

Resilience from Violence in the Transgender Community

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This dissertation titled
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ABSTRACT

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Resilience from Violence in the Transgender Community

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Research has consistently documented high rates of sexual violence against transgender individuals and the pathways between experiences of violence and negative mental health outcomes in this population have been well established. However, emerging research suggests that not all transgender victims of violence experience negative outcomes and some may experience positive adaptation, a concept which has been termed resilience. Moreover, the Minority Stress Model has been adapted to account for resilience from violence in the transgender community and identifies two variables that may promote resilience in this population: community connectedness and transgender pride. However, this model has yet to be validated. Additional resilience factors from violence for transgender survivors of violence have been suggested (i.e., social support, cultivation of hope/optimism, facilitative coping) but much of this research has not explicitly examined these variables as resilience factors from sexual violence. Finally, research has suggested that attention to intersectionality is important to examination of resilience in the transgender community.

Based on the limitations of the literature, the current study examined resilience factors from sexual violence, including community connectedness, transgender identity pride, social support, hope/optimism, and use of coping skills, among transgender individuals with attention to diversity. Findings demonstrated that the majority of

individuals had experienced sexual victimization. The current study did not find support for the resilience variables suggested by the literature; however, direct relationships between suggested resilience factors and well-being and trauma symptoms were found. Additionally, results from structural equation models showed that 1) transphobia mediated the relationship between sexual violence and trauma symptoms and 2) the relationship between violence and trauma symptoms existed among older individuals but not younger individuals.

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RESILIENCE FROM VIOLENCE IN THE TRANSGENDER COMMUNITY

Despite the high rates of sexual violence in transgender populations (Testa et al., 2012), little research has examined how transgender survivors of sexual violence positively adapt following these experiences, a concept which has been termed resilience (Fletcher & Sarkar, 2013). Recently, the Minority Stress Model was adapted to account for resilience in the transgender community and identifies two variables that may promote resilience: community connectedness and transgender pride (Testa, Habarth, Peta, Balsam, & Bockting, 2015). Limited research supports these variables as potential resilience factors for transgender survivors of violence (e.g., Singh & McKleroy, 2011). In addition, social support (DiFulvio, 2014), cultivation of hope and optimism (e.g., Singh, Hays, & Watson, 2011), and facilitative coping (e.g., Kwon, 2013) have been suggested to serve as resilience factors among survivors of sexual violence who are transgender. Finally, research has also suggested that attention to diversity is important to the examination of resilience in the transgender community (Singh, 2013). Thus, the current study examined resilience factors, including community connectedness, transgender identity pride, social support, hope and optimism, and use of coping skills, among transgender survivors of sexual violence with attention to intersectionality. This research is important to the development of culturally-informed intervention and prevention efforts (e.g., Bockting, 2014).

Rates of Sexual Violence and Impact

Research has consistently demonstrated high rates of sexual violence against transgender individuals. Although rates vary based on study methodology, approximately

50% of transgender individuals report a history of lifetime sexual violence victimization (for a review, Stotzer, 2009). Troublingly, when rates of violence are compared between transgender individuals and their cisgender peers, the rates of sexual violence in transgender men and women are often higher (e.g., Effrig, Bieschke, & Locke, 2011) with some exceptions (Wilson, 2013). Despite these high rates of violence and increased attention to studying individuals who identify as transgender, research in this area has several limitations. For example, researchers have noted that transgender individuals are often excluded from research or results for them are combined with those for lesbian, gay, and bisexual individuals (e.g., Kwon, 2013). This is especially concerning given that research has connected sexual violence with negative mental health outcomes in transgender populations (Clements-Nolle, Marx, & Katz, 2006). Even more, research has suggested that transgender survivors may experience greater negative outcomes as a result of their victimization. Specifically, Wilson (2013) showed that transgender victims of sexual violence reported greater levels of stress compared to cisgender survivors. Thus, further research is needed to better understand how individuals are impacted by these experiences. Whereas the bulk of research on victimization among transgender survivors has focused on understanding the links between experiences of sexual violence and negative outcomes, scholars have begun to call for research examining positive pathways after experiencing adversity as well (e.g., Hendricks & Testa, 2012).

Definitions of Resilience and Recovery

As discussed above, although progress has been made in understanding the effects of sexual violence in transgender populations, this research has been criticized for

assuming that all transgender victims of violence will develop negative outcomes as well as for failing to examine resilience variables (Hendricks & Testa, 2012). Trauma researchers have also begun to find that resilience to adversity, rather than being rare and found only in exceptional individuals, is the most common response to trauma (Bonanno & Mancini, 2012). Although interest in examining resilience has grown, it has been operationalized and defined inconsistently (for a review, see Fletcher & Sarkar, 2013). Briefly, research in this area has moved from defining resilience as a collection of personality traits to a more inclusive examination of individual-, family-, and community-level variables. In addition, researchers have distinguished resilience from coping (Fletcher & Sarkar, 2013). Many of the definitions of resilience share two elements which include experience of adversity and positive adaptation. Additionally, recent research suggests that examination of both the presence of positive outcomes and decreased negative outcomes is important to gain a full understanding of resilience in the transgender population. Specifically, Bariola and colleagues (2015) showed that predictors of resilience differed from predictors of psychological distress in transgender men and women. However, this research is currently in its infancy. Thus, the current study will examine resilience factors and define resilience as an outcome that includes both decreased negative outcomes and the presence of positive adaptation.

Minority Stress Model

The Minority Stress Model offers a framework for understanding resilience from violence in minority populations (Meyer, 2003). This model was adapted by Hendricks and Testa (2012) to explain the effects of violence on mental health outcomes among

transgender populations and to account for the unique experiences of transgender individuals. Briefly, the Minority Stress Model was first developed by Meyer (2003) to explain the increased rates of mental health disorders among gay, lesbian, and bisexual populations, when compared to their heterosexual peers. Meyer (2003) proposed that the high rates of mental health disorders were caused in part by stressors due to one's minority status. These stressors fall into two categories: distal and proximal. Distal stressors are objective external events or conditions and may be chronic or acute (e.g., discrimination). Proximal stressors are subjective and related to one's minority identity and include a) anticipation and expectation of future discrimination, b) concealment of identity, and c) internalization of societal beliefs about one's minority status.

Overall, research has supported the role of distal and proximal stressors in the Minority Stress Model in explaining the effects of violence on mental health outcomes among transgender populations (for a review see Hendricks & Testa, 2012). However, as mentioned above, in addition to negative mental health outcomes, it is important to remember that not all effects of minority stress are negative and many marginalized individuals develop positive coping skills and resilience (Meyer, 2003). To account for these positive outcomes, Testa and colleagues (2015) adapted the Minority Stress Model for transgender individuals to include resilience factors that would act as partial moderators between experiences of violence and mental health outcomes. In this model the two key variables are community connectedness and identity pride (see Figure 1).

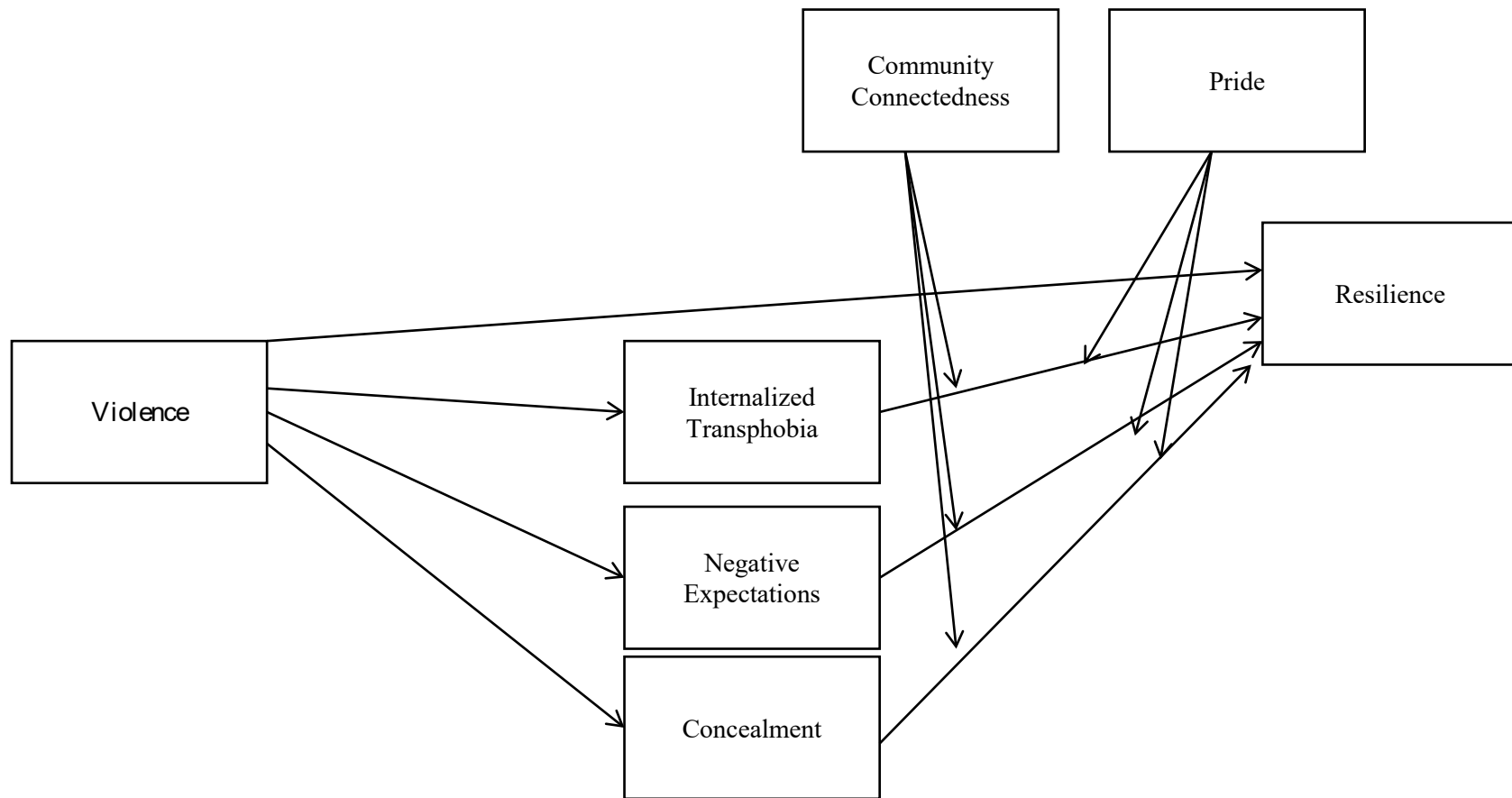


Figure 1. Minority Stress Model with Resilience Factors.

