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Personality and its Relation to Mental and Psychosocial Health in Emerging Adult Sexual Minority Men: The P18 Cohort Study

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Abstract

Personality disorder (PD) and personality pathology encompass a dimension of psychological dysfunction known to severely impact multiple domains of functioning. However, there is a notable dearth of research regarding both the pervasiveness and correlates of personality pathology among young sexual minority males who themselves experience heightened mental health burdens. Using the self-report version of the Standardized Assessment of Personality-Abbreviated Scale (SAPAS-SR) we tested associations between distinct personality characteristics with sociodemographic and psychosocial factors as well as mental health states in a sample of 528 young (age 21–25) sexual minority men. In multivariate analysis, personality traits varied significantly by race/ethnicity. Personality traits were also positively associated with psychosocial states, specifically, internalized anti-homosexual bias, level of connection with the gay community, and male body dissatisfaction, as well as mental health in the form of recent depressive and anxious symptomatology. These findings support the complex synergy which exists between personality characteristics, psychosocial conditions, and mental health burdens present among sexual minority men and support the need for an all-encompassing approach to both the study and care of this population that addresses the influences of both internal and external factors on well being.

Introduction

Young sexual minority men (YSMM), are more likely to experience, and experience a higher degree of mental health burdens when compared to the general population.[1,2] This includes depression, generalized anxiety and post-traumatic stress disorder (PTSD).[3,4] Increased experience of sexual minority stressors, such as those related to victimization or internalized homonegative prejudice, and lack of accessibility to culturally competent and affirming

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mental health care have been among the many factors implicated in this persistent disparity. [4–7]

Whereas mental health conditions such as depression and PTSD have been widely studied among YSMM, especially in relation to the HIV epidemic, few if any investigations have examined and considered the occurrence of personality-related pathology in this population. [8,9] Although it is widely acknowledged within the psychiatric and mental health community that Personality Disorder is etiologically distinct in many ways from other mental health conditions, PD has been shown to be highly comorbid with depression and anxiety disorders. [10–12] It is therefore justifiable to hypothesize that those populations which experience mental health conditions at elevated rates also might be disproportionately impacted by PD and personality pathology.

There are also contextual factors, perhaps unique to the experiences of gay and other sexual minority men, which may be associated with certain personality traits and personality characteristics. For example, much of the literature examining the prevalence of male body image concerns and body dissatisfaction found among sexual minority men has included some considerations of personality factors such as perfectionism, characteristics of rigidity and tendencies towards self-criticism.[13,14] Similarly, it has been well documented that sexual minority men often indicate greater worry and anxiety; often related to HIV, experiences of discrimination or harassment on the basis of sexual identity, and how they are perceived by individuals and by society more generally; and these worries may in-turn affect personality factors such as the tendency towards social avoidance and mistrust of others.[15,16]

Finally, personality disorders have distinct diagnostic criteria, which include enduring and significant impairments to self and interpersonal functioning often accompanied by one or more pathological personality trait domains.[17] However, the ability to positively diagnose an individual with a personality disorder or pathological personality traits typically requires a semi-structured clinical interview and information that is generally unobtainable in a population-based study dealing with a non-psychiatric population. Therefore our investigation employs criteria established by a validated screening instrument (the SAPAS-SR) that broadly assesses several personality traits that are associated with personality pathology. To this end, establishing prevalence estimates of personality pathology within this population lies outside the scope of this investigation. Instead, the extent to which certain personality traits are represented within this sample of YSMM is treated in a descriptive way, in the interest of providing additional context to the way inner experiences can affect health and wellbeing.

Documenting the presence of personality traits in YSMM is an important first step in deepening our understanding of the multiple mental health burdens faced by sexual minority men, beyond those that have been traditionally studied (ie. major depressive disorder, PTSD and suicidality).[18,19] As a further step, these analyses also consider the correlates of personality traits associated with types of pathology. These include basic demographic characteristics, psychosocial factors and other mental health states, which may also function to diminish the wellbeing of this population.

