

A Call for “Trans-action”: The Role of Enacted Stigma in Mediating the Relationship between School Climate and School Attachment among Gender Minority Students

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Several studies have highlighted the association between enacted stigma with various mental health and educational disparities among sexual minority students, but fewer have done so with an exclusive gender minority sample and even less have included school attachment as an outcome measure. The purpose of the current analyses is to test the main effects that an LGBTQ-inclusive school context as well as enacted stigma has on school attachment, and whether enacted stigma acts as a mediator. Results show that exposure to enacted stigma is a risk factor for low school attachment, while a supportive LGBTQ-inclusive school climate is a protective one, and that the relationship between an inclusive climate and school attachment is significantly mediated by enacted stigma. Within a theoretically informed lens, these findings represent a notable contribution to educational research in terms of the importance of providing a healthy school environment for gender minority students.

Si plusieurs études ont souligné le lien entre la stigmatisation effective et diverses disparités portant sur la santé mentale et l'éducation chez des élèves appartenant à une minorité sexuelle, moins d'entre elles ont porté exclusivement sur un échantillon composé d'une minorité sexuelle et encore moins ont inclus l'intérêt pour l'école parmi les mesures de résultats. L'objectif de nos analyses est d'évaluer les incidences principales qu'ont, d'une part, un contexte scolaire inclusif face à la population LGBTQ et, d'autre part, la stigmatisation effective, sur l'intérêt pour l'école. Nous cherchons également à savoir si la stigmatisation effective joue un rôle de médiateur. Les résultats indiquent que l'exposition à la stigmatisation effective constitue un facteur de risque pour une mauvaise relation avec l'école, qu'un climat scolaire inclusif face à la population LGBTQ est un facteur de protection et que le rapport entre un climat inclusif et l'intérêt pour l'école est modifié considérablement par la stigmatisation effective. Dans une optique fondée sur les théories actuelles, ces résultats représentent une contribution notable à la recherche en éducation en évoquant l'importance de fournir un milieu scolaire sain pour les élèves appartenant à une minorité sexuelle.

Gender minority individuals (i.e., transgender, transsexual, and/or two spirit—herein referred to as trans)¹ are often placed under the same umbrella as sexual minority individuals (i.e.,

lesbian, gay, and/or bisexual), ² and as a result, are often seen as experiencing the same issues and triumphs as their sexual minority counterparts. There has been progress in creating a safe and supportive environment for the lesbian, gay, bisexual, transgender, two spirit, queer, and questioning community (herein referred to as LGBTQ) (e.g., legalization of same-sex marriage in 2005). However, much of this progress has neglected to consider the needs and specific issues of trans individuals (as noted in Clements-Nolle, Marx, & Katz, 2006). Trans individuals have unique experiences related to their relationships with family and friends, access to health care, and more specifically, and the topic of this article, their school experiences (as explored in Veale et al., 2015).

The purpose of the current article is to explore the school experiences of trans youth, using data from a 2008-2009 study. One major limitation of the data is that it was collected nearly 10 years ago. However, despite policy changes over the years, the current data is arguably still relevant to fully understand how school experiences for trans youth have been affected by locating the analysis within a theoretically informed framework. As will be discussed, rates of victimization for trans youth have, despite increased awareness to the issue, remained stable over the past 10 years (see Veale et al., 2015). Few studies have explored the unique experiences and challenges of trans students in a quantitative capacity (e.g., Clark et al., 2014; Grossman & D'Augelli, 2006; Veale et al., 2015); and most that have done so present descriptive explanations. While important, few empirical studies have examined how the experiences of trans youth are affected within an explanatory analysis, which is the goal of the present study.

Background and Theoretical Framework

It has been well documented that schools are largely heteronormative, homophobic, and transphobic social institutions, which often create an environment fraught with experiences of bullying and harassment, especially among LGBTQ youth (e.g., Kosciw, Greytak, Bartkiewicz, Boesen, & Palmer 2012; Kosciw, Greytak, Plamer, & Boesen, 2014; Taylor & Peter, 2011b). Recent studies have explored similar correlations among trans youth (Clark et al., 2014; Grossman & D'Augelli, 2006; Veale et al., 2015). For example, in a large-scale survey of school-aged youth in New Zealand, over half of trans youth (53.5%) reported being afraid that someone at their school would hurt or bother them, and almost one in five (17.6%) indicated that they were bullied at school at least weekly (Clark et al., 2014). Further, in the Canadian Trans Youth Health Survey, 55% of trans youth reported being bullied once or more, 24% reported being bullied one to three times, and 13% reported being bullied 12 or more times (Veale et al., 2015).

