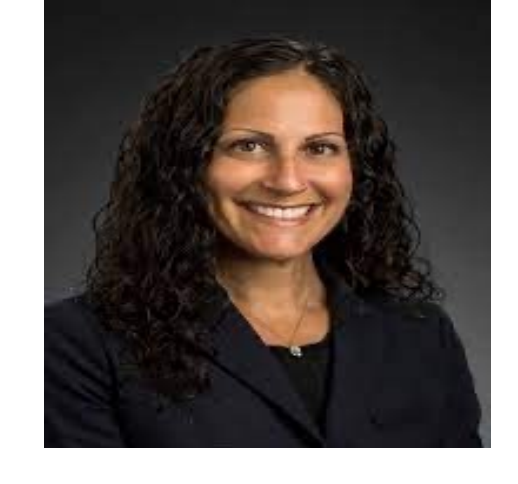


# Exploring correlates of self-stigma in persons who use methamphetamine



**Madeline Hooten, MS**  
Graduate Research Assistant,  
College of Health Solutions,  
Arizona State University



**Sydney Silverstein, PhD**  
Boonshoft Assistant Professor,  
School of Medicine,  
Wright State University



**Raminta Daniulaityte, PhD**  
Associate Professor,  
College of Health Solutions,  
Arizona State University

## BACKGROUND

- There is an urgent need for substance use and harm reduction programs to improve interventions addressing the challenges related to the stigmatization of persons who use illicit drugs.
- When a person is stigmatized, they are considered devalued, unimportant, and flawed in ways that directly impact how they are treated and supported.<sup>2-4</sup>
- Self-stigmatization occurs through the internalization of public stigma and experiences of shame due to negative stereotypes of drug use.
- These internalized stereotypes may result in a loss of self-esteem and attachment to individual identity.<sup>1</sup>
- This study, conducted with a community-recruited sample of people who use methamphetamine, **aims to explore how the experiences of self-stigma related to methamphetamine use are associated with selected socio-demographics and drug use characteristics.**

## METHODS

- Between **December 2019 and November 2021, 91 participants** over the age of 18 years old with reported past 30-day use of methamphetamine were recruited in **Dayton, Ohio.**
- Participants completed structured interviews on socio-demographics, drug use characteristics, experiences of stigma, perceived risks, and experiences of negative consequences due to methamphetamine use.
- Pearson's Chi-Square test and One-Way ANOVA were used to identify the associations between self-stigma and selected social and drug use characteristics. Non-parametric tests were used where needed.



