Non-suicidal self-injury (NSSI; cutting, burning oneself) occurs at very high rates among individuals diagnosed with an eating disorder and clinicians are struggling to understand why. This research evaluated a theoretically informed model explaining the occurrence of NSSI within eating disorder populations. Self-report data was collected from over 420 females admitted to an inpatient treatment program. Analyses indicated that the proposed model, which specified NSSI as resulting from a complex series of associations between childhood trauma, low self-esteem, psychopathology, dissociation, and body dissatisfaction, has validity. The results can help clinicians better treat NSSI among those who are diagnosed with an eating disorder.