THESIS

LGBTQ WELLBEING AND TELOMERE LENGTH: THE ROLE OF POLITICAL SALIENCE

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ABSTRACT

LGBTQ WELLBEING AND TELOMERE LENGTH: THE ROLE OF POLITICAL SALIENCE

Lesbian, gay, bisexual, transgender, and gender queer (LGBTQ) individuals face disparities in experiences of negative physical and mental health. The current study examined the impact of internalized homophobia, sense of belonging, and a relatively new and understudied construct of political salience, as these related to physical health. Given the underexplored nature of the construct of political salience, a new measure was developed within this study.

Participants' physical health was examined using telomere length, an indicator of cellular aging.

35 Participants provided self-report data and a saliva sample to the researchers; 17 identified as LGBTQ and 18 identified as heterosexual. Heterosexual individuals were included in the study to explore possible differences in telomere length, a question not yet tested in the literature.

Significant main effects were found for sense of belonging, internalized homophobia, and telomere length with political salience. However, potentially due to low sample size power in the study, political salience was not found to be a moderating factor for the relationships between sense of belonging and telomere length, or for the relationship between internalized homophobia and telomere length.

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DEDICATION

To Jimmy, thank you for supporting me throughout this process. And to all of my friends and family members that identify as LGBTQ, this is just another step forward.

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INTRODUCTION

Empirical research indicates that the LGBTQ population disproportionately experiences negative mental and physical health when compared to heterosexual self-identified individuals (e.g. Herek, Gillis, & Cogan, 2009; Landers, Mimiaga, & Conron, 2011; Lehavot & Simoni, 2011; Stall et al., 2016). However, the possible effect of political salience – the degree to which one is attuned to, and impacted by, politics and shifts in the sociopolitical environment, has not yet been explored. In this paper, findings on LGBT mental health (in the context of minority stress) will be considered, leukocyte telomere length will be reviewed as one indicator of physical health and aging, and political salience, both general political salience and salience specific to President's Trump administration and policies, will be explored. In addition, given the lack of research on the role of political salience to date, a new measure will be developed and tested. In this examination, we will also explore the associations between sense of belonging as a member of the LGBTQ community as a protective factor, and internalized homophobia as a risk factor for cellular aging.

REVIEW OF THE LITERATURE

Minority Stress Theory and Telomere Length

The theoretical grounding for the aims of this study are grounded in minority stress theory. Minority stress theory refers to the combination of multiple and persistent stressors experienced by those who identify as a member of a minority community, which can negatively impact physical health (Meyer, 2003). Effects of minority stress can be especially pronounced for sexual and gender minorities as these individuals often experience isolation, discrimination, fear, and lack of self-acceptance (Lick, Durso, & Johnson, 2013).

The prolonged stress one endures as a result of minority stress has been shown to effect one's physical health (Frost, Lehavot, & Meyer, 2015). Research shows that measuring leukocyte telomere length provides one indicator of physical health and aging (Zhu, et al., 2011). Leukocyte telomere length (also referred to in this paper as telomere length) are groups of proteins at the end of one's DNA that protects the DNA strand. The telomere proteins prevent the DNA strand from getting recognized as a broken end or damaged DNA, thus inhibiting processes that would change or try to "fix" that strand and end up damaging an individual's genetic code (Blackburn, Epel, & Lin, 2015). The length of someone's telomere is associated with the risk of contracting age-related or comorbid diseases; where the shorter the leukocyte telomere length, the higher the risk of contracting an age-related or comorbid disease (Kahl & da Silva, 2016). These diseases include kinds of degenerative age-related diseases, cardiovascular disease, certain kinds of cancer, diabetes, dementia, and different cognitive impairments.

Over a typical life span, human leukocyte telomeres naturally shorten due to cellular division (Ridout, Ridout, Price, Sen, & Tyrka, 2016). However, this shortening can be expedited

by a variety of environmental and internal factors (Oliveira, Zunzunegui, Quinlan, Fahmi, Tu, & Guerra, 2016; Tomiyama et. al, 2012), including depression (Ridout, Ridout, Price, Sen, & Tyrka, 2016), and racial discrimination (Chae, Nuru-Jeter, Adler, Brody, Lin, Blackburn, & Epel, 2014). Additionally, poor health behaviors such as eating a low nutrient diet, lack of healthy sleep hygiene, smoking, and alcohol use all can have a negative impact on telomere length (Shalev et al., 2014). Given these research findings, it is then logical to conclude that telomere length can be affected by the minority stress one endures.

