negative subscale of the Life Events Scale; Suicidal Behavior = Suicidal Behaviors Questionnaire – Revised; Self-Compassion = Self-Compassion Scale; Hopelessness = Beck Hopelessness Scale. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 2

Summary of the Moderated Mediation Model of the Positive Components of Self-Compassion

Model/Variable	Hopelessness			Suicidal Behavior		
	β	SE	95% CI	β	SE	95% CI
Overall Self-Compassion						
Hopelessness	-	-	-	0.44	0.17	[0.10, 0.79]
Negative Life Events	1.02	0.31	[0.40, 1.64]	-0.11	0.19	[-0.03, 0.01]
Self-Compassion Total	0.04	0.2	[-0.35, 0.43]	-0.23	0.16	[-0.55, 0.09]
NLE X SCT	-0.05	0.02	[-.08, -.01]	0.01	0.02	[-0.02, 0.04]
Hopelessness x SCT	-	-	-	-0.01	0.01	[-0.03, 0.01]
Self-Kindness						
Hopelessness	-	-	-	0.36	0.14	[0.08, 0.64]
Negative Life Events	0.93	0.24	[0.46, 1.40]	0.01	0.21	[-.41, .42]
Self-Kindness	0.19	0.17	[-0.15, 0.53]	-0.12	0.14	[-.39, .15]
NLE x Self-Kindness	-0.05	0.02	[-0.08, -0.02]	0.00	0.01	[-.02, .03]
Hopelessness x Self-Kindness	-	-	-	-0.00	0.01	[-.02, .02]
Common Humanity						
Hopelessness	-	-	-	0.48	0.15	[.17, .78]
Negative Life Events	0.97	0.25	[.47, 1.46]	-0.09	0.23	[-.54, .36]
Common Humanity	0.20	0.22	[-.24, .63]	-0.12	0.18	[-.48, .24]
NLE x CH	-0.06	0.02	[-.10, -.02]	0.01	0.02	[-.02, .05]
Hopelessness x CH	-	-	-	-0.01	0.01	[-.04, .01]
Mindfulness						
Hopelessness	-	-	-	0.47	0.18	[.13, .82]
Negative Life Events	0.60	0.3	[.01, 1.19]	0.18	0.25	[-.30, .67]
Mindfulness	-0.06	0.25	[-.56, .44]	0.05	0.2	[-.34, .44]
NLE x Mindfulness	-0.03	0.02	[-.08, .02]	-0.01	0.02	[-.05, .03]
Hopelessness x Mindfulness	-	-	-	-0.01	0.01	[-.04, .02]

Note. NLE = Negative Live Events; SCT = Self-Compassion Total; CH = Common Humanity; Negative Life Events = Negative subscale of the Life Events Scale; Suicidal Behavior = Suicidal Behaviors Questionnaire – Revised; Self-Compassion = Self-Compassion Scale; Hopelessness = Beck Hopelessness Scale.