In addition, various mediation models have shown there to be an indirect effect between LGBTQ status (albeit largely LGB status) and negative health and educational outcomes when experiences of victimization and related stressors are considered (Aragon, Poteat, Espelage, & Koenig, 2014). These findings have been consistent with research on other minority populations where external and internal stressors are associated with poor health (Meyer, 2003). A popular theory used to conceptualize this relationship is minority stress theory (Meyer, 2003).

Minority stress theory posits that minority groups experience higher levels of stress than their majority counterparts, and from these heightened stress levels, physical and mental health disparities emerge, where minority groups exhibit poorer mental and/or physical health than their majority counterparts. A core component of minority stress theory is the relationship between distal stress, also known as enacted stigma, and negative outcomes (e.g., poor educational outcomes or poor mental health). Specifically, enacted stigma is a stressor external

to minority individuals, which encompasses a wide-range of hostilities, such as relational (e.g., exclusion or rejection), indirect (e.g., target of rumours), or direct victimization (e.g., verbal, sexual, and/or physical assault). The negative impact of enacted stigma has been empirically verified, especially among sexual and racial minority populations (Collier, van Beusedom, Bos, & Sanford, 2013; Pascoe & Richman, 2009).

Several qualitative studies have investigated the link between exposure to enacted stigma and negative outcomes specifically among trans youth (Collier et al., 2013; Grossman & D'Augelli, 2006; McGuire, Anderson, Toomey, & Russell, 2010; Wyss, 2004). In a systematic review examining psychosocial and health outcomes related with peer victimization among LGBTQ adolescents, Collier and colleagues (2013) found support for these connections. In particular, they found that peer victimization among gender and sexual minority students had a particularly profound impact on their sense of school belonging, depressive symptoms, educational trajectories, and traumatic stress, as well as on their alcohol and substance use.

More recently, quantitative studies have begun to explore the minority stress model among transgender and gender non-conforming individuals (Breslow et al., 2015; Frost, 2017; Reisner, Greytak, Parsons, & Ybarra, 2015; Tebbe & Moradi, 2016). For example, Reisner et al. (2015), among an American sample of gender minority youth, explored the relationship between bullying and substance use under a minority stress framework. However, studies based exclusively on transgender and gender non-conforming students are less common, particularly those based on quantitative methodologies (Grossman & D'Augelli, 2007).

Trans youth experience unique instances of enacted stigma and/or minority stress. For example, the Canadian Trans Youth Health Survey found that 55% of trans youth reported never participating in school, lunchtime, or after school activities, and 84% reported never participating in physical activities (e.g., hockey, soccer, figure skating, dance, etc.) with a coach in the past month. Further, trans youth have to deal with the issue of living in their felt gender, which can also cause higher levels of stress for trans youth, in comparison to their sexual minority counterparts (see Veale et al., 2015). The Canadian Trans Youth Health Survey found that trans youth living in their felt gender full-time were more likely to report better mental and physical health than youth not living in their felt gender or only living in their felt gender part-time (Veale et al., 2015).

In addition to the direct correlation between exposure to enacted stigma and negative outcomes, several protective factors have been shown to reduce the odds of these negative disparities, mostly among samples of sexual minority students (Birkett, Espelage, & Koenig, 2009; Galliher, Rostosky, & Hughes, 2004; Homma & Saewyc, 2007; Konishi, Saewyc, Homma, & Poon, 2013). One such protective factor is an LGBTQ-inclusive school climate, which has been operationalized in a wide variety of ways but has shown to be negatively correlated with health disparities and positively associated with academic performance indicators. For example, Saewyc, Konishi, Rose, and Homma (2014) found that sexual minority students in schools with gay-straight alliances (GSAs) and anti-homophobia policies reported lower incidences of suicidality than those in schools without these interventions (see also, Goodenow, Szalacha, & Westheimer, 2006).