Internalized Homophobia. One potential source of stress, that can be linked to minority stress theory, is the degree to which one feels uncomfortable about their sexual orientation. Internalized homophobia (IH) is defined as the act of internalizing the dominant culture's homophobic views and norms (Meyer, 1995). In this way, an individual who internalizes these homophobic perspectives may experience a great deal of difficulty in feeling pride and acceptance of one's sexual orientation or relationships. Research that has examined the relationship between internalized homophobia and mental health factors indicates a strong correlation between psychological distress and internalized homophobia levels (Walch, Ngamake, Bovornusvakool, & Walker, 2015). Internalized homophobia has also been found to be associated with risk behaviors that result in negative health outcomes, such as self-harm behaviors, suicidal ideation, substance use, and risky sexual activity (Williamson, 2000). Due to the strong correlation between internalized homophobia and psychological distress, it is logical to expect to observe more negative physical health outcomes (as indicated by telomere length) in individuals who report greater internalized homophobia.

Sense of Belonging. Another factor that may affect one's telomere length is sense of belonging. Sense of belonging is defined as the sense of personal involvement and integration within a system or environment (Hagerty, Lynch-Sauer, Patusky, Bouwesma, & Collier, 1992). For sexual and gender minorities, the strongest predictor of belongingness is LGBTQ community involvement. Research findings indicate that as the sense of belonging to the LGBTQ community increases, psychological distress (Barr, Budge, & Adelson, 2016) and behaviors related to negative physical health outcome, such as smoking (Johns, Pingel, Youatt, Soler, McClelland, & Bauermeister, 2013), significantly decrease in sexual and gender minorities. Acceptance/support from one's community has also been found to counteract many of the negative effects many sexual minority individuals experience, including mental and physical affects (Romijnder, Wilkerson, Crutzen, Kok, Bauldry, & Lawler, 2017). Additionally, there is research that indicates a strong correlation between perceived stigma/lack of acceptance from one's family/friends, such that when perceived stigma/acceptance increases, so does the prevalence of physical and mental health symptoms (Burton, Bonanno, & Hatzenbuehler, 2014). These findings highlight the impact that perceived stigma, or lack of acceptance, has on individuals who identify as a sexual or gender minority. Since research indicates that social stressors can have a significant impact on one's physical health, it is then logical to predict that sexual minorities who do not feel they belong to an LGBTQ community, and who have a lack of support from family members and friends will have shorter telomere lengths.

Political Salience. Another important variable that may affect physical and mental health is politics. Research shows that legislation that is based in negative stereotypes of LGBTQ individuals may add to the minority stress those individuals feel (Levitt et. al., 2009), thus potentially increasing levels of depression, anxiety and symptoms of post-traumatic stress

disorder (Russell, 2000). The degree to which one is aware of the legislation, policies, and politics is an important and understudied construct and may be central to the experiences and wellbeing of LGBTQ individuals. For the purposes of this study, this will be defined as "political salience", which is conceptualized as the degree to which an individual is aware of, and impacted by, United States politics. A small but growing body of research has found links between politics and health. One such study found that polices that are aimed at promoting social equality, particularly welfare state and labor market policies, have a beneficial effect on the life expectancy of the country's inhabitants (Navarro et al., 2006). However, there are no known studies to date that have examined the impact of political salience and mental health and wellbeing. Given the frequency of LGBTQ-specific policies and laws proposed and changed, particularly having to do with healthcare and labor laws, it stands to reason that the individuals in power in the United States set a tone for the acceptance or discrimination of the LGBTQ community. For instance, research shows that LGBTQ couples who feel their relationship is not recognized (i.e, the political push back on gay marriage being legalized) report more mental health issues (LeBlanc, Frost, & Bowen, 2018). Additionally, individuals who experience minority stress as a result of their gender identity or sexual orientation can contribute to what is called "couple-level minority stress"; which is exacerbated by societal views and discrimination against same-sex relationships (Frost, LeBlanc, de Vries, Alston-Stepnitz, Stephenson, & Woodyatt, 2017). Given this, it is logical to conclude that PS may have an effect on one's mental health (measured by sense of belonging and IH) and physical health (measured by telomere length). For instance, sense of belonging to the LGBTQ community may mean greater attunement to politics out of a desire to protect one's community in the face of changing policies and shifting political climates.

