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Social Ecological Correlates of Family-Level Interpersonal and Environmental Microaggressions Toward Sexual and Gender Minority Adolescents

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Abstract

Microaggressions are associated with mental and behavioral health problems and are common experiences for sexual and gender minority adolescents (SGMA). Little is known about the social ecological correlates of family-level interpersonal and environmental microaggressions for SGMA. Utilizing a national sample of SGMA (N = 1,177), this study (a) identified the frequencies of family-level interpersonal and environmental microaggressions by participant demographics and (b) examined individual-, family-, and structural-level factors associated with interpersonal and environmental microaggressions. Outness to parents, a transgender or genderqueer identity, and higher levels of gender role non-conformity were associated with higher frequencies of interpersonal microaggressions. Higher levels of family-level child maltreatment and religiosity were associated with higher frequencies of interpersonal and environmental microaggressions. State-level non-discrimination protections were associated with lower frequencies of environmental microaggressions. Suggestions for increased individual-level support for gender non-binary adolescents as well as family targeted preventive strategies are discussed. Areas for future research are highlighted.

Keywords

sexual minority; gender minority; adolescence; family violence; microaggressions; minority stress

Microaggressions are defined as interpersonal or environmental indignities that intentionally or unintentionally communicate slights or insults to oppressed groups (Sue, 2010). Microaggressions are a common experience for sexual (e.g., gay, lesbian, bisexual) and gender (e.g., transgender, genderqueer) minority adolescents (SGMA) and often manifest as microassaults (e.g., being called a “dyke”), microinsults (e.g., being assumed to be promiscuous), and microinvalidations (e.g., having a romantic partner referred to as a “friend”). Referred to by Nadal and colleagues (2011) as “death by a thousand cuts,” the chronic and cumulative nature of microaggressions has been theorized to carry similar negative effects to more overt forms of victimization (Gartner and Sterzing, 2016). Seventy-four percent of SGMA experienced interpersonal microaggressions (e.g., being directly called names) in the last school year, with 75% experiencing sexual-minority-specific

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environmental microaggressions (e.g., overhearing “gay” used in a negative way) and 33% reporting gender-minority-specific environmental microaggressions (e.g., overhearing “he/she” or “tranny”) on an often to frequent basis (Kosciw, Greytak, Palmer, & Boesen, 2014). Consistent with minority stress theory (Meyer, 1995, 2003), school-based experiences of microaggressions that target a student’s sexual or gender minority identity are associated with a range of negative outcomes, such as psychological distress (Woodford, Han, Craig, Lim, & Matney, 2014), attempted suicide (Goldblum et al., 2012), and skipping class and truancy (Kosciw et al., 2014).

Although a growing body of evidence has identified high rates of overt forms of family violence (e.g., emotional abuse, sexual abuse, and physical abuse) for sexual minority adolescents (SMA; Friedman et al., 2011; Sterzing et al., 2016), little is currently known about family-level homo/transnegative interpersonal and environmental microaggressions (referred to as interpersonal microaggressions or environmental microaggressions throughout) experienced by SGMA. Interpersonal microaggressions are homo/transnegative slights directed at the sexual and/or gender minority adolescent, while environmental microaggressions are overheard or witnessed slights by family members toward other sexual and/or gender minority persons or the broader sexual and gender minority community (Woodford, Chonody, Kulick, Brennan, & Renn, 2015). Addressing this gap in understanding SGMA’s family environments is vital, as adolescent developmental literature suggests that family connectedness is critical to positive developmental outcomes and functions as a protective factor against health risk behaviors, including violence, substance use, and age of sexual debut (Resnick et al., 1997; Smetana, Campione-Barr, & Metzger, 2006). In regard to SMA, Ryan and colleagues (2009, 2010), found that lower levels of family rejection (e.g., parents blaming children for their anti-gay mistreatment) and higher levels of family acceptance (e.g., parents inviting children’s openly sexual minority friends to family activities) in adolescence predicted greater self-esteem, social support, and general health, while protecting against mental and behavioral health issues in adulthood. Although little is known about gender minority adolescents (GMA), sexual minority young adults who reported higher levels of family rejection in adolescence were 8.4 times more likely to report having attempted suicide and 5.9 times more likely to report high levels of depression when compared to sexual minority peers reporting no or low-levels of family rejection (Ryan, Huebner, Diaz, & Sanchez, 2009).

In their seminal research on family rejection, Ryan and colleagues (2009) examine many factors relevant to microaggressions in the family system. Their study employed a convenience sample of non-Latino white and Latino young adults (N = 245; 20–25 y/o) to measure interpersonal microaggressions perpetuated by parents and caregivers toward their adolescent’s sexual orientation and/or gender expression. For example, participants were asked “Between ages 13–19, how often did your parents/caregivers blame you for any anti-gay mistreatment that you experienced?” (Ryan et al., 2009). While this study represents an important first step in understanding the role of microaggressions in the lives of SGMA, it has numerous limitations that the current study seeks to address. First, it did not examine the experience of overhearing or witnessing environmental microaggressions. Moreover, this research focused on parents and caregivers only and did not ask about interpersonal and environmental microaggressions that occur within the larger family system. Finally, the

study was demographically limited, both in that it only engaged non-Latino white and Latino participants, and in that all participants were drawn from one geographic location. The current study seeks to fills these gaps by employing a diverse national sample to examine the frequencies of both interpersonal and environmental microaggressions perpetrated by parents, siblings, grandparents, aunts, uncles, and other extended family members who reside inside and outside the adolescent's home.

Social Ecological Correlates

Given the paucity of research on microaggressions in the family system, no study to date has examined the social ecological correlates of family-level interpersonal and environmental microaggressions for SGMA. This is an important gap as the identification of individual-, family-, and structural-level risk and protective factors is critical to the development of effective interventions to improve family climates for this adolescent population. Moreover, the examination of both interpersonal and environmental microaggressions allows for the identification of potentially distinct sets of risk and protective factors for each form of microaggression. As recommended by other sexual and gender minority scholars (e.g., Hong & Espelage, 2012; Horn, Kosciw, & Russell, 2009), the current study utilized a social ecological framework (see Figure 1) to compile a list of individual-, family-, and structural-level factors associated with differential rates of overt forms of family and peer rejection and violence for SGMA. These factors remain untested but may play an important role in increasing or decreasing risk for interpersonal and environmental microaggressions.

Individual Factors

The extant literature has identified several individual-level risk factors associated with higher rates of bullying victimization for SGMA: early/mid adolescence compared to late adolescence (Kosciw, Greytak, & Diaz, 2009); identifying as bisexual or questioning compared to gay or lesbian (Birkett, Espelage, & Koenig, 2009; Button, O'Connell, & Gealt, 2012), and identifying as non-cisgender (e.g., transgender, genderqueer) compared to cisgender (Greytak, Kosciw, & Diaz, 2009). A racial/ethnic minority identity has also been found to be an individual-level risk factor in studies examining experiences of family rejection among SGMA. Specifically, Ryan and colleagues (2009) found gay and bisexual Latino men reported significantly higher levels of family rejection in comparison to their White male and female counterparts. Gender role non-conformity is also a risk factor for increased rates of physical, emotional, and sexual abuse in families (Roberts, Rosario, Corliss, Koenen, & Austin, 2012). Furthermore, disclosing a sexual and/or gender minority identity (i.e., "coming out") to parents or caregivers is associated with higher rates of victimization (D'Augelli, Grossman, & Starks, 2005; D'Augelli, Hershberger, & Pilkington, 1998). Individual-level risk factors—age, sexual orientation, gender identity, race/ethnicity, gender role non-conformity, and outness to parents—identified from the literature on family and peer violence may be associated with differential rates of interpersonal and environmental microaggressions in family systems.