Table 3

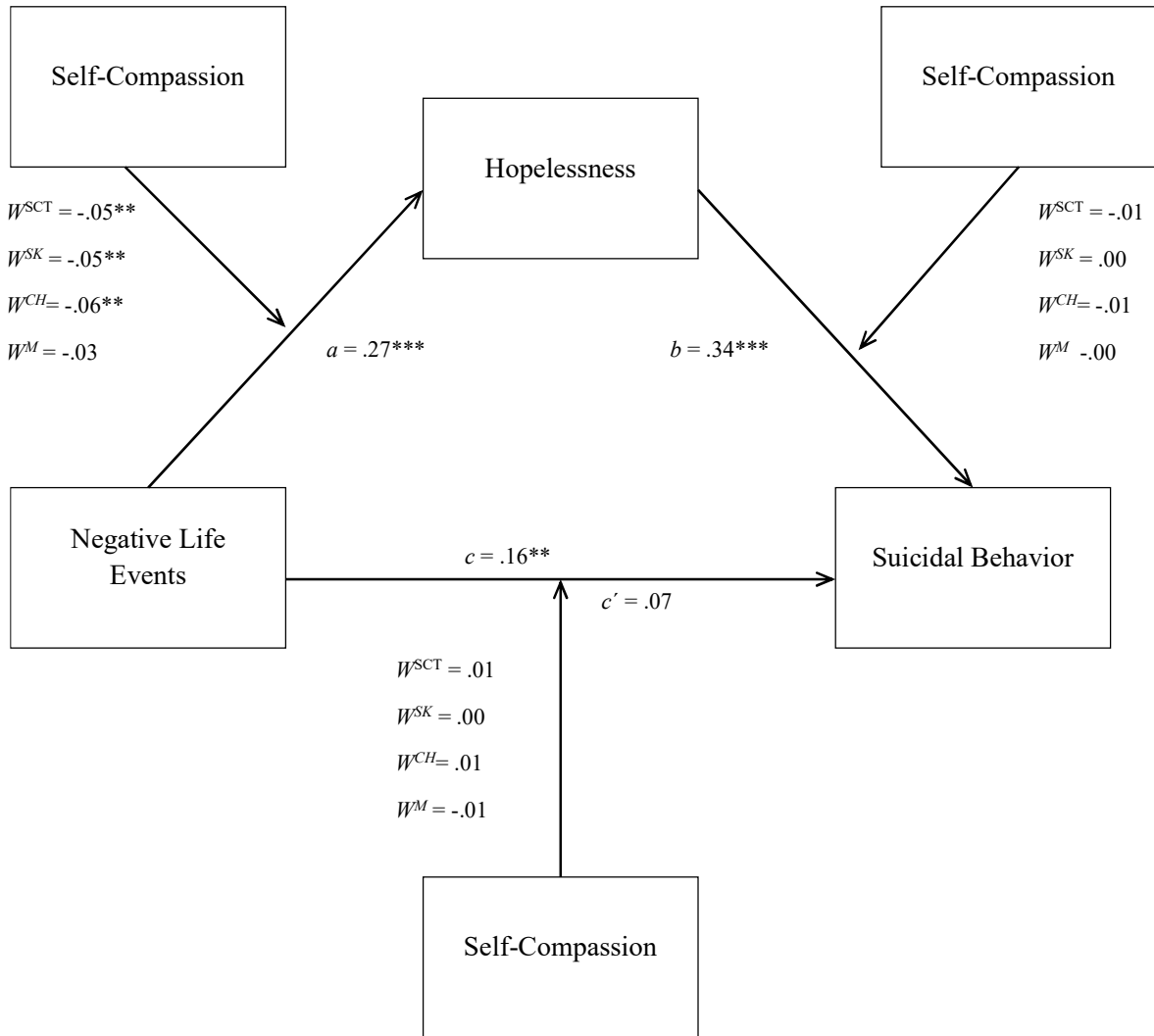
Summary of the Moderated Mediation Model of the Negative Components of Self-Compassion

Model/Variable	Hopelessness			Suicidal Behavior		
	β	SE	95% CI	β	SE	95% CI
Self-Judgment						
Hopelessness	-	-	-	0.10	0.18	[-0.25, 0.45]
Negative Life Events	-0.58	0.29	[-1.14, -.01]	0.17	0.24	[-.31, .65]
Self-Judgment	0.29	0.19	[-0.65, 0.08]	0.16	0.14	[-.13, .44]
NLE x Self-Judgment	0.05	0.02	[0.02, 0.09]	-0.01	0.01	[-.04, .02]
Hopelessness x Self-Judgment	-	-	-	0.01	0.01	[-.01, .03]
Isolation						
Hopelessness	-	-	-	0.21	0.17	[.13, .54]
Negative Life Events	-0.25	0.25	[-.74, .24]	0.06	0.21	[-.36, .48]
Isolation	-0.06	0.20	[-.45, .34]	-0.11	0.16	[-.20, .43]
NLE x Isolation	0.04	0.02	[.00, -.08]	0.00	0.02	[-.03, .03]
Hopelessness x Isolation	-	-	-	-0.01	0.01	[-.02, .03]
Over-Identification						
Hopelessness	-	-	-	0.26	0.16	[-.05, .58]
Negative Life Events	-0.33	0.25	[-.83, .17]	0.04	0.21	[-.37, .45]
Over-Identification	-0.14	0.21	[-.55, .27]	0.14	0.16	[-.18, .46]
NLE x Over-Identification	-0.04	0.02	[.01, .08]	0.00	0.02	[-.03, .03]
Hopelessness x Over-Identification	-	-	-	0.00	0.01	[-.02, .02]

Note. NLE = Negative Live Events; Negative Life Events = Negative subscale of the Life Events Scale; Suicidal Behavior = Suicidal Behaviors Questionnaire – Revised; Self-Compassion = Self-Compassion Scale; Hopelessness = Beck Hopelessness Scale.

Figure 1.

