Parental Autonomy Support Predicts Lower Internalized Homophobia and Better Psychological Health Indirectly through Lower Shame in Lesbian, Gay and Bisexual Adults

REFERENCE:

Legate, N., Weinstein, N., Ryan, W. S., DeHaan, C. R., & Ryan, R. M. (2019). Parental autonomy support predicts lower internalized homophobia and better psychological health indirectly through lower shame in lesbian, gay and bisexual adults. *Stigma and Health, 4*(4), 367-376. doi: 10.1037/sah0000150

Abstract

Previous studies have identified myriad negative consequences of *internalized homophobia*, or self-directed anti-gay prejudice, but few can speak to its developmental antecedents. This work explored whether parenting styles might affect the development of internalized homophobia and negative psychological health outcomes in sexual minority individuals. Specifically, we expected that perceiving parents as *autonomy supportive* during childhood would link to lower internalized homophobia and better psychological health, and that lower levels of shame would help to explain this effect. We tested this in a cross-sectional survey with 484 lesbian, gay, and bisexual (LGB) adults. Results supported the hypothesized model: those who described their parents as being more autonomy supportive during childhood reported lower internalized homophobia, anxiety, and depression, and greater self-esteem. These relations were mediated by a tendency to experience shame, whereby autonomy support from mothers (but not fathers) related to lower shame, which in turn linked to lower internalized homophobia and better psychological health. This work underscores the importance of autonomy-supportive interventions with families, as it suggests that autonomy-supportive parents may promote resilience against the development of internalized homophobia, a potent risk factor for mental health problems and self-harm.

Keywords: *internalized homophobia, autonomy support, self-determination theory, self-stigma; shame*

Parental Autonomy Support Predicts Lower Internalized Homophobia and Better Psychological Health Indirectly through Lower Shame in Lesbian, Gay and Bisexual Adults

Those with *internalized homophobia*, or self-directed prejudice regarding a lesbian, gay or bisexual (LGB) identity, suffer costs to health and well-being. For example, individuals high in internalized homophobia report more depression, anxiety, substance use, suicidal ideation, and risky sexual behavior, as well as impaired ability to cope with stress (Newcomb & Mustanski, 2010; 2011; Puckett, Woodward, Mereish, & Pantalone, 2015; Szymanski, Chung, & Balsam, 2001). Given these correlates of internalized homophobia, it is worthwhile to try to understand what gives rise to this harmful attitude toward the self. Yet, few studies have examined how internalized homophobia develops in LGB individuals, and what protects against it. To investigate potential interpersonal factors that might influence the development of internalized homophobia, we employed a self-determination theory (SDT) view of how parents and other important socializers might impact self and identity processes throughout development (R. Ryan & Deci, 2000; 2017). Specifically, we test a cross-sectional model based in SDT examining whether perceiving parents as *autonomy supportive*, or supportive and accepting of authentic self-expression, links to a lower tendency to feel shame, and in turn, relates to lower internalized homophobia and better psychological health.

Individual Differences in Internalized Homophobia

Internalized homophobia is a type of self-stigma whereby LGB individuals incorporate negative societal views about sexual minorities into their self-concept; it is a product of stigmatizing social and cultural views about sexual minorities (Herek, Gillis, & Cogan, 2009). Sometimes referred to as internalized homonegativity (Berg, Munthe-Kaas, & Ross, 2016), or internalized heterosexism (Szymanski, Kashubeck-West, & Meyer, 2008), internalized

homophobia is conceptualized as an individual difference with adverse mental health consequences (Newcomb & Mustanski, 2011; Puckett et al., 2015). A growing body of work has identified internalized homophobia as a reliable and robust risk factor for psychopathology and psychological distress (Hatzenbuehler, Dovidio, Nolen-Hoeksema & Phills, 2009; Herek et al., 2009; Szymanski et al., 2001; Williamson, 2000), suicide (Meyer, 1995), and sexual identity concealment (e.g., Balsam & Mohr, 2007; Herek et al., 2009).

Fewer studies, however, have identified factors that precede individual differences in internalized homophobia. Although there is certainly variability in LGB individuals' exposure to prejudice, discrimination, and antigay messages, LGB individuals grow up aware of the negative stereotypes and attitudes associated with a sexual minority identity, and as they come to realize their sexual orientation, may apply these negative views to the self (Meyer, 1995). These negative messages may be internalized early, and come from various sources such as school, media, and religion (Human Rights Campaign, 2013; Kubicek et al., 2009). Yet despite the ubiquity of anti-LGB messages, individuals vary greatly in the extent to which they internalize these messages – while some experience deep shame and tension regarding their LGB identity, others live relatively free from self-stigma. For example, in a large and diverse sample of gay and bisexual men, approximately one-third of the sample reported no internalized homophobia when they first realized they were gay or bisexual, another third demonstrated high internalized homophobia, and the last third fell somewhere in between (Herrick et al., 2013).

A handful of studies have examined the connection between internalized homophobia and social environments and suggest that a lack of social support, broadly defined, is a possible antecedent of internalized homophobia. Notably, internalized homophobia has been linked with feeling a lack of acceptance about one's sexual identity from others, generally (e.g., Cox,

Dewaele, van Houtte & Vincke, 2011), and from parents specifically (Pachankis, Goldfried & Ramrattan, 2008; Puckett et al., 2015). Similarly, work by Shilo and Savaya (2011) links social support from family to self-acceptance among LGB adolescents and young adults. A longitudinal study looking at trajectories of internalized homophobia over time found that support from peers and involvement in the LGBT community predicted decreases in internalized homophobia two years later (Puckett, Feinstein, Newcomb, & Mustanski, 2018). Most illustrative of the importance of a supportive family, a prospective study of LGB youth and young adults found that those who reported greater social support from their families at baseline had more positive attitudes about their sexual identity one year later (Rosario, Schrimshaw, & Hunter, 2008). Importantly, Snapp, Watson, Russell, Diaz, and Ryan (2015) found that acceptance from multiple sources – friends, family, and one's community – all positively impacted the self-esteem of LGBT young adults, but when sources were compared, family acceptance mattered the most. Taken together, these studies suggest that supportive others, especially parents, may insulate people from developing high levels of internalized homophobia. Herein we examine a specific form of support from parents, *autonomy support*, or conveying acceptance for individuals as they are, as a protective factor for individuals as they become aware of an identity that is stigmatized in society.

Parental Autonomy Support Promotes Resilience

According to SDT, all people have a need for autonomy, or a need to express themselves authentically and fully and to behave in accord with their values, interests, and beliefs (R. Ryan, 1993). Parenting styles vary in how much they support their children's autonomy – namely, by providing unconditional acceptance and encouragement for honest self-expression (Assor, Roth, & Deci, 2004; R. Ryan, La Guardia, Solky-Butzel, Chirkov, & Kim, 2005). Parents can also

thwart autonomy by pressuring, manipulating, or shaming children to shape their behavior to suit their parents' wishes, for example, by conveying that the child is only loveable under certain conditions (Roth & Assor, 2012; Roth, Assor, Niemiec, Ryan, & Deci, 2009). Simply put, autonomy-supportive parents allow and encourage children to "be themselves", while autonomy-thwarting parents pressure their children to be the way others want them to be.