The decision to examine personality traits and personality pathology also has particular relevance given the age of YSMM. The young sexual minority men included in this study are representative of a critical stage of development often referred to as "emerging adulthood", that is, the period following early adolescence and preceding adulthood.[20] This also coincides with the developmental period considered to be the peak age of onset for personality disorder.[21,22] Unlike other mental health conditions, PD is considered to be relatively enduring and pervasive and its effects on behavior and interpersonal functioning can be profound.[23] Thus, the traits under investigation are likely to be fixed, remain relatively stable over the lifespan and have lasting implications on the individual's inner experiences and interpersonal functioning.[24,25]

Given the extant literature, the aims of our analyses were as follows: (1) to describe the extent to which certain personality features were common within this YSMM sample; (2) to examine demographic differences in personality pathology among YSMM; and (3) to delineate associations of personality pathology with mental health and psychosocial well being in sexual minority emerging adult men.

Methods

Study Design

Data for these analyses were drawn from one wave of an ongoing cohort study of young sexual minority males in New York City and the surrounding metropolitan area. Details of this study have been published previously and therefore will be summarized herein.[26] The ensuing analyses employ data from the first follow-up visit that occurred six months post-baseline (79.4% retention), as this was the visit in which a measure of personality pathology (the SAPAS-SR) was introduced. A final sample of n = 528 completed this assessment and analyses are conducted using this sample

With the exception of participant demographics (e.g., race/ethnicity), which were assessed at baseline, all other measures were administered concurrently with the SAPAS-SR at the six-month follow-up. Additionally, non-HIV infected participants were administered a rapid HIV, point-of-care-test to ascertain HIV serostatus. New York University's Institutional Review Board independently reviewed this study and all participants provided written informed consent at baseline.

Measures

Personality.—Personality features were assessed in this sample using the Self-report Standardized Assessment of Personality- Abbreviated Scale (SAPAS-SR), a scale designed to be a brief, self-administered screening instrument for Personality Disorder (α=0.98).[27] The scale is comprised of eight items (see Table 1 for a full list of scale items) and for each item the respondent provides a dichotomous 'yes' or 'no' response. 'Yes' answers are scored as '1', with the exception of one reverse-coded item, which produces a sum score (possible range of 0–8). Following the standard procedure outlined by the authors of the scale, a cut-off of 4 was applied, dividing the sample into those who are at higher risk for any type of personality disorder and those who are not. In a previous validation study, this cut-off was

found to have the best sensitivity and specificity, correctly identifying 81% of patients with a SCID-II-based diagnosis of personality disorder.[27] The items of the scale correspond to distinct personality traits that are associated with personality pathology. Although the scale is not intended for use as a diagnostic instrument, it has been demonstrated to adequately reflect the heterogeneous factors comprising the three clusters of personality disorders (A, B and C) described in the Diagnostic and Statistical Manual of Mental Disorders Version-5 (DSM-5).[17] These subgroupings are fairly well approximated by the three factors yielded by the SAPAS-SR, which in turn supports the scale's content validity.[27]

Sociodemographic Characteristics.—Participants' race and ethnicity was ascertained through self-report and examined in this analysis as Black non-Hispanic, White non-Hispanic, Hispanic/Latino, Asian/Pacific Islander (API) non-Hispanic, and Multiracial or Other. Sexual orientation was assessed by sexual attraction using the Kinsey scale.[28] Participants self-reported their sexual attraction on a 7-point continuum that ranges from exclusively heterosexual to exclusive homosexual. Consistent with previous analyses, sexual attraction was examined dichotomously as attraction being either *exclusively homosexual* or *not exclusively homosexual*.[29,30] Personal annual income was ascertained by asking participants "What was your total annual income during the last year?" with responses collapsed into the following three categories: "less than $5,000", "between $5,000 and $25,000", and "More than $25,000". School enrollment was determined by asking, "Are you currently enrolled in school?" with responses coded as either "yes" or "no". HIV Serostatus was determined as per protocol described in *Study Design*.

