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Comparison of Gender Minority Stress and Resilience Among Transmasculine, Transfeminine, and Nonbinary Adolescents and **Young Adults**

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Abstract

Purpose: This study examined whether transmasculine, transfeminine, and nonbinary adolescents and young adults (AYA) experience different levels of gender minority stress and resilience.

Methods: Demographic and clinical information were abstracted from medical charts from AYA initiating gender-affirming care. Group comparisons between transgender and nonbinary groups were examined using one-way analyses of variance and Tukey's honestly significant difference post hoc tests.

Results: Participants were 638 transgender and nonbinary AYA (65.5% transmasculine, 24.6% transfeminine, and 9.9% nonbinary). Transmasculine and transfeminine AYA reported more discrimination (ps = .008 and .006, respectively) compared to non-binary AYA. Transfeminine and nonbinary AYA reported more negative future expectations ($p_s = .006$ and .016, respectively) and pride (ps .001 and .032, respectively) than transmasculine AYA.

Conclusions: Findings suggest that transmasculine, transfeminine, and nonbinary AYA experience different levels of gender minority stress and resilience. Future research is warranted to further examine between-group differences and differential impact on mental health outcomes.

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Keywords

Transgender; Nonbinary; Minority stress; Adolescents and young adults

Transgender and nonbinary (TNB) adolescents and young adults (AYA) are at disproportionate risk for anxiety, depression, self-harm, suicidality, and substance misuse compared with cisgender peers [1,2]. The gender minority stress model posits that experiences of gender minority stress and resilience (GMSR) [3], including distal stressors (i.e., victimization, rejection, discrimination, and identity nonaffirmation), proximal stressors (i.e., negative future expectations [NFEs], internalized transphobia, and gender identity concealment [IC]), and resilience factors (i.e., identity pride and community connectedness) impact well-being and account for mental health disparities between TNB and cisgender AYA. Indeed, TNB AYA are more likely to use substances than cisgender AYA, and this association is mediated by disproportionate experiences of victimization [4]. Furthermore, internalized transphobia is associated with depression and anxiety among TNB AYA [5].

There is recognition of the need for differential analysis to identify between-group differences between nonbinary and binary transgender (i.e., transmasculine and transfeminine) AYA [6]. Recent research shows nonbinary AYA are at increased risk for depression and anxiety compared with binary transgender AYA [7]. Yet, limited research has examined differential experiences of GMSR among gender identity subpopulations, which may contribute to mental health disparities in nonbinary AYA compared with binary transgender AYA. To address this gap, this study examines whether transmasculine, transfeminine, and nonbinary AYA experience different levels of GMSR.

Methods

All patients initiating care within a multidisciplinary gender clinic between July 2013 and July 2019 completed psychosocial forms as standard of care. Demographic characteristics and subscale scores on the adolescent version of the Gender Minority Stress and Resilience (GMSR-A) measure [8] (i.e., discrimination, rejection, victimization, nonaffirmation, internalized transphobia, NFE, IC, pride, and community connectedness) were extracted from patient charts. Gender was assessed via open-ended questioning (e.g., "How would you describe your gender identity?") during patients' clinical encounter and documented in clinician notes. AYA assigned female at birth and self-reported gender as boy/man/male were considered "transmasculine"; AYA assigned male at birth and self-reported gender as girl/woman/female were considered "transfeminine." AYA reporting a gender outside the binary (e.g., nonbinary and genderfluid) or inclusive of multiple genders (e.g., male and nonbinary; both female and male) were categorized as "nonbinary," irrespective of assigned sex at birth. Groups were compared using one-way analysis of variance and Tukey's honestly significant difference post hoc tests. Assumption of homogeneity of variance across groups was maintained using Levene's test. When homogeneity of variance was not met, Welch's F tests and Games-Howell post hoc tests were conducted. The Ann & Robert H. Lurie Children's Hospital of Chicago Institutional Review Board approved this retrospective chart review.

Results

A total of 669 AYA completed the GMSR-A. To maintain comparisons among transmasculine, transfeminine, and nonbinary identities, 31 AYA who reported "questioning" their gender (n = 28) or an "unknown" gender (n = 3) were removed from analyses. The final sample of 638 AYA consisted of 418 transmasculine (65.5%), 157 transfeminine (24.6%), and 63 nonbinary (9.9%) AYA. The average age was 16.1 years (range 12.03–24.11 years), and the majority were white (73.1%) and living authentically (i.e., indicated "living in their affirmed gender all or almost all of the time" on the GMSR; 69.1%). Between-group differences were found (Welch's $F_{2,147.15} = 21.94$; p .001); transmasculine AYA were more likely to be living authentically compared with transfeminine (p .001) and nonbinary (p .001) AYA. Tables 1 and 2 provide sample characteristics, descriptives, and correlations.