Not surprisingly, this quality of parenting shapes identity development and psychological health (e.g., Chirkov, Ryan, Kim, & Kaplan, 2003; R. Ryan, 1995). Starting in infancy, autonomy-supportive parenting fosters feelings of safety (Whipple, Bernier & Mageau, 2011), and among children and adolescents promotes an ability to adjust to various life domains (Soenens & Vansteenkiste, 2005), and protects against developing a self-critical style, depression, and disordered eating (Soenens, Luyckx, et al., 2008; Soenens, Vansteenkiste, et al., 2008). Work on identity development in high-school and college students demonstrates that those who reported being more satisfied in their need for autonomy also showed healthier identity development, broadly defined, one semester later (Luyckx, Vansteenkiste, Goossens, & Duriez, 2009).

Based on work in SDT, we argue that when children grow up in autonomy-supportive households they may be better protected from negative messages concerning their identities, particularly stigmatized identities. Importantly, autonomy-supportive parents send messages contrary to stigmatizing messages a child or adolescent may encounter in society, specifically that *all* aspects of the child are acceptable and worth expressing. This climate fosters resilience, for example, by promoting non-defensive, open coping when faced with contentious events (e.g., Hodgins, Yacko, & Gottlieb, 2006), and by promoting fuller integration of personal events and memories into people's self-concept, even those judged as negative or shameful (Weinstein,

Deci, & Ryan, 2011). This process of integrating all aspects of oneself and one's experience – not just those that are pleasant or socially valued – has long-been regarded as vital for health and well-being (Rogers, 1961; 1963; Weinstein et al., 2011).

Closely related to the present research, Weinstein and colleagues (2012) showed that perceiving parents as autonomy supportive during childhood predicted more integration around sexual identity; that is, people were more accepting of their sexual orientation and were better able to integrate it into their self-concept, presumably because this identity was more accepted. Further, perceiving parents as autonomy supportive protected individuals from defensively responding to LGB targets with hostility, regardless of parents' attitudes towards LGB individuals. This research is a helpful start to understanding the role of parental autonomy support in identity development, but to date no one has examined how parental autonomy support may protect vulnerable individuals from taking in harmful societal messages that are self-relevant. The present research aims to do this and tests a potential mechanism for why this might occur, namely by guarding against a general tendency to feel ashamed of oneself.

Shame

Autonomy support from parents during early development may bolster resilience to internalizing negative, self-relevant messages by protecting individuals from developing a tendency to feel shame. Shame involves feelings of inferiority, self-consciousness, and a desire to hide failings or deficiencies (Tangney, Miller, Flicker & Barlow, 1996; Tangney, Wagner, & Gramzow, 1992). Individuals who tend to feel ashamed of themselves are especially vulnerable to taking on the negative opinions of others, which is particularly salient for those who hold an identity that is devalued by society at large.

Applied to the issue at hand, it follows that a tendency to experience shame may be a risk factor for self-stigmatization. Indeed, persons with mental illness who are more prone to experience shame exhibit more self-stigma with respect to their mental illness (Hasson-Ohayon et al., 2012). More immediate to the present work, studies with lesbian, gay and bisexual samples reveal a link between a tendency to experience shame and higher internalized homophobia (Chow & Cheng, 2010; Sherry, 2007). Further, being prone to shame reliably predicts poor psychological health outcomes such as depression and anxiety (Kim, Thibodeau, & Jorgensen, 2011; Tangney et al., 1992), including in lesbian, gay and bisexual samples (Bybee, Sullivan, Zielonka, & Moes, 2009; Hequembourg & Dearing, 2013).

In line with these literatures, we explore the idea that autonomy-supportive parenting insulates people from developing internalized homophobia and poor psychological health because it reduces the tendency to experience shame. In previous work, autonomy-supportive parents tended to have children with more stable self-worth, and as a result, higher well-being (Assor et al., 2004; Roth et al., 2009). Conversely, adolescents with autonomy-thwarting parents were more prone to feelings of shame than adolescents with autonomy-supportive parents (Assor & Tal, 2012). In an effort to please parents and important others, people may adopt a tendency to be attuned to the negative evaluations of others, setting the stage for those with a stigmatized, devalued identity to adopt negative societal messages and apply them to the self.

Present Study

Though there have been calls for more research examining the role of social relationships in promoting resilience among LGB individuals (Kwon, 2013; Savin-Williams, 2008), few studies have explored resilience to developing internalized homophobia, and none to date have identified *why* supportive social relationships may be a protective factor. This research builds on

the extant literature on internalized homophobia by exploring the role that a specific type of interpersonal support – autonomy support from parents – has, and examining a potential mechanism through which parental autonomy support protects against internalized homophobia and poor mental health: namely, by protecting against a tendency to experience shame. Herein we test a cross-sectional model guided by self-determination theory, whereby parents shape people's self-concept and well-being. We expected that LGB individuals' retrospective accounts of their parents as being autonomy supportive during childhood would relate to lower levels of current internalized homophobia and better current psychological health.[1] Moreover, we expected these links would be explained by a lower tendency to experience shame. In other words, we hypothesized that autonomy-supportive parenting would link to lower internalized homophobia and better psychological health through a sense of self-worth that is resilient, as opposed to highly vulnerable, to the negative evaluations of others.

Method

Participants and Procedure

We aimed for a sample size above 404 in order to have adequate power (.80) to detect mediated effects from paths with small to medium effect sizes (Thoemmes, MacKinnon, & Reiser, 2010). Participants were recruited through a number of online sources. Participants recruited online via LGB discussion boards, community, and social networking websites were entered into a raffle to win $50, and participants recruited on crowdsourcing sites like Amazon's Mechanical Turk and Prolific Academic were compensated $2.00 and $3.75, respectively (per

[1] While cross-sectional work consistently shows a negative relation between internalized homophobia and mental health indicators (Newcomb & Mustanski, 2010), longitudinal work shows that internalized homophobia infrequently predicts worse mental health over time, and with approximately the same frequency as mental heath predicted subsequent decreases in internalized homophobia over time (Rosario, Schrimshaw, Hunter, & Gwadz, 2002). With the direction of this path so unclear, we modeled internalized homophobia and mental health indices as simultaneous outcomes.

the sites' recommendations for participant payment) in addition to being entered into the raffle. Recent research has pointed to these two crowdsourcing sites as yielding high quality data with more attentive participants than typical means of subject recruitment (i.e., student subject pools; Hauser & Schwarz, 2016; Peer, Brandimarte, Samat, & Acquisti, 2017). A small number of duplicates were identified with IP addresses and removed. The sample consisted of 491 individuals, though seven participants endorsed being heterosexual at least once during the survey. Participants were asked at three points to identify their sexual orientation as a way of ensuring that all held an LGB identity. After excluding these individuals (1.4%), our final sample was 484 participants (180 men, 278 women, 15 transgender men and nine transgender women, and two participants did not respond to this question). Participants varied across sexual orientations (27.7% gay, 22.1% lesbian, and 50.2% bisexual). Further, participants were primarily White (71.9%), 6.4% were Hispanic, 5.4% were Black/African-American, 4.5% were Asian, 11.1% identified as other or multi-racial, and 0.7% declined to respond. They ranged in age from 18-64 years old (M = 28.4 years, SD = 9.2). The survey was anonymous to encourage participation by LGB-identified persons who may not be comfortable with others knowing about their sexual orientation. Participants completed surveys over a period of approximately 15 minutes. Surveys assessed perceived parent autonomy support during childhood, current levels internalized homophobia, a current, general tendency to feel ashamed of oneself, and current, general psychological health indices. Surveys also assessed variables not included in the hypothesized model, including current levels of outness. The study was approved by an Institutional Review Board. All assessments and data can be found on the study page: https://osf.io/uh5y7/?view_only=70125f5e0a51451cb50adb8ac0c34182.