Although definitions have been inconsistent, identity pride can be defined as integration of transgender status into identity and positive valence of transgender identity (Meyer, 2003). Recent research has supported it as a resilience factor in transgender populations (e.g., Bockting, Miner, Swinburne Romine, Hamilton, & Coleman, 2013; Singh & McKleroy, 2011). Even more, while not specifically with victims of sexual violence, Jefferson, Neilands, and Sevelius (2013) found that increased transgender identity pride was related to increased coping self-efficacy among 98 transgender women of color. Testa and colleagues (2015) also included community connectedness as a potential resilience factor for transgender populations. Researchers have distinguished between community connectedness and community participation. Community participation is the behavioral involvement in a group (e.g., Ashmore, Deaux, & McLaughlin-Volpe, 2004), whereas community connectedness has been conceptualized as beliefs of belongingness (Frost & Meyer, 2012). Qualitative research with transgender women has suggested community connectedness as a resilience factor (Graham et al., 2014). Limited quantitative data has also suggested that feeling connected to other transgender individuals is related to decreased negative mental health outcomes (Pflum, Testa, Balsam, Goldblum, & Bongar, 2015). Although their assessment of connection was limited to two items, another study suggested that connection to other transgender individuals may serve as a protective factor from gender stigma (Bockting et al., 2013). Despite some promising findings, further research is needed examining community connection using a more thorough assessment of community connection and with survivors of sexual violence specifically.

Additional Resilience Factors

Despite the paucity of research on community connectedness, other research has examined the role of social support as a resilience factor in the transgender population (e.g., DiFulvio, 2014). According to Heaney and Israel (2008), social networks are defined as relationships that surround people. In this way, community connectedness can be seen as a similar but distinct concept from social networks. Past research has suggested that social support is related to mental health among transgender individuals (Bockting, 2014). Research to date has largely examined two sources of support in this community – familial social support and peer social support (e.g., Trujillo, Perrin, Sutter, Tabaac, & Benotsch, 2017). In addition, research not specific to sexual violence has suggested that some types of social support may serve as moderators in the relationship between victimization and mental health outcomes in this population. For example, Trujillo and colleagues (2017) found that relationships between discrimination and suicidal ideation were only present among those with low peer or significant other social support. Emerging research has also suggested that other forms of support, specifically online support (Singh, 2013) and social support from healthcare providers (Moody, Fuks, Peláez, & Smith, 2015), may be important to mental health in the transgender community (e.g., Higa et al., 2012). This research is important as Internet access has continued to grow (Fox & Duggan, 2013). However, online support and support from healthcare providers have not been thoroughly examined in the transgender community. Thus, further research is needed to better understand the role of differing forms of social support as a resilience factor given that none of this research has examined the role of

support as a moderator between experiences of sexual violence and resilience in transgender individuals.

Another potential resilience factor identified in the literature is hope and optimism. Research with trauma survivors suggests that hope and optimism may protect against trauma symptoms (Ai & Park, 2005). Although not identified in the Minority Stress Model, qualitative research has also pointed to hope and optimism as potential resilience factors for transgender survivors of violence. Specifically, findings showed that transgender individuals identified cultivation of hope as a resilience factor (e.g., Moody et al., 2015). Quantitative research has also found that optimism was related to decreased suicidal behavior after accounting for social support and age (Moody & Smith, 2013) in transgender Canadians. Overall, limited research suggests that hope and optimism should be examined in more detail as a potential resilience factor among transgender survivors of sexual violence as currently no research has examined these constructs with sexual violence survivors who identify as transgender.

In addition, facilitative coping has been suggested as a potential resilience factor in transgender survivors of violence. For example, research conducted by Budge, Adelson, and Howard (2013) showed that facilitative coping was related to decreased mental health issues whereas increased avoidant coping was related to increased mental health issues among transgender individuals. In addition, research conducted with cisgender survivors of sexual violence suggested that avoidance coping was related to PTSD symptoms (e.g., Ullman, Townsend, Filipas, & Starzynski, 2007). Importantly, limited research has suggested that coping may serve as a moderator between violence

and mental health outcomes. Specifically, Haden and Scarpa (2008) found that disengagement coping moderated the relationship between community violence victimization and depressed mood among college students. More specifically, low levels of disengagement coping weakened the relationship between victimization and depressed mood to non-significant. In sum, it appears that increased facilitative coping and decreased avoidant coping may serve as resilience factors among transgender survivors of sexual violence. However, no research has examined the use of coping strategies as resilience factors among transgender survivors of sexual violence. This is important as most empirically-supported treatments for sexual trauma survivors target coping strategies (e.g., Resick, Monson, & Chard, 2016).

Identities and Resilience

In addition to gender identity, it is important to consider other identities when examining resilience (e.g., Singh, 2013). Briefly, Meyer (2003) conceptualizes minority stress as social stress (including violence) experienced by those as a result of their minority status and notes that it is additive. More specifically, minority stress requires additional effort to confront given that it is in addition to other psychosocial stressors. Thus, it would be expected that individuals who are members of multiple minority groups (e.g., sexual minorities, racial and ethnic minorities) would experience greater minority stress and experience greater negative outcomes and demonstrate less resilience as a result. Limited research has supported the assertion that transgender individuals with multiple minority statuses experience greater victimization. For example, Birkett, Newcomb, and Mustanski (2015) found that African American LGBT adolescents

experienced greater LGBT victimization (a measure including verbal violence, sexual violence, physical violence, and property damage) than their white LGBT peers.

In addition, research has supported the assertion made by the Minority Stress Model that multiple minority statuses are related to greater minority stress and thus poorer mental health functioning and less resilience. For example, Wilson (2013) showed that transgender individuals who were also of sexual minority status experienced poorer mental health functioning compared to those who were not of sexual minority status. Other research has suggested that lower socioeconomic status is a minority status that may impact resilience from violence among transgender populations (Lombardi, 2009). Research also points to age as a potential moderator in the relationship between experience of victimization and resilience. For example, although not specific to sexual violence, research showed that the relationship between gender-related victimization and major depression was strongest during adolescence and then declined in later stages of life among transwomen (Nuttbrock et al., 2010). The researchers suggest that resilience may be something that is learned over the lifetime. However, research has not examined the moderating role of age between sexual violence and mental health outcomes among transgender survivors of sexual violence.

PURPOSE OF THE CURRENT STUDY

The current study used the Minority Stress Model as a guide to examine resilience from sexual violence in the transgender community. Additionally, recent research has suggested other variables that may serve as resilience factors from violence and those factors are also included in the following specific aims.

The first aim was to examine the major tenants of the expanded Minority Stress Model with the inclusion of resilience factors. I hypothesize that the resilience variables in the Minority Stress Model will moderate the relationships between the mediators proposed by the Minority Stress Model and increased well-being and decreased trauma symptoms. Specifically, at high levels of community connectedness and transgender identity pride, the relationships between the mediators (transphobia, nondisclosure, and negative expectations for the future) and negative mental health outcomes and well-being will be weakened. In contrast, at low levels of community connectedness and transgender identity pride, the relationships between the mediators (transphobia, nondisclosure, and negative expectations for the future) and negative mental health outcomes and well-being will be strengthened.

The second aim was to examine differing forms of social support as resilience factors from violence. I hypothesize that familial social support, peer social support, healthcare provider social support, and online social support will serve as moderators in the relationships between sexual violence victimization and negative mental health outcomes and well-being. Specifically, at high levels of each form of support, the relationships between sexual violence and negative mental health outcomes and well-

being will be weakened. In contrast, at low levels of each form of support, the relationships between sexual violence and negative mental health outcomes and well-being will be strengthened. The hypotheses that follow propose the same pattern of moderation (i.e., relationships are attenuated at high levels of the moderator, relationships are strengthened at low levels of the moderator).

My third aim was to examine hope and optimism as resilience factors from violence. I hypothesize that hope and optimism will serve as moderators in the relationships between sexual violence and well-being and negative mental health outcomes. In addition, my fourth aim was to examine coping skills as resilience factors from violence. I hypothesize that facilitative coping and avoidant coping will serve as moderators in the relationships between sexual violence and well-being and negative mental health outcomes. Finally, my fifth aim was to examine the impact of differing identities on resilience from violence. First, I hypothesize that membership in additional minority groups (ethnicity, sexual orientation, and income) will be related to decreased use of resilience factors and increased negative mental health outcomes and decreased well-being. Second, I hypothesize that among survivors of violence, increased age will be related to increased use of resilience factors, decreased negative mental health outcomes, and increased well-being. Third, I hypothesize that age will moderate the relationships between violence and well-being and mental health outcomes.

METHODS

Participants

Participants for the current study included 193 transgender individuals over the age of 18 from the United States (99%) and Canada who were recruited from Mechanical Turk. Thirty-one percent identified as a man or transman, 54% as a woman or a transwoman, 11% as genderqueer, and 4% as other. The majority identified as White (70%) or African American (18%), were single (60%), were working full-time (75%), and had a Bachelor's degree or greater (54%). Most (67%) had an annual income of \$35,000 or more. Thirty-three percent identified as bisexual, 24% as heterosexual/straight, and 19% as gay or lesbian. The average age was 30.24 ($SD = 7.06$, Range = 18-71 years). Detailed demographic characteristics are presented in Table 1.