Psychosocial Health.—Internalized homonegative bias was assessed using a 4-item measure (α=0.81) addressing internalized homonegative attitudes and beliefs (e.g. *"Sometimes I wish I was not gay/bisexual")*.[31] Consistent with how this scale has been used previously, this was then examined dichotomously as either those with any internalized homonegative attitudes, or those with none.[32] Male body image was assessed using the Male Body Dissatisfaction Scale, a 25-item measure with a 5-point Likert scale with responses ranging from *Always* to *Never* or *Strongly Agree* to *Strongly Disagree* depending on the item (α=0.95).[33] Following the scale instructions, participants additionally weighted each item rating *"How important is this item to you?"* on a 1–10 scale. Item importance rating was then divided by ten, which yielded item weightings that range from 0.1–1. The weighting was then multiplied by the item response (1–5) and thus a weighted sum score is obtained that can range from 2.5 to 125 with higher scores denoting greater body dissatisfaction. Per the scoring instructions, a cut-point of 50 was applied to dichotomize the distribution in terms of *High* and *Low to Moderate* levels of male body dissatisfaction. Gay socialization and community affinity was ascertained by using a single item (*"I feel part of the gay community in New York City"*) with responses ranging from *Strongly Agree* to *Strongly Disagree* on a 5-point Likert scale.[34] For this analysis, responses ranging from *Disagree* to *Strongly Disagree* were considered "low" in community affinity and compared dichotomously to all other responses.

Mental Health.—Anxious symptomatology was assessed via an item that asked, *"During the past 30 days, for about how many days have you felt worried, tense, or anxious?"*

Similarly, for depressive symptomatology, the question was posed, *"During the past 30 days, for about how many days have you felt sad, blue, or depressed?"* For both items, responses were examined dichotomously as those who had experienced symptoms in the last thirty days and those who had not.

Analytic Plan

Our first aim was to describe the sample in terms of the personality dimensions examined by the SAPAS-SR. As such, descriptive analysis was first conducted to assess the distribution among the eight individual items of the SAPAS-SR. From there, we analyzed differences in personality pathology by demographic states and the associations of personality pathology with mental and psychosocial health using non-parametric statistics in the form of chi-square tests of independence. Finally, a logit model was created and a regression was performed to allow for multivariate analysis of factors. For the purpose of both bivariate and multivariate analysis, the cut-score of four on the SAPAS-SR was used to differentiate those more likely to experience personality pathology.

Results

Sample Characteristics

The median age of participants at the time of the assessment was 23.47 years (SD = 0.63). The sample was diverse in terms of race and ethnicity, with 31% of participant identifying as Hispanic/Latino (n = 161), 27% identifying as Black non-Hispanic (n = 141), 8% identifying as API non-Hispanic (n = 39), 9% as Multiracial or Other (n = 45), and 25% identifying as White non-Hispanic (n = 133). In terms of sexual orientation, 46% (n = 240) identified their sexual attraction as "Exclusively Homosexual".

Descriptive Analysis of Personality Items on the SAPAS-SR

Table 1 depicts the frequency distribution among the eight items of the SAPAS-SR. Overall a majority of the sample did not endorse the personality traits captured by each item save for one notable exception. The scale item, *"In general, are you a perfectionist"* was endorsed by 53% of the sample. Other scale items that were endorsed with relative frequency were *"Are you normally a worrier?"* (48%), *"Would you normally describe yourself as a loner?"* (33%), and the reverse-coded item, *"In general, do you trust other people?"* (35%).