The positive effect of such practices in reducing the odds of negative disparities among sexual minority youth is important; however, ensuring an inclusive school climate for gender minority or trans students will require more trans-specific measures. For example, the issue of gender-inclusivity with respect to washrooms, change rooms, and/or sports activities is not generally an issue for sexual minority students. Further, ensuring that teachers and other school

personnel respect and use the correct pronouns for trans youth is a trans-specific issue. Despite the unique experiences of trans students, LGBTQ-inclusive practices should not be discouraged. Such practices can help schools appear safer for trans and/or gender non-conforming individuals. For instance, Toomey, McGuire, and Russell (2012) found that students from schools that had LGBTQ-inclusive curriculum and a GSA perceived their schools to be safer for gender non-conforming male students.

School climates fraught with homo-negative (e.g., “that’s so gay”), homophobic (e.g., “faggot”), and gender-negative/transphobic language have also been known to lead to negative environments. For example, the vast majority (91%) of gender and sexual minority students in an American study reported feeling distressed due to frequent homo/transphobic remarks made in their school (Kosciw et al., 2012, 2014). A similar number of transgender students in another study reported that hearing “gay” used in a derogatory fashion at school made them feel bothered or distressed (85%) (Greytak, Kosciw, & Diaz, 2009).

School attachment has also been investigated as a protective factor against negative health and educational disparities. For instance, studies have shown that high levels of school connectedness/attachment are associated with positive outcomes, such as greater academic achievement (Strolin-Goltzman, Sisselman, Melekis, & Auerbach., 2014), while low levels are correlated with negative outcomes, such as depression (Eisenberg & Resnick, 2006), deviant behaviour (Hirschfield & Gasper, 2011), and dropping out of school (Henry, Knight, & Thornberry, 2012). In the Canadian Trans Youth Health Survey (Veale et al., 2015), despite the low levels of school connectedness generally, trans youth who reported higher school connectedness were two times more likely to report good or excellent levels of mental health.

Other research has examined the impact of school attachment as an outcome measure. This body of research has found that sexual minority adolescents experience lower levels of school attachment relative to their heterosexual peers (Aerts, Van Houtte, Dewaele, Cox, & Vincke, 2012; Pearson, Muller, & Wilkinson, 2007; Peter, Taylor, Ristock, & Edkins, 2015; Poteat, Mereish, DiGiovanni, & Koenig, 2011; Robinson & Espelage, 2011). Research suggests, however, that trans youth are even more likely to experience low levels of school attachment (Greytak et al., 2009; Kosciw et al., 2014; Veale et al., 2015).

As with health disparities, research has shown that a supportive and inclusive school climate is an important factor in promoting school attachment among LGBTQ students (Kosciw et al., 2014). Research also suggests that the more gender and sexual minority students can discuss LGBTQ issues in school, the more connected they feel to their school. For instance, Greytak et al. (2009) found that transgender students who felt comfortable talking about LGBTQ issues at school reported being more connected to their school than trans youth who indicated not feeling comfortable.

Despite the large number of studies empirically examining both enacted stigma and school attachment, few studies have assessed the direct impact between the two within multivariate statistical models, and even fewer have done so with exclusively a trans-only sample. It has been documented elsewhere that the bundling of “LGBTQ” into a single parcel often neglects the unique experiences of gender minority individuals (Clements-Nolle, Marx, & Katz, 2006). We certainly recognize the socio-political as well as scientific merit for the composite analysis, and we appreciate that gender and sexual identities are not mutually exclusive from one another; however, such practice also decreases the deployment of knowledge exclusive to trans and gender non-conforming youth.

To this end, the main purpose of the current study is to analyze school attachment among

trans students. As mentioned, school attachment typically is tested as a protective factor in relation to the correlation between enacted stigma and health or educational disparities. Instead, the objective of the current analysis is to empirically test school context and enacted stigma as predictors of school attachment. In addition, enacted stigma is investigated as having a mediating effect between school climate and school attachment. It is thus hypothesized that trans students from schools with positive and inclusive climates will report less exposure to enacted stigma, which leads to higher levels of school attachment. More specifically, the current study seeks to expand on the existing literature by addressing the following three research questions:

1. What is the relationship between measures of enacted stigma and school attachment; meaning, do trans youth who experience higher levels of enacted stigma report less school attachment?
2. Among trans youth, is there a positive correlation between LGBTQ-inclusive school climate and school attachment?
3. Does enacted stigma mediate the relationship between school climate and school attachment?

