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Supporting Transgender and Gender Diverse Youth: Protection Against Emotional Distress and Substance Use

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Abstract

Introduction: Important mental and physical health disparities exist for transgender and gender diverse youth compared with cisgender youth (i.e., those whose birth-assigned sex and gender identity align), yet little is known about factors that protect transgender and gender diverse youth from health problems. The objective of this paper is to identify modifiable protective factors in the lives of transgender and gender diverse adolescents, with the goal of informing efforts to eliminate disparities in depression, suicidality, and substance use in this population.

Methods: Secondary data analysis of the 2016 Minnesota Student Survey examined associations between eight protective factors (connectedness to parents, adult relatives, friends, adults in the community, and teachers; youth development opportunities; and feeling safe in the community and at schools) and depression, suicidality, and substance use (alcohol, binge drinking, marijuana, nicotine) among 2,168 adolescents who identified as transgender, genderqueer, genderfluid, or questioning their gender. Logistic regressions assessed the role of each protective factor separately and simultaneously.

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Results: Each protective factor was associated with lower odds of emotional distress and substance use. When protective factors were examined simultaneously, parent connectedness was protective for all measures. Feeling safe at school and connected to adults in one's community protected against depression and suicidality; teacher connectedness buffered risk of substance use.

Conclusions: Given that transgender and gender diverse youth report lower levels of connectedness and safety, bolstering an explicitly transgender and gender diverse-friendly network of caring parents, safe and supportive schools, and connections to adults in the community may support efforts to eliminate disparities in depression, suicidality, and substance use.

INTRODUCTION

Disparities in mental health problems and substance use among transgender and gender diverse (TGD) youth (i.e., gender identity or expression differ from societal expectations based on birth-assigned sex), relative to their cisgender peers (i.e., birth-assigned sex and gender identity are congruent), are well documented.^{1–6} Emerging evidence suggests disparities in emotional distress and substance use are partially explained by peer victimization and depressive symptoms,^{2,4,7} consistent with the minority stress model.^{8,9} Focusing on these disparities masks the reality that some TGD youth are doing well and have supports to thrive.³ Methodologic limitations, including small or non-random samples of TGD youth and the analysis of TGD youth with lesbian, gay, bisexual, and queer/questioning youth, make it difficult to examine factors that contribute to resilience specifically among TGD youth. This paper leverages a large, population-based sample of TGD youth to identify promising protective factors against depression, suicidality, and substance use that can be examined in longitudinal and prevention research.

The social ecologic model describes multiple, overlapping contexts that influence health and health-risk behaviors.^{10,11} In addition to personal characteristics, interpersonal relationships; factors at the organizational level, such as the school and community context; and broader public health and policy all play important roles in fostering individual health. Factors at each level have been shown to confer risk or protection over time.¹² TGD youth, in particular, are more likely to experience minority stress in multiple contexts, which likely contributes to important health disparities.^{8,9,13} Thus, understanding aspects of the family, school, and community that may protect against emotional distress and substance use is critical. This paper focuses on external protective factors at the interpersonal and organizational levels to inform efforts to improve support networks, community climate, and the provision of services to TGD youth and their families.

Caring and connected interpersonal relationships can be key sources of support for young people.^{14,15} Parents are both the most widely researched interpersonal protective factor and the most generally protective across a range of health behaviors for TGD youth. Greater connectedness with parents is associated with decreased risk of depression and suicidality, and greater levels of life satisfaction, self-esteem, and resilience for TGD youth.^{16–19} When TGD youth are supported by parents in their gender identity, disparities in emotional distress are reduced or eliminated.^{16,19} Because TGD youth report weaker connections to parents

and teachers,³ relationships with non-parental adult relatives, friends, and adults in one's community may compensate for less accepting parent-child relationships by providing support. Very little is known about protective factors for substance use among TGD youth specifically, beyond documenting disparities. Studies using samples of lesbian, gay, bisexual, transgender, and queer/questioning (LGBTQ) youth do suggest that family support is protective against substance use^{19,20}; however, disaggregated research is needed to understand the roles these relationships play in promoting healthy development specifically among TGD youth.