Bivariate Associations Between Sociodemographic Characteristics and SAPAS-SR Scores

Bivariate associations between sociodemographics, psychosocial factors, mental health and personality pathology are summarized in Table 2. In this sample of YSMM, 27.7% (n = 146) exceeded the four-point threshold for screening criteria of the SAPAS-SR for some personality pathology. Associations between race/ethnicity and general personality pathology failed to achieve significance in bivariate analysis. Similarly, no significant relationships were detected between personality pathology and sexual orientation as measured by sexual attraction at the bivariate level. Annual income was modestly associated with personality pathology ($\chi 2$ (2) = 6.68, p = .035; φ = .12). When examined by school enrollment status, proportion of participants indicating any personality pathology did not differ significantly. While this was also the case when examining personality pathology by

HIV serostatus, the ability to detect significant associations was notably restricted by limited cell sizes.

Bivariate Associations Between Psychosocial and Mental Health Factors and SAPAS-SR Scores

Internalized anti-homosexual/homonegative prejudice was associated with personality pathology ($\chi 2$ (1) = 15.53, p < .001; φ = .17). Specifically, any experience of internalized homonegativity was associated with greater pathology. Male body dissatisfaction was also statistically significantly related to personality ($\chi 2$ (1) = 6.61, p = .01; φ = .11) with greater body dissatisfaction associated with greater pathology. Less attachment to gay communities was also significantly associated with general pathology ($\chi 2$ (1) = 6.96, p = .008l φ= .12).

Both depressive and anxious symptomatology experienced within the last thirty days were highly, positively associated with personality pathology ($\chi 2$ (1) = 43.2 p < .001; φ = .29 and $\chi 2$ (1) = 32.3 p < .001; φ = .25, respectively).

Multivariate Associations Between Sociodemographic, Psychosocial and Mental Health Factors and SAPAS-SR Scores

To test multivariate associations between several factors and personality pathology, variables were entered into a binary logistic regression. In addition to race, all variables significant at the bivariable level were entered into the model simultaneously. Table 3 lists the corresponding adjusted and unadjusted odds ratios. While not significant in bivariate analysis, race was a significant factor in the regression model. Specifically, Black non-Hispanic identity was significantly associated with reduced odds of SAPAS-SR scores greater or equal to four (adjusted odds ratios [AOR] = 0.19, 95% confidence interval [CI]: 0.04, 0.99). Conversely, greater odds of personality pathology were observed for those with internalized anti-homosexual prejudice, low gay community attachment, and symptoms of depression and anxiety (AOR = 1.65, 95% CI: 1.06, 2.56; AOR = 1.63, 95% CI: 1.03, 2.57; AOR = 2.62, 95% CI: 1.42, 4.85; AOR = 1.94, 95% CI: 1.05, 3.60, respectively). Level of body dissatisfaction was dropped from the model as non-significant, though this is likely the result of the high degree of association with other variables included in the model, as the crude odds of personality pathology for those with body dissatisfaction remain significantly high (odds ratio [OR] = 1.66, 95% CI: 1.13, 2.45).

Discussion

The primary aim of this study was to examine personality traits associated with personality pathology in a diverse sample of YSMM and further, to determine whether those traits are associated with other factors of interest. Results from this analysis, which is among the first of its kind within this population, provide some evidence that personality traits function amidst an array of factors to affect the wellbeing of YSMM. This highlights a mental health burden that is potentially being overlooked. There are, however, important limitations to be noted when comparing the estimates obtained via a screening instrument to population-based estimates using large national samples. Nevertheless, for the purpose of assessing factors related to personality within this sample, the SAPAS-SR provides adequate