Measures

Autonomy Support. The autonomy subscale from the Basic Need Satisfaction in Relationships Scale (BPNS-R; La Guardia, Ryan, Couchman, & Deci, 2000) was modified for the present study to assess perceived support for autonomy during childhood from both mothers and fathers. Participants were asked to respond to three items for both 'moms' and 'dads' on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale, using the stem "When I was growing up (younger than age 14)…" Items were: "When I was with my mom [dad], I felt free to be who I am", "When I was with my mom [dad], I had a say in what happens, and I could voice my opinion," and "When I was with my mom [dad], I felt controlled and pressured to be certain ways" (reverse coded). These three items were originally adapted in this way by Weinstein and colleagues (2012) to assess autonomy support from mothers and fathers in childhood, showing predictive validity with sexual identity outcomes, and scores on the autonomy subscale of the BPNS-R have been shown to change as a function of autonomy manipulations (Sheldon & Filak, 2008; Weinstein & Ryan, 2010). Items were averaged to create one score for each parent with higher scores reflecting greater perceived autonomy support, and they showed good internal consistency in the current study (mothers, $\alpha = .81$ and fathers, $\alpha = .76$). The vast majority of participants (98%) reported on both mothers and fathers.

Shame. The tendency to feel ashamed of oneself was measured using the character shame subscale of the Experience of Shame Scale (Andrews, Qian, & Valentine, 2002). This scale correlates highly with other measures of shame and detrimental self-concept, and predicts depression across time (Andrews et al., 2002), as well as anxiety in participants with borderline personality disorder (Rüsch et al., 2007), and lower self-disclosure in those with eating disorders (Swan & Andrews, 2003). Participants responded according to how they have felt in the past year using a scale ranging from 1 (*not at all*) to 4 (*very much*). Example items include, "Have

you felt ashamed of the sort of person you are?" and "Have you tried to conceal from others the sort of person you are?". Here, the twelve items showed high internal consistency (α = .95).

Internalized Homophobia. Seven items from the Internalized Homophobia Scale measured participants' attitudes toward their own sexual orientation (Meyer & Dean, 1998). Participants responded using a 1 (*disagree strongly*) to 5 (*agree strongly)* Likert-type scale. Items included, "I wish I weren't gay/lesbian/bisexual," and "I feel that being gay/lesbian/bisexual is a personal shortcoming for me." Internal consistency for this scale was good (α = .87). This scale is commonly used when assessing internalized homophobia, correlates highly with other measures of internalized homophobia (Shildo, 1994), and shows convergent validity with depression and being out about sexual identity (Frost & Meyer, 2009). The scale in this form was used in previous research evaluating the role of autonomy support in internalized homophobia (W. Ryan, Legate, & Weinstein, 2015).

Psychological Health. Three indicators of psychological health were measured with items taken from three well-validated scales of anxiety, depression and self-esteem. These versions of the scales were administered in previous research showing a link between autonomy support and psychological health outcomes in LGB individuals (Legate, Ryan, & Weinstein 2012; W. Ryan, Legate, & Weinstein, 2015) and other stigmatized groups (Weinstein, Legate, Ryan, Sedikides, and Cozzolino, 2017). Using these items, participant fatigue was reduced while allowing us to test varied indicators of psychological health, and to conceptually replicate previous work focused on psychological health within other stigmatized samples.

State Trait Anxiety Inventory (STAI). Three items were used from the STAI (Spielberger, 1972). Participants responded in terms of how they are feeling currently (e.g., "I feel nervous") using a 1 (*strongly disagree*) to 7 (*strongly agree*) scale (α = .88). The STAI has

been validated in varied samples including high school and college students (Spielberger, 1983), and in both normal and high distress populations (Spielberger, 2010).

Center for Epidemiologic Studies Depression Scale (CES-D). Three items were used from the CES-D (Radloff, 1977) as an indicator of depression. Participants responded to items in terms of how they are feeling currently (e.g., "I feel sad") on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale (α = .85). Validation work for this scale has been undertaken in the general population (Radloff, 1977) and it has shown both factorial and discriminant validity (Orme, Reis, & Herz, 1986).

Rosenberg Self-Esteem Scale (RSES). Three items were adapted from the RSES (Rosenberg, 1965). The RSES factor structure has been shown to be consistent across 53 countries (Schmitt & Allik, 2005), and has been validated with ages ranging from adolescents to young adults (Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002). Participants responded to items in terms of how they are feeling currently (e.g., "I am satisfied with myself") on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale (α = .82).

Data Analytic Strategy

First, we examined correlations between main study variables before building our path model. Next, we examined whether there were differences across recruitment sources across study variables using multivariate analysis of variance (MANOVA). Then we built a path model to test our hypothesis that perceiving parents as autonomy supportive during childhood would be indirectly linked to lower internalized homophobia and better psychological health through a lower general tendency to experience shame. The path model was created using Mplus version 7.4 software (Muthén & Muthén, 1998–2014), using full information maximum likelihood procedures to estimate missing data (less than 1.5% on all variables). We correlated the four

outcome variables (internalized homophobia and the three indicators of psychological health) and calculated bias-corrected bootstrap standard errors and 95% confidence intervals with 1000 samples for all model parameter estimates. To evaluate model fit, we followed recommendations by Little (1997) and Hu and Bentler (1999): a comparative fit index (CFI) and Tucker-Lewis index (TLI) above .90, and a root mean square error of approximation (RMSEA) and standardized root mean square residuals (SRMR) below 0.08. More specifically, an RMSEA value of 0.05 or less indicates a close fit of the model in relation to the degrees of freedom, and a value of 0.08 or less indicates a reasonable error of approximation (Browne & Cudeck, 1993).

Results

Table 1 provides means, standard deviations, and zero-order correlations (with their 95% confidence intervals) for all variables. Correlations showed that autonomy support from both mothers and fathers was related to lower shame, internalized homophobia and better psychological health, indicating preliminary support for hypotheses. We found significant differences on demographic variables, as well as recruitment source. Age was unrelated to study variables, but race and sexual orientation correlated with most study variables. Specifically, being bisexual (versus gay or lesbian) and non-White (versus White) was related to worse mental health outcomes. To account for these differences, we ran the path model with and without race, sexual orientation, and recruitment source as control variables on outcomes.[2]

[2] Because we found significant differences across recruitment sources on some variables, we ran a model controlling for recruitment source (dummy coded as MTurk, Prolific Academic, and other) as well as race and sexual orientation on outcomes (race was dichotomized into White and non-White; sexual orientation was dichotomized into bisexual vs. lesbian/gay). The model fit was not quite acceptable with the presence of these controls ($\chi^2(12, N = 484) = 60.62$, $p < .001$, CFI = .96, TLI = .88, RMSEA = .09 (90% CI [.07, .12]), SRMR = .06), but the same direct and indirect effects emerged as significant as in the model without control variables. Model paths indicated that participants from MTurk had higher internalized homophobia ($p = .007$) but lower anxiety ($p < .001$) as compared to other recruitment sources, and participants from Prolific Academic had lower self-esteem ($p = .03$) as compared to other sources. Race and sexual orientation were not related to outcomes. Because indirect and direct paths were identical in both models, and for reasons of parsimony and better statistical fit, we focus on the model without controls in the text and in Figure 1.