TGD youth, like their cisgender peers, engage in a variety of contexts at the organizational level, such as schools, community groups, and recreational activities, although the level of engagement in these activities for TGD and cisgender youth may differ.²¹⁻²⁴ Feeling safe in one's environment is necessary, though not sufficient, for optimal health, and TGD youth report feeling unsafe more frequently than straight, cisgender youth.^{3,22} Much has been written about the extent to which TGD youth feel unsafe at school, reasons for these feelings, and measures to increase feelings of safety.^{1,21,22} Experiences with victimization, harassment, and unequal treatment often underlie feeling unsafe and emotional distress, and schools are a key context for these processes. Opportunities to engage in youth development promoting activities (e.g., where youth have meaningful opportunities for leadership and teamwork), are considered to be broadly protective for youth.²⁵ However, the role of youth development activities has been far less studied among TGD youth. Thus, feeling safe at school and in one's community, and opportunities to engage in youth development activities, were investigated for relationships with emotional distress and substance use for TGD youth.

Understanding the broad range of protective factors across multiple levels of adolescents' social ecologies is particularly important for TGD youth, given that this population experiences harassment, stigma, and discrimination at higher rates than their cisgender peers.^{4,26} Identifying multiple protective factors in the lives of TGD youth can inform intervention efforts to create protective networks. Acknowledging the complex systems in which youth live, the current cross-sectional study aims to address how interpersonal (connectedness to parents, adult relatives, friends, community adults, and teachers) and organizational (youth development opportunities, community and school safety) protective factors are uniquely related to depression, suicidality, and substance use among TGD youth.

METHODS

Study Sample

Data come from the 2016 Minnesota Student Survey (MSS), administered triennially to fifth, eighth, ninth, and 11th graders attending Minnesota public schools. The MSS assesses a variety of health and health-risk behaviors, as well as risk and protective factors. Every school district is invited to complete the MSS, and in 2016, a total of 85% of districts participated. Schools used passive consent procedures, as established by state law. Because the study covered a broad range of topics, parents withdrawing consent because of their child's gender identity is unlikely. Only ninth and 11th graders answered questions regarding gender identity, so analyses were restricted to these grades. The IRB at the

University of Minnesota determined that this secondary analysis of anonymous data did not meet the criteria of human subjects research.

Measures

A modified version of the two-question approach was used.²⁶ Students answered the question, *What is your biological sex?* With response options: *male/female*. This question is referred to as birth-assigned sex to remain consistent with the TGD community's preferred terminology²⁷ and in keeping with the preferences of a panel of TGD young people engaged to discuss terminology. Youth were also asked whether they identify as *transgender*, *genderqueer*, *genderfluid*, or *unsure about* their gender identity (*yes/no*).

Youth self-reported eight key protective factors, organized here by interpersonal and organizational levels. Parent connectedness³ was assessed with three items concerning whether youth felt they could talk to their mother or father about problems they were having and whether they thought their parents cared about them ($\alpha=0.75$). Single items assessed how much *you feel [other adult relatives, friends, and adults in the community] care about you*. Four items from the Student Engagement Inventory²⁸ assessed teacher–student relationship quality ($\alpha=0.87$; e.g., *At my school, teachers care about students*). Youth development opportunities were assessed with a 7-item scale from the Developmental Assets Profile ($\alpha=0.86$; e.g., *When you spend time doing activities outside of the regular school day, how often do you learn skills like teamwork or leadership?*).²⁹ Youth reported whether they felt safe in their community with two items assessing feeling safe *in my neighborhood* and *going to and from school* and a single item assessing whether they felt *safe at school*. All response options ranged from *one* to *four*, and mean scores were created for multi-item scales. For all protective factors, higher scores indicated higher levels of protection.