Furthermore, those who experience higher rates of internalized homophobia may be more attuned to politics as a way of comparing how they feel about themselves to how the country and leaders of the country feel about sexual minorities. Research has shown that people who are more depressed sometimes seek out confirming views or evidence that fit these negative views of one's self (Davoodi, Wen, Dobson, Noorbala, Mohammadi, & Farahmand, 2018). In the same way, people with higher internalized homophobia may seek out views or evidence that confirms their negative view of self as it pertains to their sexual orientation. One possible source of negative views about minority sexual orientation may be in political polices/climates that are unsupportive of LGBTQ identities.

Currently, there are no research studies that link one's political salience and indicators of physical health in sexual minority population. Additionally, there are no political salience measures, and none that assess perceived impact related to the current administration. This study seeks to fill this gap in the literature by developing a new political salience measure that includes general salience about politics, specific questions about President Trump and his administration, and linking political salience scores to individuals' telomere length, internalized homophobia, and sense of belonging.

RESEARCH QUESTION AND HYPOTHESES

This study is the first to examine the relationship between internalized homophobia, sense of belonging, political salience and telomere length. It is also the first to assess if telomere length is different between LGBTQ and heterosexual individuals. For this thesis, we hypothesize that ones' internalized homophobia scores will be positively correlated with ones' telomere length (hypothesis 1a), and that political salience scores will be negatively correlated with telomere length (hypothesis 1b). We further hypothesize that one's sense of belonging scores will be positively correlated with telomere length (such that the greater one's sense of belonging, the longer one's telomere length; hypothesis 1c). We also hypothesize that internalized homophobia will be positively correlated to one's political salience score (hypothesis 2a), and that sense of belonging will be correlated with one's political salience (such that the higher the sense of belonging, the lower one's political salience; hypothesis 2b). Furthermore, we predict that political salience will act as a moderating factor between one's sense of belonging and telomere length (hypothesis 3a); such that as one's political salience score increases, the positive association between sense of belonging and telomere length will decrease. Additionally, we hypothesize that political salience scores will have a moderating effect on the relationship between internalized homophobia and one's telomere length (hypothesis 3b); such that the higher one's political salience score, the stronger the association between internalized homophobia and telomere length.

METHODS

Participants

For this study, participants were recruited via convenience sampling by distributing flyers in and around a community in the western united states, as well as through research assistants recruiting in person. Flyers were distributed around a western university's campus, as well as LGBTQ support centers on campus. Research assistants recruited participants in person at local LGBTQ support groups (e.g., a pride resource center). Interested participants contacted lab assistants and received a link to the questionnaire via email or took the questionnaire at the time of recruitment on an iPad that was provided.

Any English-speaking individual who were over the age of 18 were eligible to participate in the study. The sample population (n=35) consisted of 17 LGBTQ participants and 18 heterosexual participants. Within the sample, gender identity varied from male to transgender and other. 1 participant identified as transgender, 4 identified as gender queer, 11 identified as male, 27 as female and 1 as other. Sexual orientation varied from gay to bisexual and other. "Other" was a write in option and people's responses ranged from asexual to pansexual, etc. 3 participants identified as gay, 4 as lesbian, 5 as bisexual, and 10 as other. Participants were asked to write in their ethnicities. The breakdown of participants' ethnicities are as follows: 1 African-American, 1 American, 1 Asian, 5 Caucasian, 1 Caucasian and Hispanic, 1 Caucasian-Asian, 2 Hispanic, 1 Latinx, 2 White/Latino, 1 non-Hispanic, 1 non-Hispanic white, 26 White, and 1 White American. The age range of the participants were between 18 and 51; with the majority being in their late 20s, early 30s.

Measures

For this study, we used an adaptation of Nugesser's (1983) Internalized Homophobia (IH) Scale found in Wagner's (2011) article. The IH scale consists of 20 items, 9 from Nugesser's (1983) measure and 11 from the HIV Center for Clinical and Behavioral Studies at the New York State Psychiatric Institute (Wagner, 2011). The items were adapted to be more inclusive, shifting gay-specific phrasing to be inclusive of all sexual/gender identities.