Table 1

Demographic Characteristics

Demographic Characteristic	N=193
Gender Identity	
Man/transman	60 (31%)
Woman/transwoman	104 (54%)
Genderqueer	21 (11%)
Other	8 (4%)
Assigned Birth Sex	
Male	120 (62%)
Female	66 (34%)
Decline to State	7 (3%)
Intersex	
Yes	22 (11%)
No	144 (75%)
Decline to State	27 (14%)
Ethnicity	
White	135 (70%)

Table 1: cont.

African-American	35 (18%)
Korean	2 (1%)
Other Asian	1 (1%)
Biracial/Multiracial	2 (1%)
American Indian/Alaska Native	7 (1%)
Native Hawaiian	2 (1%)
Guamanian or Chamorro	1 (1%)
Asian Indian	1 (1%)
Chinese	3 (2%)
Mexican/Mexican American	15 (8%)
Puerto Rican	8 (4%)
Other Hispanic	6 (3%)
Relationship Status	
Single	116 (60%)
Married/civil union	27 (14%)
Partnered in an open relationship	7 (4%)
Partnered in a monogamous relationship	28 (14%)
Co-habiting	11 (6%)
Divorced	3 (2%)
Highest level of education	
Partial high school	3 (2%)
High school diploma/GED	46 (24%)
Associate's degree	41 (22%)
Bachelor's degree	92 (48%)
Master's/doctoral degree	11 (6%)
Employment Status	
Working full-time	145 (75%)
Working part-time	27 (14%)
Unemployed/looking for work	13 (7%)
Keeping house/raising children full time	6 (3%)
Retired	1 (1%)
Disabled/SSI	1 (1%)
Annual income	
Less than \$5,000	7 (4%)
\$5,000 - \$11,999	13 (7%)
\$12,000 - \$15,999	6 (3%)
\$16,000 - \$24,999	21 (11%)
\$25,000 - \$34,999	36 (19%)
\$35,000 - \$49,999	35 (18%)
\$50,000 - \$74,999	52 (27%)
\$75,000 - \$99,999	15 (8%)
Over \$100,000	7 (4%)
Region	

Table 1: cont.

Northeast	51 (26%)
Southeast	32 (17%)
Midwest	43 (22%)
Southwest	22 (11%)
Northwest	15 (8%)
Sexual orientation	
Bisexual	65 (33%)
Heterosexual/straight	47 (24%)
Gay/lesbian	36 (19%)
Pansexual	20 (10%)
Asexual	13 (7%)
Other	12 (2%)

Measures

Attention Checks

Three items were included in the current study in order to try to ensure conscientious responding and English competency. These items were embedded in the surveys. An example item is, “Please select the answer “blue” from the response options below.” Participants were excluded from study analyses if they failed to respond correctly to any of the items.

Demographics Questionnaire

A demographics questionnaire assessed age, ethnicity, income, region of United States, and sexual orientation. See Table 2 for a review of measures used.

Table 2

Means and Standard Deviations for Variables of Interest

Measure	Number of Items	Sample Item	Response Options	Range	<i>M (SD)*</i>
Sexual Experiences Survey-Short Form Victimization	7 (5 tactics)	<i>Someone had oral sex with me or made me have oral sex with them without my consent by:</i>	4-point scale ranging from 0 to +3 times	NA	NA
Verbal Violence Scale	16	<i>Threatened to hurt you</i>	6-point scale ranging from “Never” to “20+ times”	NA	NA
General Violence Conflict Tactics Scale	28	<i>Pushed, grabbed, or shoved</i>	7-point scale ranging from “Never” to “20+ times”	NA	NA
Gender Minority Stress and Resilience Measure- Internalized transphobia	8	<i>I often ask myself: Why can't my gender identity or expression just be normal?</i>	5-point scale ranging from “Strongly disagree” to “Strongly agree”	0-32.00	11.56 (8.38)
Gender Minority Stress and Resilience Measure- Negative expectations for future events	9	<i>If I express my gender IDENTITY/HISTORY, people would think I am disgusting or sinful</i>	--	0-36.00	17.29 (8.53)

Table 2: cont.

Gender Minority Stress and Resilience Measure- Nondisclosure	5	<i>Because I don't want others to know my gender IDENTITY/HISTORY, I don't talk about certain experiences from my past or change parts of what I will tell people.</i>	--	0-20.00	9.41 (5.45)
Gender Minority Stress and Resilience Measure - Community connectedness	5	<i>I feel connected to other people who share my gender identity</i>	--	1.00-20.00	12.34 (4.34)
Gender Minority Stress and Resilience Measure- Transgender identity pride	8	<i>I'd rather have people know everything and accept me with my gender identity and gender history</i>	--	0-32.00	18.74 (7.03)
Multidimensional Scale of Social Support-total	12	<i>My friends really try to help me</i>	7-point scale ranging from "Very strongly disagree" to "Very strongly agree"	12.00-84.00	56.94 (16.00)
Multidimensional Scale of Social Support-Online	4	<i>The following questions refer to your interactions with others that you met and interact with primarily online: My friends really try to help me</i>	--	4.00-28.00	20.10 (6.16)

Table 2: cont.

Multidimensional Scale of Social Support-Healthcare Providers	4	<i>My healthcare providers are willing to help me make decisions</i>	--	4.00-28.00	18.82 (5.91)
Multidimensional Scale of Social Support-Peer	4	<i>I have friends with whom I can share my joys and sorrows</i>	--	4.00-28.00	20.11 (5.48)
Multidimensional Scale of Social Support-Significant Other	4	<i>There is a special person in my life who cares about my feelings</i>	--	4.00-28.00	20.07 (6.54)
Multidimensional Scale of Social Support-Familial	4	<i>I get the emotional help and support I need from my family</i>	--	4.00-28.00	17.63 (6.89)
Life Orientation Test-Revised	6	<i>In uncertain times, I expect the best</i>	5-point scale ranging from “I disagree a lot” to “I agree a lot”	6.00-30.00	16.48 (5.72)
Hope Scale	8	<i>I energetically pursue my goals</i>	4-point scale ranging from “Definitely false” to “Definitely true”	8.00-32.00	23.16 (4.96)
Ways of Coping (Revised)-Avoidant coping	16	<i>Tried to forget the whole thing</i>	4-point scale ranging from “Not used” to “Used a great deal”	0-46.00	16.55 (11.79)

Table 2: cont.

Ways of Coping (Revised)- Facilitative Coping	18	<i>Talked to someone to find out more about the situation</i>	--	0-54.00	18.23 (13.10)
Trauma Symptom Checklist-40	40	<i>Feeling isolated from others</i>	4-point scale ranging from “Never” to “Often”	0-118.00	31.41 (25.38)
Satisfaction with Life Scale	5	<i>The conditions of my life are excellent</i>	7-point scale ranging from	5.00- 35.00	21.91 (7.56)

Gender Identity Questionnaire

Gender identity was assessed with the Gender Identity Questionnaire (Wilson, 2013). Participants were asked to indicate their gender identity in their own words, their assigned sex at birth, their current gender, and if they were born with an intersex condition. This questionnaire was developed by Wilson (2013) in response to recommendations from Sausa, Sevelius, Keatley, Iniguez, and Reyes (2009) and has been used with transgender and cisgender samples (Wilson, 2013).

Sexual Experiences Survey-Short Form Victimization (SES-SFV)

The SES-SFV assessed sexual assault experiences in adolescence and adulthood (Koss et al., 2007). The SES-SFV is a revised version of the original Sexual Experiences Survey (SES; Koss & Oros, 1982). The following unwanted sexual experiences are assessed: rape and non-rape (i.e., unwanted sexual contact, sexual coercion, attempted coercion, attempted rape, and completed rape). For the current analyses, individuals were categorized into their most severe experience on a six-point scale ranging from no contact to completed rape. The SES-SFV has shown adequate two-week test reliability with category match rates between 70%-73% (Johnson, Murphy, & Gidycz, 2017). The SES-SFV has also shown validity as demonstrated by significantly more events reported since age 14 than in the past year and has been shown to be related to trauma symptoms and sexual problems (Johnson et al., 2017). In the current sample, internal consistency of the SES was .98.

Verbal Violence Scale (VVS)

Psychological violence victimization since the age of 14 was assessed with the VVS (Wilson, 2013). Wilson (2013) adapted the VVS from the Index of Psychological Abuse (IPA; Sullivan & Bybee, 1999). The VVS contains eleven items that assess a range of verbally abusive behaviors. Items are responded to on a six-point scale ranging from “*Never*” to “*20+ times*” to create a total score. In the current sample, internal consistency of the VVS was .95.

General Violence Conflict Tactics Scale (G-CTS)

Physical violence victimization since the age of 18 was assessed using a modified version of the G-CTS (Stuart, Moore, Kahler, & Ramsey, 2003a). Respondents indicate the number of times they had experienced violence victimization from each of the following groups of people: adult friends, co-workers, bosses, adult friends, acquaintances, strangers, police officers, gang/groups of people, and other to create a total score. The G-CTS was modified in the current study to include romantic partners and family as well. The G-CTS has been used with adult men and women referred to batterer intervention programs (Stuart, Moore, Ramsey, & Kahler, 2003b; Stuart et al., 2003a). In the current sample, internal consistency of the G-CTS was .92.

Gender Minority Stress and Resilience Measure (GMSRM)

Proximal minority stress variables and resilience variables included in the Minority Stress Model were assessed with the GMSRM (Testa et al., 2015). The GMSRM has 58 items that comprise nine subscales, five of which were included in the current study: internalized transphobia, negative expectations for future events,

nondisclosure, community connectedness, and transgender identity pride. Higher scores indicate greater endorsement of that scale. The GMSRM has demonstrated divergent and convergent validity among transgender adults (Testa et al., 2015). Confirmatory factor analyses have supported a nine-factor model consistent with the subtests (Testa et al., 2015). In the current sample, internal consistency of the GMSRM subscales ranged from .78-.93.