Family Factors

In addition to these individual-level factors, non-violent family adversity (e.g., parental death, divorce, incarceration) could be a potential risk factor for higher rates of interpersonal and environmental microaggressions, as adverse events are associated with higher rates of overt forms of family violence in samples drawn from the general adolescent population (Finkelhor, 2008; Finkelhor, Shattuck, Turner, Ormrod, & Hamby, 2011; Lauritsen, 2003). While non-violent family adversity has not been studied as relates to more subtle forms of victimization, the decreased stability of caregivers (e.g., divorce), family structure (e.g., incarceration, death), and community (e.g., multiple relocations) inherent with high levels of non-violent family adversity may increase the likelihood of exposure to interpersonal and environmental microaggressions. Additionally, SGMA experience higher rates of sexual and physical abuse compared to heterosexual peers (Friedman et al., 2011), which may also be associated with more frequent microaggressions against SGMA.

Religious families have also been found to be less accepting of their sexual and gender minority children (Newman & Muzzonigro, 1993; Ryan et al., 2010) and, as a result, may engage in more frequent acts of interpersonal and environmental microaggressions. Lower levels of parental education have been associated with increased concern about their child's sexual minority identity (Conley, 2011), with these concerns potentially manifesting as negative interpersonal or environmental messages (e.g., "being gay is just a phase"). Although family income remains unexamined in regard to microaggressions, findings suggest that SGMA in families with the lowest incomes had parents who were less concerned about their child's sexual minority status, while parents with higher incomes expressed higher levels of concern (Conley, 2011). Overall, these family-level factors—non-violent adversity, child maltreatment, religiosity, parental education, and family poverty—may help us identity SGMA who are at the greatest risk for interpersonal and environmental microaggressions in their family system.

Structural Factors

Horn and colleagues (2009) discuss the importance of expanding the current research paradigm that views SGMA as inherently "at-risk" to considering structural-level factors in the development of risk and resilience. Accordingly, factors such as community poverty and education rates, state-level legal protections (i.e., states with school non-discrimination laws or policies), and level of urbanicity (e.g., urban, rural, isolated) may influence microaggressions in SGMA's families. State-level legal protections, for example, have been studied in relation to individual mental health outcomes such as attempted suicide, with less supportive environments leading to higher levels of suicidality among SMA when controlling for other mental health factors (Hatzenbuehler, 2011). Other research has looked at broader factors such as school district poverty and adult educational attainment as well as urbanicity as they relate to SGMA school climate (Kosciw et al., 2009). This research has found that youth in rural communities and in communities with lower adult educational attainment faced more hostile school climates. These findings are supported by qualitative research in which SGMA from rural communities discussed experiencing family and community negativity and spoke to a need for social acceptance and support (Paceley, 2016). In addition, youth in areas of higher poverty were less likely to hear homophobic remarks at

school (Kosciw et al., 2009). These studies suggest these structural-level factors—community poverty and education rates, state-level legal protections, and urbanicity—may also be associated with differential rates of interpersonal and environmental microaggressions.

Present Study

To address the aforementioned gaps, this study utilized a large national sample of SGMA (N = 1,177, 14–19 y/o) to (a) identify the frequency of interpersonal and environmental microaggressions by age, sexual orientation, gender identity, and race/ethnicity and (b) examine the social ecological correlates of interpersonal and environmental microaggressions across the individual- (age, sexual orientation, gender identity, race/ethnicity, gender role non-conformity, and outness to parents), family- (non-violent adversity, childhood maltreatment, family religiosity, parental/caregiver education, and family poverty), and structural-levels (community poverty, community education, state-level legal protections, and urbanicity). This paper concludes with a discussion of the findings and recommendations for future research and potential prevention strategies.

Methods

Sampling Procedures

As shown in Table 1, study participants (N = 1,177) were between 14 and 19 years old, with a mean age of 16.4 (SD = 1.2). Participants reported the following gender identities: female (40.7%, n = 478), male (33.1%, n = 389), transgender (5.6%, n = 66), genderqueer (4.6%, n = 54), gender neutral (2.9%, n = 34), gender fluid (6.4%, n = 75), gender variant (0.3%, n = 3), bigender (0.6%, n = 7), questioning (4.0%, n = 47), and other (1.8%, n = 21). Due to small cell sizes, genderqueer, gender neutral, gender fluid, gender variant, bigender, questioning, and other were collapsed under genderqueer (20.5%, n = 241) for the purpose of analysis. Sexual orientation categories were gay (30.7%, n = 361), lesbian (24.0%, n = 282), bisexual (18.4%, n = 216), pansexual (11.2%, n = 132), questioning (7.1%, n = 83), queer (4.1%, n = 48), asexual (1.8%, n = 21), straight/heterosexual (0.7%, n = 8), and other (2.2%, n = 26). Due to small cell sizes, asexual, straight/heterosexual, and other were collapsed under “other” (4.7%, n = 55) for the purpose of analysis. The sample’s racial and ethnic composition was Caucasian (62.2%, n = 732), multiracial (13.0%, n = 153), Latino/a (9.9%, n = 117), African American (8.2%, n = 97), Asian/Pacific Islander (3.7%, n = 43), American Indian (1.2%, n = 14), and other (0.9%, n = 11). Due to small cell sizes and for the purpose of analysis, Asian/Pacific Islander, American Indian, and other categories were collapsed under “other” (5.8%, n = 68). Participants were recruited from all 50 states, with 81% (n = 953) and 19% (n = 224) from urban and rural areas, respectively.

Inclusion criteria.—Participants were eligible for study inclusion if they met the following criteria: (a) identified their sexual orientation as non-heterosexual (i.e., lesbian, gay, bisexual, pansexual, queer, questioning, or other) or their gender identity as non-cisgender (i.e., transgender, gender queer, gender neutral, gender fluid, gender variant, bigender, questioning, or other), (b) were 14 to 19-years-old, (c) lived in the United States,

(d) were currently enrolled in middle or high school, (e) were literate in English, and (f) self-reported that this was the first time taking the survey.

Participant recruitment.—Participants were recruited through Facebook advertisements targeting 14 to 19-year-old users who (a) specified at least one interest in a sexual or gender minority topic (e.g., RuPaul's Drag Race) or organization (e.g., Human Rights Campaign) *or* (b) reported sexual interest, utilizing the binary gender options provided by Facebook, in someone of the same gender (e.g., lesbian, gay) or both genders (e.g., bisexual, pansexual). In addition, twelve sexual and gender minority youth serving community organizations were selected to aid in study promotion based on the number of youth they served and their geographic location in the United States (i.e., Northeast, South, Midwest, Southwest, West, and Northwest). Partnering organizations used their email lists, websites, social media sites (e.g., Facebook pages, Twitter), and facilities to promote the study. Lastly, a promotional video was produced and hosted on the study's website (http://www.SpeakOut.berkeley.edu), Facebook page, and YouTube page.

Data Collection Procedures

The study utilized an anonymous internet-based survey. Study procedures were approved by the Institutional Review Board at the University of California, Berkeley. The study received a parental waiver of consent because of the risks associated with sexual orientation and/or gender identity disclosure to parents for minor participants. Data collection took place from April 28, 2015 to June 30, 2015. Participants entered the survey through the study's website. Participants watched a required consent video and had three opportunities to correctly answer five consent-related quiz questions before being deemed ineligible to participate. Those who consented to participate completed an eligibility screener. If found eligible, they were able begin the survey. To prevent multiple survey submissions from the same participant, the survey screened out anyone using an IP address that had previously (a) failed the consent quiz, (b) been found ineligible during eligibility screening, or (c) started or completed a survey. Participants who completed the survey could request a $15 gift card be sent to their email. To maintain confidentiality and the anonymous nature of the survey, gift cards were processed by a separate vendor and no identifying information was stored in a dataset or made available to the research team.