Three measures of emotional distress were included. The two-item Patient Health Questionnaire-2 (PHQ-2)³⁰ assessed depressive symptoms in the past 2 weeks on a scale from zero (not at all) to four (nearly every day; $\alpha=0.80$). In keeping with developer recommendations for adolescents, responses were summed then dichotomized based on the cut off score for a positive screen requiring further evaluation (three or more versus fewer than three).^{30,31} Participants also indicated whether they experienced suicidal ideation (*seriously considered attempting suicide*) or had a suicide attempt (*actually attempted suicide*) in the past year (*yes/no*).

Students indicated how many days, during the previous 30 days, they drank any alcohol (*one or more drinks of an alcoholic beverage*), engaged in binge drinking (*five or more drinks of alcohol* within a couple of hours), used marijuana (*marijuana or hashish*), or used any of eight nicotine products (*cigarettes, cigars, chewing tobacco, e-cigarettes, hookah, menthol products, other flavored nicotine products*). All responses were dichotomized to ever versus never using each substance in the past 30 days because of skew.

Youth self-reported their grade in school (ninth/11th) and whether they participated in the free/reduced-price lunch program (*yes/no*). Two questions assessing Latino/Hispanic ethnicity and race were combined into a six-category race/ethnicity variable (non-Hispanic American Indian, black, Asian/Pacific Islander, white, multiple races, and Hispanic). Finally,

the MSS Interagency team categorized schools into either the seven-county Twin Cities metropolitan area or elsewhere in Minnesota.

Statistical Analysis

Descriptive statistics were used to characterize the sample on key study variables. Because each protective factor was related to each dependent variable in bivariate analyses (all $p < 0.001$, Table 1), logistic regressions were conducted entering all protective factors simultaneously to examine independent associations with depression, suicidality, and substance use. Regressions controlled for race/ethnicity, birth-assigned sex, free/reduced-price lunch, grade, and school location. All analyses were conducted in SPSS, version 22, and a Bonferroni correction was used ($\alpha = 0.007$) to account for multiple comparisons.

RESULTS

The analytic sample included 2,168 TGD students (2.7%). Table 2 presents a description of the sample. Approximately two thirds of TGD youth were assigned female at birth, 41.3% identified as youth of color, and 38.8% received free/reduced-price lunch. Emotional distress levels were generally high, with 57.9% meeting the cut off score for additional depression screening (PHQ-2), 44.9% reporting suicidal ideation, and 16.7% reporting a suicide attempt. Substance use ranged from 11.2% (binge drinking) to 25.9% (any nicotine use).

When all protective factors were entered simultaneously in logistic regressions (Table 3), several key protective factors emerged. Feeling more connected to parents was related to significantly lower odds of all seven indicators of emotional distress and substance use relative to those reporting less connected relationships with parents (Table 3 provides AORs and 99.3% CIs). ORs represent the change in odds of the dependent variable for a one unit increase in the protective factor. More than one unit increases are possible. In this case, a one unit increase in parental connectedness was associated with a 23% reduction in the odds of depressive symptoms, which has public health implications. Caring adults in the community and feeling safe at school were associated with significantly lower odds of the three emotional distress indicators but not substance use. Youth who reported higher quality relationships with teachers had significantly lower odds of using all four substances relative to peers with lower teacher-student relationship quality. Finally, feeling that friends cared was associated with significantly lower odds of binge drinking and nicotine use.

DISCUSSION

This paper identified several key protective factors against depression, suicidality, and substance use among TGD youth, although the pattern varied. Across all outcomes, feeling more connected to parents was widely protective for TGD youth. These findings are consistent with literature demonstrating the broad importance of parent connectedness among TGD youth.¹⁶⁻¹⁸ Given that TGD youth report less connectedness with their parents than their cisgender peers,³ increasing investment in programs offering support and guidance to parents of TGD youth and linking parents to existing supports (e.g., through health care, schools, religious institutions) may be effective ways to bolster the development of these

caring relationships. Strong teacher–student relationships were protective for substance use. School connectedness is associated with lower rates of tobacco, alcohol, and marijuana use both concurrently and longitudinally in both general samples and among LGBTQ youth.^{40,41} This paper extends that work to TGD youth.