Multidimensional Scale of Perceived Social Support (MSPSS)

The MSPSS was used to assess perceived social support from family, peers, healthcare providers, and online sources (Zimet, Dahlem, Zimet, & Farley, 1988; Zimet, Powell, Farley, Werkman, & Berkoff, 1990). The original MSPSS contains three subscales (family, peers, and significant others) that comprise twelve items. The family and peer supports subscales will be used in the current study. Higher scores indicate greater social support. The MSPSS was modified in the current study by adding two additional sources of support: healthcare providers and online sources. The MPSSS has shown construct validity as demonstrated by a negative correlation to depressive symptoms in university undergraduates (Zimet et al., 1988). Finally, confirmatory factor analyses have supported a three-factor model, consistent with the three subscales in the unmodified MPSS, in multiple samples (Zimet et al., 1988; Zimet et al., 1990). In the current sample, internal consistency MSPSS subscales ranged from .91-.96.

Life Orientation Test-Revised (LOT-R)

Generalized optimism was assessed with the LOT-R (Scheier, Carver, and Bridges, 1994). The LOT-R contains ten items (four items are “filler” items). Lower

scores indicate greater optimism. The LOT-R has shown discriminant and convergent validity, as demonstrated by its correlation (in the expected direction) with depression, coping, and acceptance, in a large undergraduate sample (Scheier et al., 1994).

Confirmatory and exploratory factor analyses have supported a one factor model (an optimism factor) in undergraduate and nationwide clinical samples (Scheier et al., 1994).

In the current sample, internal consistency of the LOT-R was .85.

Hope Scale (HS)

Hope was assessed with the HS (Synder et al., 1991). The HS contains twelve total items (with four filler items) that comprise two subscales: Agency (goal-directed determination) and Pathways (planning ways to meet goals). In the current study, only the total score was used. Higher scores indicate greater hope. The HS has demonstrated good test-retest reliability (Synder et al., 1991). For example, three-week test-retest reliability among undergraduates was 0.85 (Anderson, 1988). The HS has demonstrated divergent and convergent validity (e.g., correlation with optimism, $r = 0.60$; Gibb, 1990). Factor analyses have supported a two-factor structure (Synder et al., 1991). In the current sample, internal consistency of the HS was .87.

Ways of Coping (Revised) (WC-R)

Facilitative and avoidance coping were assessed with the WC-R (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). The WC-R contains 66 items that comprise eight subscales: Confrontive Coping, Distancing, Self-controlling, Seeking Social Support, Accepting Responsibility, Escape-Avoidance, Planful-problem Solving, and Positive Reappraisal. In the current study, respondents were asked to reflect on the

most distressing violence experience they endorsed on the VVS, G-CTS, or SES-SFV while answering questions. Respondents who have not experienced violence are asked to reflect on a recent stressful event while answering items. The WC-R subscales have been shown to be related to other measures of coping (e.g., Multidimensional Coping Inventory; r 's = -0.20-0.77; Endler & Parker, 1990). Budge and colleagues (2013) have used the WC-R with transgender and genderqueer individuals and found that a two-factor solution was the best fit to the data with the factors of facilitative and avoidance coping; these subscales also showed good internal consistency ($\alpha = 0.87$). Higher scores indicate greater use of facilitative and avoidance coping. In the current sample, internal consistency of the avoidant and facilitative coping subscales was .94 and .95, respectively.

Trauma Symptom Checklist-40 (TSC)

Trauma symptoms and psychological distress over the past two months were assessed with the TSC-40 (Briere & Runtz, 1989). The TSC-40 contains forty items that comprise a total score and six subscales (dissociation, anxiety, depression, sexual abuse trauma index, sleep disturbance, and sexual problems). In the current study, only the total score was used. Higher scores indicate increased trauma symptoms. The TSC-40 has demonstrated validity as scores on the scale are related to sexual abuse history (e.g., Elliot & Briere, 1992; Zlotnick et al., 1996). The total TSC-40 has also shown discriminant validity and convergent validity (e.g., lack of correlation to social support; Zlotnick et al., 1996). In the current sample, internal consistency of the TSC was .97.

Satisfaction with Life Scale (SWLS)

Psychological well-being was assessed with the SWLS (Diener, Emmons, Larsen, & Griffin, 1985). The SWLS is a brief measure of well-being with the inclusion of life satisfaction. The SWLS contains five items that comprise a total score. Higher scores indicate greater well-being. Test-retest reliabilities of the SWLS have ranged from 0.50 to 0.84 over four and five years (for a review, see McDowell, 2010 and Pavot & Diener, 2008). The SWLS has demonstrated correlations with other scales of well-being as well (r 's = 0.45-0.82) and factor analyses have typically identified a single factor (McDowell, 2010). In the current sample, internal consistency of the VVS was .91.

Procedure

Participants were recruited through Mechanical Turk. When they signed up for the study, participants were provided with a link to an online survey through the Mechanical Turk system. Participants read an electronic version of an informed consent form and indicated their understanding and consent by clicking a button to continue on to the survey. They were also able to print the informed consent form for their records. Participants then completed the Gender Identity Questionnaire. Participation was limited to those who self-identify as transgender. The participants who did not self-identify as transgender were informed that they did not qualify to complete the study. Participants who self-identified as transgender were asked to complete the following (in this order): the Demographics Questionnaire, Multidimensional Scale of Perceived Social Support, Gender Minority Stress and Resilience Measure, Life Orientation Test-Revised, Hope Scale, Trauma Symptom Checklist-40, Satisfaction with Life Scale, Verbal Violence

Scale, General Violence Conflict Tactics Scale, Sexual Experiences Survey – Short Form Victimization, and Ways of Coping-Revised. Attention checks were included in the surveys in order to ensure conscientious responding and English competency. After completing the online survey participants received debriefing text with researchers' contact information and a list of psychological resources that are available. Participants were compensated \$2.00 for their participation. The study was reviewed and approved by the Institutional Review Board at Ohio University.

RESULTS

Data Preparation

The initial sample consisted of 240 individuals who completed surveys. Nineteen individuals indicated that their assigned gender and current gender matched and thus were excluded from analyses. Twenty-eight individuals failed one or more of the attention checks and thus were excluded from analyses. Ipsative mean substitution was used to deal with missing data (Tabachnick & Fidell, 2007). For participants missing less than 20% of data on a given measure, their data point was replaced with the mean data point for that item of the sample. Less than 2% of the sample had data imputed. The final sample included 193 individuals who identified as transgender. All of these participants passed the validity checks included in the current study.

Descriptive Statistics

For sexual victimization, statistics reported indicate the most severe act/category experienced within each type of abuse. Twenty-three percent of individuals reported no sexual victimization experiences since age 14, 4% reported unwanted contact, 14% reported attempted coercion, 4% reported coercion, 6% reported attempted rape, and 49% reported completed rape as their most severe victimization. Eighty-nine percent of participants had experienced psychological aggression victimization since age 14. Sixty-five percent of individuals endorsed experiencing physical victimization since age 18. Descriptive statistics for study measures are included in Table 2 (See Appendix B for a table depicting correlations between study measures).

Inferential Statistics

In the following analyses, individuals were categorized into their most severe experience on a six-point scale ranging from no contact to completed rape. This is scoring method is consistent with research on sexual victimization utilizing the SES (e.g., Kelley & Gidycz, 2016). Analyses were conducted with the entire sample ($N = 193$), with the exception of the correlational analyses described in Aim 5, which were completed with only survivors of sexual violence ($n = 164$). In order to examine Aim 1 regarding moderated mediation in the Minority Stress Model, Structural Equation Modeling was used. Variables were mean-centered to reduce multi-collinearity (Aiken & West, 1991). Mplus 7 was used to test the fit of this model to the data. First, the fit of the model was examined. The goodness-of-fit chi-square statistic was used to provide a test of the hypothesized model; a non-significant chi-square statistic is desirable because it indicates that there is not a significant difference between the model and the data. Several goodness-of-fit indices were utilized in order to examine the fit of the model to the data, including the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error Approximation (RMSEA). Second, mediation was examined using maximum likelihood estimation bootstrapped (5,000 resamples) asymmetric confidence intervals (CIs; Preacher & Hayes, 2008). Point estimates were calculated; confidence intervals containing zero are not significant. Third, interaction effects were added individually to the model and examined separately. Significant interactions were examined at high (+1 standard deviation) and low (-1 standard deviation) levels (Aiken & West, 1991).

Initial results revealed acceptable goodness-of-fit indices, $\chi^2(2, N = 193) = 5.25, p = 0.07$; CFI = 0.99; TLI = 0.87; RMSEA = 0.09. The interaction term of transgender identity pride and transphobia was the only interaction that was significant when added to the model. The model continued to demonstrate acceptable goodness-of-fit indices when the interaction term of transgender identity pride and transphobia was added, $\chi^2(8, N = 193) = 7.25, p = 0.51$; CFI = 1.00; TLI = 1.09; RMSEA = 0.00 (See Figure 2). Sexual violence was related to transphobia ($B = 1.06, p < .001$) and trauma symptoms ($B = 3.62, p < .001$). Transphobia was related to trauma symptoms ($B = 0.78, p < .05$) and negative expectations for the future was related to trauma symptoms ($B = 0.64, p < .001$).