Variables and Measures

Interpersonal and environmental microaggressions.—The current study utilized the interpersonal (9-item) and environmental (7-item) microaggression subscales from a new measure assessing family-level lifetime experiences of homo/transnegative microaggressions and homo/transpositive microaffirmations (i.e., subtle and often small recognition and acceptance of a person's identity; Darrell, Littlefield, & Washington, 2016). The measure was designed as a part of a larger project, which developed both microaggression and microaffirmation instruments to investigate risk and protective factors for polyvictimization among SGMA. Interpersonal and environmental microaggression items were adapted from existing measures assessing adolescent family rejection stemming from sexual orientation and gender expression (Ryan et al., 2009) and sexual and gender minority microaggressions in adult and college samples (Woodford et al., 2015; Wright & Wegner, 2012). Additional

items were generated, removed, and refined through a series of expert advisory board and youth advisory board meetings (comprised of 14 to 19-years-old SGMA). Example items included: interpersonal microaggressions: “How often has a member of your family said or implied that your sexual orientation or gender identity was ‘just a phase’?” and environmental microaggressions: “How often has a member of your family said being LGBTQ is a choice that can be changed?”. Responses were on a Likert scale ranging from *Never* (0) to *All the time* (4). All participants received the environmental microaggressions subscale; however, only those participants who reported disclosing their sexual orientation and/or gender identity to at least one family member were presented the interpersonal subscale (n = 952). Initial measure testing was conducted with the interpersonal (9-items) and environmental (7-items) microaggression subscales and the interpersonal (7-items) and environmental (6-items) microaffirmation subscales. In initial testing, a four-factor solution with the interpersonal and environmental microaggressions and interpersonal and environmental microaffirmations subscales had excellent fit: $\chi 2(371) = 3121.76$, $p < .001$, NNFI = 0.95, CFI = 0.95, SRMR= 0.06 (Hu & Bentler, 1999). Both microaggression subscales used in the current study had excellent internal reliability ($\alpha = .90$).

Individual-level factors.

Demographics.: Age, sexual orientation, gender identity, and race/ethnicity measures were adapted from prior sexual minority youth studies (Busseri, Willoughby, Chalmers, & Bogaert, 2008; Diamond & Lucas, 2004) and approved by the study’s youth advisory board.

Gender role non-conformity.: A single item assessed gender role non-conformity: “Compared to other people of the same biological/anatomical sex who are the same age, do you see yourself as:”. Response options ranged from *much more feminine* (0) to *much more masculine* (5). Participants assigned male at birth had their responses reverse coded so that a high value indicated higher levels of gender role non-conformity.

Outness to parent.: Participants who indicated a non-heterosexual orientation and/or non-cisgender identity were asked: “Who in your life knows about your sexual orientation?” and “Who in your life knows about your gender identity?”, respectively. A binary variable (*yes/no*) was created such that sexual and gender minority participants who disclosed their minority identity to at least one parent or caregiver were classified as *yes*, with those who had not disclosed were classified as *no*.

Family-level factors.

Non-violent adversity.: Non-violent family adversity was measured using adapted items from Turner and Butler’s (2003) lifetime adversity measure, which was both developed and validated on a university sample and subsequently used on samples of children and young adults (Finkelhor, Ormrod, & Turner, 2007). Eleven adapted items were used to assess the lifetime frequency of non-violent adversities (e.g., “Close family member was hospitalized for an illness”). Response options ranged from: *Never* (0) to *Five or more times* (5). The items were summated to create a scale that ranged from 0 to 55, with higher scores indicating higher levels of family-level non-violent adversity. The scale demonstrated satisfactory internal consistency ($\alpha = .80$).

Child maltreatment.: Four questions from an adapted version of the Abbreviated Juvenile Victimization Questionnaire – 2nd Revision (AJVQ; Finkelhor, Hamby, Turner, & Ormrod, 2011) were used to assess physical abuse, emotional abuse, physical neglect, and custodial interference. The response options were, *This never happened* (0), *Once in the past year* (1), *Twice in the past year* (2), *3–5 times in the past year* (3), *6–10 times in the past year* (4), *11–20 times in the past year* (5), *More than 20 times in the past year* (6), *Not in the past year but it did happen before* (7). Utilizing recoded binary versions of physical abuse, emotional abuse, physical neglect, and custodial interference (i.e., yes/no), a count variable (range: 0 to 4) was created of the total number of maltreatment types experienced in the participant's lifetime.

Family religiosity.: Participants were asked how important religion is to their (1) mother or maternal caregiver, (2) father or paternal caregiver, and (3) extended family. Response options for these three questions were on a four-point scale ranging from *Not important at all* (1) to *Extremely important* (4). A scale was created measuring overall family religiosity by summing the three items on religious importance (range: 3 to 12; $\alpha = .50$). Scale summation used listwise deletion resulting in the loss of 55 participants who reported "not applicable" on at least one of the three items.

Parent/caregiver education.: Parent/caregiver education was assessed through one item asking participants, "What is the highest level of education completed by anyone in your home?" with response options ranging from *Less than high school* (1) to *Completed a graduate degree (e.g. Master's, Doctorate)* (6).

Family poverty.: Family poverty was assessed through a single item asking participants, "Do you receive free or reduced lunch at school?" with a binary (*yes/no*) response option.

Structural-level factors.—Self-reported zip codes were used to determine structural-level factors, with 87.8% ($N = 1,033$) of participants providing this location-based indicator.

Community poverty and education.: Data from the United States Census 2014 American Community Survey (U.S. Census Bureau, 2014) was used to gather information on percent of population below the poverty line and average level of education by zip code tabulation area.

State-level legal protections.: Zip codes were also used to determine each participant's state and state-level GLSEN (2016) data on non-discrimination laws protecting sexual and gender minority students in schools was imported into the dataset.

Urbanicity.: Zip code was used to bring in urbanicity data on a 4-point scale: *Urban* (1), *Large rural* (2), *Small rural* (3), and *Isolated* (4; Rural Health Research Center, 2000).

Data Analysis

Multiple imputation with chained equations was performed using IVEware (version 0.2) to create 20 data sets with no missing values on victimization measures and all social ecological predictors (*IVEware: Imputation and Variance Estimation Software*, 2002;

Raghunathan, Lepkowski, Van Hoewyk, & Solenberger, 2001). Demographic factors, outness to parents, and zip code generated variables were not imputed for the current study. Listwise deletion was used for these variables and for the calculation for the family religiosity scale variable. Sample size for each model is specified in Tables 1 and 2. The multiply imputed data were analyzed using commercially available software (Stata, version 14.2).

Descriptive analyses were conducted for interpersonal and environmental microaggressions stratified by age, sexual orientation, gender identity, and race/ethnicity. Bivariate linear regression analyses were used to identify significant mean differences in interpersonal and environmental microaggressions by these demographic factors. Multiple linear regression was used to examine the social ecological correlates of interpersonal and environmental microaggressions, first with only individual-level factors, then with individual- and family-level factors, and finally, the full model including individual-, family-, and structural-level factors.