Participants marked their responses to items such as "An LGBTQ identity is a natural expression of sexuality in humans", and "If I were cis-gender/heterosexual, I would be happier" on a 5-point, Likert-style scale (1= strongly disagree, 5= strongly agree). Wagner (2011) tested Nugesser's (1983) IH measure, and found that it was a reliable and valid measure, with a Cronbach alpha of .92 as well as being significantly correlated with variables that we would expect IH to be correlated with (e.g. depression and anxiety). For the current study, Cronbach alpha was .87

The sense of belonging subscale, taken from the sense of belonging instrument (Hagerty & Patusky, 1995) and altered to be relevant to the LGBTQ community, was used. The scale consists of 8 items that are rated on a Likert scale of 1 through 4; the higher the score, the greater the sense of belonging. For example, a score of 1 indicates the lowest sense of belonging, a score of 2 or 3 indicates a moderate sense of belonging, and a score of 4 indicates the highest sense of belonging. Items include phrases such as "I feel that I'm part of the LGBT community", and "I am proud of the LGBT community." Cronbach's alpha for the current study was .72

Given that there are no measures of political salience at the time of this study, items were created to assess this construct. 20 items were developed, 10 assessing general political salience and impact, 10 items assessing salience and impact specific to the current President Trump

Administration. Within the aims of the study, we conducted an exploratory factor analysis to test our hypotheses for the measure. Participants responded to the items on a 7-item Likert-type scale (1= strongly disagree, 7= strongly agree). An example of an item from the General Political Salience subscale is "I am usually aware of changes in social policies like laws and regulations". An example item of the specific President Trump Administration Salience subscale is "News about President Trump often makes me feel upset or nervous." Cronbach's alpha for the current study was .76 overall and .73 for the general saliency subscale and .78 for the president Trump administration subscale.

Since a variety of factors can cause telomere length to fluctuate (Oliveira, Zunzunegui, Quinlan, Fahmi, Tu, & Guerra, 2016; Tomiyama et. al, 2012), we controlled for external factors that may cause this change.

Procedures

The purpose of the study was to examine the relationship between LGBTQ individuals' internalized homophobia, political salience, sense of belonging, and leukocyte telomere length. Thus, the study followed a non-experimental, associational, within-subject design. The study lasted approximately 15 weeks. We sought responses on the survey and saliva samples (to assay telomere length) from participants at one time point. The time it took to complete the survey and provide a saliva sample was approximately 40 minutes. Participants completed the survey and provided a saliva sample to a research assistant. Compensation of a \$20 visa gift card was provided at the time of completion of the survey and possession of saliva sample.

RESULTS

To examine the main effects outlined in this study, bivariate correlations were examined, while controlling for body mass index. Note that only the LGBTQ self-identified participants were asked to answer questions regarding their sense of belonging and internalized homophobia. Thus, hypotheses 1a, 1c, 2a, 2b, 3a, and 3b were only tested within the LGBTQ sample. Hypothesis 1b was tested with both the LGBTQ and heterosexual participants. First, correlations with telomere length were examined. Higher internalized homophobia scores were significantly correlated with shorter telomere length, -.17, p < .01, (thus supporting hypothesis 1a) and greater political saliency was also significantly correlated with shorter telomere length, -.17, p < .01, (thus supporting hypothesis 1c). Higher ratings of sense of belonging was significantly correlated with longer telomere length, .26, p < .01, (thus supporting hypothesis 3b). Next, main effects for political salience were examined. Ratings of internalized homophobia, .11, p = .08, and sense of belonging, .13, p = .09, were not significantly positively correlated with political salience (thus not supporting hypotheses 1b and 3a, respectively). Next, tests of moderation were examined using interaction terms in a multiple regression. First, each variable was grand mean centered and then multiplied into an interaction term. Each interaction term was entered into the multiple regression as a predictor of telomere length. No significant results were found in the prediction of political salience as a moderator for the relationship between internalized homophobia and telomere length, B = .12, p = .11, (thus not supporting hypothesis 2), nor were there any significant results for the prediction of political salience as a moderator for the relationship between sense of belonging and telomere length, B = .21, p = .09, (thus not supporting hypothesis 4).