Transphobia mediated the relationship between sexual violence and trauma symptoms, (Point estimate = 0.83, 95% CI = 0.22-1.68). Transgender identity pride was related to well-being ($B = 0.49, p < .001$). The interaction term of transgender identity pride and transphobia was significantly related to well-being ($B = -0.02, p < .05$). However, when confidence intervals were examined at high (Point estimate = 0.10, 95% CI = -0.08 – 0.32) and low (Point estimate = -0.18, 95% CI = -0.42 – 0.03) levels of transgender identity pride, they were not significant. The model accounted for 32.0% of the variance in well-being and 34.8% of the variance in trauma symptoms.

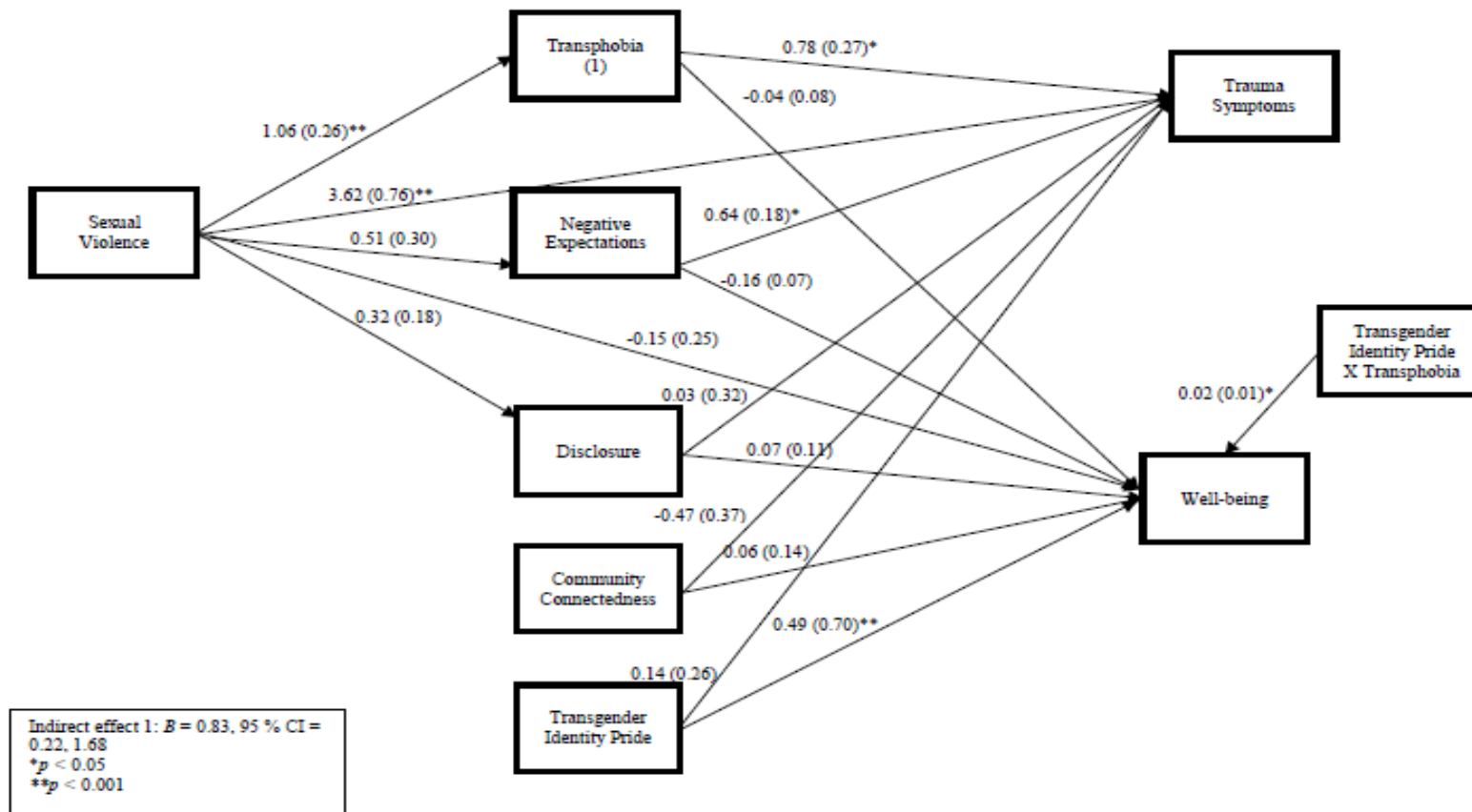


Figure 2. Model with Regression Weights.

In order to examine hypotheses on familial, peer, and healthcare provider social support, a fully saturated model (i.e., zero degrees of freedom), consisting of 45 parameters, was used to examine moderation in Amos 7.0 (See Figure 3). This was done primarily to offer a more conservative test of moderation. Because fully saturated models always produce a perfect fit to the data; therefore, model fit indices were neither examined nor reported. Variables were mean-centered to reduce multi-collinearity (Aiken & West, 1991). Regression coefficients allowed for comparison of the strength of different moderators. Interaction effects were examined with a three-step process. First, the direct effect of violence on resilience was examined. Second, the interaction effects of violence and the moderator variables were examined. Significant interactions were examined at high (+1 standard deviation) and low (-1 standard deviation) levels (Aiken & West, 1991). These procedures were also used to examine the following hypotheses on the moderating effects of online social support, hope and optimism, coping skills, and age.

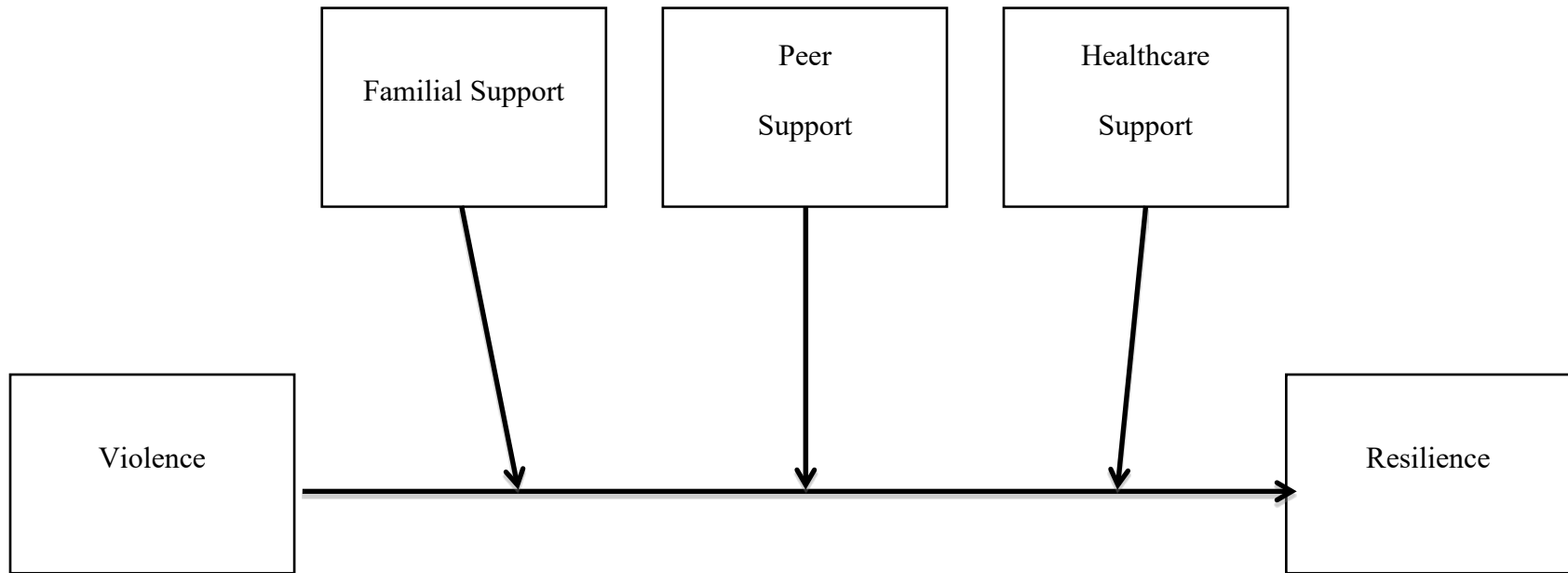
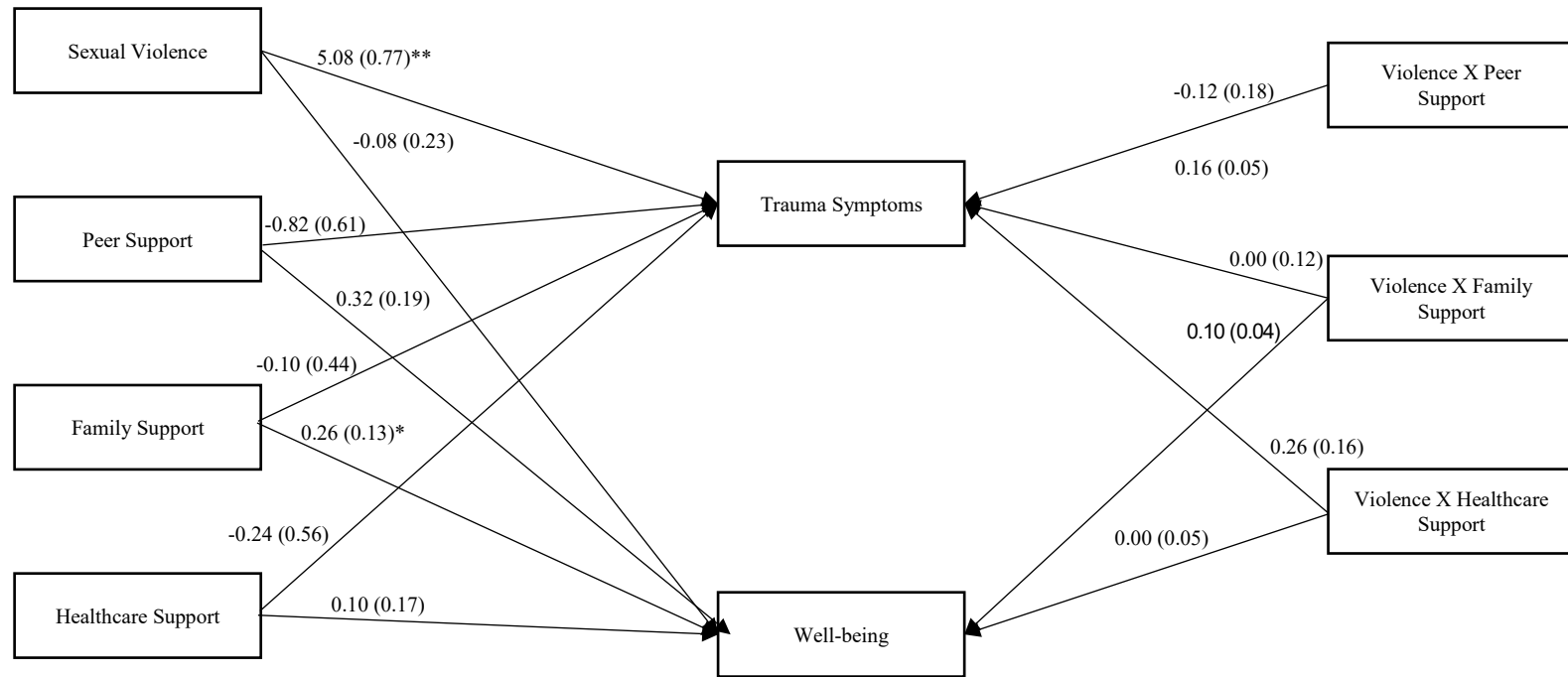