estimates. In surveying the personality dimensions represented on the SAPAS-SR, it was noted that certain items were more commonly endorsed relative to others among YSMM in this sample. These include items addressing perfectionism, being a 'worrier', being prone to social isolation, and a tendency to mistrust others. In context, these findings take on additional meaning and import. Sexual minorities are more likely to have experiences that may directly or indirectly lead to the development of various personality features. Quite naturally, previous studies have examined external stressors, such as discrimination and harassment, and internal stressors, such as internalized homonegative attitudes and beliefs, and noted their associations with a multitude of mental health disorders such as depression and PTSD.[4,5,35,36] In following a similar procedure, this analysis seeks to draw a comparable connection between such experiences and idiosyncratic personality features. Similarly, it is likely the case that personality traits, once manifested, further influence certain inner experiences and behaviors. The best example of this in the extant literature on sexual minority men relates to body image concerns. While the nature of the relationship cannot be directly inferred from cross-sectional data of the kind presented here, an association was observed between personality pathology and greater levels of body dissatisfaction among YSMM. One interpretation might be that dysfunctional personality features create in the individual a propensity to ruminate about negative life events and negative self-concepts. This may function to intensify the experience of environmental stressors, increasing their potency and leading to disorder. To the extent to which any results presented here can be interpreted absent a developmental framework, we believe there is sufficient evidence to warrant further investigation into the emergence of personality traits among YSMM, which may in turn affect, or be affected by, overall health and wellbeing.

It is important to note again that the population of young sexual minority men is not monolithic and our results further support this assertion. Racial and ethnic differences noted in multivariate analysis provide evidence for the disproportionate nature of health states within the YSMM community broadly. These differences are noted in other health conditions affecting the population such as HIV and cigarette smoking, to name two examples.[37–39] It should also be noted that differences in estimates of personality pathology in terms of race and ethnicity vary dramatically, as reported in previous investigations.[40–42] This may be partially accounted for by differences in methodology and criteria set of personality pathology. Nonetheless, there seems to be enough evidence to suggest that PDs are under-diagnosed in some communities, leading to an underestimation of their prevalence.[43] That Black non-Hispanic YSMM in this sample demonstrated significantly lower odds of personality pathology is a notable finding deserving of further investigation.

These data also suggest that personality pathology is associated with the psychosocial and mental health of sexual minority men. Our demonstrated associations between mental health symptoms and psychosocial health with personality pathology add to the growing literature that seeks to describe the interplay of numerous health factors functioning synergistically to diminish the health of YSMM, namely a theory of syndemics.[44] For the last three decades, the focus of much of the health-related literature on sexual minority men has been principally on HIV. However, as we enter the third decade of effective antiviral treatment for HIV, both the perceptions of the epidemic and the disease course itself have been transformed.[45,46] And while HIV continues to disproportionately affect gay and bisexual

men, it is not the sole health condition defining the lives of sexual minority men, especially those of a younger generation.[47] In effect, our findings further support the necessity to attend to more than just HIV, and for that matter, more than just a conventional understanding of mental health in sexual minority men. Traditionally, investigations of mental health in YSMM have focused almost exclusively on substance use, depression, anxiety and suicidality.[6,48–50] The inclusion of personality dimensions allows for broader examinations and will perhaps lead to changes in the way we conceptualize and approach sexual minority mental health. As the traits associated with PD are pervasive and enduring, they must be perceived differently from other mental disorders, especially in terms of their potential to exacerbate risk in an already disproportionately affected population. Still, the differences that we have detected with regard to personality psychopathology align with the clearly established literature on the complex constellation of health concerns evident in the sexual minority population.[51]

Limitations

Before drawing final conclusions, key study limitations must be noted. First, and perhaps most importantly, estimates of personality pathology are based on screening data that are self-reported. Criteria of this kind are very likely to inflate estimates of PD and personality pathology, relative to those derived from semi-structured clinical interviews. To this end, meeting the criteria on a screening instrument like the SAPAS-SR does not constitute a diagnosis. However, given the clear paucity of research that has been conducted on personality pathology, not just in YSMM, but in general, use of this validated screening instrument can be justified given the potential contributions, approximate though they may be. Second, these data are cross-sectional and therefore assess personality pathology relative to other factors at one point it time. Therefore, no causal or temporal relationship can be inferred. As a result of this limitation, we are unable to assess the emergence of personality traits from within a developmental framework. Third, as with any study that relies on self-reported data, responses to survey items may be affected by social desirability bias. Steps were taken to mitigate this influence, which includes the use of audio computer-assisted self-interviews.