Results from the path model without control variables are presented in Figure 1. The overall model showed good fit to the data, $\chi^2(8, N = 484) = 25.45$, $p = .001$, CFI = .98, TLI = .96, RMSEA = .07 (90% CI [.04, .10]), SRMR = .04. Perceiving mothers as autonomy supportive in childhood was linked to a lower tendency to experience shame (*B* = -.24, *SE* = .05, 95% bias-corrected CI [-.33, -.13]), while autonomy support from fathers was not related to shame (*B* = -.04, *SE* = .05, 95% CI [-.13, .05]). In turn, shame related to greater internalized homophobia (*B* = .29, *SE* = .04, CI [.21, .36]) and worse psychological health (anxiety: *B* = .67, *SE* = .03, CI [.61, .72]; depression: *B* = .56, *SE* = .03, CI [.49, .61]; self-esteem: *B* = -.63, *SE* = .03, CI [-.69, -.57]). Psychological health indicators were all related to each other (*B*s ranging from -.64 to .54, no CI passed through 0), but not to internalized homophobia (*B*s ranging from -.03 to .05, all CIs contained 0).

Finally, mediation analyses using bias-corrected bootstrapped confidence intervals indicated that the indirect effect from mothers' autonomy support to internalized homophobia through shame was significant (*B* = -.03, *SE* = .01, 95% CI [-.05, -.02]), as were the indirect paths from mothers' autonomy support to indicators of psychological health through shame (anxiety: *B* = -.11, *SE* = .03, CI [-.17, -.06]; depression: *B* = -.10, *SE* = .02, CI [-.14, -.05]; self-esteem: *B* = .10, *SE* = .02, CI [.05, .14]). However, no indirect paths from fathers' autonomy support to the four outcomes were significant (*B*s ranged from -.02 to .02, all CIs contained 0). In sum, results supported the hypothesis that a general tendency to experience shame explains why parental autonomy support in childhood relates to lower internalized homophobia and greater psychological health. However, we only observed partial support for this hypothesis as the model showed links with mothers, but not with fathers.

Discussion

This study relied on a large sample of LGB individuals to better understand how parenting styles correspond to self and identity processes. We identified that those who perceive autonomy support from their mothers during childhood experienced lower shame, and in turn, lower internalized homophobia and better psychological health. This work informs the emerging literature on LGB resilience. Using Kwon's (2013) framework for LGB resilience, which suggests that supportive others buffer LGB individuals from reactivity to prejudice and psychological problems, it could be that autonomy-supportive parents insulate individuals with an LGB identity from internalizing negative, self-relevant judgments from others and from society at large. Simply stated, parents may help their children build up inner resources to cope with stigma (Kwon, 2013; R. Ryan & Deci, 2017).

While this model was observed for mothers, it did not hold for fathers, though we saw significant zero-order correlations showing that autonomy support from fathers linked to lower shame, less internalized homophobia and better psychological health, in line with our expectations. That these findings did not emerge in our path model suggests autonomy support provided by fathers may not uniquely predict these constructs over and above the autonomy support provided by mothers. As an alternative explanation, autonomy support from fathers could be linked to lower internalized homophobia and greater psychological health for other reasons besides shame. For example, fathers who are autonomy supportive may help children who identify as LGB regulate their emotions more adaptively, which may help them to process and cope with negative emotions that arise when facing societal stigma (Roth et al., 2009). Despite the different pattern of results for mothers and fathers, taken together this study provides preliminary evidence that internalized homophobia develops when love and approval from parents is conditional, and when parents are not supportive of authentic self-expression. It also

appears that such an environment predicts a general tendency to feel shame; this general tendency to feel shame may lead to the development of internalized homophobia.

This work suggests the importance of autonomy-supportive others to LGB individuals' mental health and self-acceptance. Indeed, past research has shown that a range of autonomy-supportive others, not just parents, can foster wellness in LGB individuals (Legate et al., 2012; W. Ryan et al., 2015), including at the level of daily interactions (Legate, Ryan, & Rogge, 2017). Importantly, autonomy support is particularly beneficial for promoting self-acceptance and well-being among those with a stigmatized identity (Weinstein et al., 2017), and immediate to the current work, for LGB individuals with high levels of internalized homophobia (W. Ryan, Legate, Weinstein, & Rahman, 2017). Taken together, this suggests that opportunities to interact with autonomy-supportive others confer myriad benefits to LGB individuals. To protect against the development of internalized homophobia specifically, it is possible that autonomy support from parents may be particularly crucial, as they are instrumental in shaping their children's developing sense of self (Bowlby, 1969; Rogers, 1961; Soenens & Vansteenkiste, 2005; Whipple et al., 2011).

In sum, our findings are consistent with work showing that social support, generally (Cox et al., 2011; Puckett et al., 2018; Shilo & Savaya, 2011) and from parents, specifically (e.g., Pachankis et al., 2008; Puckett et al., 2015) buffers against internalized homophobia, and we build on this research in a number of ways. For one, we explored meaningful relations with parents during childhood, as these relationships are essential for long-term identity development (Bowlby, 1969; Waters, Merrick, Treboux, Crowell, & Albersheim, 2000). Furthermore, although a handful of studies have examined the link between supportive others and internalized homophobia, mechanisms for this link have not yet been identified. In this study we begin to

describe a developmental pathway by which supportive parents, especially mothers, shape self-concept and wellness in LGB individuals.

Yet these advances should be considered in light of several limitations of the current research. Most notably, these data were cross-sectional, and relied on retrospective accounts of perceived autonomy support from parents during childhood. While our model conceptualizes retrospective reports of parental autonomy support in childhood as protecting against the development of internalized homophobia, it is quite plausible that internalized homophobia may cause people to recall their parents as less accepting in general. This alternative explanation is consistent with theorizing that internalized homophobia may cause individuals to anticipate and perceive more negative treatment on the basis of their identity (Meyer & Dean, 1998). However, longitudinal studies find that social support from family predicts more positive attitudes towards sexual identity one year later (Rosario et al., 2008), and that more social support at baseline predicts less perceived stigma one year later among people recently diagnosed with a mental illness (Mueller et al., 2006). Importantly, these researchers do not find evidence for the reverse path (i.e., baseline perceived stigma does not predict less social support one year later). Though these longitudinal studies support our conceptual model, it is crucial that future research follow children and adolescents over time as they interact with parents and as they develop their sexual identity. Understanding the directionality of these links is crucial to developing family-based interventions. Further, it is important to test whether parental autonomy support predicts lower trajectories of internalized homophobia as LGB individuals get older. Prior work by Puckett and colleagues (2018) suggests that internalized homophobia either decreases over time or it remains stable (as opposed to increasing), and so it would be important to test whether parental autonomy support predicts decreasing levels of internalized homophobia over time. Future work should

also use behavioral or observational methods to capture autonomy support from parents, thereby reducing the bias inherent in self-reported and retrospective accounts.

The cross-sectional nature of these data also means that results cannot speak to the directionality of the relation between internalized homophobia and a tendency to feel shame. Rather than internalized homophobia resulting from general feelings of shame, it may be that a tendency to feel shame is an outcome of internalized homophobia. While studies examining these two constructs tend to conceptualize them in the same direction we do (Chow & Cheng, 2010; Hequembourg & Dearing, 2013), they are also cross-sectional, making it critical for future research to disentangle directionality. Finally, we did not examine how diverse parenting circumstances might have affected outcomes, and so future work could examine whether this model holds for those raised by divorced parents, single parents, or same-gendered parents.