Figure 3. Proposed Model of Moderating Roles of Familial, Peer, and Healthcare Social Support Between Violence and Resilience

The model examining familial, peer, and healthcare provider social support accounted for 23.6% of the variance in well-being and 25.0% of the variance in trauma symptoms (See Figure 4). None of the interaction terms were significantly related to well-being or trauma symptoms (p 's > 0.05). Sexual violence was related to trauma symptoms ($B = 5.08, p < .001$) and familial social support was related to well-being ($B = 0.26, p < .05$).



* $p < 0.05$
 ** $p < 0.001$

Figure 4. Model with regression weights.

Because online social support has received less empirical attention in this population, it was examined separately. In order to examine the hypothesis regarding online social support, a fully saturated model (i.e., zero degrees of freedom), consisting of 15 parameters, was used to examine moderation in Amos 7.0 (See Figure 5). The model accounted for 9.7% of the variance in well-being and 21.9% of the variance in trauma symptoms (See Figure 6). None of the interaction terms were significantly related to well-being or trauma symptoms (p 's > 0.05). Sexual violence was related to trauma symptoms ($B = 5.05, p < .005$) and online support was related to well-being ($B = 0.36, p < .05$) and trauma symptoms ($B = -0.96, p < .05$).

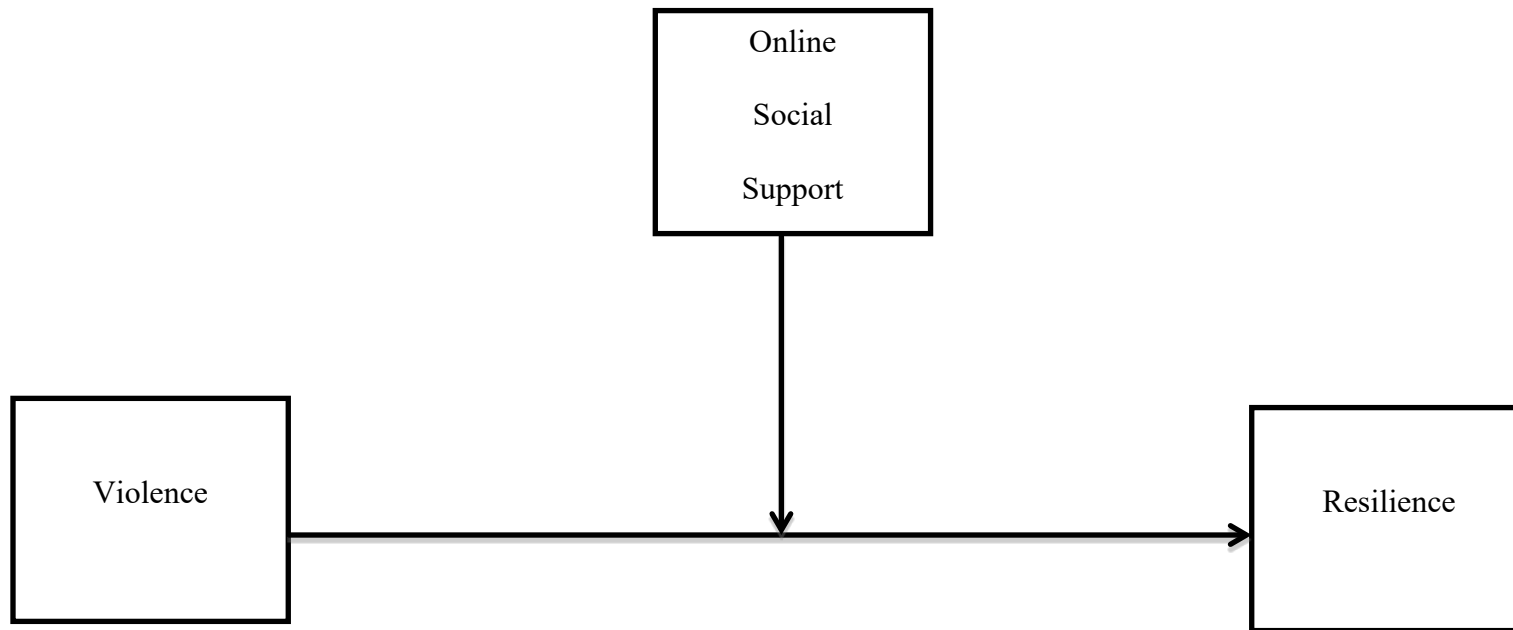
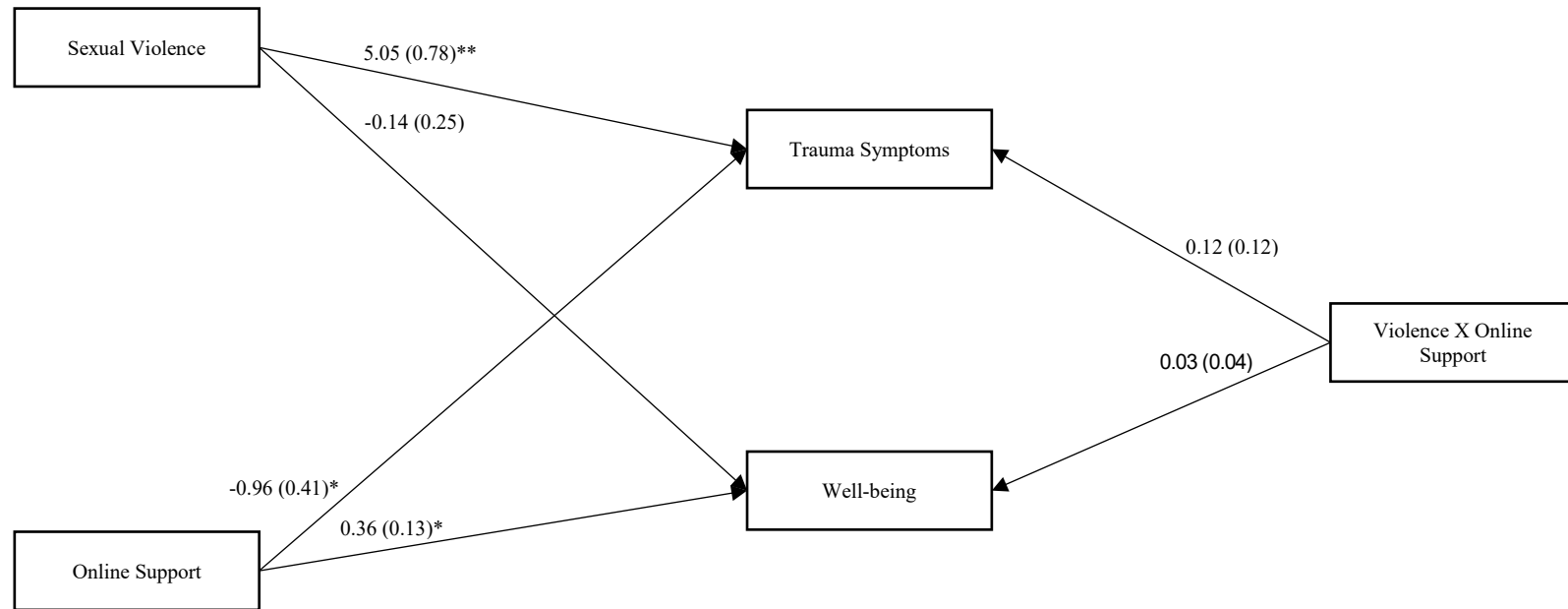


Figure 5. Proposed Model of Moderating Role of Online Social Support Between Violence and Resilience.



* $p < 0.05$
** $p < 0.001$

Figure 6. Model with Regression Weights.

In order to examine the hypotheses on hope and optimism, a fully saturated model (i.e., zero degrees of freedom), consisting of 28 parameters, was used to examine moderation in Amos 7.0 (See Figure 7). The model accounted for 42.0% of the variance in well-being and 30.8% of the variance in trauma symptoms (See Figure 8). None of the interaction terms were significantly related to well-being or trauma symptoms (p 's > 0.05). Sexual violence was related to trauma symptoms ($B = 4.47, p < .001$). In the current study, higher optimism scores indicated decreased optimism. Optimism was related to well-being ($B = -.51, p < .001$) and trauma symptoms ($B = 1.12, p < .05$). Hope was related to well-being ($B = 0.65, p < .001$).

