

# Effects of Impulsivity and Fearlessness about Death on Non-Suicidal Self-Injury

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## Introduction

Non-suicidal self-injury (NSSI), the deliberate, self-inflicted damage to bodily tissue without the intent to die, continues to be problematic among college students. 15% to 35% of college students engage in NSSI at least once during their lifetime (Turner, Austin, Chapman, 2014). This is concerning due to studies suggesting a strong relationship between NSSI and suicide attempts (Brausch & Muehlenkamp, 2018).

Urgency theory states that individuals who tend to be more impulsive are more likely to act without regard to long-term consequences when experiencing strong negative emotions. Individuals with higher impulsivity are also more likely to engage in NSSI (Maxfield & Pepper, 2018), which may be due to the short-term benefit of regulating their emotions without regard for potential long-term consequences. (Maxfield & Pepper, 2017). Research suggests that negative urgency, the tendency to act rashly when distressed, is significantly linked to both suicidal ideation and self-harming behaviors (Anestis & Joiner, 2011).

Studies show that fearlessness about death (FAD) leads to an increased engagement in risky behaviors and susceptibility to suicidal ideation (Monteith, Bahraini, & Menefee, 2017). However, research looking at relationships between fearlessness about death and NSSI has been sparse and inconsistent (Monteith et al., 2017).

Despite the similarity of the effects of impulsivity, negative urgency, and FAD on likelihood to engage in NSSI, very little research has looked at the possible interactive effects that they have on NSSI frequency.

## Hypotheses

1. We hypothesize there will be an interaction between high levels of both general impulsive behavior and fearlessness about death, explaining greater frequency of NSSI.
2. Likewise, we hypothesize there will be an interaction between high levels of both negative urgency and fearlessness about death, explaining greater frequency of NSSI.
3. We further predict that the interaction between negative urgency and fearlessness about death will have greater impact on frequency of NSSI than the interaction between general impulsive behavior and fearlessness about death.

## Method

Participants included 323 undergraduate college students ( $M_{age}=19.06$ ,  $SD=1.63$ ; 83.6% female; 92.6% Caucasian) from a Midwestern university (see Figure 1). All participants had a history of engaging in NSSI. These individuals completed the following self-report measures in a lab setting as part of a larger, longitudinal study.

- o The Acquired Capability for Suicide Scale-Fearlessness About Death (ACSS-FAD) was used to assess fearlessness about death (FAD).
- o The UPPS-P Impulsive Behavior Scales was used to assess general impulsivity and negative urgency.
- o Participants were given a self-report measure, the Self Injurious Thoughts & Behaviors Interview, that asked questions about NSSI over their lifetimes, as well as within the past year.

## Results

Our results indicate that there are significant positive main effect relationships between both general impulsivity and past year NSSI Frequency ( $B=.44$ ,  $p < .001$ ), as well as FAD and past year NSSI frequency ( $B=.029$ ,  $p < .001$ ), but there is not an interactive effect between general impulsivity and FAD on past year NSSI Frequency ( $B=-.001$ ,  $p=.150$ ). See figure 2.1.

Furthermore, our results show that there is a positive main effect relationship between negative urgency and past year NSSI Frequency ( $B=.098$ ,  $p < .001$ ) and that Negative Urgency and FAD have a significant interactive effect on past year NSSI Frequency. See figure 2.2

Figure 2.1: Poisson Regression

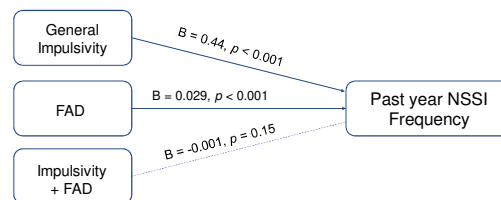
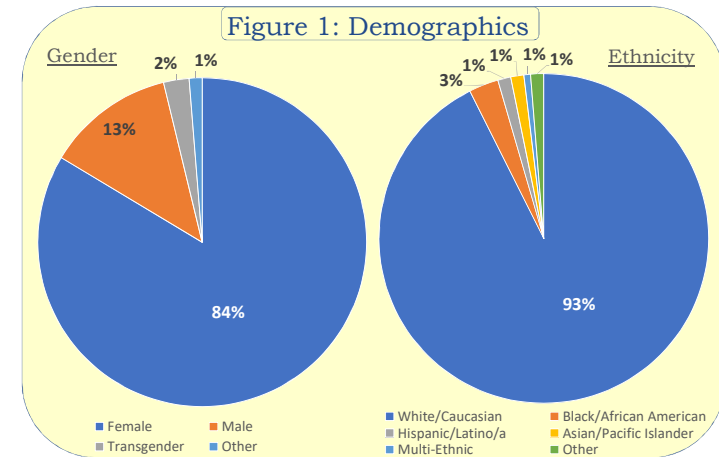
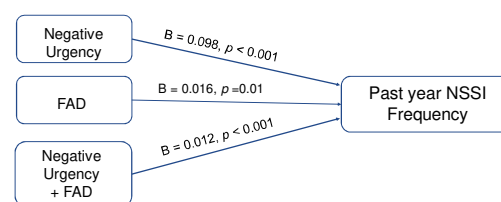


Figure 2.2: Poisson Regression



## Discussion

Our study obtained mixed results. While general impulsivity was directly related to NSSI, it did not demonstrate an interactive effect with fearlessness about death. Our second and third hypotheses were supported as only the interaction between negative urgency and FAD was significant.

The interaction was relatively weak however, indicating that while those with higher levels of both negative urgency and FAD engage in NSSI more frequently, the differences are relatively small. For therapists working especially with young adults who self-injure, assessing, and treating as needed, their levels of negative urgency and FAD may be somewhat clinically useful as a supplement to treatment.

Our research was limited by both overall sample size and our sample's demographics being not representative of the larger population. Future research should make efforts to be more representative of the general population. Likewise, future research would be able to look at negative urgency's interactive relationship with other variables related to NSSI Frequency and could even look at negative urgency as a mediator between FAD and NSSI or NSSI Frequency.

Overall, it appears that there is an interaction between high levels of both negative urgency and FAD that explain greater frequency of NSSI. At the same time, it appears general impulsivity does not contribute to an interactive effect with FAD. This suggests that preventative measures should focus attention on negative urgency's interactive effects on NSSI.

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