Despite these limitations, this work underscores the importance of interventions with important others, particularly parents, as a way of boosting the autonomy support they provide their children. The *Family Acceptance Project* (C. Ryan, Huebner, Diaz, & Sanchez, 2009) is a model for this: it provides education to families about the importance of accepting their LGB children (and the costs of rejecting them), not just after they come out as LGB, but well before that. Indeed, it may be that such family-based interventions are effective to the extent that they can help parents fully accept their children for who they are, in all of their identities. The present research can further inform such interventions by highlighting the importance of autonomy-support specifically, and focusing on how parents and other important figures can increase the provision of autonomy support. SDT has a strong tradition of creating effective interventions and trainings to increase autonomy support among parents, teachers, health care providers, and others (e.g., Cheon, Reeve, Le, & Le, 2018; Edmunds, Ntoumanis, & Duda, 2008; Ryan, Patrick, Deci,

& Williams, 2008). Developing such interventions for parents may further promote resilience in children as they develop their sense of self, and may be particularly valuable to those navigating a stigmatized identity.

The importance of autonomy support to identity development and well-being is not limited to the family context or to childhood (e.g., Legate et al., 2012). Interventions to increase autonomy support from teachers, peers, managers, and co-workers are also likely to increase the well-being of LGB individuals. Critically, experiencing autonomy support at school and at work has been shown to improve well-being, learning outcomes, and productivity of students and workers in general, not just those who hold a stigmatized identity (Ryan & Deci, 2017). Therefore, interventions that target autonomy support are likely to improve outcomes for everyone and especially for LGB and other stigmatized individuals, without singling out one specific group. Trainings that focus on teaching strategies to provide choice and support for others rather than on reducing sexual prejudice explicitly may be more effective as they may inspire less reactance among participants (Legault, Gutsell, & Inzlicht, 2011). In this particularly heated political climate where identity politics are a source of controversy, designing interventions that are not perceived (or actually) targeted toward the benefit of a specific group may be particularly important. Additional research is needed to develop and assess the efficacy of such interventions for parents, schools, and workplaces.

More broadly, the present research represents an important step in understanding the developmental processes involved in how stigma is internalized among LGB individuals. It is crucial to understand the development of internalized homophobia, as it is a reliable and potent risk factor for mental health problems, self-harm, and HIV-risk-taking behavior (e.g., Meyer, 2003; Williamson, 2000). These results may also have implications for other groups vulnerable

to self-stigma, such as transgender individuals, those with a disability, mental illness, or who are overweight or obese (Durso, L. E., & Latner, J. D., 2008; Hasson-Ohayon et al., 2012; King, Shultz, Steel, Gilpin, & Cathers, 1993). Given this, it is important to test this model in these other stigmatized groups to see whether having autonomy-supportive parents may promote resilience in these individuals as they come to integrate a stigmatized identity into their self-concept.

References

Andrews, B., Qian, M., & Valentine, J. D. (2002). Predicting depressive symptoms with a new measure of shame: The Experience of Shame Scale. *British Journal of Clinical Psychology, 41*, 29–42. http://dx.doi.org/10.1348/014466502163778

Assor, A., Roth, G., & Deci, E. L. (2004). The emotional costs of parents' conditional regard: A self-determination theory analysis. *Journal of Personality*, *72*, 47-88. http://dx.doi.org/10.1111/j.0022-3506.2004.00256.x

Assor, A., & Tal, K. (2012). When parents' affection depends on child's achievement: Parental conditional positive regard, self-aggrandizement, shame and coping in adolescents. *Journal of Adolescence*, *35*, 249-260. http://dx.doi.org/10.1016/j.adolescence.2011.10.004

Balsam, K. F., & Mohr, J. J. (2007). Adaptation to sexual orientation stigma: A comparison of bisexual and lesbian/gay adults. *Journal of Counseling Psychology*, *54*, 306-319. http://dx.doi.org/10.1037/0022-0167.54.3.306

Berg, R. C., Munthe-Kaas, H. M., & Ross, M. W. (2016). Internalized homonegativity: A systematic mapping review of empirical research. *Journal of Homosexuality*, *63*, 541-558. http://dx.doi.org/10.1080/00918369.2015.1083788

Birtel, M. D., Wood, L., & Kempa, N. J. (2017). Stigma and social support in substance abuse: Implications for mental health and well-being. *Psychiatry Research*, *252*, 1-8. http://dx.doi.org/10.1016/j.psychres.2017.01.097

Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment.* New York, NY: Basic Books.

Browne, M., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Newbury Park: Sage

Bybee, J. A., Sullivan, E. L., Zielonka, E., & Moes, E. (2009). Are gay men in worse mental health than heterosexual men? The role of age, shame and guilt, and coming-out. *Journal of Adult Development*, *16*, 144-154.

Cheon, S. H., Reeve, J., Lee, Y., & Lee, J. (2018). Why autonomy-supportive interventions work: Explaining the professional development of teachers' motivating style. *Teaching and Teacher Education, 69,* 43-51. http://dx.doi.org/10.1016/j.tate.2017.09.022

Chirkov, V., Ryan, R. M., Kim, Y., & Kaplan, U. (2003). Differentiating autonomy from individualism and independence: a self-determination theory perspective on internalization of cultural orientations and well-being. *Journal of Personality and Social Psychology*, *84*, 97-110. http://dx.doi.org/10.1037/0022-3514.84.1.97

Chow, P. K. Y, Cheng, S. T. (2010). Shame, internalized heterosexism, lesbian identity, and coming out to others: A comparative study of lesbians in mainland China and Hong Kong. *Journal of Counseling Psychology*. *57*, 92–104.

Cox, N., Dewaele, A., Van Houtte, M., & Vincke, J. (2010). Stress-related growth, coming out, and internalized homonegativity in lesbian, gay, and bisexual youth. An examination of stress-related growth within the minority stress model. *Journal of Homosexuality*, *58*, 117-137. http://dx.doi.org/10.1080/00918369.2011.533631

Durso, L. E., & Latner, J. D. (2008). Understanding self-directed stigma: Development of the Weight Bias Internalization Scale. *Obesity*, *16*, S80-S86. http://dx.doi.org/10.1038/oby.2008.448

Edmunds, J., Ntoumanis, N., & Duda, J. L. (2008). Testing a self-determination theory-based teaching style intervention in the exercise domain. *European Journal of Social Psychology, 38,* 375-388. http://dx.doi.org/10.1002/ejsp.463

Frost, D. M., & Meyer, I. H. (2009). Internalized homophobia and relationship quality among lesbians, gay men, and bisexuals. *Journal of Counseling Psychology*, *56*, 97-109.

Hasson-Ohayon, I., Or, S. E. B., Vahab, K., Amiaz, R., Weiser, M., & Roe, D. (2012). Insight into mental illness and self-stigma: The mediating role of shame proneness. *Psychiatry Research*, *200*, 802-806. http://dx.doi.org/10.1016/j.psychres.2012.07.038

Hatzenbuehler, M. L., Dovidio, J. F., Nolen-Hoeksema, S., & Phills, C. E. (2009). An implicit measure of anti-gay attitudes: Prospective associations with emotion regulation strategies and psychological distress. *Journal of Experimental Social Psychology*, *45*, 1316-1320. http://dx.doi.org/10.1016/j.jesp.2009.08.005

Hauser, D. J., & Schwarz, N. (2016). Attentive Turkers: MTurk participants perform better on online attention checks than do subject pool participants. *Behavior research methods*, *48*, 400-407. http://dx.doi.org/10.3758/s13428-015-0578-z

Herek, G. M., Gillis, J. R., & Cogan, J. C. (2009). Internalized stigma among sexual minority adults: Insights from a social psychological perspective. *Journal of Counseling Psychology*, *56*, 32-43. http://dx.doi.org/10.1037/a0014672

Herrick, A. L., Stall, R., Chmiel, J. S., Guadamuz, T. E., Penniman, T., Shoptaw, S., ... & Plankey, M. W. (2013). It gets better: Resolution of internalized homophobia over time and associations with positive health outcomes among MSM. *AIDS and Behavior*, *17*, 1423-1430. http://dx.doi.org/10.1007/s10461-012-0392-x

Hequembourg, A. L., & Dearing, R. L. (2013). Exploring shame, guilt, and risky substance use among sexual minority men and women. *Journal of Homosexuality*, *60*, 615-638. http://dx.doi.org/10.1080/00918369.2013.760365

Hodgins, H. S., Yacko, H. A., & Gottlieb, E. (2006). Autonomy and nondefensiveness.