Connections with an adult in the community buffered the risk of depression and suicidality but were unrelated to substance use. Some research has questioned whether smoking rates are elevated when LGBTQ community connectedness is higher, yet other studies have found LGBTQ community connections protective for LBQ young women.³² This relationship has not previously been studied in a sample of TGD adolescents. Connectedness to community adults was unrelated to smoking in this study but did protect against emotional distress. Because the item regarding relationships with community adults was broad, information about how or where young people established these relationships was unavailable. Future work should examine behaviors modeled in these relationships, such as smoking, to clarify the mechanisms involved. Previous studies indicate that formal, natural, and youth-initiated mentoring relationships of high quality positively impact young people’s development and educational outcomes.^{33–35} Emerging evidence indicates that mentoring may be effective for supporting LGBTQ youth,^{36,37} but researchers have not yet explored mentoring among TGD youth. In addition, schools may consider intentional efforts to link TGD youth to caring adults in community-based LGBTQ youth-serving organizations and other TGD–friendly community resources. School clubs, such as gay-straight alliances/gender and sexuality alliances, already make these links somewhat informally.³⁸ Healthcare providers and school personnel, such as school counselors, social workers, and school nurses, may find that maintaining resource lists of TGD–friendly community organizations can facilitate connections between TGD youth and supportive adults in the community. Ensuring that youth-serving organizations, where TGD youth may have the opportunity to connect with caring adults, are TGD–friendly will require intentional education and self-review.

At the organizational level, feeling safe at school protected against depression and suicidality, which is consistent with existing research with LGBTQ youth.^{22,39} Efforts to ensure safe and supportive schools for LGBTQ youth broadly are underway in many areas. For example, school policies and practices aimed at preventing bullying and harassment, providing safe and appropriate bathroom access, and eliminating bias/improving gender inclusivity in a school may make TGD youth feel safer and welcome.^{21,42–44} Efforts to educate teachers on how to support TGD youth who may come out to them, recognize the unique needs of TGD students, and represent LGBTQ figures in curricula may foster teachers’ ability to support and connect with TGD youth.^{42,45,46} Because teachers differ in their knowledge, comfort, and willingness to approach these topics, professional development and curricular supports can further these efforts.^{44–46} With replication, the current findings underscore the need to ensure efforts within schools target both feelings of safety and teacher–student relationships to fully support TGD youth with regard to promoting emotional health and preventing substance use.

Connectedness to friends buffered against binge drinking and nicotine use. Although measures of whether friends were engaged in prosocial behavior were not included, these findings demonstrate that peer support can be beneficial to TGD youth. More research with

TGD youth and the use of more nuanced measures of friend caring and friends' use of substances are needed before additional conclusions can be drawn regarding the role of friend connectedness.

Healthcare providers should consider the school and community contexts of their TGD patients when assessing available supports. School nurses, in particular, have a critical advocacy role to play in schools. Providers can educate parents on the importance of supporting their children and refer parents to groups, such as PFLAG. To do this appropriately, providers should receive training in working with TGD patients and their families. Awareness of school and community supports in the area may be facilitated by partnering with LGBTQ organizations.

Limitations

The current study has several strengths, namely a large, population-based sample of TGD youth and an examination of a wide variety of protective factors across multiple levels of the social ecologic model. Several limitations must also be discussed. These data were correlational, and neither causation nor temporal ordering can be inferred, which is important in establishing protective factors. Although the sample of TGD youth was large, all youth resided in one state, so results should be generalized with caution. Data were collected in schools, which may be a concern because TGD youth are more likely to miss school than their cisgender peers as a result of harassment.²² These findings should not be generalized to TGD youth who do not attend school, as specific protective factors for youth who have dropped out are likely to be different (e.g., school factors are not relevant).