Lastly, the measures included in this study to address non-personality related mental health may contribute to some measurement ambiguity, as they attend to symptomatology rather than diagnostic criteria. More precise measures of depression and anxiety are included in the larger study from which these data are drawn, however their administration occurred at study visits not concurrent with the assessment of personality, and therefore would not be appropriate to include in a cross-sectional analysis. While we acknowledge this as a limitation to the precision with which we can analyze associations between mental health conditions, we believe this shortcoming is offset by the quality and uniqueness of this sample; as representative of a new generation of highly diverse, both racially and economically, sexual minority men. We believe it is imperative to continue to bring focus and awareness to this population.

Conclusions

The associations that exist between personality pathology, psychosocial factors and mental health in YSMM further suggest that health problems and health conditions within this population are co-occurring and potentially synergistic. Moreover, the differences that are noted across race and ethnicity reinforce that differences in health states exist even *within* sexual minority populations. Taken together, these findings support approaches to care for this population that are holistic and attend to the entire person. As the provision of healthcare to YSMM moves further away from a strictly HIV focus, we must begin to consider other types of pervasive and enduring conditions, like those associated with personality pathology, that may have a lasting influence on overall health. In doing so, it is necessary to recognize personality as not only a health factor in its own right, but also a factor that significantly impacts engagement in health behaviors and engagement with healthcare.

Several important recommendations can be gleaned from this analysis. First, the ability to ascertain early life experiences, and experiences of childhood trauma in particular, would add significantly to the strength and validity of the inferences discussed here. The association between childhood trauma and the development of PD is well evidenced, as is the notion that sexual minorities experience greater instances of trauma throughout the life course, relative to the general population.[11,52–55] With these well-supported ideas in mind, it is not only logical but also imperative that future investigations into the development of PD within sexual minority populations address this potential mechanism of PD pathogenesis. Additionally, non-pathological personality features should be investigated for their contribution to health behavior and healthcare engagement, particularly among YSMM. Other recommendations largely concern the selection of appropriate instruments to both assess personality pathology and other conditions. While the ability to assess personality pathology within a non-psychiatric population remains a challenge for as long as there remains so few non-structured instruments that can be properly administered, definite improvements can be made to the design of future studies, such as the inclusion of comparisons to population norms. Finally, to better determine the utility of the SAPAS-SR within sexual minority populations, it should be independently validated using comparison studies that seek to correctly identify sexual minority individuals with personality disorders.

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Table 1:

Descriptive analysis using the SAPAS-SR in a sample of N=528 YSMM

SAPAS-SR Item	Yes % (n)	No % (n)	Missing % (n)
In general, do you have difficulty making and keeping friends?	14 (77)	85 (448)	1 (3)
Would you normally describe yourself as a loner?	33 (174)	66 (349)	1 (5)
In general, do you trust other people? (Reverse Code)	63 (333)	35 (187)	1 (4)
Do you normally lose your temper easily?	16 (86)	83 (438)	1 (4)
Are you normally an impulsive sort of person?	25 (132)	74 (390)	1 (6)
Are you normally a worrier?	48 (256)	51 (267)	1 (5)
In general, do you depend on others a lot?	20 (106)	79 (417)	1 (5)
In general, are you a perfectionist?	53 (278)	46 (245)	1 (5)

Table 2:

Bivariate associations between sociodemographics, psychosocial and mental health factors with personality pathology