Motivation and Emotion, *30*, 283-293. http://dx.doi.org/10.1007/s11031-006-9036-7

Hu, L. T. & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*, 1-55. http://dx.doi.org/10.1080/10705519909540118

Human Rights Campaign (2013). Growing up LGBT in America: *HRC youth survey report key findings*. Washington, D.C. Retrieved from: https://www.aamc.org/initiatives/diversity/449822/hrc2.html

Kim, S., Thibodeau, R., & Jorgensen, R. S. (2011). Shame, guilt, and depressive symptoms: A meta-analytic review. *Psychological Bulletin, 137,* 68-96. http://dx.doi.org/10.1037/a0021466

King, G. A., Shultz, I. Z., Steel, K., Gilpin, M., & Cathers, T. (1993). Self-evaluation and self-concept of adolescents with physical disabilities. *American Journal of Occupational Therapy*, *47*, 132-140. http://dx.doi.org/10.5014/ajot.47.2.132

Kubicek, K., McDavitt, B., Carpineto, J., Weiss, G., Iverson, E. F., & Kipke, M. D. (2009). "God made me gay for a reason": Young men who have sex with men's resiliency in resolving internalized homophobia from religious sources. *Journal of Adolescent Research*, *24*, 601-633. http://dx.doi.org/10.1177/0743558409341078

Kwon, P. (2013). Resilience in lesbian, gay, and bisexual individuals. *Personality and Social Psychology Review*, *17*, 371-383. http://dx.doi.org/10.1177/1088868313490248

La Guardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: A self-determination theory perspective on attachment, need fulfillment, and well-being. *Journal of Personality and Social Psychology, 79,* 367-384. http://dx.doi.org/10.1037/0022-3514.79.3.367

Lee, R. S., Kochman, A., & Sikkema, K. J. (2002). Internalized stigma among people living with HIV-AIDS. *AIDS and Behavior*, *6*, 309-319. http://dx.doi.org/10.1023/A:1021144511957

Legate, N., Ryan, R. M. & Rogge, R. D. (2017). Daily autonomy support and sexual identity disclosure predicts daily mental and physical health outcomes. *Personality and Social Psychology Bulletin, 43,* 860–873. http://dx.doi.org/10.1177/0146167217700399

Legate, N., Ryan, R. M., & Weinstein, N. (2012). Is coming out always a "good thing"? Exploring the relations of autonomy support, outness, and wellness for lesbian, gay, and bisexual individuals. *Social Psychological and Personality Science*, *3*, 145-152. http://dx.doi.org/10.1177/1948550611411929

Legault, L., Gutsell, J. N., & Inzlicht, M. (2011). Ironic effects of antiprejudice messages: How motivational interventions can reduce (but also increase) prejudice. *Psychological Science, 22,* 1472-1477. http://dx.doi.org/10.1177/0956797611427918

Little, T. D. (1997). Mean and covariance structures (MACS) analyses of cross-cultural data: Practical and theoretical issues. *Multivariate Behavioral Research*, *32*, 53-76. http://dx.doi.org/10.1207/s15327906mbr3201_3

Luyckx, K., Vansteenkiste, M., Goossens, L., & Duriez, B. (2009). Basic need satisfaction and identity formation: Bridging self-determination theory and process-oriented identity research. *Journal of Counseling Psychology, 56*, 276-288. http://dx.doi.org/10.1037/a0015349

Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, 38-56. http://dx.doi.org/10.2307/2137286

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological Bulletin*, *129*, 674-

697. http://dx.doi.org/10.1037/0033-2909.129.5.674

Meyer, I. H., & Dean, L. (1998). Internalized homophobia, intimacy, and sexual behavior among gay and bisexual men. In G. M. Herek (Ed.), *Stigma and sexual orientation: Understanding prejudice against lesbians, gay men, and bisexuals* (pp. 160-186). Thousand Oaks, CA: Sage.

Mueller, B., Nordt, C., Lauber, C., Rueesch, P., Meyer, P. C., & Roessler, W. (2006). Social support modifies perceived stigmatization in the first years of mental illness: a longitudinal approach. *Social Science & Medicine*, *62*, 39-49. http://dx.doi.org/10.1016/j.socscimed.2005.05.014

Muthén, L. K., & Muthén, B. (1998–2014). *Mplus user's guide.* (7th ed.). Los Angeles, CA: Muthén & Muthén.

Newcomb, M. E., & Mustanski, B. (2010). Internalized homophobia and internalizing mental health problems: A meta-analytic review. *Clinical Psychology Review*, *30*, 1019-1029. http://dx.doi.org/10.1016/j.cpr.2010.07.003

Newcomb, M. E., & Mustanski, B. (2011). Moderators of the relationship between internalized homophobia and risky sexual behavior in men who have sex with men: A meta-analysis. *Archives of Sexual Behavior*, *40*, 189-199. http://dx.doi.org/10.1007/s10508-009-9573-8

Orme, J. G., Reis, J., & Herz, E. J. (1986). Factorial and discriminant validity of the Center for Epidemiological Studies Depression (CES‐D) scale. *Journal of Clinical Psychology*, *42*, 28-33. https://doi.org/10.1002/1097-4679(198601)42:1<28::AID-JCLP2270420104>3.0.CO;2-T

Pachankis, J. E., Goldfried, M. R., & Ramrattan, M. E. (2008). Extension of the rejection sensitivity construct to the interpersonal functioning of gay men. *Journal of Consulting and Clinical Psychology*, *76*, 306-317. http://dx.doi.org/10.1037/0022-006X.76.2.306

Peer, E., Brandimarte, L., Samat, S., & Acquisti, A. (2017). Beyond the Turk: Alternative platforms for crowdsourcing behavioral research. *Journal of Experimental Social Psychology*, *70*, 153-163. https://doi.org/10.1016/j.jesp.2017.01.006

Puckett, J. A., Feinstein, B. A., Newcomb, M. E., & Mustanski, B. (2018). Trajectories of internalized heterosexism among young men who have sex with men. *Journal of Youth and Adolescence*, *47*, 872-889. https://doi.org/10.1007/s10964-017-0670-z

Puckett, J. A., Woodward, E. N., Mereish, E. H., & Pantalone, D. W. (2015). Parental rejection following sexual orientation disclosure: Impact on internalized homophobia, social support, and mental health. *LGBT Health*, *2*, 265-269. http://dx.doi.org/10.1089/lgbt.2013.0024

Radloff, L. S. (1977). The CES-D scale a self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*, 385-401. http://dx.doi.org/10.1177/014662167700100306

Robins, R. W., Trzesniewski, K. H., Tracy, J. L., Gosling, S. D., & Potter, J. (2002). Global self-esteem across the life span. *Psychology and Aging*, *17*, 423-434.

Rogers, C. R. (1961). *On becoming a person: A therapist's view of psychotherapy*. Boston: Houghton Mifflin.

Rogers, C. R. (1963). The actualizing tendency in relation to "motives" and to consciousness. In Marshall Jones (Ed.), *Nebraska Symposium on Motivation* (pp. 1-24). Lincoln, NE: University of Nebraska Press.