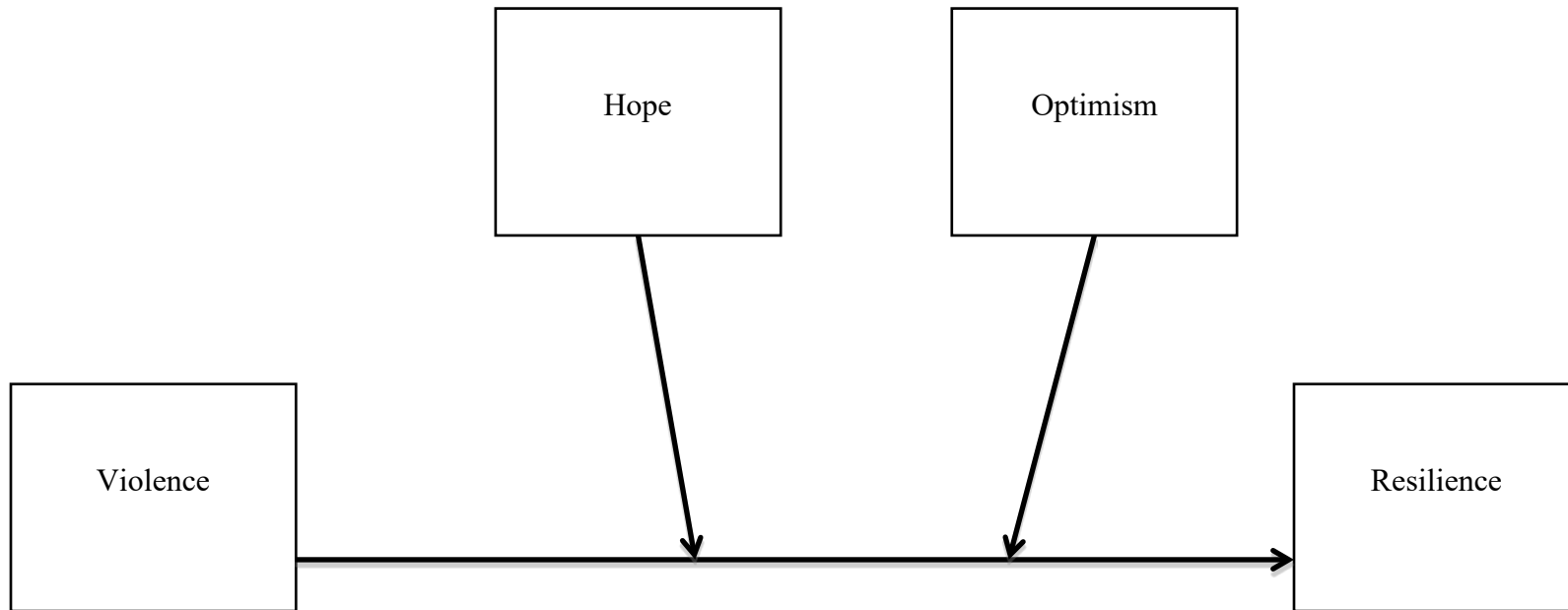


Figure 7. Proposed Model of Moderating Roles of Hope and Optimism Between Violence and Resilience.

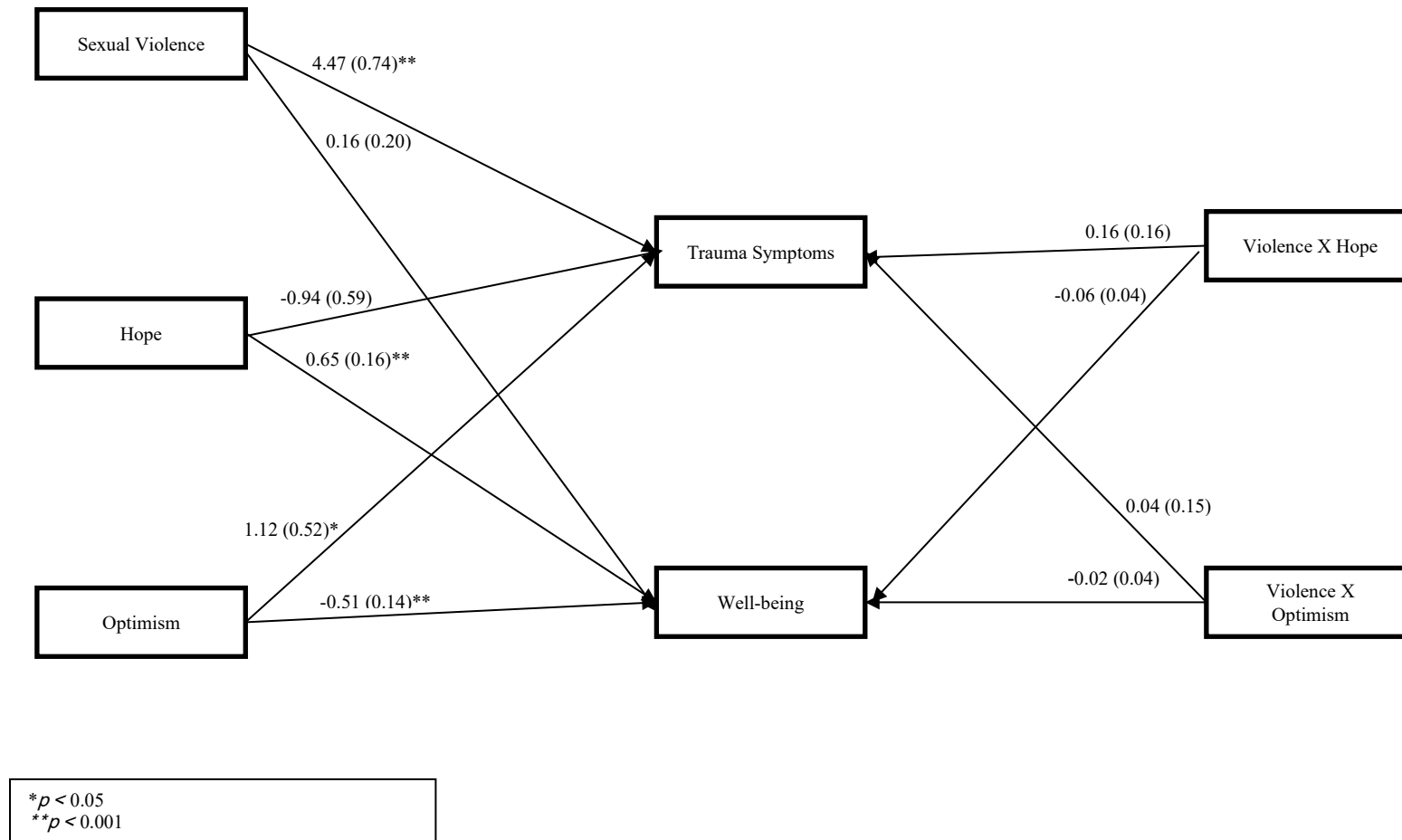


Figure 8. Model with Regression Weights.

In order to examine hypotheses on facilitative and avoidant coping, a fully saturated model (i.e., zero degrees of freedom), consisting of 28 parameters, was used to examine moderation in Amos 7.0 (See Figure 9). The model accounted for 15.2% of the variance in well-being and 35.0% of the variance in trauma symptoms (See Figure 10). None of the interaction terms were significantly related to well-being or trauma symptoms (p 's > 0.05). Sexual violence was related to trauma symptoms ($B = 2.30, p < .05$). Avoidant coping was negatively related to well-being ($B = -0.47, p < .001$) and positively related to trauma symptoms ($B = 1.22, p < .05$). Facilitative coping was positively related to well-being ($B = 0.30, p < .05$).

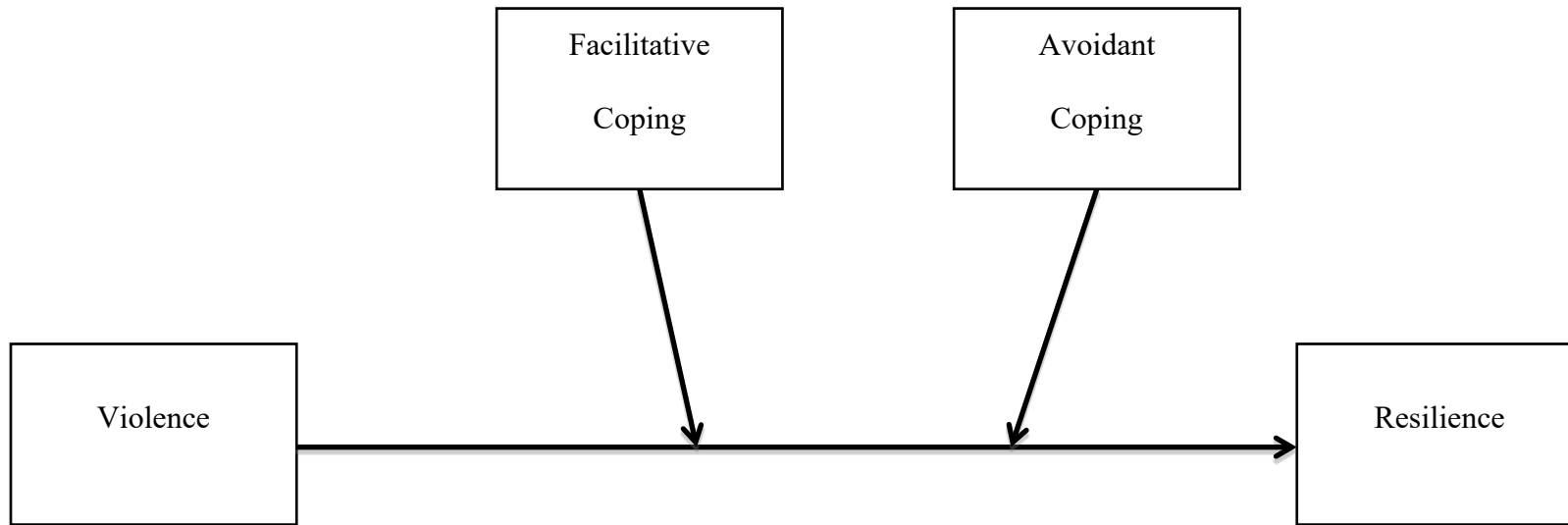


Figure 9. Proposed Model of Moderating Roles of Facilitative and Avoidant Coping Between Violence and Resilience.