Results

Frequency of Microaggressions by Demographics

Interpersonal microaggressions.—The overall frequency of interpersonal microaggressions ($N = 952$) was 14.87 (95% CI: 14.29, 15.44; Table 1). Nineteen-year-old SGMA reported the highest frequency of interpersonal microaggressions (M = 16.52, 95% CI: 12.77, 20.28), with 14 to 18 year olds reporting means between 14.40 to 15.15. These age differences, however, were not statistically significant at the bivariate-level. In regard to sexual orientation, participants who identified as “other” had the highest frequency of family-level interpersonal microaggressions (M = 18.32; 95% CI: 15.33, 21.32), followed by pansexual (M = 18.10, 95% CI: 16.44, 19.76), queer (M = 16.96, 95% CI: 14.60, 19.32), lesbian (M = 14.68, 95% CI: 13.61, 15.76), gay (M = 13.95, 95% CI: 13.00, 14.91), questioning (M = 13.81, 95% CI: 10.39, 17.23), and bisexual (M = 13.66, 95% CI: 12.17, 15.15). Participants who identified their sexual orientation as “other,” pansexual, or queer had a significantly higher frequency ($p < .05$) of interpersonal microaggressions in comparison to gay participants. When examined by gender identity, transgender participants reported the highest frequency of interpersonal microaggressions (M = 19.58, 95% CI: 17.27, 21.90), followed by genderqueer (M = 17.87, 95% CI: 16.71, 19.04), cisgender female (M = 13.97, 95% CI: 13.04, 14.90), and cisgender male (M = 13.25, 95% CI: 12.32, 14.19). Transgender and genderqueer participants reported a significantly higher frequency ($p < .05$) of interpersonal microaggressions scores in comparison to cisgender male participants. Participants who identified their race ethnicity as “other” (M = 15.73, 95% CI: 13.07, 18.39) and multiracial (M = 15.66, 95% CI: 13.97, 17.34) reported the highest frequencies of interpersonal microaggressions, followed by Caucasian (M =14.98, 95% CI: 14.26, 15.71), Latino (M= 13.67, 95% CI: 11.91, 15.42), and African American (M = 13.62, 95% CI: 12.02, 15.22). None of these mean differences in interpersonal microaggressions by race/ethnicity were statistically significant.

Environmental microaggressions.—The overall frequency of environmental microaggressions for the entire sample (N = 1,177) was 11.31 (95% CI: 10.91, 11.70; Table 1). Nineteen-year-old SGMA also reported the highest frequency of environmental microaggressions (M = 12.58, 95% CI: 10.31, 14.85), while 14 to 18 year olds had means that ranged from 10.61 to 11.70. Similar to interpersonal microaggressions, no significant age differences were observed at the bivariate-level. Participants who identified their sexual orientation as "other" reported the highest average score (M = 12.96, 95% CI: 11.29, 14.63), followed by pansexual (M = 12.85, 95% CI: 11.59, 14.11), queer (M = 12.31, 95% CI: 10.43, 14.18), questioning (M = 11.86, 95% CI: 10.32, 13.39), lesbian (M = 11.49, 95% CI: 10.69, 12.29), gay (M = 10.58, 9.89, 11.27), and bisexual (M = 10.48, 95% CI: 9.52, 11.45). Participants who identified their sexual orientation as "other" and those who identified as pansexual had a significantly higher frequency of environmental microaggressions ($p < .05$) when compared to gay participants. Genderqueer participants had the highest frequency of environmental microaggressions (M = 12.64, 95% CI: 11.80, 13.48), followed by transgender (M = 11.68, 95% CI: 9.98, 13.37), cisgender female (M = 11.29, 95% CI: 10.64, 11.93), and finally cisgender male (M = 10.43, 95% CI: 9.76, 11.09). Genderqueer participants reported a significantly higher frequency of environmental microaggressions ($p < .05$) compared to cisgender male participants. Participants who identified their race ethnicity as "other" (M = 11.78, 95% CI: 10.18, 13.39), Caucasian (M = 11.41, 95% CI: 10.90, 11.91), and multiracial (M = 11.22, 95% CI: 10.09, 12.36) reported the highest frequencies of environmental microaggressions, followed by African American (M = 10.98, 95% CI: 9.82, 12.15) and Latino (M= 10.64, 95% CI: 9.36, 11.92). No differences in environmental microaggressions by race/ethnicity were statistically significant.

Social Ecological Correlates

To examine social ecological correlates of interpersonal and environmental microaggressions, models were built by clustering variables into theoretically distinct social ecological levels (i.e., individual, family, and structural). As such, individual-level variables were examined in the first model (i.e., age, sexual orientation, gender identity, race/ethnicity, gender role non-conformity, outness to parents). In the second model, individual- and family-level (i.e., non-violent adversity, child maltreatment, family religiosity, parent/caregiver education, and family poverty) were examined. In the third model, all variables were examined together: individual-, family-, and structural-level (i.e., community poverty, community education, state-level legal protections, and urbanicity).

Model 1: Individual-level factors only.

Interpersonal microaggressions.: The overall multiple linear regressions model for interpersonal microaggressions and individual-level predictors was statistically significant $F(16, 923) = 4.70$, $p < .001$ (see Table 2). At the individual-level, transgender ($\beta = 6.21$, $p < .001$) and genderqueer ($\beta = 5.34$, $p < .001$) identities were associated with a higher frequency of interpersonal microaggressions compared to cisgender male participants. In addition, higher levels of gender role non-conformity ($\beta = 0.74$, $p < .05$) and outness to parents ($\beta = 1.96$, $p < .01$) were associated with higher levels of interpersonal microaggressions.

Environmental microaggressions.: The overall model for environmental microaggressions and individual-level predictors was also significant $F(16, 1{,}142) = 1.97$, $p < .05$ (see Table 3). Age was the only significant factor, such that for every year increase in age, participants had a significantly higher frequency of environmental microaggressions ($\beta = 0.37$, $p < .05$).

Model 2: Individual- and family-level factors only.

Interpersonal microaggressions.: The overall model for interpersonal microaggressions and individual- and family-level predictors was statistically significant $F(21, 869) = 15.46$, $p < .001$ (see Table 2). At the individual-level, bisexual participants ($\beta = -2.29$, $p < .05$) had a significantly lower frequency of interpersonal microaggressions compared to gay participants. In addition, transgender and genderqueer identities (compared to cisgender males), gender role non-conformity, and outness to parents remained statistically significant. At the family-level, higher levels of child maltreatment ($\beta = 1.98$, $p < .001$), and family religiosity ($\beta = 0.98$, $p < .001$) were significantly associated with more frequent interpersonal microaggressions.

Environmental microaggressions.: The overall model for environmental microaggressions and individual- and family-level predictors was also significant $F(21, 1{,}078) = 15.94$, $p < .001$ (see Table 3). At the individual-level, age ($\beta = 0.40$, $p < .05$) remained statistically significant and higher levels of gender role non-conformity ($\beta = 0.48$, $p < .05$) was significantly associated with more frequent environmental microaggressions. At the family-level, higher levels of non-violent adversity ($\beta = 0.09$, $p < .01$), child maltreatment ($\beta = 1.15$, $p < .001$), and family religiosity ($\beta = 1.02$, $p < .001$) were associated with more frequent environmental microaggressions.

Model 3: Individual-, family-, and structural-level factors.

Interpersonal microaggressions.: The final model regressed interpersonal microaggressions onto individual-, family-, and structural-level factors: $F(25, 716) = 12.38$, $p < .001$. Increase in age ($\beta = 0.51$, $p < .05$) was significantly associated with more frequent interpersonal microaggressions. All significant factors from models 1 and 2 remained significant in model 3, except for bisexual orientation. None of the structural-level factors were significantly associated with interpersonal microaggressions.