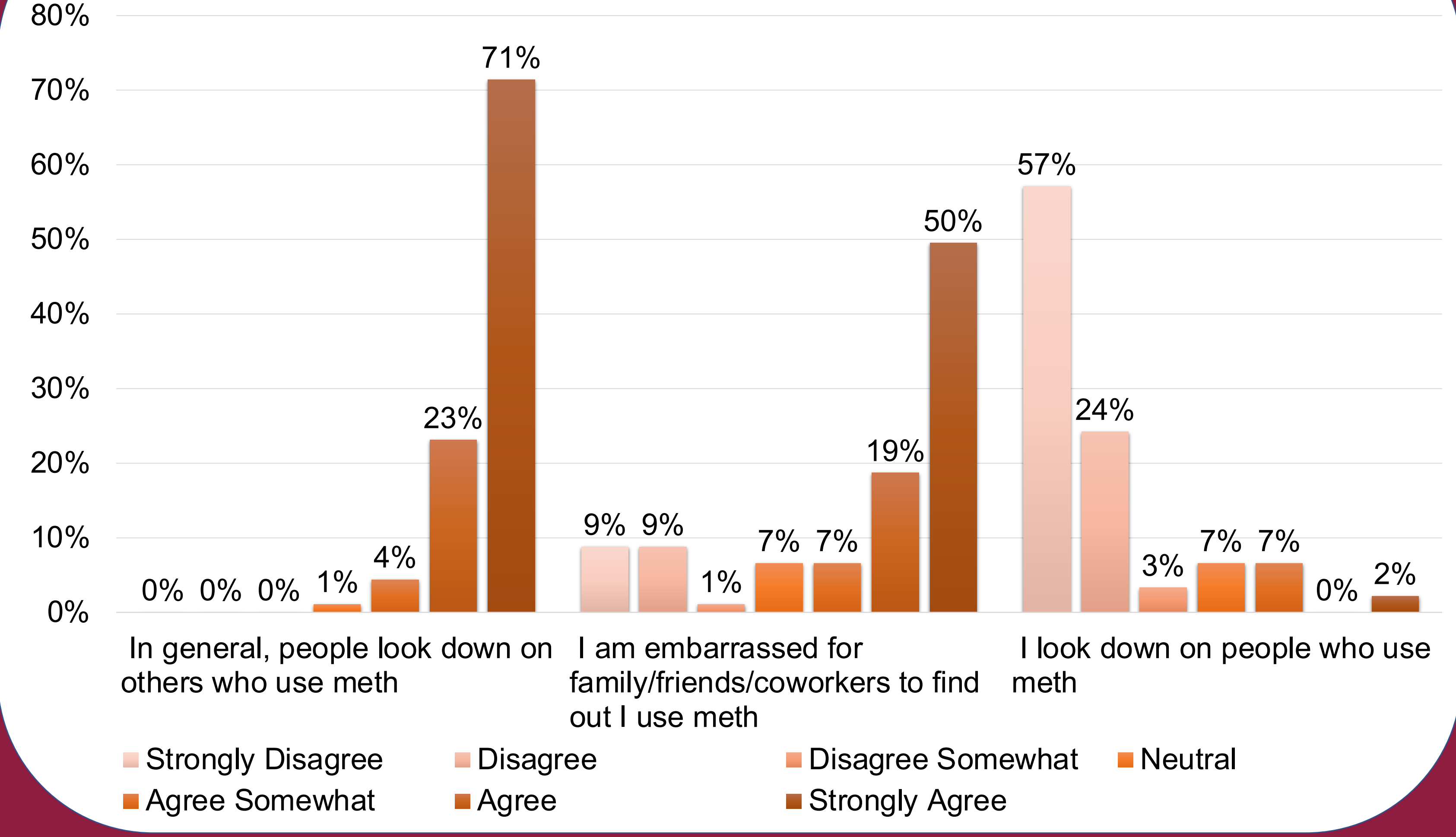
## Results

- Out of 91 participants, over 95% identified as white, 53% were female, 46.2% reported a high school education or less, and about 43% reported homelessness in the past 30 days (Table 1).
- Nearly all (98.9%) participants endorsed a question on perceived public stigma: "In general, people look down on others who use methamphetamine" (Figure 1).
- 68 participants (74.7%) endorsed the self-stigma question "I am too embarrassed for my friends and family to know I use methamphetamine" (Figure 1).
- Individuals who reported self-stigma related to methamphetamine use were more likely to be female.
- They were less likely to have attended treatment for methamphetamine use.
- They were also more likely to indicate that they experienced depression due to methamphetamine use, and perceived risk of too much weight loss from methamphetamine use. (Table 2)

**Table 1. Social and drug use characteristics of persons who use methamphetamine (N=91)**

Characteristics	N or Mean	% or SD
<b>Socio-demographics</b>		
Age (years)	42.4	10.6
Gender (female)	48	52.7%
Race/Ethnicity (White/Non-Hispanic)	87	95.6%
Homeless (ever)	83	91.2%
Employed (full time or part-time)	24	26.4%
Education (high school or less)	42	46.2%
Marital Status (married or living with someone)	31	34.1%
Ever experienced unintentional drug-related OD	69	75.8%
Heroin/Fentanyl use last 30 days	57	62.6%
<b>Methamphetamine (meth) use</b>		
Age of first meth use (years)	30.8	11.2
Days of meth use, past 30 days	18.7	9.15
Meth injection (ever inject meth)	69	75.8%
<b>Methamphetamine Use Disorder (Current)</b>		
(DSM-5 criteria) Mild	2	2.2%
(DSM-5 criteria) Moderate	11	12.1%
(DSM-5 criteria) Severe	76	83.5%