Data and Methods

The full sample consisted of over 3,700 Canadian secondary school students. Data were collected in 2008-2009 in a study primarily funded by Egale Canada Human Rights Trust (Taylor & Peter., 2011b). Gender identity was assessed through the following list of multiple option responses: male, female, transgender, transgender male-to-female, transgender female-to-male, two spirit, or an 'other' open-ended specification (e.g., genderqueer). For the current study, only students who selected any of the trans options, or wrote in the other option that they identified as trans, were retained for further analysis. A total of 116 trans students participated in the survey.

Two methods of data collection were employed: an open-access questionnaire that yielded a non-probability sample and a controlled-access, whole class, in-school survey that produced a probability sample. Recruitment in the open-access survey intentionally recruited gender and sexual minority students, and as such, most participants identified as LGBTQ, while most students in the controlled in-school survey were cisgender heterosexual. The questionnaire was accessible in both French and English; however, due to a parallel study by Chamberland, Émond, Julien, Otis, and Ryan (2010) in Québec, we did not actively recruit participants in that largely Francophone province. As an alternative, we pooled identical questions from both surveys in order to provide a full national analysis (Peter, Taylor, & Chamberland, 2014). Thus, this study reports on the Canada-excluding-Québec dataset only. For additional information on data collection and sampling procedures, see Peter et al. (2015), Taylor and Peter (2011a), and Taylor and Peter (2011b).

The average age of trans-identified participants was nearly 18 years ($M=17.93$, $SD=3.28$), 56% were white, and 44.8% resided in an urban area. Nearly three-quarters (71.7%) indicated that they were currently in secondary school. The 28.3% who were no longer attending a secondary school were instructed to report retrospectively on their experiences. Table 1 shows complete demographic information.

Table 1

Participants’ Characteristics

Gender Identity			Sexual Orientation ^a		
Transgender ^b	13.8%	n=16	Lesbian	30.2%	n=35
Transgender FTM	25.9%	n=30	Gay	25.9%	n=30
Transgender MTF	22.4%	n=26	Bisexual	33.6%	n=39
Transgender and Male	7.7%	n=9	Straight/ Heterosexual	31.0%	n=36
Transgender and Female	4.3%	n=5	Queer	38.8%	n=45
Two spirit /Multigender ^c	25.9%	n=30	Questioning	17.2%	n=20

Race and Ethnicity			Community Type		
White	56.0%	n=65	Urban	44.8%	n=52
First Nations, Métis, Inuit	12.9%	n=15	Small city or suburban	44.0%	n=51
Asian	12.9%	n=15	Rural, reserve, or military base	9.5%	n=11
African Canadian /Black	4.3%	n=5	No response	1.7%	n=2
Multiracial	10.3%	n=12			
No response	3.4%	n=4			

Note. a Totals add up to over 100%, because students could identify with more than one sexual orientation.

b Students who identified as transgender, but did not specify FTM, MTF, male, or female.

c Multigender refers to participants who identify as female and male or FTM and MTF.

Measures

The variables used to empirically test the listed hypotheses are described below. Univariate descriptive statistics are presented in Table 2.

School attachment. Ten 4-point Likert-scale agreement questions were used to measure students’ attachment to their school environment, half of which were reverse-coded so that higher values from all responses correspond to a greater sense of belonging. Examples of items favourable to positive school attachment include: “I feel like a real part of my school”; “I am treated with as much respect as other students”; and “I can be myself at school.” Examples of variables used to illustrate a poor school connection include: “It is hard for me to feel accepted at my school”; “Sometimes I feel depressed about my school”; and “I wish I were in a different school.” Items were computed to form a composite index ($\alpha=.89$) and then centered on the mean.