There were significant between-group differences on discrimination ($F_{2,637} = 5.257$; p = .005), NFE ($F_{2,637} = 7.180$; p = .001), IC ($F_{2,637} = 18.791$; p = .001), and pride ($F_{2,637} = 17.171$; p = .001) GMSR subscales. Post hoc tests indicated transmasculine and transfeminine (ps = .008, .006, respectively) AYA reported more experiences of discrimination compared to nonbinary AYA. Transmasculine AYA also reported more IC compared with both transfeminine (p = .001) and nonbinary (p = .001) AYA, and both transfeminine and nonbinary AYA reported more NFE (ps = .006, .016, respectively) and pride (ps = .001, .032, respectively) than transmasculine AYA. No other significant group comparisons were found across GMSR factors.

Discussion

Findings suggest differences in GMSR between transmasculine, transfeminine, and nonbinary AYA. First, transmasculine and transfeminine AYA experienced more discrimination compared to nonbinary AYA. Findings may be because of differences in social transition and gender expression between binary transgender and nonbinary AYA. In our sample, nonbinary AYA may still maintain a gender expression consistent with their sex assigned at birth, possibly limiting experiences of explicit gender-based discrimination. In terms of NFE, both transferminine and nonbinary AYA reported more NFE compared with transmasculine AYA. Transferminine AYA may be acutely attuned to the negative health outcomes disproportionally experienced by transferminine people (particularly those of color), affecting their expectations for the future [9]. Furthermore, health care providers may be less informed about options for nonbinary medical transition (e.g., microdosing hormones), thus negatively influencing nonbinary AYAs' future expectations for their transition. Regarding IC, transmasculine AYA reported more concealment compared with transfeminine and nonbinary AYA. Transmasculine AYA may be more able to conceal their assigned sex (e.g., wearing chest binder) and be read as their gender without medical intervention compared with transferminine AYA. Nonbinary AYA, by nature of identifying outside the gender binary, also may be less able to conceal their gender minority identity. Finally, greater identity pride among transfeminine and nonbinary AYA compared with transmasculine AYA may be attributable to established representation of transfeminine people (e.g., Jazz Jennings and Laverne Cox) and recent increases in nonbinary visibility

in popular media (e.g., Jonathan Van Ness and Asia Kate Dillon), whereas transmasculine representation in the media remains relatively rare [10]. Overall, identifying differences in GMSR factors between nonbinary and binary transgender AYA can inform case conceptualization and identify intervention targets to promote resilience among TNB AYA.

The limitations of the present study include reliance on chart reviewed, cross-sectional data, and generalizability as our sample consisted primarily of treatment-seeking, white AYA living in the Midwestern U.S. Future research should use mixed-methods and recruit diverse, population-based samples to elucidate differential experiences of GMSR in TNB AYA. Given our findings, future research should also examine the degree of social transition in the experience of GMSR and gather qualitative data to further understand group differences between nonbinary and binary transgender AYA. Despite these limitations, this study provides preliminary evidence to suggest between-group differences in experiences of GMSR within a treatment-seeking TNB AYA population.

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References

- [1]. Reisner SL, Vetters R, Leclerc M, et al.Mental health of transgender youth in care at an adolescent urban community health center: A matched retrospective cohort study. J Adolesc Health2015;56:274–9. [PubMed: 25577670]
- [2]. Day JK, Fish JN, Perez-Brumer A, et al.Transgender youth substance use disparities: Results from a population-based sample. J Adolesc Health2017;61:729–35. [PubMed: 28942238]
- [3]. Hendricks ML, Testa RJ. A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the Minority Stress Model. Prof Psychol Res Pr2012;43:460.
- [4]. Reisner SL, Greytak EA, Parsons JT, Ybarra ML. Gender minority social stress in adolescence: Disparities in adolescent bullying and substance use by gender identity. J Sex Res2015;52:243–56. [PubMed: 24742006]
- [5]. Chodzen G, Hidalgo MA, Chen D, Garofalo R. Minority stress factors associated with depression and anxiety among transgender and gender-nonconforming youth. J Adolesc Health2019;64:467– 71. [PubMed: 30241721]
- [6]. Kattari SK, Atteberry-Ash B, Kinney MK, et al. One size does not fit all: Differential transgender health experiences. Soc Work Health Care 2019;58:899–917. [PubMed: 31618117]
- [7]. Thorne N, Witcomb GL, Nieder T, et al.A comparison of mental health symptomatology and levels of social support in young treatment seeking transgender individuals who identify as binary and non-binary. Int J Transgend2019;20:241–50. [PubMed: 32999610]
- [8]. Hidalgo MA, Petras H, Chen D, Chodzen G. The gender minority stress and resilience measure: Psychometric validity of an adolescent extension. Clin Pract Pediatr Psychol2019;7:278. [PubMed: 33224698]
- [9]. Nuttbrock L, Bockting W, Rosenblum A, et al.Gender abuse, depressive symptoms, and HIV and other sexually transmitted infections among male-to-female transgender persons: A three-year prospective study. Am J Public Health2013;103:300–7. [PubMed: 22698023]

[10]. Capuzza JC, Spencer LG. Regressing, progressing, or transgressing on the small screen? Transgender characters on US scripted television series. Commun Q2017;65:214–30.

