# Study of Non-Suicidal Self Injury and Acquired Capability for Suicide

Anthony Phagoo<sup>1</sup>, Seren Lurie <sup>2</sup>, Destinee Castillo<sup>3</sup>, Alexis May<sup>4</sup>

- <sup>1</sup>Department of Psychology, Wesleyan University
- <sup>2</sup>Department of Psychology and Neuroscience and Behavior, Wesleyan University
- <sup>3</sup>Department of Psychology and SISP, Wesleyan University
- <sup>4</sup>Department of Psychology, Wesleyan University

# Introduction

Research has been conducted on the differences between non-suicidal self injury (NSSI) and self injurious behavior, as well both of these behaviors have been explored in relationship/correlation to suicide attempts. 1'2 This present study seeks to understand how severe vs. non severe methods of NSSI relate to the acquired capability of individuals, moderated through the use of the level of subjective pain in an individual. Our bivariate analysis is the severity of NSSI and acquired capability. Acquired capability is essentially when the heightened degree of fearlessness and a lack of subjective pain makes the actions and thoughts of suicide less fearsome.<sup>3</sup> Moreover, research has closely looked at the correlation between acquired capability and the subjective pain an individual experiences as it associates with suicide attempt history.4 This lead us to utilize pain as a moderator for NSSI methods in order to observe if more severe methods correlate with greater acquired capability. Thus, we seek to explore what is the relationship between severity of NSSI method and acquired capability for suicide, and is this relationship moderated by the presence of physical pain during NSSI?

### Methods

#### **Participants**

- 805 participants who had engaged in NSSI at some point in their lives were recruited and participated in an online survey.
- •63.4% of participants experienced physical pain during self-harm.
- •63.5 % of participants engaged in severe NSSI.

# Demographics

- •50% female, 48.9% identified as Male, and 0.9% percent of the population identified as other.
- •Median Age = 28 (IQR = 18-38)
- •78% European descent; 4.5% African American; 4.5% East Asian descent, 4.7% Latin American descent, 5.7% multiple ethnicities, less than 1% identified as Indian, South East Asian descent, Middle Eastern descent, Native American descent or other.
- 78% Heterosexual/Straight, 12% identified as Bisexual, 3% identified as Gay, less than 2% identified as Lesbian or Questioning and less than 1% identified as Other, Pansexual, Queer or Asexual.

# Procedures & Measures

- The severity of NSSI and acquired capability were measured with self-report questionnaires. Acquired capability was measured with the Acquired Capability for Suicide Scale (ACSS).<sup>6</sup> NSSI was measured with the Inventory of Statements about Self-Injury (ISAS).<sup>7</sup>
- •The variable of Acquired Capability was summed up from the ACSS (acquired capability for suicide) scale.

# Analytic Plan

Differences between the severity of NSSI and acquired capability were tested with a two-factor ANOVA and a linear regression analysis. A chi-square analysis was performed on our demographic statistics. The moderator for the study was physical pain that was experienced during self-harm.

# Results

# **ACSS (Capability)**

Demographic	X-squared	P value
Age	2002.8	0.993
Race	65.08	0.0414
Gender	129	0.0104
Sexual		
Orientation	67.1	0.0286

# **Severity of NSSI**

Demographic	X-sq	P value
Age	81	0.001
Race	0.00391	0.95
Gender	24.5	<.001
Sexual Orientation	22.1	<.001

# Results

Regression	Variables	<b>Test Statistics</b>	P value
	NSSI Severity,		
	Acquired		
ANOVA	Capability	F value: 0.009	0.93
	NSSI Severity,		
	Acquired		
	Capability,		
	Presence of		
	Pain During		
Linear	NSSI (as		
Regression	moderator)	t value: 0.54	0.59

- There was no significant relationship between severity of NSSI and acquired capability for suicide, with and without considering the presence of pain during NSSI.
- We did not find significant relationships between any our demographic variables and acquired capability.
- When looking at the demographic variables and severity of NSSI, there were significant relationships with age, gender, and sexual orientation.
- Older people were more likely to have mild NSSI (x2 81, p=0.001).
- Females were more likely to have severe NSSI (x2 = 24.5, p<0.001)
- Those who identified as straight were more likely to have mild NSSI (x2 = 22.1, p<0.001)</li>

### **Discussion**

- This data set was large but not necessarily diverse, which may have negatively impacted the quality of the demographic-based analyses.
- Future research may look at the frequency of NSSI as it relates to acquired capability, as well as specific methods and capability. In addition, it may explore the effect of severity of NSSI on different aspects of capability (for instance, focusing specifically on pain tolerance rather than capability as a whole).
- Future research should also be done to explore in depth the experiences of minority groups (race, sexual orientation) to understand how these factors play a role in NSSI frequency and acquired capability.

# Reference

1. Whitlock 2015. 2. Posner 2014. 3. Richardson et al., 2007. 4. Ammerman, 2016. 5. Joiner 2005. 6. Van Orden et al., 2008. 7. Klonsky & Glenn, 2009.