DISCUSSION

While examining sense of belonging, internalized homophobia, telomere length and political salience in our sample, we found several main effects to be significant. As predicted, internalized homophobia scores were significantly correlated with telomere length; such that the more internalized homophobia one experiences, the shorter their telomere length. Results from the current study support previous findings that internalized homophobia is correlated with poor health indicators and outcomes, perhaps explained by minority stress (Walch, Ngamake, Bovornusvakool, & Walker, 2015). Specifically, the more minority stress one experiences, the higher one's internalized homophobia could become; resulting in a decrease in telomere length. Internalized homophobia can develop when an individual who identifies as a minority, based on their gender identity and/or sexual orientation, internalizes culture's negative sentiments about their LGBTQ identity (Meyer, 1995). For instance, if an individual who identifies as LGBTQ believes the negative sentiments about their identity, and adopts them as their own, their mental wellbeing may decrease due to the internal conflict these differing messages may cause (Walch, Ngamake, Bovornusvakool, & Walker, 2015); thus negatively impacting their physical health as indicated by telomere length.

A strength of the current study is the development and testing of a potentially important and understudied variable that may be impactful for LGBTQ health and wellbeing; political salience. Political salience measures the awareness individuals have, and the impact, of policies, the current administration, and politics in general. American politics has the potential to impact large groups that reside both in the United States and elsewhere. Based on policies and messages specific to cultural norms the administration chooses to express, the current administration has

the potential to negatively impact these groups' physical health (as indicated by telomere length). Results revealed that the higher the political salience score one reported, the shorter their telomere length. Thus, those with greater awareness of political policies in general, and especially with regard to the current administration, may experience stress that affects not only their general wellbeing, but also their physical health. This could be due to the stress individuals feel when, or if, they feel discriminated against by the current administration, or by politics in general. This correlation was significant for both LGBTQ and non-LGBTQ participants. We know from past research that LGBTQ individuals who feel that policies discriminate against their sexual orientation and/or gender identity often experience minority stress (Levitt et. al., 2009), which, then, may impact their wellbeing (Russell, 2000). For non-LGBTQ participants, this correlation could be due to the political climate in the United States at the time of this study. Research has found that polices that aim to reduce social inequalities result in lower mortality rates and an increase in positive health indicators in the general public (Navarro, et al., 2006). Thus, if individuals perceive the current administration is not seeking to reduce gaps in social inequality, their indicators of health may suffer as an outcome.

Another important relationship identified in the current study was that between sense of belonging and telomere length. Specifically, higher reports of sense of belonging to the LGBTQ community were associated with longer telomere length. Thus, sense of belonging appears to be a protective factor against negative physical health indicators for LGBTQ individuals. From past studies, high sense of belonging to the LGBTQ community has been associated with lower psychological and physiological stress (Barr, Budge, & Adelson, 2016), in addition to decreasing risk behaviors associated with poor physical health outcomes (Johns, Pingel, Youatt, Soler, McClelland, & Bauermeister, 2013). For example, when one is able to connect to, and feel

supported by, similarly identified individuals they may be less affected by the negative impacts that minority stress can cause. Alternatively, individuals who feel that they do not belong to a group that supports their LGBTQ identity show increased instances of depression and anxiety (McCallum & McLaren, 2011) which has been shown to impact physical health (Frost, Lehavot, & Meyer, 2015). It then makes sense that the participants who felt that they belonged in the LGBTQ community would feel less psychological stress, and thus, have less negative health outcomes (i.e. longer telomere length).

These findings indicate that internalized homophobia, sense of belonging and political salience are all associated with telomere length in LGBTQ and heterosexual individuals. This is the first study to examine how these three factors influence physical health as measured by telomere length. We also found that there were no differences between LGBTQ and heterosexual individuals' telomere length. This study is the first to test how these factors influence telomere length in LGBTQ individuals. We expected to find shorter telomere length in LGBTQ individuals due to the amount of stress and negative health outcomes they experience in relation to their heterosexual counterparts (e.g. Herek, Gillis, & Cogan, 2009; Landers, Mimiaga, & Conron, 2011; Lehavot & Simoni, 2011; Stall et al., 2016). However, it is promising that the telomere length did not significantly vary between the LGBTQ and heterosexual participants, suggesting the experiences of LGBTQ individuals may not be as aversive with regard to physical health outcomes as expected. It should also be noted that, due to low power, there may be important differences between these two groups that can be explored in subsequent studies that have a larger and more diverse sample.

Political salience was defined in the current study as the degree to which an individual is aware of, and impacted by, United States politics. To begin to unpack the possible influence of

political salience in the LGBTQ community, we examined the association between political salience and internalized homophobia. This main effect was found to be insignificant, which indicates that one's experience of internalized homophobia was not associated with a participant's sense of political salience. Internalized homophobia is developed when individuals internalize negative sentiments about their LGBTQ identity (Meyer, 1995). These findings may indicate that one's sense of pride or shame regarding one's sexual identity does not influence or relate to their awareness of policies and politics in general. That is to say, once internalized homophobia has been deeply entrenched in an individual, it may be hard to alter their experience in either direction based on the current political climate.