Enacted stigma. Four measures were used to test the effect of enacted stigma on school attachment: (1) feeling unsafe at school due to gender identity/expression; (2) feeling unsafe at school due to sexual identity; (3) skipping school due to feeling unsafe; and (4) experiences with harassment/victimization. More specifically, the two distinct feeling unsafe questions were binary-coded with 1 representing feeling unsafe. Two 5-point questions measured skipping school in the past year: one due to feeling unsafe while at school, and the other due to feeling unsafe while on the way too school. Response categories for both questions ranged from “never”

Table 2

Descriptive Statistics

Continuous measures*	Mean	SD	Min.	Max.
School attachment	0	7.07	-14.64	15.36
# times skipped school (unsafe)	0	2.53	-1.65	6.35
Harassment/ Victimization	0	11.03	-10.46	32.54
Hear negative gender expression comments	0	3.03	-7.47	4.53
Comfort talking about LGBTQ issues: School staff	0	4.06	-5.55	6.45
Comfort talking about LGBTQ issues: Classmate or close friend	0	1.74	-4.00	2.00
Dummy variables	% Yes			
Feel unsafe: Sexual identity	49.7			
Feel unsafe: Gender identity/expression	51.7			
Hear homo-negative comments (daily)	74.7			
Hear homophobic comments (daily)	54.1			
School or district anti-homophobia policy	25.2			

Note. * Mean centered—each value is subtracted from the average so that the index is shifted, but the units are retained, which results in a mean of zero whereby individual respondents are located either below or above the average score.

to “yes, more than 10 days.” Due to the high correlation ($r=.72$) between the two variables, they were computed to form an index. Finally, a total of 13 questions were used to form an index on experiences with harassment/ victimization, which were based on a 4-point scale ranging from 0 (“never”) to 4 (“frequently”). Questions were based on whether or not students experienced verbal, physical, sexual, or targeted harassment (e.g., cyberbullying, property damaged or stolen, etc.) due to their sexual orientation, perceived sexual identity, gender identity, or gender expression ($\alpha=.94$).

School climate. Six separate measures were used to evaluate the impact of school climate on school attachment among trans students. Two measures were used to assess how comfortable students felt talking about LGBTQ issues with school staff (i.e., teachers, counselors, principal, coach) ($\alpha=.90$); and classmates or a close friend ($r=.53$). In addition, two questions were used to measure homophobic discourse: homo-negative language (e.g., “That’s so gay”) and homophobic slurs (e.g., “faggot” or “dyke”) communicated in a derogatory manner. Both measures were recoded so that the value of 1 corresponds to students who reported hearing such comments “daily.” Negative gender-related language was measured through an index comprising four items: comments about girls not acting “feminine” enough, comments about boys not acting “masculine” enough, negative remarks about girls in general, and negative remarks about boys in general ($\alpha=.79$). Finally, students were asked two questions about whether their school had a policy or procedure for reporting incidents of homophobia either at the school or their school district level. Students who answered “yes” to either question were given the value of one, while respondents who responded “no” or “did not know” were given the value of zero.

Analytic Procedures

Analyses were conducted using IBM SPSS V.22. Procedures consisted of multivariate linear regression, employing the hierarchical entry method, with school attachment as the outcome measure. In particular, after controlling for age, the first block consisted of enacted stigma measures, while the second block added the school climate measures. Hierarchical multiple regression was used as a means to fix the sequence of entry among predictor variables in order to control for the effects of covariates or binary measures independent of the influence of other indicators. An analysis that only considers the impact of enacted stigma, but does not control for school climate characteristics, may overestimate the effect of enacted stigma on school attachment. To this end, the impact of the school climate measures represent a residualized version by which the effects of the enacted stigma variables have been held constant. Further, preliminary bivariate tests found no differences between specific gender identity (e.g., MTF, FTM, trans only, etc.) on school attachment, and thus all subsequent analyses included trans students as a whole group, which is consistent with previous studies using similar samples (see, for example, Clements-Nolle et al., 2006; Greytak et al., 2009).