Environmental microaggressions.: The final model regressed environmental microaggressions onto individual-, family-, and structural-level factors: $F(25, 887) = 12.85$, $p < .001$. All individual and family-level factors that were significant in Models 1 and 2 remained statistically significant in Model 3, with the exception of gender role non-conformity. In addition, participants from states with a mandated school non-discrimination policy that provided explicit protections for sexual and/or gender minorities ($\beta = -1.73$, $p < .001$), compared to those without a state-level policy, had a significantly lower frequency of environmental microaggressions in their families after controlling for the other variables in the model.

Discussion

The current study is the first to identify the frequency of interpersonal and environmental microaggressions that occur within family systems for SGMA. At the bivariate-level, one of the most important findings to emerge from the current study was the significantly higher frequency of interpersonal and environmental microaggressions experienced by adolescents with gender identities that do not conform to their assigned birth sex. For example, transgender (M = 19.58) and genderqueer (M = 17.87) adolescents experienced more frequent interpersonal microaggressions compared to cisgender sexual minority males (M = 13.97), with genderqueer adolescents (M = 12.64) also hearing or witnessing more frequent environmental microaggressions compared to cisgender sexual minority males (M = 11.29). Additionally, SGMA who identified as pansexual (M = 18.10), queer (M = 16.96), and "other" (M = 18.32) experienced more frequent interpersonal microaggressions by their family members compared to those who identified as gay (M = 13.95). Moreover, participants who identified as pansexual (M = 12.85) and "other" (M = 12.96) experienced more frequent environmental macroaggressions by their family members compared to participants who identified as gay (10.58). Although further research is required, the current study suggests these differences in interpersonal and environmental microaggressions by sexual orientation are likely related to the participants' non-cisgender gender identity, as approximately 80% of pansexual adolescents, 60% of queer adolescents, and 78% of "other"-identified adolescents identified as either transgender or genderqueer. Collectively, these findings suggest that non-cisgender SMA are potentially at greater risk for experiencing interpersonal and environmental microaggressions. These findings are theoretically and empirically consistent with the extant literature suggesting that less conformity to hegemonic expectations for gender and sexuality increases risk of discrimination and violence for individuals who fail to fit into the binary systems of male versus female and heterosexual versus homosexual (Harrison, Grant, & Herman, 2012; Singh, Meng, & Hansen, 2014; Wilkinson, 2004). In other words, adolescents who challenge dominant gender identity and sexual orientation cultural scripts (Seidman, 2003) potentially elicit more frequent acts of gender and sexuality policing from their parents, siblings, and extended family members (D'Augelli et al., 2008; Singh et al., 2014).

In regard to the multivariate results, family-level factors were the most consistent correlates of both forms of microaggressions, with SGMA from families with higher levels of child maltreatment and family religiosity reporting more frequent interpersonal and environmental microaggressions than those from families with lower levels of child maltreatment and religiosity. The current study suggests families who engage in more frequent child maltreatment are also more likely to express interpersonal and environmental microaggressions. Family-level homo/transnegative attitudes may be expressed along a continuum that simultaneously includes both subtle (e.g., microaggressions) and overt (e.g., emotional abuse, physical neglect) acts of violence toward SGMA. Future research is needed to identity the frequency of SGMA who grow up in families characterized as child maltreatment only, microaggressive only, and co-occurring maltreatment and microaggressive. Family religiosity was also associated with more frequent microaggressions, which is consistent with past research that suggests religious families,

particularly those holding fundamentalist beliefs, have more homophobic and anti-gay attitudes (Schulte & Battle, 2004) and less tolerance toward sexual and gender minorities (Hooghe, Claes, Harell, Quintelier, & Dejaeghere, 2010).

In addition, high levels non-violent family adversity (e.g., death, divorce, incarceration, multiple relocations) was associated with greater frequency of environmental microaggressions. A possible explanation for this finding may relate to the wider range of caregivers, reconstituted family structures (e.g., step families), and social contexts (e.g., households, neighborhoods, communities) encountered by these youth (Turner, Finkelhor, & Ormrod, 2007). With more variation in caregivers and social contexts, these SGMA may have increased opportunities to encounter homo/transnegativity in their environment when compared to youth in more stable family environments. Additional research is needed to unpack non-violent family adversity to identify the specific aspects of this multi-dimensional construct that are associated with more frequent microaggressions in family systems.

In addition to family-level factors, several individual, minority-specific factors—gender identity, outness to parents, and gender role non-conformity—were associated with more frequent interpersonal microaggressions. First, transgender or genderqueer adolescents continued to experience more frequent interpersonal microaggressions from family members compared to cisgender, sexual minority males, even after controlling for other individual-, family-, and structural-level factors. Second, SGMA who were “out” to their parents experienced more frequent interpersonal microaggressions in comparison to those who had not disclosed their gender identity and/or sexual orientation to their parents. Third, higher levels of gender role non-conformity were also associated with more frequent experiences of interpersonal microaggressions. These findings are in keeping with previous studies that report significant violence and rejection in relation to possessing a non-cisgender gender identity (Grossman D’Augelli, & Frank, 2011), being out to parents (D’Augelli et al., 2005; D’Augelli et al., 1998), and having higher levels of gender role non-conformity (D’Augelli, Grossman, & Starks, 2006; Roberts et al., 2012). These finding may relate to research indicating that parents attempt to change gender atypical behavior in their children, sometimes through overt acts of violence (e.g., hitting, threatening) and sometimes through more covert mechanisms (e.g., buying more gender typical gifts, forcing or encouraging gender typical attire; D’Augelli et al., 2006). SGMA with a disclosed or perceived non-cisgender identity or those with atypical gender expression may experience microaggressions as a form of gender role policing from family members who desire to increase their child’s conformity to gender and sexuality norms.

In contrast to interpersonal microaggressions, age was the only significant individual-level factor associated with environmental microaggressions in the family after controlling for the other social ecological factors. The finding that families with older SGMA are more environmentally microaggressive suggests that there may be developmental processes (e.g., puberty, changes in peer group affiliation) that increase the likelihood of families expressing more ambient negativity toward sexual and gender minorities. An additional explanation may relate to adolescents becoming more aware of environmental microaggressions present in their family systems as they age and begin to identify as a sexual and/or gender minority.

Finally, when examining structural-level factors, SGMA from states with legal protections aimed at preventing discrimination based on sexual and gender minority identity experienced significantly less environmental microaggressions in their families compared to SGMA in states without non-discrimination protections, even after controlling for individual-, family-, and other structural-level social ecological factors. This finding is in keeping with past research suggesting that sexual orientation protections in school anti-bullying policies lead to better school climates for all students (Hatzenbuehler & Keyes, 2013). For example, schools with anti-bullying policies have been found to have less bullying and hostility for heterosexual students as well as SGMA (Hatzenbuehler & Keyes, 2013). While the current finding is specific to the family system, it suggests that state-level legal protections may help reduce environment microaggressions in families for SGMA even if they are unrelated to interpersonal microaggressions. This finding echoes other literature on policy interventions for SGMA, which calls for an increased presence of enumerated anti-bullying in schools (Hatzenbuehler & Keyes, 2013; Hall, 2017), and suggests that this intervention may also have an important relationship to family environments.