	Total (n=526)	***SAPAS-SR* Score ≥4 (n=146)**		
	% (n)	**% (n)**	**χ^2**	***p***
Sociodemographic characteristics				
Race/Ethnicity (n=519)				
Hispanic/Latino	31 (161)	34 (48)		
Black non-Hispanic	27 (141)	19 (26)		
API non-Hispanic	8 (39)	10 (14)	9.13	.058
White non-Hispanic	25 (133)	26 (36)		
Multiracial or Other	9 (45)	11 (16)		
Sexual Attraction				
Exclusively Homosexual	46 (240)	41(60)		
Not Exclusively Homosexual	54 (288)	59 (86)	1.91	.099
Annual Income (n=501)				
Less than 5K	26 (128)	29 (39)		
≥5K and < 25K	42 (212)	48 (66)		
≥ 25K	32 (161)	23 (32)	6.68	.035
School Enrollment				
Currently enrolled	30 (159)	30 (43)		
Not currently enrolled	70 (367)	70 (103)	0.04	.436
HIV Serostatus				
HIV-positive	5 (28)	3 (4)		
HIV-negative	95 (498)	97 (142)	2.64	.074
Psychosocial Health				
Internalized prejudice (n=515)				
Any	43 (222)	57 (81)	15.53	< .001
None	57 (293)	43 (61)		
Body Dissatisfaction (n=515)				
High	51 (268)	60 (88)		
Low	49 (255)	40 (58)	6.61	.007
Gay community attachment (n=523)				
Low	31 (164)	40 (58)		
High	69 (359)	60 (87)	6.96	.006
Mental Health				
Depressive symptomatology (n=526) (≥1 day out of past 30 days)				
Yes	62 (329)	85 (124)	43.20	< .001
No	38 (197)	15 (22)		
Anxious symptomatology (n=526) (≥1 day out of past 30 days)				
Yes	65 (343)	84 (123)	32.60	< .001

	Total (n=526)	***SAPAS-SR* Score ≥4 (n=146)**		
	% (n)	**% (n)**	**χ^2**	***p***
No	35 (183)	16 (23)		

Table 3:

Binary logistic regression examining associations between sociodemographics, psychosocial and mental health with personality pathology

	***SAPAS-SR* Score ≥4**			
	OR	***95% CI***	**AOR**	***95% CI***
Race/Ethnicity				
Hispanic/Latino	1.16	(0.77–1.76)	0.30	(0.06–1.46)
Black non-Hispanic	**0.50**	**(0.31–0.81)**	**0.19**	**(0.04–0.99)**
API non-Hispanic	1.52	(0.76–3.02)	0.30	(0.06–1.95)
White non-Hispanic	0.96	(0.62–1.50)	0.25	(0.05–1.28)
Multiracial or Other	1.50	(0.79–2.85)	0.35	(0.06–1.95)
Income Level (High)	**0.56**	**(0.35–0.87)**	-	-
Medium	1.39	(0.94–2.06)	1.65	(0.98–2.80)
Low	1.23	(0.79–1.91)	1.66	(0.90–3.02)
Internalized prejudice				
Any vs. None	**2.19**	**(1.48–3.24)**	**1.65**	**(1.06–2.56)**
Body Dissatisfaction				
High vs. Low	**1.66**	**(1.13–2.45)**	1.26	(0.80–1.96)
Gay community attachment				
Low vs. High	**1.71**	**(1.15–2.55)**	**1.63**	**(1.03–2.57)**
Depressive symptomatology				
≥1 day out of past 30 days	**4.81**	**(2.93–7.90)**	**2.62**	**(1.42–4.85)**
Anxious symptomatology				
≥1 day out of past 30 days	**3.89**	**(2.38–6.35)**	**1.94**	**(1.05–3.60)**

OR, odds ratio; AOR, adjusted odds ratio; CI, confidence interval;

Adjusted odds ratios include all variables in the table

Crude and adjusted odds ratios with statistical significance ($p \leq .05$) represented in bold

Income level High: ≥ 25K; Medium: ≥5K and < 25K; Low: < 5K