Roth, G., & Assor, A. (2012). The cost of parental pressure to express emotions: Conditional regard and autonomy support as predictors of emotion regulation and intimacy. *Journal of Adolescence*, *35*, 799-808. http://dx.doi.org/10.1016/j.adolescence.2011.11.005

Roth, G., Assor, A., Niemiec, C. P., Ryan, R. M., & Deci, E. L. (2009). The emotional and academic consequences of parental conditional regard: Comparing conditional positive regard, conditional negative regard, and autonomy support as parenting practices. *Developmental Psychology*, *45*, 1119-1142. http://dx.doi.org/10.1037/a0015272

Rosario, M., Schrimshaw, E. W., & Hunter, J. (2008). Predicting different patterns of sexual identity development over time among lesbian, gay, and bisexual youths: A cluster analytic approach. *American Journal of Community Psychology*, *42*, 266-282. http://dx.doi.org/10.1007/s10464-008-9207-7

Rosario, M., Schrimshaw, E. W., Hunter, J., & Gwadz, M. (2002). Gay-related stress and emotional distress among gay, lesbian and bisexual youths: A longitudinal examination. *Journal of Consulting and Clinical Psychology*, *70*, 967-975. http://dx.doi.org/10.1037//0022-006X.70.4.000

Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton, NJ: Princeton University Press. http://dx.doi.org/10.1515/9781400876136

Rüsch, N., Lieb, K., Göttler, I., Hermann, C., Schramm, E., Richter, H., ... & Bohus, M. (2007). Shame and implicit self-concept in women with borderline personality disorder. *American Journal of Psychiatry*, *164*, 500-508. http://dx.doi.org/10.1176/ajp.2007.164.3.500

Ryan, C., Huebner, D., Diaz, R. M., & Sanchez, J. (2009). Family rejection as a predictor of negative health outcomes in white and Latino lesbian, gay, and bisexual young adults. *Pediatrics*, *123*, 346-352. http://dx.doi.org/10.1542/peds.2007-3524

Ryan, R. M. (1993). Agency and organization: Intrinsic motivation, autonomy, and the self in psychological development. In J. E. Jacobs (Ed.), *Nebraska symposium on motivation: Developmental perspectives on motivation* (Vol. 40, pp. 1-56). Lincoln, NE: University of Nebraska Press.

Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality, 63,* 397-427. http://dx.doi.org/10.1111/j.1467-6494.1995.tb00501.x

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*, 68–78. http://dx.doi.org/10.1037//0003-066X.55.1.68

Ryan, R. M. & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness.* New York: Guilford Publishing.

Ryan, R. M., La Guardia, J. G., Solky-Butzel, J., Chirkov, V., & Kim, Y. (2005). On the interpersonal regulation of emotions: Emotional reliance across gender, relationships, and cultures. *Personal Relationships*, *12*, 145-163. http://dx.doi.org/10.1111/j.1350-4126.2005.00106.x

Ryan, W. S., Legate, N., & Weinstein, N. (2015). Coming out as lesbian, gay, or bisexual: The lasting impact of initial disclosure experiences. *Self and Identity*, *14*, 549-569. http://dx.doi.org/10.1080/15298868.2015.1029516

Ryan, W. S., Legate, N., & Weinstein, N., Rahman, Q. (2017). Autonomy support fosters lesbian, gay and bisexual identity disclosure and wellness, especially for those with internalized homophobia. *Journal of Social Issues, 73,* 289-306. http://dx.doi.org/10.1111/josi.12217/

Ryan, R. M., Patrick, H., Deci, E. L., & Williams, G. C. (2008). Facilitating health behaviour

change and its maintenance: Interventions based on self-determination theory. *European Health Psychologist, 10,* 2-5.

Savin-Williams, R. C. (2008). Then and now: Recruitment, definition, diversity, and positive attributes of same-sex populations. *Developmental Psychology*, *44*, 135-138. http://dx.doi.org/10.1037/0012-1649.44.1.135

Schmitt, D. P., & Allik, J. (2005). Simultaneous administration of the Rosenberg Self-Esteem Scale in 53 nations: Exploring the universal and culture-specific features of global self-esteem. *Journal of Personality and Social Psychology*, *89*, 623-642. http://dx.doi.org/10.1037/0022-3514.89.4.623

Sheldon, K. M., & Filak, V. (2008). Manipulating autonomy, competence, and relatedness support in a game‐learning context: New evidence that all three needs matter. *British Journal of Social Psychology*, *47*, 267-283. https://doi.org/10.1348/014466607X238797

Sherry, A. (2007). Internalized homophobia and adult attachment: Implications for clinical practice. *Psychotherapy: Theory, Research, Practice, Training*, *44*, 219-225. http://dx.doi.org/10.1037/0033-3204.44.2.219

Shildo A. Internalized homophobia: conceptual and empirical issues in measurement. In: Herek GM (ed.) *Lesbian and Gay Psychology: Theory, Research and Clinical Applications*. Thousand Oaks, CA: Sage; 1994. pp. 176–205.

Shilo, G., & Savaya, R. (2011). Effects of family and friend support on LGB youths' mental health and sexual orientation milestones. *Family Relations*, *60*, 318-330. http://dx.doi.org/10.1111/j.1741-3729.2011.00648.x

Snapp, S. D., Watson, R. J., Russell, S. T., Diaz, R. M., & Ryan, C. (2015). Social support networks for LGBT young adults: Low cost strategies for positive adjustment. *Family*

Relations, *64*, 420-430. http://dx.doi.org/10.1111/fare.12124/

Soenens, B., Luyckx, K., Vansteenkiste, M., Luyten, P., Duriez, B., & Goossens, L. (2008). Maladaptive perfectionism as an intervening variable between psychological control and adolescent depressive symptoms: A three-wave longitudinal study. *Journal of Family Psychology*, *22*, 465-474. http://dx.doi.org/10.1037/0893-3200.22.3.465

Soenens, B., & Vansteenkiste, M. (2005). Antecedents and outcomes of self-determination in 3 life domains: The role of parents' and teachers' autonomy support. *Journal of Youth and Adolescence*, *34*, 589-604. http://dx.doi.org/10.1007/s10964-005-8948-y

Soenens, B., Vansteenkiste, M., Vandereycken, W., Luyten, P., Sierens, E., & Goossens, L. (2008). Perceived parental psychological control and eating-disordered symptoms: Maladaptive perfectionism as a possible intervening variable. *The Journal of Nervous and Mental Disease*, *196*, 144-152. http://dx.doi.org/10.1097/NMD.0b013e318162aabf

Spielberger, C.D. (Ed.) (1966). *Anxiety and behavior*. New York, NY: Academic Press.

Spielberger, C. D. (1983). *Manual for the State-Trait Anxiety Inventory STAI* (Form Y; Self-Evaluation Questionnaire). Palo Alto, CA: Consulting Psychologists Press.

Spielberger, C. D. (2010). *State‐Trait anxiety inventory*. John Wiley & Sons, Inc. https://doi.org/10.1002/9780470479216.corpsy0943

Swan, S., & Andrews, B. (2003). The relationship between shame, eating disorders and disclosure in treatment. *British Journal of Clinical Psychology*, *42*, 367-378. https://doi.org/10.1348/014466503322528919

Szymanski, D. M., Chung, Y. B., & Balsam, K. F. (2001). Psychosocial correlates of internalized homophobia in lesbians. *Measurement and Evaluation in Counseling and Development*, *34*, 27.

Szymanski, D. M., Kashubeck-West, S., & Meyer, J. (2008). Internalized heterosexism: A historical and theoretical overview. *The Counseling Psychologist*, *36*, 510-524.

