

Individual changes in stress-level predict non-suicidal self-injury

By Jessica K. Edwards

The rate of non-suicidal self-injury (NSSI)¹ rises sharply during adolescence, particularly in females,² which may be due in part to sex differences in stress and coping processes.³ Such an association between life stress levels and NSSI, however, is debated: while theoretical models have suggested a link between the two, meta-analyses have shown that life stress inconsistently predicts NSSI. In their latest study, Adam Miller and colleagues propose that these inconsistencies might be due to a reliance on “between-person” models⁴ that compare individuals with high stress levels to those with low stress levels. The researchers thus established a new model — a within-person, stress-threshold model of NSSI — to determine whether life stress is a reliable clinical marker of NSSI risk. By this model, youth are at risk for engaging in NSSI during times when they experience increased stress relative to their own average stress level.

In adolescent and emerging adult females, Miller et al. found that the mean levels of monthly or daily stress were not associated with increased NSSI risk. Instead, they found that the participants were more likely to think about and engage in NSSI when they reported higher-than-usual daily perceived stress relative to their own average perceived stress. These data support that between-person differences in stress are not robustly associated with NSSI risk. Rather, young people are most likely to engage in NSSI when stress increases above their own typical levels. The researchers propose that knowledge about when an adolescent or emerging adult exceeds their own typical stress level (within-person) might be more useful for informing clinical care. Consequently, clinicians could benefit from transitioning from assessing stress during an intake assessment (where risk is compared relative to the population) to ongoing stress monitoring to capture individual within-person stress fluctuations.

Miller, A. B. et al. (2019), *Does higher-than-usual stress predict nonsuicidal self-injury? Evidence from two prospective studies in adolescent and emerging adult females.* *J. Child Psychol. Psychiatr.* doi:10.1111/jcpp.13072

References

¹International Society for the Study of Self-injury. (2018, May). What is self-injury? Retrieved from: <https://itriples.org/about-self-injury/what-is-self-injury>.

²Fox, K.R., Franklin, J.C., Ribeiro, J.D., Kleiman, E.M., Bentley, K.H. and Nock, M.K. (2015). Meta-analysis of risk factors for nonsuicidal self-injury. *Clin. Psychol. Rev.*, 42, 156–167. doi: 10.1016/j.cpr.2015.09.002.

³Rose, A.J. and Rudolph, K.D. (2006). A review of sex differences in peer relationship processes: Potential trade-offs for the emotional and behavioural development of girls and boys. *Psychol. Bull.* 132, 98–131. doi: 10.1037/0033-2909.132.1.98.

⁴Liu, R.T., Cheek, S.M. and Nestor, B.A. (2016). Non-suicidal self-injury and life stress: A systematic meta-analysis and theoretical elaboration. *Clin. Psychol. Rev.*, 47, 1–14. doi: 10.1016/j.cpr.2016.05.005.

Glossary

Non-suicidal self-injury (NSSI): Defined by the International Society for the Study of Self-Injury¹ as deliberate, self-inflicted damage of body tissue without suicidal intent and for purposes not socially or culturally sanctioned.