Finally, following the method developed by Baron and Kenny (1986), the presence of a mediation effect was empirically tested. Specifically, the significant measures from the school climate variables were standardized and computed into a composite index in order to act as the independent variable in the path model. The same procedure was done for the significant enacted stigma measures, which is tested as the mediation variable. In order to show a significant mediation effect, four criteria are required (Baron & Kenny, 1986). First, the main effect of the independent variable (i.e., school climate) must have a significant effect on the dependent variable (i.e., school attachment). Second, the independent variable must have a significant effect on the mediating variable (i.e., enacted stigma). Third, the combined effects of the independent variable and the mediating variable must show a significant effect between the mediating variable and the dependent variable and a non-significant effect (or a substantially reduced association) between the independent and dependent variable. Fourth, the overall path model must be statistically significant, which is confirmed through the Sobel test (Sobel, 1986). The purpose of the Sobel test is to determine whether a mediator (i.e., enacted stigma) influences the relationship between the independent variable (i.e., school climate) and the dependent variable (i.e., school attachment).

Results

As illustrated in Table 3, when only the enacted stigma measures were entered, all variables except feeling unsafe due to sexual identity or perceived sexual orientation were statistically significant. Experiencing incidents of harassment or victimization was the strongest correlate with school attachment ($\beta = -.248$). Put another way, the more trans students reported being bullied based on their sexual orientation, perceived sexual identity, gender identity, or gender expression, the lower their attachment was to school.

When school climate indicators were entered, results show that comfort in talking about LGBTQ issues with school staff was the strongest predictor of school attachment ($\beta = .268$), after controlling for the enacted stigma risk factors. Frequency of hearing negative language pertaining to gender expression was the next strongest predictor of school attachment ($\beta = -.217$), followed by school or district with an anti-homophobia policy ($\beta = .190$), and hearing

Table 3

Standardized and Unstandardized Regression Coefficients by School Attachment

	Enacted Stigma		School Climate	
	b	β	b	β
Interpret	3.33 (3.04)		-4.39 (2.98)	
Feel unsafe: Sexual identity	-1.61 (1.39)	-.114	-1.16 (1.17)	-.082
Feel unsafe: Gender identity/expression	-3.15 (1.26)**	-.223	-3.07 (1.08)**	-.218
# Times skipped school (unsafe)	-.62 (.25)*	-.220	-.50 (.21)*	-.178
Harassment/ Victimization	-.16 (.06)**	-.248	-.11 (.05)*	-.164
Frequency of hearing negative gender expression comments			-.51 (.18)**	-.217
Hear homo-negative comments (daily)			2.16 (1.20)	.133
Hear homophobic comments (daily)			-2.57 (1.01)**	-.181
Comfort talking about LGBTQ issues: School staff			.47 (.14)***	.268
Comfort talking about LGBTQ issues: Classmates or close friend			.39 (.32)	.096
School or district anti-homophobia policy			3.09 (1.08)**	.190
r^2 (adjusted)	.325		.538	
F change in r^2	14.82***		10.20***	

Note. * $p < .05$; ** $p < .01$, *** $p < .001$

homophobic comments daily ($\beta = -.181$). All of the enacted stigma measures except for feeling unsafe due to sexual identity or perceived sexual orientation remained as significant predictors of school attachment.

Further, the F change in r^2 option enables researchers to assess whether entering the additional school climate variables resulted in a significant improvement in explained variance. Results show that the enacted stigma measures accounted for 32.5% of the variation in school attachment; however, introducing the school climate variables explained an additional 21.3% of variation in school attachment, and this change in R^2 was significant $F(3,90) = 18.83, p < .001$. Together both the enacted stigma and school climate measures accounted for 53.8% of the variance in school attachment among trans youth.

Finally, results of testing for a mediation effect show that the standardized composite measure of the significant school climate variables in the hierarchical regression model was associated with an increase in school attachment ($b = 1.85, se = .26, p < .001, \beta = .60$), which is the first criterion of mediation. The second criterion, an association between school climate and enacted stigma was also significant ($b = -.36, se = .09, p < .001, \beta = -.40$). Third, the combined effect demonstrates that both school climate ($b = 1.35, se = .26, p < .001, \beta = .43$) and enacted stigma ($b = -$

1.41, $se=.29$, $p<.001$, $\beta=-.41$) were significantly related to school attachment; however, the overall impact of school climate is substantially reduced. Finally, the overall path model was significant according to the Sobel test. Specifically, results of the Sobel test suggest that the association between school climate and school attachment is significantly mediated by enacted stigma (Sobel=3.10, $p<.01$), and accounts for 27.4% of the total effect.