Another relationship that was examined was between political salience and sense of belonging. This correlation was also found to be insignificant, meaning the political salience scores an individual reported was not found to be associated with sense of belonging scores. This could be due to a variety of factors, including the location and presence of the LGBTQ community. For instance, if a community has an active, present, and established LGBTQ group, and the group is accepted within said community, political salience would not necessarily be correlated to an individual's sense of belonging. Research has found that, for African American women, the formation of racial identity is often central to their development of sense of belonging; thus, creating a protective factor against negative experiences during their school years (Butler-Barnes, Leath, Williams, Byrd, Carter, & Chavous, 2017). Thus, if a strong sense of belonging is established in the LGBTQ community, awareness and impact of American politics would not necessarily be correlated.

The potential moderating factor of political salience was explored. Specifically, its potential moderating effect on the relationships between sense of belonging and telomere length,

and internalized homophobia and telomere length. Both the moderating effect between sense of belonging and telomere length, and internalized homophobia and telomere length were found to be insignificant. Meaning, political salience was not found to strengthen the relationships between internalized homophobia and telomere length, nor between sense of belonging and telomere length. This may be due to internalized homophobia and sense of belonging already being deeply engrained in someone's identity prior to the time they began to realize any political influence in their lives. For instance, if someone's internalized homophobia and sense of belonging has already contributed to the physiological stress they experience, thus impacting their telomere length, political salience would not necessarily play a large factor in mitigating that relationship. Additionally, if someone has developed a strong sense of belonging in the LGBTQ community and have reported low internalized homophobia prior to this current administration, political salience may not have a large effect on those already established relationships with telomere length. However, it should be noted that the power was low for this study, due to the small sample size of 17 LGBTQ participants. This may be another reason why political salience was not found to impact the relationship between internalized homophobia, sense of belonging and telomere length. Regardless, political salience is an important factor while considering the wellbeing of LGBTQ individuals due to the influence politics has on cultural norms surrounding LGBTQ identities.

Limitations and Directions for Future Research.

While this study was revolutionary in its examination of political salience and telomere length, there are some limitations that should be taken into consideration. Limitations of this study include the use of a new, un-tested political salience measure, lack of generalizability, low power, and threats to internal and external validity. In regards to the political salience measure,

future studies should run confirmatory factor analyses that further test the measure's validity and reliability. Additionally, the political salience measure failed to measure the positive aspects of one's political salience; such as the power one may feel when they are aware of their country's politics, and the hope for change some people may feel. Furthermore, the population we intend to make generalizations about includes the LGBTQ population in the United States, or at least the LGBTQ community in the western united states. Since we recruited by convenience sampling, we were restricted in generalizing our findings to the entire LGBTQ community in the United States. Generalizability was low since the LGBTQ demographics of Fort Collins, Colorado differs from the U.S. LGBTQ demographic as a whole. Given that we used convenience sampling and had a specific population we were studying from northern Colorado we had low to medium external validity. There were also limitations in gathering racial and socioeconomic data that could be generalizable to the LGBTQ population in the United States. The majority of the participants in this study were Caucasian and indicated that it was not very difficult to live on their current household income. Thus, the population studied is not generalizable to the United States or even to the area of Northern Colorado.

Another limitation was the small sample size. Given that there was a sample size of 35 individuals, the power was low for this study. If we were able to gather a larger sample of LGBTQ and heterosexual participants, we may have seen more significant correlations. For instance, perhaps with a larger sample size, the power to detect significance of political salience as a moderating factor between sense of belonging and telomere length, as well as internalized homophobia and telomere length could exist.

Other limitations included threats to internal validity. The social desirability bias, specifically when it comes to the political salience measure which involved items specific to the

Trump administration, may be applicable to this study. Given that half of the participants identified as LGBTQ, they may have felt the need to go along with the common view on the Trump administration within the LGBTQ community due to the fear of being ostracized. This may or may not have been an issue, because we gathered self-report data. In addition, because we examined the association between two or more variables, we cannot determine causality due to lack of randomized longitudinal empirical testing.