Two limitations of the measures should also be noted. The questions assessing birth-assigned sex ("biological sex") and gender identity were variations of the recommended two-item approach.²⁶ The wording "biological sex" may be less familiar among young people more accustomed to the term "birth-assigned sex." Finally, the single gender identity question included "unsure" along with transgender, genderqueer, and genderfluid, with a yes/no response. As a result, groups could not be disaggregated to examine whether the factors identified in the study models protected across transgender, nonbinary, and questioning groups. Additional research is needed to further examine these variations with the larger TGD youth population using more specific questions assessing birth-assigned sex and gender identity.

CONCLUSIONS

Research has clearly documented disparities in depression, suicidality, and substance use for TGD youth, as well as reduced levels of some protective factors (e.g., parent and teacher connectedness, feeling safe at school) relative to cisgender adolescents.¹⁻⁶ To address these disparities, TGD youth need broad, flexible support networks comprising caring and connected parents, teachers, and other adults in the community and safe, supportive environments. Such a network would provide TGD young people who do not have strong connections in one area (e.g., with parents) with access to needed support in another arena (e.g., at school or in the community). Clinicians treating TGD patients should use a strengths-based approach by including protective factors when assessing the overall

wellbeing of each patient. Findings from this study suggest the need to bolster support in three areas: outreach to parents, creating safe and supportive schools, and fostering connections to caring adults in the community, which were associated with greater wellbeing in this population. Importantly, these protective factors are similar to those found for youth in general. Because TGD youth report feeling less safe and connected in schools and the community, on average, efforts to educate adults/staff and create a TGD–welcoming climate are needed. Supportive adults in clinics, community organizations, and religious institutions who interface with youth and parents have an important opportunity to provide education and support to parents of TGD youth and serve as connections for TGD youth as appropriate. The supportive role of these community institutions is particularly important when schools are unable or unwilling to improve safety and supportiveness for TGD youth. Coordinated efforts from community entities and schools will be required to build a TGD–friendly support network that can reduce disparities in emotional distress and substance use among TGD youth.

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Table 1.

AORs (95% CIs) for Associations Between Each Protective Factor and Depression, Suicidality, and Substance Use Among TGD Youth, Examined Separately

Variable	PHQ-2	Suicidal ideation, past year	Suicide attempts, past year	Alcohol, any past 30 days	Binge drinking, any past 30 days	Marijuana, any past 30 days	Nicotine, any past 30 days
Parent connectedness	0.59 (0.53, 0.66)	0.47 (0.43, 0.53)	0.49 (0.43, 0.56)	0.67 (0.59, 0.75)	0.63 (0.54, 0.73)	0.58 (0.51, 0.66)	0.70 (0.61, 0.78)
Other adult relatives care	0.67 (0.62, 0.73)	0.63 (0.58, 0.68)	0.64 (0.58, 0.70)	0.77 (0.71, 0.85)	0.78 (0.69, 0.87)	0.71 (0.64, 0.78)	0.82 (0.75, 0.89)
Friend caring	0.80 (0.74, 0.87)	0.69 (0.64, 0.75)	0.69 (0.62, 0.76)	0.78 (0.71, 0.85)	0.71 (0.63, 0.80)	0.73 (0.66, 0.80)	0.75 (0.69, 0.82)
Adults in community care	0.66 (0.61, 0.72)	0.59 (0.55, 0.64)	0.62 (0.55, 0.69)	0.76 (0.69, 0.84)	0.76 (0.67, 0.87)	0.70 (0.63, 0.78)	0.75 (0.69, 0.83)
Teacher-student relationship quality	0.56 (0.48, 0.65)	0.52 (0.45, 0.60)	0.57 (0.48, 0.69)	0.50 (0.42, 0.59)	0.41 (0.33, 0.51)	0.49 (0.41, 0.59)	0.48 (0.41, 0.57)
Youth development opportunities	0.59 (0.52, 0.68)	0.54 (0.47, 0.62)	0.55 (0.46, 0.65)	0.67 (0.57, 0.78)	0.55 (0.45, 0.69)	0.59 (0.50, 0.70)	0.62 (0.53, 0.72)
Feel safe in community	0.61 (0.52, 0.71)	0.52 (0.45, 0.61)	0.45 (0.37, 0.55)	0.65 (0.55, 0.77)	0.65 (0.52, 0.81)	0.62 (0.51, 0.74)	0.63 (0.53, 0.74)
Feel safe at school	0.60 (0.53, 0.68)	0.53 (0.47, 0.60)	0.47 (0.40, 0.55)	0.68 (0.60, 0.78)	0.65 (0.54, 0.77)	0.68 (0.58, 0.79)	0.64 (0.56, 0.73)