The current study also had several non-significant social ecological factors that are worthy of note. Race/ethnicity was not associated with interpersonal and environmental microaggressions across all bivariate and multivariate analyses. While the literature is limited, studies do suggest that racial minorities experience more family- and societal-level homonegativity than their White counterparts (Glick & Golden, 2010; Daboin, Peterson, & Parrot, 2015; Ryan et al., 2009). Although this is the first study to examine family-level homo/transnegative microaggressions, these non-significant findings suggest White and racial minority SGMA experience similar rates of interpersonal and environmental microaggressions across their immediate and extended family contexts. In addition to race/ethnicity, the current study found that while state-level legal protections were associated with a reduction in environmental microaggressions, they were not significantly associated with rates of interpersonal microaggressions. This finding suggests that legal protections may help to reshape the social climate toward sexual and gender minorities, reducing the acceptability of environmental microaggressions in family systems; however, these types of broad, state-level protective policies may be ineffective for reducing direct, interpersonal microaggressions toward SGMA by their family members.

Limitations

The current study has the following limitations. First, the data for the study are cross-sectional and therefore no causal claims can be made from the analysis. For example, families that hold more progressive views toward sexual and gender minorities may move to states with more socially progressive policies, as opposed to these state-level policies influencing the likelihood of families expressing fewer environmental microaggressions. Second, zip codes were used in order to gather objective measures for state- and community-level variables, which may lack the precision necessary to capture the nuance of the neighborhood or community context for SGMA (Grubesic & Matisziw, 2006). Third, a single item was used to measure gender role non-conformity; because of the multidimensional nature of this construct (e.g., behavioral mannerisms, physical attire, hobbies), it is possible a more exhaustive measure would have found an association between

gender role non-conformity and the frequency of environmental microaggressions within the family system. Fourth, the measure used for family religiosity had poor internal consistency (α = .50); as a result, we recommend future studies continue to explore potential connections between family religiosity and the frequency of environmental microaggressions within family systems. Fifth, only participants who had disclosed their sexual orientation or gender identity to a family member were presented the interpersonal microaggression measure. It is possible that someone who has not disclosed to any family members could still experience interpersonal microaggressions related to their perceived sexual orientation and/or gender identity. Future research is needed that assesses the frequency of interpersonal microaggressions regardless of disclosure status. Sixth, the study employed a new measure of interpersonal and environmental microaggressions in families. While initial testing of the measure showed positive results, replication with other samples is an important next step for this novel measure. Lastly, the study relied on retrospective, self-report data, which may have led to inaccurate information on parental-level demographics (e.g., highest education-level in the home) and may also have introduced recall bias regarding past experiences of child maltreatment and non-violent family adversity (King & Bruner, 2000).

Despite these limitations, this study had many strengths, including the size and diversity of the sample. The sample represents a large number of transgender and genderqueer adolescents, giving it sufficient power to examine gender identity and sexual orientation separately. The study also includes youth from all 50 states as well as urban and rural locals, increasing the representativeness of the sample. Finally, by conducting an anonymous online survey, the study was able to gather information on a wide range of sensitive topics (e.g., child maltreatment) that youth are sometimes less likely to share in face-to-face surveys (McDermott, Roen, & Piela, 2013).

Practice Implications

This study used a social ecological framework to identify the frequency and individual-, family-, and structural-level correlates of interpersonal and environmental microaggressions for SGMA and has potential implications for individual-level practitioners, family systems practitioners, and policy makers. The identification of unique social ecological correlates of interpersonal and environmental microaggressions suggest a nuanced approach may be needed to tackle this complex issue. For example, transgender and genderqueer adolescents may need more support to deal with more frequent interpersonal microaggressions from their family members than their cisgender sexual minority counterparts, including family systems interventions that provide educational resources on sexual and gender minorities and training on affirming, interpersonal communication skills for parents of adolescents with non-cisgender and non-binary gender identities (e.g., The Family Acceptance Project; Ryan et al., 2010 and The Transgender Teen; Brill & Kenney, 2016). In addition, social marketing campaigns targeting community beliefs generally, and parental understanding specifically, may be beneficial in addressing prevailing views of adolescents who do not conform to binary gender expectations and those with less conventionally understood sexual orientations. Finally, interventions targeting self-acceptance may be beneficial to SGMA in microaggressive families, as research with college age SMA suggests higher levels of self-

acceptance could potentially disrupt the link between heterosexism and negative mental health (Woodford et al., 2014).

The identification of shared social ecological correlates suggests that there are areas of intervention that could have substantial impact across interpersonal and environmental microaggressions. The study suggests that families with high levels of non-violent adversity and child maltreatment may also be particularly microaggressive environments for SGMA. Social workers, school counselors, and other professionals who work in child welfare may need additional education, training, and assessment tools to detect and help reduce interpersonal and environmental microaggressions toward sexual and gender minorities within these family systems. Furthermore, religious families may engage more frequently in interpersonal and environmental microaggressions toward SGMA. Family interventions, similar to the Family Acceptance Project, that target religiously diverse families and provide tools and resources to parents to support their SGMA may be extremely important in improving these family climates (Ryan, 2010). As young people from families with less religious affiliation have been found to have more accepting families (Ryan et al., 2010), the broader faith community may also be an important point of intervention. Working with clergy and community leaders to increase acceptance of sexual and gender minorities may play a critical role in changing family approaches to the sexual and gender identity of their children. As practitioners, helping faith communities engage in dialogue around their beliefs and acceptance of sexual and gender minorities may facilitate the emergence of communities in which SGMA and their families thrive and where homo/transnegative microaggressions are less common. Although additional research is needed, policy advocates and elected officials need to propose and support policies that protect and increase the social integration of sexual and gender minorities to reduce environmental microaggressions and more overt acts of violence (e.g., forced homelessness, physical abuse) in family systems.

Research Implications

In addition to these practice implications, the current study also highlights the need for additional research in this area. First, more research is needed focusing on the experiences of non-cisgender and gender non-binary adolescents and their families. In the current study, these adolescents experienced more frequent interpersonal microaggressions even after controlling for other individual-, family-, and structural-level factors. Research suggests that these adolescents may be particularly vulnerable to peer victimization (Greytek et al., 2009; Wilkinson, 2004) and family negativity and abuse (Roberts et al., 2012; Grossman et al., 2011) because of their failure to adhere to the gender binary; however, past research has struggled with small sample sizes and lack of precision in gender identity measures (i.e., categorizing all non-cisgender participants as transgender) and therefore little is known about this adolescent population. Second, while current research on family rejection of sexual minority youth speaks to some aspects of interpersonal microaggressions (Ryan et al., 2009), research is lacking regarding the mental and behavioral health correlates of environmental microaggressions for SGMA. Additionally, more research is needed that moves away from individual-level correlates of family microaggressions and explores more fully the family- and structural-level risk and protective factors for environmental and interpersonal microaggressions. For example, what are the potential relationships among

other state-level policies (e.g., anti-transgender bathroom restrictions, religious freedom protections, mandated sexual and gender minority inclusive curriculum in schools) and the frequency of family-level environmental and interpersonal microaggressions toward SGMA?

Conclusion

The current study advances microaggressions research by examining interpersonal and environmental microaggressions for SGMA, expanding upon prior research that has focused on direct forms of family rejection and hostility (Conley, 2011; Ryan et al., 2009). This distinction has important implications for understanding and shaping family climates for SGMA, with gender minorities and gender role non-conforming adolescents at potentially greater risk for interpersonal microaggressions and adolescents living in states with non-discrimination protections experiencing less frequent environmental microaggressions. This more nuanced and complete picture of family-level microaggressions offers new and valuable insight for practitioners working with SGMA and fuels future research in this area.