CONCLUSION

Given all that we know regarding minority stress and its effects on the internal and external health of stigmatized individuals, as well as the potential negative health effects one's leukocyte telomere length have, we have an obligation as researchers and clinicians to explore the various external and internal variables that affect marginalized communities. In this study, we examined the impact political salience has on the relationship between one's levels of internalized homophobia, sense of belonging and telomere length. The political climate of one's society usually echoes societies sentiments or beliefs regarding various groups of people. Thus, if said sentiments or beliefs were anti-LGBTQ and an LGBTQ individual's awareness of political affairs were high, it stands to reason that their internal stress, manifested by internalizing these anti-LGBTQ beliefs, would affect their leukocyte telomere length. Political salience was found to be significantly correlated to sense of belonging, internalized homophobia and telomere length. With an increase in sample size, studies that help expand on this work have the potential to deepen our understanding of how political salience affects America's LGBTQ population. Performing and analyzing this study, we introduced a new variable into the research literature, political salience, as well as generating new questions regarding the political climate and how it affects the citizens of this country. Our hopes for this work is to get others questioning what impact politics can have on an individual and how one administration based in Washington, DC can negatively affect a community across the country.

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Table 1

Political Salience Measure

Factor Loadings

1. I am usually aware of changes in social	.77
policies like laws and regulations	
2. I can get pretty upset about politics	.68
3. I prefer to ignore what happens in politics	71
4. Politics has a strong influence on my life	.78
5. I feel scared about the way things are going in this country	.65
5. I worry about changes in policies and laws	.72
7. I am relatively confident in the leaders of our country	81
8. I have strong feelings about the current administration	.71
9. In general, I usually feel supportive of our political system	69
10. I worry about my safety because of the way the political system is currently functioning	.73
11. The Trump administration impacts my level of stress	.79
12. The election of Donald Trump is a good step for our country	88
13. President Trump is dangerous	.81
14. The Trump administration is doing good things for our country	80
15. News about President Trump often makes me feel upset or nervous	.72
16. Seeing President Trump on television or social media makes me feel sick	.68
17. President Trump has good intentions and gets treated unfairly	79
18. I think a lot about the Trump administration	.71
19. I have gotten into fights with others about President Trump	.62
20. The President Trump administration causes me anxiety	.77

Notes: Items 1-10 are hypothesized to load onto a sub-factor of General Political Salience. Items 11-20 are hypothesized to load onto the sub-factor President Trump Administration Specific Political Salience.

Table 2

Correlations Among Variables

	1	2	3	4
1. Homophobia	1.00			
2. Political Salience	.11	1.00		
3. Belonging	.16**	.13	1.00	
4. Telomere	17**	17**	.26*	1.00

Note: Homophobia refers to scores on the Internalized Homophobia Scale (Nugesser, 1983). Homophobia refers to scores on the Internalized Homophobia Scale (Nugesser, 1983). Political Salience refers to scores on the Political Salience Scale. Sense of belonging refers to scores on the Sense of Belonging Subscale (Hagerty & Patusky, 1995). Telomere refers to telomere length of participant. *p < .05, **p < .01

Table 3

Descriptive Information for Measures

Variable	M	SD	Range	α
Homophobia	2.32	.60	1.00-5.00	.87
Political Salience Overall	5.41	1.00	1.00-7.00	.76
Political Salience General	5.39	1.11	1.00-7.00	.73
Political Salience Current	5.98	.90	1.00-7.00	.78
Belonging	2.25	.61	1.00-4.45	.72

Note: Homophobia refers to scores on the Internalized Homophobia Scale (Nugesser, 1983). Political Salience Overall refers to scores on the Political Salience Scale. Political Salience General is a sub-factor of the Political Salience Scale. Political Salience Current is a sub-factor of the Political Salience Scale that is specific to President Trump's Administration. Sense of belonging refers to scores on the Sense of Belonging Subscale (Hagerty & Patusky, 1995).

Table 4

Multiple Regression Predicting Telomere Length

	Telomere Length			
Predictor Variable	В	SE	β	
PSxHomophobia	.12	.08	.10	
PSxBelonging	.21	.09	.13	

Note: Homophobia refers to scores on the Internalized Homophobia Scale (Nugesser, 1983). Political Salience refers to scores on the Political Salience Scale. Sense of belonging refers to scores on the Sense of Belonging Subscale (Hagerty & Patusky, 1995).