Discussion

The role of enacted stigma among young people has garnered considerable theoretical and empirical attention, but most studies have primarily focused on sexual minority (and not gender minority) youth, and the vast majority have focused on negative health (e.g., mental illness and suicidality) or educational outcomes (e.g., skipping school, dropping out of school, and low academic achievement). Within this context, school connectedness (i.e., attachment) is regarded as a protective factor, which helps explain, in part, the lower odds of health or educational disparities among LGBTQ youth. In the present study, we accept this empirical conclusion, and therefore, examine the impact school climate has on school attachment (as an alternative to negative disparities) and whether or not enacted stigma mediates this relationship.

In regard to our first research question, we found that among trans students there was a significant association between exposure to enacted stigma and lower levels of school attachment. In particular, trans students who reported being bullied, felt unsafe at school due to their gender identity and/or expression and skipped school due to feeling unsafe, were less attached to their school. These results are consistent with previous studies (Veale et al., 2015), and lend additional support as the association within our study is empirically tested within a multivariate model thereby controlling for other factors such as school climate. Interestingly, feeling unsafe due to sexual identity or perceived sexual orientation was not associated with lower levels of school attachment, which speaks to the importance of disaggregating sexual and gender identities, especially among trans youth. Nevertheless, our first hypothesis lends support to the main premise of minority stress theory in that trans students who experience situations of enacted stigma are less attached to their school environment.

Our second research question, whether school climate would be significantly related to school attachment, was also confirmed. Thus, even when controlling for exposure to enacted stigma, we found that supportive school climates were positively correlated to school attachment. Specifically, greater exposure to gender negative language corresponded to lower school attachment among trans students. A similar relationship was found for homophobic language, but not for homo-negative language. One possible explanation for the null relationship between homo-negative language and school attachment may be the binary nature of the variable where the higher value represented daily use, which may have resulted in there not being suitable variance in the measure thereby resulting in a Type II error. Another, and more plausible, explanation is that usage of language such as “that’s so gay” is so widespread among students that it has become normalized to a certain extent in the school experience of trans youth, resulting in a minimal impact on their school attachment.

The significant association between presence of a school- or district-based anti-homophobia policy and school attachment supports previous research that highlights the importance of such a policy for sexual minority populations (Saewyc et al., 2014). The significance of these policies for trans youth, and for their school attachment, further signifies their importance, especially from a policy implication perspective. Unfortunately, our survey did not ask students whether

their school or district had an anti-transphobia policy (or an equivalent policy specifically outlining protections based on gender identity or gender expression), nor did we ask questions assessing their perception of staff and student training if such policies were present. It would be fruitful for future research to pursue these considerations.

The final significant protective school climate variable was how comfortable trans students felt talking about LGBTQ issues with school staff. Such a measure has not been widely tested, especially within multivariate models, but the current study suggests that it is worthy of further investigation, particularly since it was the strongest predictor in terms of overall magnitude. While being comfortable talking to school staff was an important factor in greater school attachment, a similar variable based on a close friend or classmate was not. The implication of these findings, we believe, is that it is first and foremost the responsibility of school staff to create the conditions in which all students feel comfortable to discuss LGBTQ issues with them. Interestingly, preliminary bivariate tests (not presented) showed that the presence of a GSA was not a significant protective measure for school attachment. To this end, the importance of both anti-homophobia policies and feeling comfortable talking about LGBTQ issues with school staff (compared to the presence of GSA or comfort talking to peers) speaks to the necessity of creating a positive school climate that starts with the adults who work there.

Our final research question, testing for a mediation effect, showed a significant relationship between school climate and school attachment where the total effect was mediated by enacted stigma. In other words, school climate influences school attachment, in part, through its effect on enacted stigma. This finding suggests that poor school climate provides an environment suitable for harassment and victimization, which in turn negatively affects how attached trans students are to their school. Conversely, a supportive and welcoming school climate for trans youth leads to lower levels of enacted stigma, which results in greater school attachment. Policies and research have been well versed on the negative impact that enacted stigma has on gender and sexual minority youth; however, our results also show that creating a healthy school environment is vital, both as a way to improve the school attachment of trans youth, and also as a means of reducing the conditions in which harassment and bullying occur.