**Figure 1. Reported stigma in persons who use methamphetamine (N=91)**



**Table 2. Social and drug use characteristics associated with self-stigma in persons who use methamphetamine (N=91)**

Variables	Self-stigma experiences "I am embarrassed for family/friends/coworkers to find out I use meth"		
	Agree* N=68	Disagree* N=23	ANOVA or Chi-Squared, p value
Age (mean, std)	42.8 (11.0)	41.4 (9.6)	0.561
Female	<b>40 (58.8%)</b>	<b>8 (34.8%)</b>	<b>0.046</b>
Non-Hispanic White	64 (94.1%)	23 (100.0%)	0.702^
Homeless (ever)	61 (75.5%)	22 (26.50%)	0.758
Employed (full-time or part-time)	20 (29.4%)	4 (17.4%)	0.258
Education (high school or more)	34 (50.0%)	8 (34.8%)	0.206
Marital Status (married/living as married)	24 (35.3%)	7 (30.4%)	0.671
Health insurance (has insurance)	61 (89.7%)	21 (91.3%)	0.697^
Ever experienced an overdose	51 (76.1%)	18 (78.3%)	0.834
Age of first meth use (mean, SD)	31.9 (10.85)	27.5 (11.92)	0.107
Heroin/Fentanyl use last 30 days	42 (61.8%)	15 (65.2%)	0.767
Experienced negative consequences of meth use: Depression	<b>58 (85.3%)</b>	<b>14 (60.9%)</b>	<b>0.019#</b>
Experienced negative consequences of meth use: Risk of overdose	22 (32.4%)	3 (13.0%)	0.073
Perceived risks of meth use: Hallucinations	59 (87.0%)	20 (86.8%)	0.981
Perceived risks of meth use: Loss of interest in social activities	52 (76.5%)	18 (78.3%)	0.860
Perceived risks of meth use: Too much weight loss	<b>61 (89.7%)</b>	<b>16 (69.6%)</b>	<b>0.021</b>
Attended treatment for meth use	<b>11 (16.2%)</b>	<b>9 (39.1%)</b>	<b>0.022</b>

^ Mann-Whitney U non-parametric test  
# Fisher's Exact Test  
\* 0-4 = disagree; 5-7 =agree

## CONCLUSION

- Self-stigma is common among people who use methamphetamine, as reported by over 70% of our study participants.
- Our findings emphasize the need for increased attention to gender differences in how people view, and experience stigma related to methamphetamine use.
- In addition, interventions to address stigma-related experiences need to consider public perceptions of the risks of methamphetamine use.
- Public messaging needs to take into account the harms that can be exerted on persons who use methamphetamine.
- Additional longitudinal studies are needed to understand the complex interplay between self-stigma experiences and utilization of substance use treatment services among individuals with stimulant use disorder.
- More research is needed with ethnic minorities to understand stigma experiences and stimulant use.

## REFERENCES

1. Matthews S, Dwyer R, Snook A. Stigma and Self-Stigma in Addiction. *J Bioethinq.* 2017;14(2):275. doi:10.1007/S11673-017-9784-Y
2. Ezell JM, Walters S, Friedman SR, et al. Stigmatize the use, not the user? Attitudes on opioid use, drug injection, treatment, and overdose prevention in rural communities. *Soc Sci Med.* 2021;268:113470. doi:10.1016/J.SOCSCIMED.2020.113470
3. Quinn DM, Earnshaw VA. Concealable Stigmatized Identities and Psychological Well-Being. *Soc Personal Psychol Compass.* 2013;7(1):40. doi:10.1111/SPC3.12005
4. Tsai AC, Kiang M v, Barnett ML, et al. Stigma as a fundamental hindrance to the United States opioid overdose crisis response. *PLoS Med.* 2019;16(11). doi:10.1371/JOURNAL.PMED.1002969

## FUNDING

Support for this project was provided by the National Institute of Health grant R21DA049304-01 (Daniulaityte, PI).

The authors declare no conflict of interest.