Notes: Separate logistic regressions controlled for race/ethnicity, birth-assigned sex, free/reduced price lunch, grade, and metropolitan school location. All ORs are statistically significant ($p < 0.05$).

TGD, transgender and gender diverse; PHQ, Patient Health Questionnaire.

Table 2.

Frequencies and Means of Key Variables and Demographic Characteristics (N=2,168)

Variable	n (%)
Birth-assigned sex	
Male	684 (31.9)
Female	1,457 (68.1)
Grade	
9	1,271 (58.6)
11	897 (41.4)
Free/reduced-price lunch	834 (38.8)
Metropolitan school location	1,188 (54.8)
Race/ethnicity	
NH American Indian	44 (2.1)
NH Asian/Pacific Islander	192 (9.0)
NH black	140 (6.5)
NH multiple races	252 (11.8)
Hispanic	255 (11.9)
NH white	1,257 (58.7)
Protective factors, mean (SD)	
Parent connectedness	3.55 (0.99)
Other adult relatives care	3.49 (1.25)
Friend caring	3.69 (1.20)
Adults in community care	2.37 (1.27)
Teacher-student relationship quality	2.77 (0.66)
Youth development opportunities	2.53 (0.73)
Feel safe in community	3.19 (0.66)
Safe at school	2.99 (0.81)
Emotional distress, mean (SD)	
PHQ-2	1,155 (57.9)
Suicidal ideation	880 (44.9)
Suicide attempts	328 (16.7)
Substance use, mean (SD)	
Any alcohol	458 (23.4)
Binge drinking	219 (11.2)
Any marijuana	337 (17.4)
Any nicotine	510 (25.9)

NH, non-Hispanic; PHQ, Patient Health Questionnaire

Table 3.

AORs (99.3% CI) for Protective Factors Regressed Simultaneously on Each Dependent Variable