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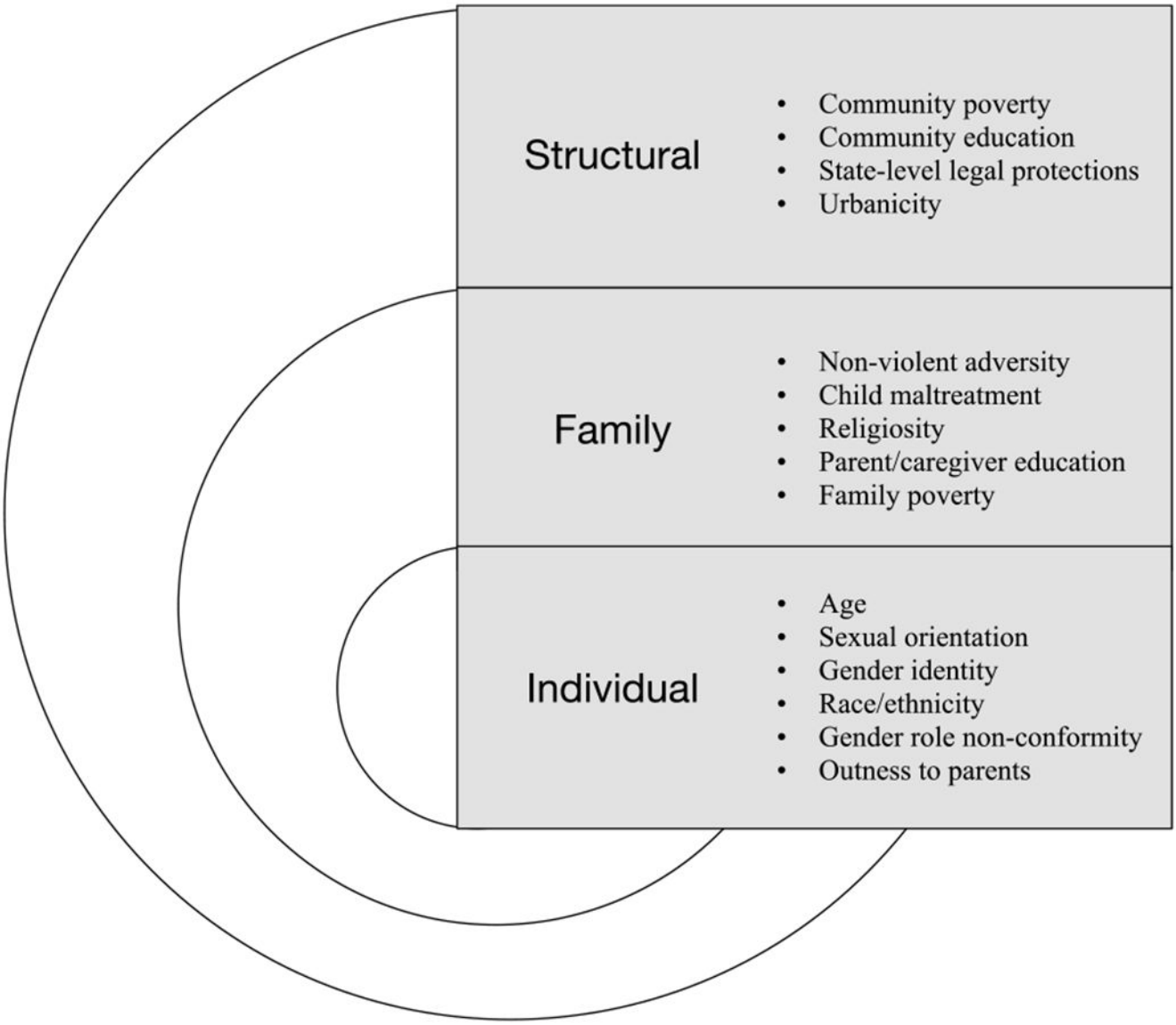

Figure I.
Social ecological model for interpersonal and environmental microaggressions

Table I.

Frequency of interpersonal and environmental microaggressions stratified by demographics (N = 1,177)

Identity	Overall	Interpersonal Range: 0–36; M = 14.87 [14.29, 15.44]		Environmental Range: 0–28; M = 11.31 [10.91, 11.70]	
	% *(n)*	Mean	95% CI	Mean	95% CI
Age					
14	6.97 (82)	14.40	[12.06, 16.74]	10.64	[9.20, 12.08]
15	16.74 (197)	15.15	[13.68, 16.62]	10.61	[9.58, 11.64]
16	27.10 (319)	14.96	[13.89, 16.03]	11.45	[10.71,12.19]
17	33.14 (390)	14.66	[13.65, 15.67]	11.70	[11.01, 12.39]
18	13.85 (163)	14.86	[13.44, 16.28]	11.05	[9.96, 12.15]
19	2.21 (26)	16.52	[12.77, 20.28]	12.58	[10.31, 14.85]
Sexual Orientation					
Gay	30.67 (361)	13.95[a,b,c]	[13.00, 14.91]	10.58[f, g]	[9.89, 11.27]
Lesbian	23.96 (282)	14.68	[13.61, 15.76]	11.49	[10.69, 12.29]
Bisexual	18.35 (216)	13.66	[12.17, 15.15]	10.48	[9.52, 11.45]
Pansexual	11.21 (132)	18.10[a]	[16.44, 19.76]	12.85[f]	[11.59, 14.11]
Questioning	7.05 (83)	13.81	[10.39, 17.23]	11.86	[10.32, 13.39]
Queer	4.08 (48)	16.96[b]	[14.60, 19.32]	12.31	[10.43, 14.18]
Other	4.67 (55)	18.32[c]	[15.33, 21.32]	12.96[g]	[11.29, 14.63]
Gender Identity					
Cisgender male	33.13 (389)	13.25[d, e]	[12.32, 14.19]	10.43[h]	[9.76, 11.09]
Cisgender female	40.72 (478)	13.97	[13.04, 14.90]	11.29	[10.64, 11.93]
Transgender	5.62 (66)	19.58[d]	[17.27, 21.90]	11.68	[9.98, 13.37]
Genderqueer	20.53 (241)	17.87[e]	[16.71, 19.04]	12.64[h]	[11.80, 13.48]
Race and Ethnicity					
Caucasian/White	62.72 (732)	14.98	[14.26, 15.71]	11.41	[10.90, 11.91]
African American/Black	8.31 (97)	13.62	[12.02, 15.22]	10.98	[9.82, 12.15]
Hispanic/Latino	10.03 (117)	13.67	[11.91, 15.42]	10.64	[9.36, 11.92]
Multiracial	13.11 (153)	15.66	[13.97, 17.34]	11.22	[10.09, 12.36]
Other	5.83 (68)	15.73	[13.07, 18.39]	11.78	[10.18, 13.39

Notes:

[a.] Three participants did not provide their gender identity and ten did not provide their race/ethnicity

[b.] Interpersonal microaggressions were assessed only for participants who were out to at least one family member about their sexual and/or gender minority identity (N = 952)

[c.] 95% CI = 95% Confidence Interval

[d] a-c, f-g: group comparisons all significant at $p < .05$; Gay was used as reference group.

[e] d-e, h: group comparisons all significant at $p < .05$, Cisgender male was used as reference group.

Table II.

