

Examining the associations of gender minority stressors with sleep health in gender minority individuals



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Background

- Gender minority (GM) individuals are a health disparity population at high risk for poor sleep health
- Limited research has examined factors that influence sleep health in GM individuals
- It is hypothesized that gender minority stressors may contribute to poor sleep health in GM populations

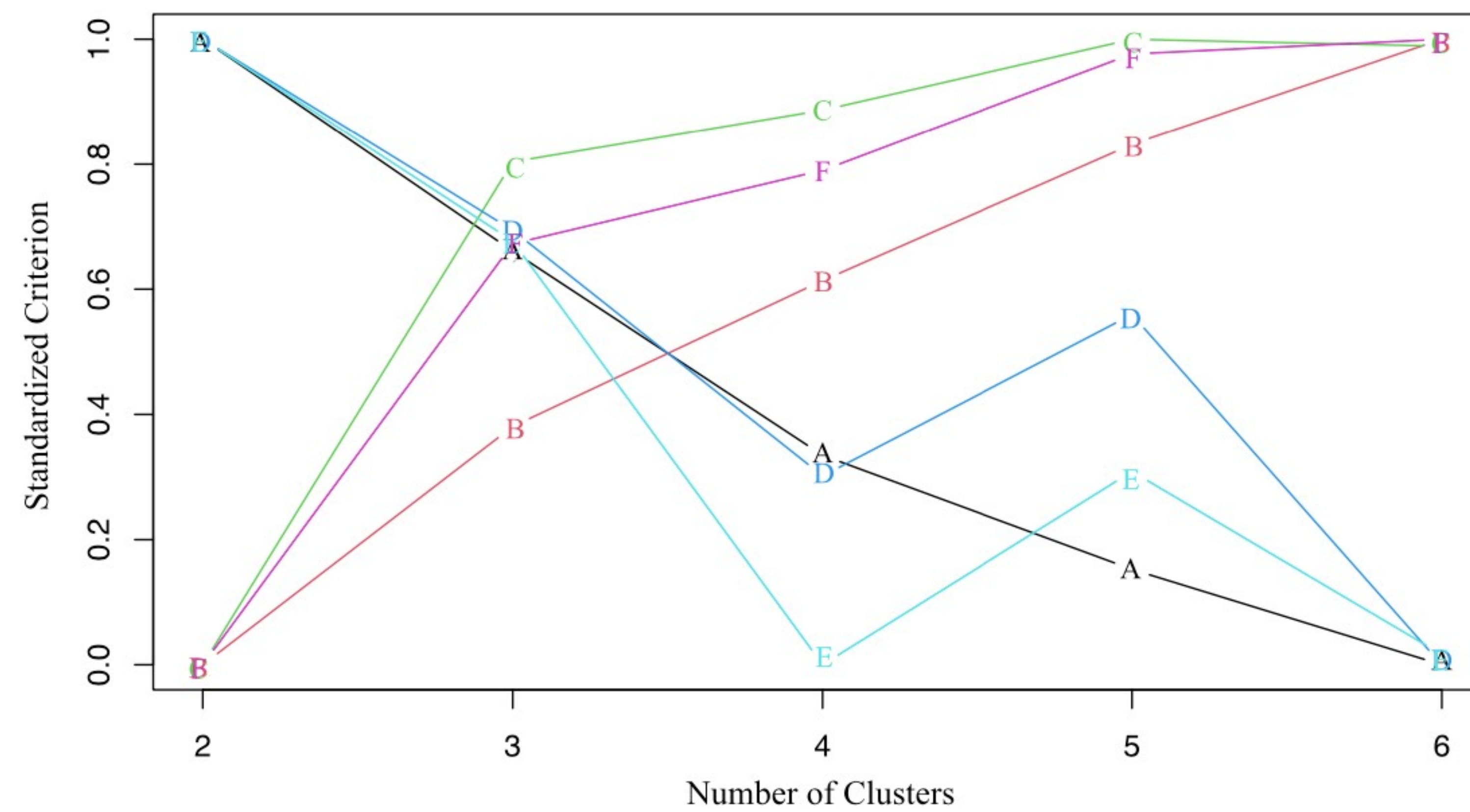
Purpose

- To investigate the associations of gender minority stressors (including stigma consciousness [SC] and gender-related discrimination [GRD]) with sleep health in GM individuals