Tangney, J. P., Miller, R. S., Flicker, L., & Barlow, D. H. (1996). Are shame, guilt, and embarrassment distinct emotions? *Journal of Personality and Social Psychology, 70,* 1256–1269.

Tangney, J. P., Wagner, P., & Gramzow, R. (1992). Proneness to shame, proneness to guilt, and psychopathology. *Journal of Abnormal Psychology*, *101*, 469-478. http://dx.doi.org/10.1037/0021-843X.101.3.469

Thoemmes, F., MacKinnon, D. P., & Reiser, M. R. (2010). Power analysis for complex mediational designs using Monte Carlo methods. *Structural Equation Modeling*, *17*, 510-534. http://dx.doi.org/10.1080/10705511.2010.489379

Waters, E., Merrick, S., Treboux, D., Crowell, J., & Albersheim, L. (2000). Attachment security in infancy and early adulthood: A twenty‐year longitudinal study. *Child Development*, *71*, 684-689. https://doi.org/10.1111/1467-8624.00176

Weinstein, N., Deci, E. L., & Ryan, R. M. (2011). Motivational determinants of integrating positive and negative past identities. *Journal of Personality and Social Psychology, 100,* 527-544. http://dx.doi.org/10.1037/a0022150

Weinstein, N., & Ryan, R. M. (2010). When helping helps: Autonomous motivation for prosocial behavior and its influence on well-being for the helper and recipient. *Journal of Personality and Social Psychology, 98,* 222-224. http://dx.doi.org/10.1037/a0016984

Weinstein, N., Legate, N., Ryan, W. S., Sedikides, C., & Cozzolino, P. J. (2017). Autonomy support for conflictual and stigmatized identities: Effects on ownership and well-being. *Journal of Counseling Psychology*. Online first edition.

Weinstein, N., Ryan, W. S., DeHaan, C. R., Przybylski, A. K., Legate, N., & Ryan, R. M. (2012). Parental autonomy support and discrepancies between implicit and explicit sexual identities: Dynamics of self-acceptance and defense. *Journal of Personality and Social Psychology*, *102*, 815-832. http://dx.doi.org/10.1037/a0026854

Whipple, N., Bernier, A., & Mageau, G. A. (2011). Broadening the study of infant security of attachment: Maternal autonomy-support in the context of infant exploration. *Social Development*, *20*, 17-32. http://dx.doi.org/10.1111/j.1467-9507.2010.00574.x

Williamson, I. R. (2000). Internalized homophobia and health issues affecting lesbians and gay men. *Health Education Research*, *15*, 97-107. http://dx.doi.org/10.1093/her/15.1.97

Table 1

Means, Standard Deviations, and Correlations Presented with 95% Confidence Intervals

	M	*SD*	Mom AS	Dad AS	IHP	Depress	Anxiety	Self-esteem	Shame	Bisexual	White
Mom AS	4.16	1.71	--								
95% CI											
Dad AS	3.7	1.68	.20***	--							
95% CI			.11, .28								
IHP	1.61	0.77	-.14**	-.09*	--						
95% CI			-.22, -.05	-.18, -.003							
Depress	2.69	1.25	-.20***	-.21**	.19***	--					
95% CI			-.28, -.11	-.30, -.13	.10, .28						
Anxiety	2.67	1.24	-.16***	-.13**	.17***	.71***	--				
95% CI			-.25, -.07	-.22, -.04	.08, .25	.66, .75					
Self-esteem	3.12	1.17	.21**	.16***	-.19***	-.76***	-.67***	--			
95% CI			.13, .30	.07, .25	-.28, -.10	-.80, -.72	-.72, -.62				
Shame	2.29	0.87	-.25**	-.09*	.28***	.56***	.67***	-.63***	--		
95% CI			-.33, -.16	-.33, -.16	.20, .36	.49, .62	.61, .71	-.68, -.58			
Bisexual	--	--	-0.09*	-.03	.07	.16***	.13**	-.13**	.17***	--	
95% CI			-.18, -.001	-.12, .06	-.02, .16	.07, .24	.05, .22	-.22, -.04	.08, .25		
White	--	--	.16***	.01	-.10*	-.12**	-.04	.09*	-.10*	-.05	--
95% CI			.07, .25	-.08, .09	-.19, -.02	-.21, -.03	-.13, .05	.005, .18	-.19, -.01	-.14, .04	
Age	28.4	9.17	-.04	-.02	-.05	.01	-.05	.03	.04	.02	-.05
95% CI			-.13, .04	-.11, .07	-.14, .04	-.08, .10	-.14, .04	-.12, .06	-.04, .13	-.06, .11	-.14, .04

Note: Correlations based on $N = 484$; Mom AS refers to autonomy support from mothers; Dad AS refers to autonomy support from fathers; IHP refers to internalized homophobia; Depress refers to symptoms of depression; Bisexual and White were dummy coded as '1' as they represented the largest sexual orientation and racial groups, respectively, and the remaining sexual orientation and racial groups were coded '0'.

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

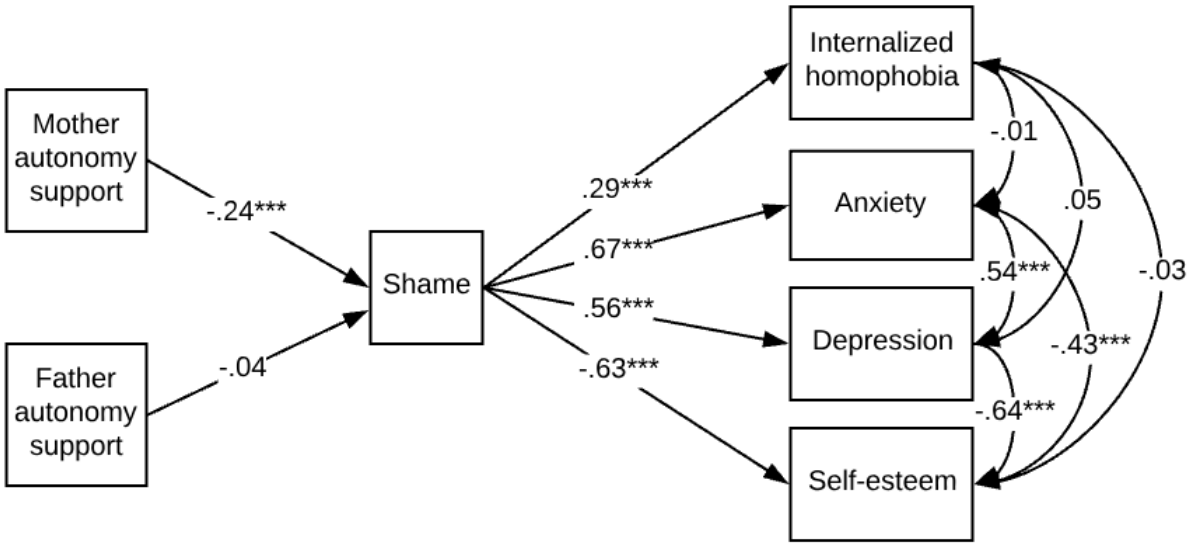

Figure 1. Path model of parent autonomy support predicting less internalized homophobia and better psychological health through lower shame.

Note: $N = 484$; Values are standardized path coefficients; Model shows good fit to the data, $\chi^2(8, N = 484) = 25.45$, $p = .001$, CFI = .98, TLI = .96, RMSEA = .07 (90% CI [.04, .10]), SRMR = .04.

*** $p < .001$