IMPLICATIONS AND CONTRIBUTION

Transmasculine, transfeminine, and nonbinary adolescents and young adults experience differing levels of gender-based minority stress and resilience, including discrimination, identity concealment, negative future expectations, and pride. Findings inform intervention development and tailoring efforts to improve well-being in transgender and nonbinary adolescents and young adults.

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Table 1

Sample demographic characteristics and descriptive statistics

	Total $(N = 638)$	Transmasculine $(n = 418)$	Transfeminine $(n = 157)$	Nonbinary $(n = 63)$
Demographics				
Age (years), mean (SD)	16.13 (2.05)	15.94 (1.93)	16.71 (2.17)	15.98 (2.32)
Designated sex at birth, n (%)				
Male	171 (26.8)		157 (100)	14 (22.2)
Female	467 (73.2)	418 (100)		49 (77.8)
Living as affirmed gender, n (%)				
Yes	441 (69.1)	326 (78)	78 (49.7)	37 (58.7)
No	197 (30.9)	92 (22)	79 (50.3)	26 (41.3)
Race, n (%)				
White	446 (73.1)	297 (71.1)	106 (72.6)	43 (74.1)
Hispanic	72 (11.8)	54 (13.3)	12 (8.2)	6 (10.3)
African-American	13 (2.1)	7 (1.7)	4 (2.7)	2 (3.4)
Asian	22 (3.6)	17 (4.1)	4 (2.7)	1 (1.7)
Multiracial	46 (7.2)	27 (6.5)	15 (10.3)	4 (6.9)
Other	11 (1.7)	4 (1.0)	5 (3.4)	2 (3.4)
Gender minority stress and resilience measure, mean (SD)	e measure, mean (SD)			
Discrimination	3.87 (1.32)	3.91 (1.30)	3.98 (1.31)	3.38 (1.37)
Rejection	5.98 (0.16)	5.98 (0.18)	5.99 (0.11)	6.00 (0.00)
Victimization	6.99 (0.12)	6.99 (0.11)	6.98 (0.18)	7.00 (0.00)
Nonaffirmation	16.31 (5.61)	16.19 (5.69)	16.08 (5.51)	17.65 (5.17)
Internalized transphobia	14.42 (8.42)	14.73 (8.23)	13.69 (9.01)	14.19 (8.13)
Negative future expectations	17.77 (8.34)	16.88 (8.02)	19.27 (8.65)	19.92 (8.79)
Identity concealment	12.57 (5.59)	13.53 (5.30)	10.78 (5.61)	10.67 (5.93)
Pride	14.78 (7.74)	13.54 (7.46)	17.55 (8.05)	16.11 (6.81)
Community connectedness	13.36 (4.36)	13.36 (4.43)	13.04 (4.24)	14.17 (4.09)

Table 2

Correlations

	1	2	3	4	3	9	7	8	6	10	11	12	13
1. Designated sex at birth	,	,		,	,	,	,	,	,		,	,	
2. Affirmed gender	58	1			,	,		1	1	1		,	
3. Age	78	*80.	1		,	,	1	1	1	1		,	1
4. Race	03	.00	00	,	,	,	,				1	,	1
5. Discrimination	.02 **	*80	.16*	.03		,			1				
6. Rejection	02	.00	.03*	.03	.05	1	1	1	1	1	1	1	
7. Victimization	.00	.01	.02	90	01	.07	,		,				,
8. Nonaffirmation	.05	90.	.13**	90	03	02	*80	1	1	1	1	1	
9. Internalized transphobia	.07	04	90.	05	04	07	00	.35 **					
10. Pride	20**	.18**	.10*	* 60°	90.	90.	00.	00	39**		1	1	
11. Community connectedness	90.	.03	10*	02	04	00.	04	.13**	.22 **	.32 **	1	1	1
12. Negative future expectations	11**	** 41.	.15**	06	07	03	02	.40	.43 **	27 **	.16**		
13. Identity concealment	.20**	22**	.01	03	.03	02	02	.23 **	.35 **	40**	07	.39**	

p < .05;