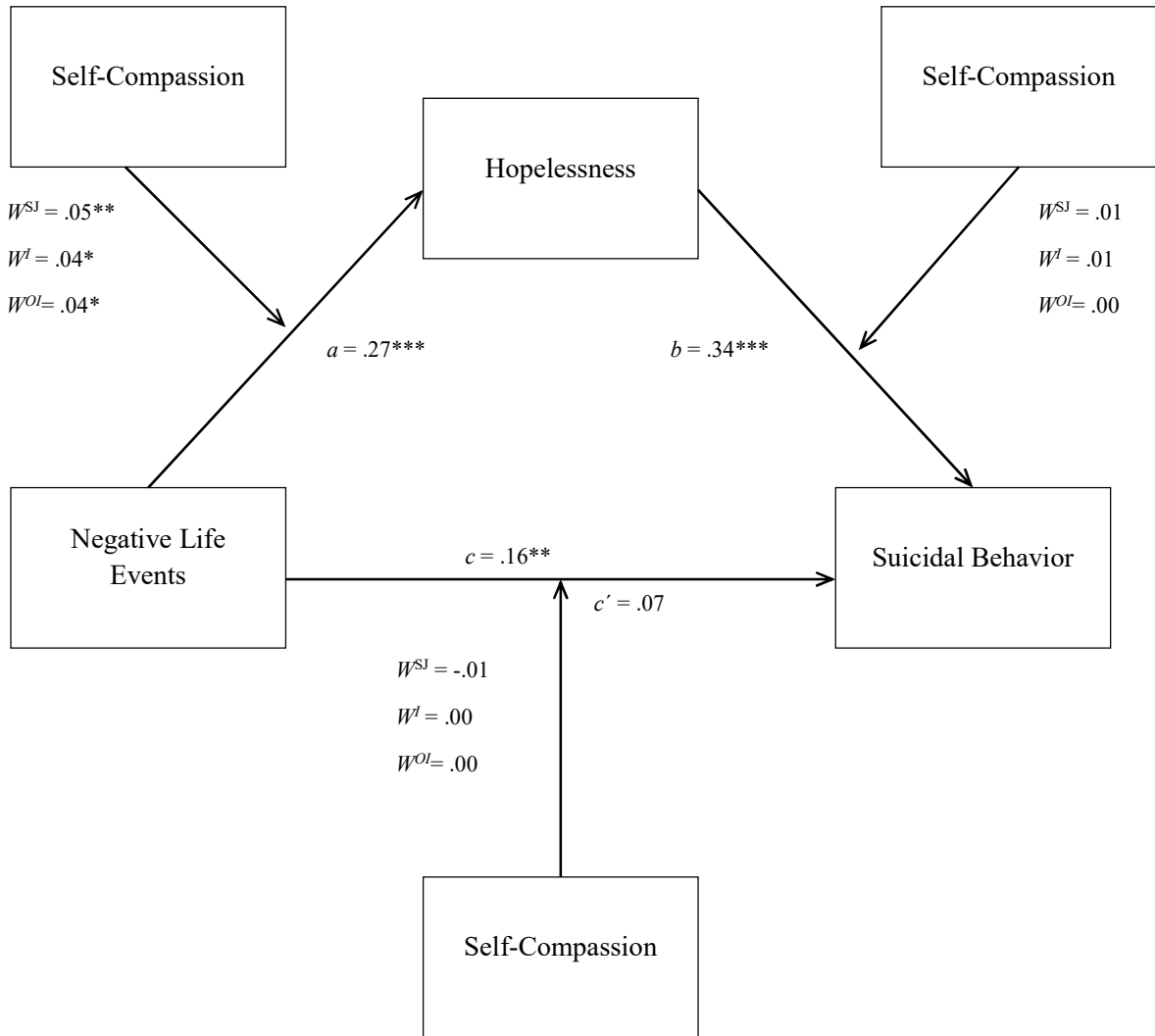
Diagram of the Moderating Effects of the Positive Components of Self-Compassion on the Associations between Negative Life Events, Hopelessness, and Suicidal Behaviors



Note: SCT = Self Compassion Total; SK = Self-Kindness; CH = Common Humanity; M = Mindfulness; Negative Life Events = Negative subscale of the Life Events Scale; Suicidal Behavior = Suicidal Behaviors Questionnaire – Revised; Self-Compassion = Self-Compassion Scale; Hopelessness = Beck Hopelessness Scale. * $p < .05$, ** $p < .01$, *** $p < .001$.

Figure 2.

Diagram of the Moderating Effects of the Negative Components of Self-Compassion on the Associations between Negative Life Events, Hopelessness, and Suicidal Behaviors



Note. SJ = Self-Judgment; I = Isolation; OI = Over-Identification; Negative Life Events = Negative subscale of the Life Events Scale; Suicidal Behavior = Suicidal Behaviors Questionnaire – Revised; Self-Compassion = Self-Compassion Scale. * $p < .05$, ** $p < .01$, *** $p < .001$.