Policy Implications

In order to adequately dismantle gender-based prejudice and discrimination, we provide the following recommendations that focus on improving school system interventions, which our study shows, at least in part, to be a necessary precursor to healthy school climates for LGBTQ, and more specifically, transgender youth or gender minority youth. First, school system interventions encompass all schools; meaning that creating gender and trans-inclusive education needs to start early in daycare and primary school settings (Dykstra, 2005). Even a relatively simple task like ‘gender-freeing’ toys (e.g., “it’s not true that only boys play with trucks and girls play with dolls, you can play with whatever toy you wish”) can go a long way in undoing hierarchical binary gender systems. Second, effective interventions must transpire at multiple levels: within and between classrooms, schools, and school districts (Sausa, 2005). All educators have a responsibility to ensure that students are included and safe, which does not simply mean free from harassment. As our study illustrates, trans students who attend educational institutions with less homophobic and transphobic language, feel more attached to their school, and those who feel comfortable talking to school staff about LGBTQ issues also feel more attached. Simply put, when a teacher or other educator provides a heteronormative, gender-

normative environment, there is a passive acceptance of peer harassment and bullying (Aragon et al., 2014). Third, while the increased focus on LGBTQ-inclusive education is long overdue and a positive step, it is important that we avoid homogenizing the experiences of trans students. Anti-homophobic policies have been shown to be effective, even among trans students as our study illustrates, but system interventions that include anti-transphobia and specific trans-inclusive programming should not be overlooked or assumed adequately addressed within the LGBTQ acronym. System level interventions that could help support trans youth in schools include gender-inclusive washrooms and change rooms, proper and consistent pronoun use in classrooms and school records, as well as an initiative to create more safe spaces for trans youth through gender-inclusive policies (see Veale et al., 2015 for more relevant policy recommendations).

Limitations

As with all research, the current study has both strengths and limitations. The principal limitation is that the data are cross-sectional, making all relationships correlational and not necessarily causal. Even in the mediation analysis, we are uncertain of the time-order of events between school context and enacted stigma, and thus we are making an assumption that inclusive school environments lead to less enacted stigma. Further, these data were collected largely in 2008 and 2009; as such, changes in trans populations as well as an increased focus on the negative impact of harassment and the positive influence of inclusive school climates among gender and sexual minority students within educational institutions may result in different experiences of school attachment. However, a more recent survey on trans youth in Canada has documented numerous inequalities, including low school connectedness (Veale et al., 2015). Finally, another limitation is the lack of an analysis on ethnic and racial diversity, particularly among two spirit participants. To date, few studies have specifically addressed two spirit populations (Taylor, 2009), and even fewer on two spirit youth, even though they are an especially marginalized population (Taylor & Ristock, 2011). Given the history of “white colonial hetero-patriarchy” (Finley, 2011, p. 32) experienced by many First Nations people, future studies should employ indigenous/participatory action research methodologies so that we do not continue the cultural erasure of First Nations people (Cameron, 2005).

Concluding Remarks

Despite these aforementioned limitations, one of the primary strengths of this study was our ability to conduct multivariate analyses with a sample of exclusively trans youth, instead of simple bivariate comparisons. Specifically, we were able to address how exposure to enacted stigma is a risk factor for low school attachment among trans youth, while a supportive school climate is a protective factor, which increases levels of school attachment. While these findings offer an important contribution, more research on trans students is needed. In particular, future studies should examine both risk and protective factors, especially within minority stress theory, that do not have health or educational disparities as outcome measures. Particularly among sexual minority youth, recent research has addressed the importance of protective factors, within a theoretically-informed lens, among this highly stigmatized population (Saewyc, 2011). Whether these same protective factors resonate among trans youth remains unclear.

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Notes

1 Gender minority is a term that is often used to refer to people who not conform to the male/female gender binary, or whose gender identity does not match their sex assigned at birth. Often refers to people who identify as, for example, transgender, genderqueer, and/or genderless.

2 Sexual minority is a term that is often used to refer to people who do not identify as heterosexual, and/or the predominant sexual orientation/sexuality that the majority of the population identifies as. Often refers to people who identify as lesbian, gay, and/or bisexual.

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