Independent variables	PHQ-2	Suicidal ideation, past year	Suicide attempts, past year	Alcohol, any past 30 days	Binge drinking, any past 30 days	Marijuana, any past 30 days	Nicotine, any past 30 days
Parent connectedness	0.77 (0.64, 0.92)	0.60 (0.49, 0.73)	0.63 (0.50, 0.80)	0.78 (0.64, 0.96)	0.70 (0.54, 0.93)	0.69 (0.55, 0.86)	0.82 (0.67, 0.996)
Other adult relatives care	0.91 (0.78, 1.06)	1.00 (0.74, 1.17)	0.98 (0.81, 1.20)	1.04 (0.87, 1.23)	1.19 (0.94, 1.50)	0.99 (0.82, 1.20)	1.15 (0.97, 1.37)
Friend caring	1.04 (0.90, 1.19)	0.90 (0.79, 1.04)	0.87 (0.73, 1.02)	0.90 (0.77, 1.05)	0.79 (0.64, 0.97)	0.90 (0.76, 1.06)	0.86 (0.74, 0.997)
Adults in community care	0.80 (0.70, 0.92)	0.78 (0.67, 0.91)	0.81 (0.66, 0.99)	0.95 (0.81, 1.13)	1.02 (0.81, 1.27)	0.88 (0.73, 1.07)	0.92 (0.79, 1.08)
Teacher-student relationship quality	0.91 (0.70, 1.18)	0.96 (0.73, 1.25)	1.21 (0.87, 1.69)	0.61 (0.45, 0.82)	0.47 (0.32, 0.69)	0.65 (0.47, 0.90)	0.62 (0.46, 0.82)
Youth development opportunities	0.87 (0.70, 1.09)	0.89 (0.71, 1.13)	0.96 (0.71, 1.29)	0.95 (0.73, 1.23)	0.76 (0.54, 1.08)	0.86 (0.64, 1.15)	0.83 (0.65, 1.07)
Feel safe in community	1.12 (0.82, 1.51)	1.01 (0.74, 1.38)	0.89 (0.62, 1.28)	0.92 (0.67, 1.28)	1.07 (0.69, 1.65)	0.94 (0.65, 1.35)	0.96 (0.70, 1.32)
Feel safe at school	0.76 (0.59, 0.98)	0.74 (0.57, 0.95)	0.60 (0.44, 0.81)	0.99 (0.75, 1.31)	1.02 (0.70, 1.48)	1.09 (0.80, 1.49)	0.88 (0.68, 1.16)
Assigned sex ^a	0.47 (0.35, 0.64)	0.48 (0.35, 0.67)	0.78 (0.50, 1.21)	1.20 (0.84, 1.71)	2.08 (1.31, 3.29)	1.49 (1.00, 2.21)	1.24 (0.88, 1.75)
Grade ^b	0.92 (0.70, 1.23)	0.81 (0.68, 1.22)	0.78 (0.54, 1.15)	1.81 (1.31, 2.49)	2.46 (1.58, 3.85)	2.23 (1.55, 2.31)	2.05 (1.50, 2.80)
Free/reduced lunch	0.98 (0.72, 1.33)	0.77 (0.56, 1.07)	1.07 (0.72, 1.60)	0.85 (0.59, 1.21)	0.87 (0.53, 1.41)	1.26 (0.85, 1.87)	1.21 (0.86, 1.69)
Metro location	1.19 (0.89, 1.58)	1.50 (1.11, 2.02)	0.85 (0.58, 1.24)	0.66 (0.47, 0.91)	0.68 (0.43, 1.06)	0.91 (0.63, 1.32)	0.68 (0.50, 0.94)
Race/ethnicity ^c							
American Indian	1.07 (0.39, 2.96)	1.56 (0.54, 4.49)	1.51 (0.46, 5.00)	0.74 (0.22, 2.47)	1.85 (0.49, 6.97)	2.60 (0.89, 7.57)	1.98 (0.72, 5.47)
Asian/Pacific Islander	0.64 (0.78, 1.09)	0.42 (0.24, 0.75)	0.64 (0.39, 1.45)	0.71 (0.35, 1.42)	1.48 (0.64, 3.40)	0.44 (0.19, 1.06)	0.79 (0.41, 1.50)
Black	0.54 (0.28, 1.04)	0.56 (0.28, 1.16)	0.88 (0.34, 2.23)	0.72 (0.31, 1.68)	1.38 (0.52, 3.71)	1.22 (0.54, 2.77)	0.99 (0.47, 2.09)
Multiple races	0.95 (0.60, 1.49)	1.00 (0.63, 1.59)	1.11 (0.63, 1.96)	1.44 (0.89, 2.34)	1.23 (0.61, 2.48)	1.18 (0.67, 2.07)	1.53 (0.95, 2.46)
Hispanic	0.66 (0.42, 1.05)	0.64 (0.40, 1.04)	1.51 (0.86, 2.63)	1.40 (0.84, 2.32)	1.82 (0.93, 3.54)	1.32 (0.75, 2.30)	1.30 (0.79, 2.13)

Note: All protective factors entered simultaneously, controlling for race/ethnicity, birth-assigned sex, free/reduced-price lunch, grade, and metropolitan school location. Boldface indicates statistical significance ($p < 0.007$).

^aReference group is birth-assigned male.

^bReference group is 11th graders.

^cReference group is non-Hispanic white.

PHQ, Patient Health Questionnaire.