Methods

- **Sample:** GM individuals who participated in Waves 1-3 of Project AFFIRM
- **Data:** Structured questionnaires
- **Analysis:**
 - 1) k-means longitudinal clustering to identify minority stress clusters
 - 2) Multiple linear and logistic regression models

Results



Criteria: (-A-) Calinski Harabatz (-B-) Kryszczuk Calinski (-C-) Genolini Calinski (-D-) Ray Turi (-E-) Davies Bouldin (-F-) BIC

Figure 1. Performance of various cluster sizes across partition criteria in k-means longitudinal cluster analysis

3 cluster solution reflected the highest average performance across all performance criteria

Table 1. Sample characteristics (N = 279)

Demographic characteristics	Mean (SD)/N (%)
Age at Wave 3 (in years; range 18-89)	36.9 (13.6)
Transmasculine	147 (52.5)
Race and ethnicity	
Non-Latinx White	127 (45.5)
Latinx	58 (20.8)
Non-Latinx African-American	39 (14.0)
Non-Latinx other race	55 (19.7)
Heterosexual identity	63 (22.6)
Minority stressors	
Stigma consciousness (SC; range 1.9-7)	4.8 (1.0)
Gender-related discrimination (GRD; range 1-10)	2.0 (2.3)
Minority stress clusters	
Low SC/low GRD	91 (32.6)
High SC/low GRD	114 (40.9)
High SC/high GRD	74 (26.5)
Sleep health outcomes	
PROMIS sleep disturbance (range 6-30)	17.2 (6.1)
Short sleep duration (<7 hours)	145 (59.1)

Table 2. Results of linear regression models examining the associations of minority stress clusters with sleep disturbance (N = 279).

	Beta (95% CI)	p
Minority stress clusters		
Low SC/low GRD group	Reference	
High SC/low GRD group	3.33 (1.64, 5.01)	<0.01**
High SC/high GRD group	4.51 (2.63, 6.39)	<0.001***
Age (in years)	-0.02 (-0.07, 0.04)	0.54
Transfeminine spectrum	-0.52 (-2.01, 0.97)	0.49
Race and ethnicity		
Non-Latinx White	Reference	
Non-Latinx African-American	0.69 (-1.53, 2.91)	0.54
Latinx	0.63 (-1.26, 2.51)	0.51
Non-Latinx other race	1.47 (-0.47, 3.40)	0.14
Heterosexual identity	0.15 (-1.67, 1.98)	0.81

Findings: High SC/low GRD and high SC/high GRD clusters had worse sleep disturbance scores compared to low SC/low GRD

Table 3. Results of logistic regression models examining the associations of minority stress clusters with sleep duration (N = 279).

	Adjusted odds ratio (95% CI)	p
Minority stress clusters		
Low SC/low GRD group	Reference	
High SC/low GRD group	1.69 (0.93 – 3.09)	0.09
High SC/high GRD group	2.17 (1.11 – 4.26)	0.02*
Age (in years)	1.02 (1.01 – 1.04)	0.02*
Transfeminine spectrum	0.76 (0.45 – 1.30)	0.32
Race and ethnicity		
Non-Latinx White	Reference	
Non-Latinx African-American	3.15 (1.37 – 7.20)	<0.01**
Latinx	1.04 (0.53 – 2.01)	0.92
Non-Latinx other race	1.81 (0.91 – 3.59)	0.09
Heterosexual identity	1.05 (0.93 – 3.08)	0.88

Findings: High SC/high GRD cluster more likely to report short sleep duration relative to low SC/low GRD cluster

Conclusions

- Participants with both high SC and high GRD had worse sleep health
- Longitudinal studies that examine factors driving link between GM stress and sleep health in gender minority individuals are needed to inform sleep health interventions tailored for this population

Acknowledgments

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