Social ecological correlates of interpersonal microaggressions: Multiple linear regression models

	Model 1 (*N* = 942)		Model 2 (*N* = 897)		Model 3 (*N* = 746)	
	β	95% CI	β	95% CI	β	95% CI
Individual-Level						
Age	0.25	[−0.24, 0.73]	0.35	[−0.10, 0.79]	**0.51** *	**[0.00, 1.01]**
Sexual Orientation						
Gay	1		1		1	
Lesbian	−0.76	[−3.23, 1.71]	−0.69	[−2.95, 1.58]	0.23	[−2.31, 2.77]
Bisexual	−1.46	[−3.65, 0.73]	**−2.29** *	**[−4.30, −0.27]**	−1.77	[−4.00, 0.45]
Pansexual	1.06	[−1.64, 3.76]	−0.02	[−2.49, 2.45]	−0.04	[−2.75, 2.68]
Questioning	−3.23	[−7.06, 0.59]	−3.33	[−6.91, 0.26]	−2.48	[−6.67, 1.70]
Queer	−0.75	[−4.13, 2.63]	−0.54	[−3.64, 2.56]	0.69	[−2.65, 4.02]
Other	−0.50	[−4.13, 3.14]	−1.04	[−4.45, 2.36]	−0.69	[−4.37, 2.98]
Gender Identity						
Cisgender male	1		1		1	
Cisgender female	1.41	[−0.89, 3.71]	1.07	[−1.04, 3.18]	0.59	[−1.79, 2.97]
Transgender	**6.21** ***	**[3.18, 9.24]**	**5.45** ***	**[2.66, 8.24]**	**6.06** ***	**[3.01, 9.12]**
Genderqueer	**5.34** ***	**[2.85, 7.82]**	**4.08** **	**[1.79, 6.37]**	**3.50** **	**[0.97, 6.03]**
Race and Ethnicity						
Caucasian/White	1		1		1	
African American/Black	−0.51	[−2.60, 1.57]	−0.23	[−2.17, 1.71]	−0.09	[−2.34, 2.15]
Hispanic/Latino	−0.32	[−2.28, 1.63]	−0.72	[−2.54, 1.09]	0.19	[−1.85, 2.23]
Multiracial	0.02	[−1.72, 1.76]	−0.30	[−1.91, 1.32]	−0.41	[−2.21, 1.38]
Other	1.02	[−1.60, 3.64]	0.01	[−2.37, 2.39]	−0.17	[−2.81, 3.15]
Gender Role Non-Conformity	**0.74** *	**[0.05, 1.43]**	**0.78** *	**[0.13, 1.42]**	**0.75** *	**[0.03, 1.46]**
Outness to Parents	**1.96** **	**[0.55, 3.36]**	**1.91** **	**[0.61, 3.20]**	**1.88** *	**[0.41, 3.35]**
Family-Level						
Non-Violent Adversity			0.07	[−0.01, 0.14]	0.08	[−0.00, 0.17]
Child Maltreatment			**1.98** ***	**[1.57, 2.39]**	**2.16** ***	**[1.70, 2.61]**
Family Religiosity			**0.98** ***	**[0.71, 1.25]**	**1.00** ***	**[0.71, 1.30]**
Parent/caregiver Education			−0.23	[−0.62, 0.16]	−0.30	[−0.72, 0.13]

	Model 1 (*N* = 942)		Model 2 (*N* = 897)		Model 3 (*N* = 746)	
	β	**95% CI**	**β**	**95% CI**	**β**	**95% CI**
Family Poverty			−0.13	[−1.39, 1.14]	−0.06	[−1.46, 1.33]
Structural-Level						
Community Poverty					−0.06	[−0.14, 0.02]
Community Education					−0.02	[−0.17, 0.20]
State-Level Legal Protections					−0.43	[−1.64 , 0.78]
Urbanicity					0.15	[−1.33, 1.62]

Notes:

[a] Family-level interpersonal microaggressions were assessed only for participants who were out to at least one family member about their sexual and/or gender minority identity (*N* = 952)

[b] 95% CI = 95% Confidence Interval

[c] **p* <.05, ***p* <.01, ****p* <.001

Table III.

Social ecological correlates of environmental microaggressions: Multiple linear regression models

	Model 1 (*N* = 1,162)		Model 2 (*N* = 1,109)		Model 3 (*N* = 918)	
	β	**95% CI**	**β**	**95% CI**	**β**	**95% CI**
Individual-Level						
Age	**0.37** *	**[0.03, 0.71]**	**0.40** *	**[0.09, 0.71]**	**0.46** *	**[0.11 – 0.81]**
Sexual Orientation						
Gay	1		1		1	
Lesbian	0.26	[−1.49, 2.02]	0.25	[−1.36, 1.87]	1.42	[−0.40, 3.24]
Bisexual	−0.49	[−2.04, 1.05]	−0.83	[−2.26, 0.59]	−0.68	[−2.26, 0.91]
Pansexual	1.49	[−0.43, 3.40]	0.68	[−1.07, 2.42]	1.22	[−0.72, 3.17]
Questioning	0.85	[−1.23, 2.92]	0.75	[−1.16, 2.67]	1.76	[−0.43, 3.94]
Queer	0.78	[−1.72, 3.28]	1.09	[−1.20, 3.37]	1.72	[−0.73, 4.17]
Other	1.36	[−1.02, 3.74]	0.55	[−1.65, 2.75]	1.30	[−1.15, 3.75]
Gender Identity						
Cisgender male	1		1		1	
Cisgender female	0.77	[−0.81, 2.35]	0.64	[−0.82, 2.10]	−0.07	[−1.73, 1.60]
Transgender	0.17	[−1.99, 2.34]	−0.73	[−2.72, 1.26]	−0.71	[−2.91, 1.49]
Genderqueer	1.54	[−0.15, 3.23]	0.72	[−0.84, 2.28]	0.29	[−1.45, 2.04]
Race and Ethnicity						
Caucasian/White	1		1		1	
African American/Black	0.04	[−1.47, 1.54]	0.07	[−1.32, 1.47]	0.31	[−1.31, 1.94]
Hispanic/Latino	−0.28	[−1.67, 1.11]	−0.76	[−2.07, 0.55]	0.24	[−1.24, 1.73]
Multiracial	−0.53	[−1.75, 0.69]	−0.78	[−1.90, 0.34]	−0.41	[−1.65, 0.83]
Other	0.47	[−1.27, 2.21]	−0.22	[−1.80, 1.37]	0.91	[−0.98, 2.80]
Gender Role Non-Conformity	0.50	[0.00, 1.01]	**0.48** *	**[0.00, 0.95]**	0.37	[−0.15, 0.90]
Outness to Parents	0.31	[−0.56, 1.18]	0.26	[−0.55, 1.06]	0.15	[−0.76, 1.05]
Family-Level						
Non-Violent Adversity			**0.09*** *	**[0.04, 0.15]**	**0.08** **	**[0.02, 0.14]**
Child Maltreatment			**1.15** ***	**[0.85, 1.44]**	**1.15** ***	**[0.82 1.48]**
Family Religiosity			**1.02** ***	**[0.86, 1.23]**	**1.04** ***	**[0.84, 1.24]**
Parent/caregiver Education			−0.26	[−0.53, 0.01]	−0.19	[−0.49, 0.11]
Family Poverty			0.06	[−0.84, 0.95]	0.18	[−0.83, 1.19]

	Model 1 (*N* = 1,162)		Model 2 (*N* = 1,109)		Model 3 (*N* = 918)	
	β	**95% CI**	**β**	**95% CI**	**β**	**95% CI**
Structural-Level						
Community Poverty					−0.02	[−0.08, 0.04]
Community Education					−0.04	[−0.18, 0.10]
State-Level Legal Protections					**−1.73** ***	**[−2.58, −0.87]**
Urbanicity					0.77	[−0.27, 1.82]

Notes:

[a] 95% CI = 95% Confidence Interval

[b] *p <.05, **p <.01, ***p <.001