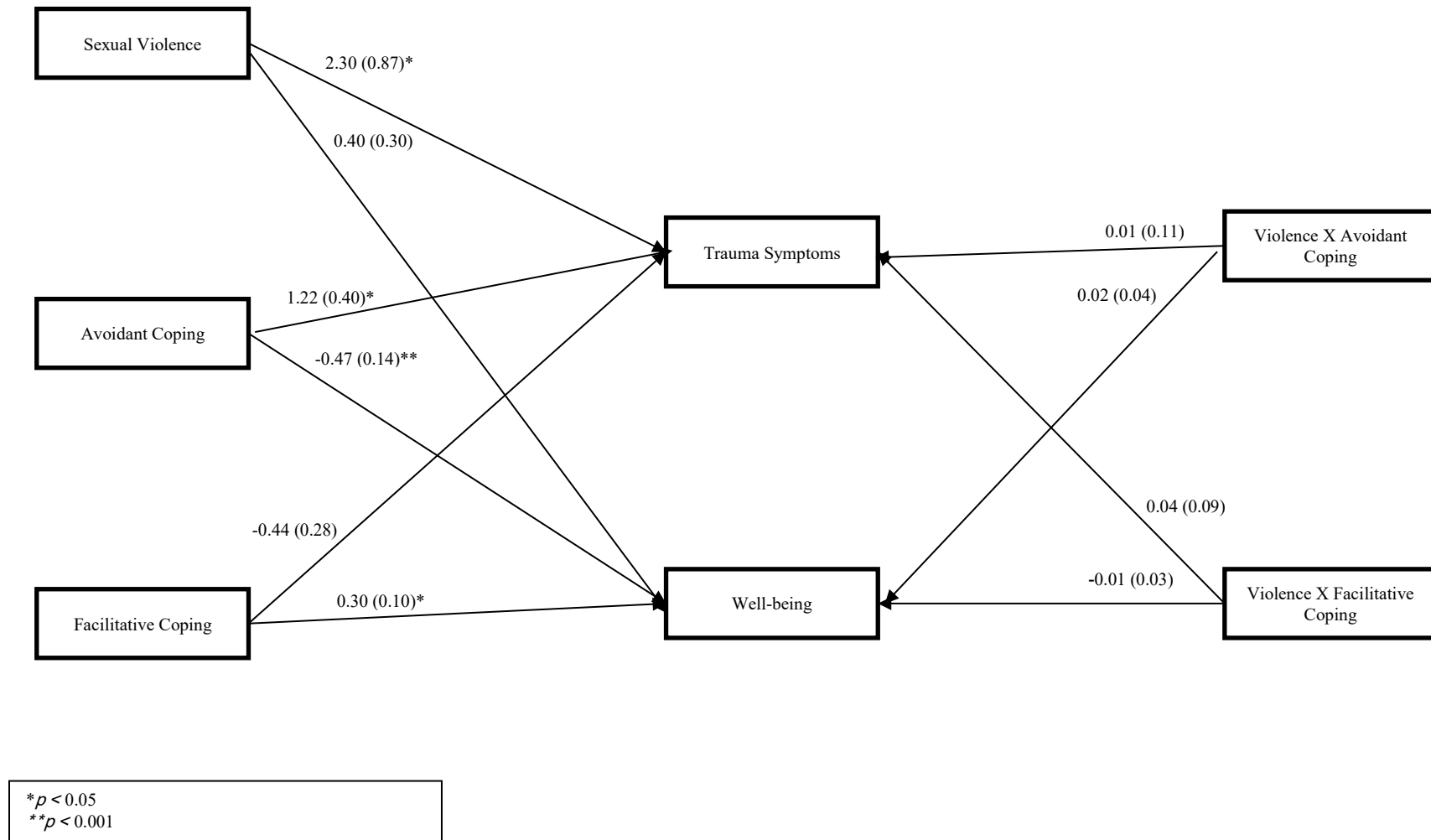


Figure 10. Model with Regression Weights.

In order to examine the hypotheses on age, membership in multiple minority groups, use of resilience factors, and outcomes, a correlation matrix with demographic/background variables (age, ethnicity, sexual orientation, and income), resilience factors (transgender identity pride, community connectedness, overall social support, hope, optimism, facilitative coping, and avoidant coping), well-being, and negative mental health outcomes was computed among survivors of violence ($n = 164$; See Table 3). Ethnicity was positively correlated with avoidant and facilitative coping, $r = 0.17$ and $r = 0.18$, $p's < .05$, respectively, such that being a person of color was related to increased avoidant and facilitative coping. Income was positively related to hope, familial social support, peer social support, and well-being; $r's = 0.19-0.28$, $p's < .05$. Income was negatively related to optimism scores, avoidant coping, and trauma symptoms; $r's = -0.16 - -0.23$, $p's < .05$. Age was positively related to income, hope, peer social support, online social support, healthcare provider support, and well-being; $r's = 0.15-0.25$, $p's < .05$. Age was negatively related to optimism and trauma symptoms, $r = -0.24$, $p < .05$ and $r = -0.20$, $p < .05$, respectively.

Table 3

Correlation Matrix Among Survivors of Violence

[illegible]

Table 3: cont.

16. Trauma Symptoms																--
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* $p < .05$, ** $p < .001$

Finally, in order to examine the hypothesis on the role of age as moderator in the relationship between sexual violence and negative mental health outcomes and well-being, a fully saturated model (i.e., zero degrees of freedom), consisting of 15 parameters, was used to examine moderation in Amos 7.0 (See Figure 11). The model accounted for 4.5% of the variance in well-being and 22.1% of the variance in trauma symptoms (See Figure 12). Sexual violence was related to trauma symptoms ($B = 5.08, p < .001$). Age was related to well-being ($B = 0.34, p < .05$) and trauma symptoms ($B = -0.96, p < .05$). The interaction term of age and violence was significantly associated with well-being ($B = -0.08, p < .05$). No other interactions were related to trauma symptoms or well-being. Thus, the age and violence interaction was probed at high and low levels of age. At higher age, violence was associated with decreased well-being ($B = -0.77, p < .05$). At lower age, sexual violence was no longer associated with well-being ($B = 0.31, p > .05$). Exploratory analyses were conducted to explore the relationship between age and sexual violence victimization frequency. Age was not related to frequency of sexual violence victimization in any category (all p 's $> .05$).

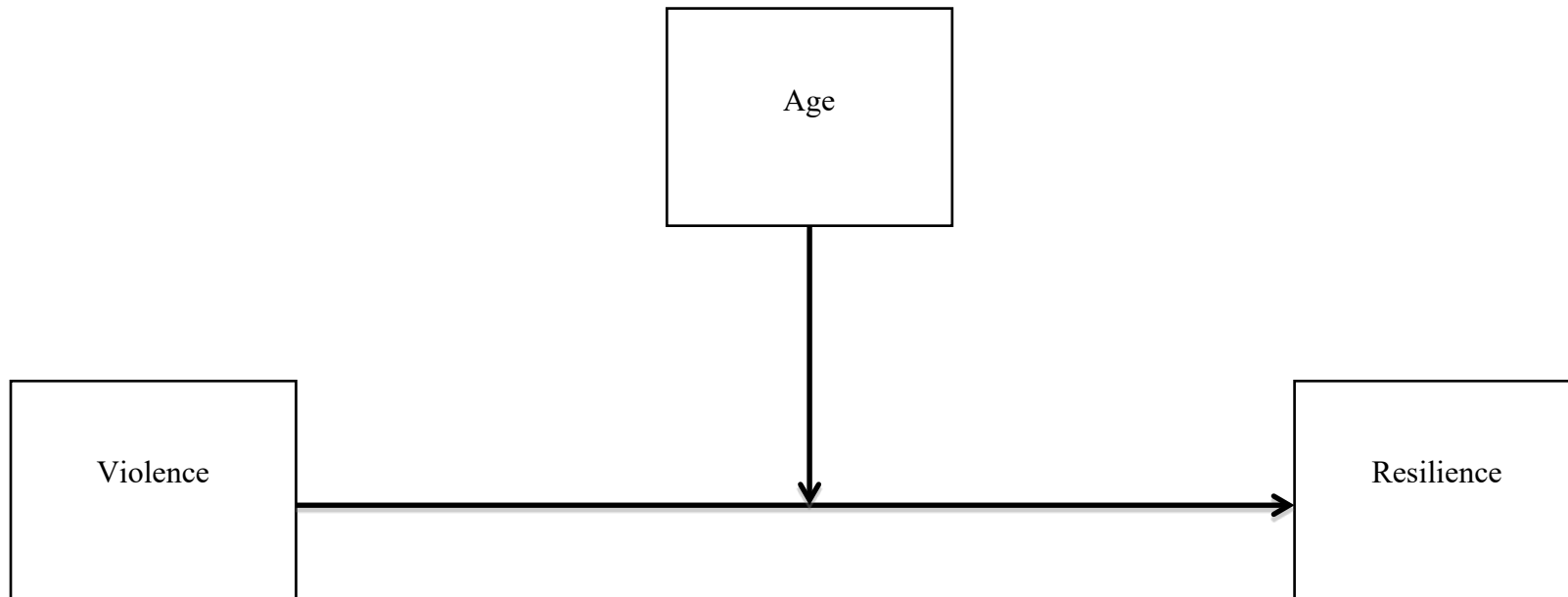
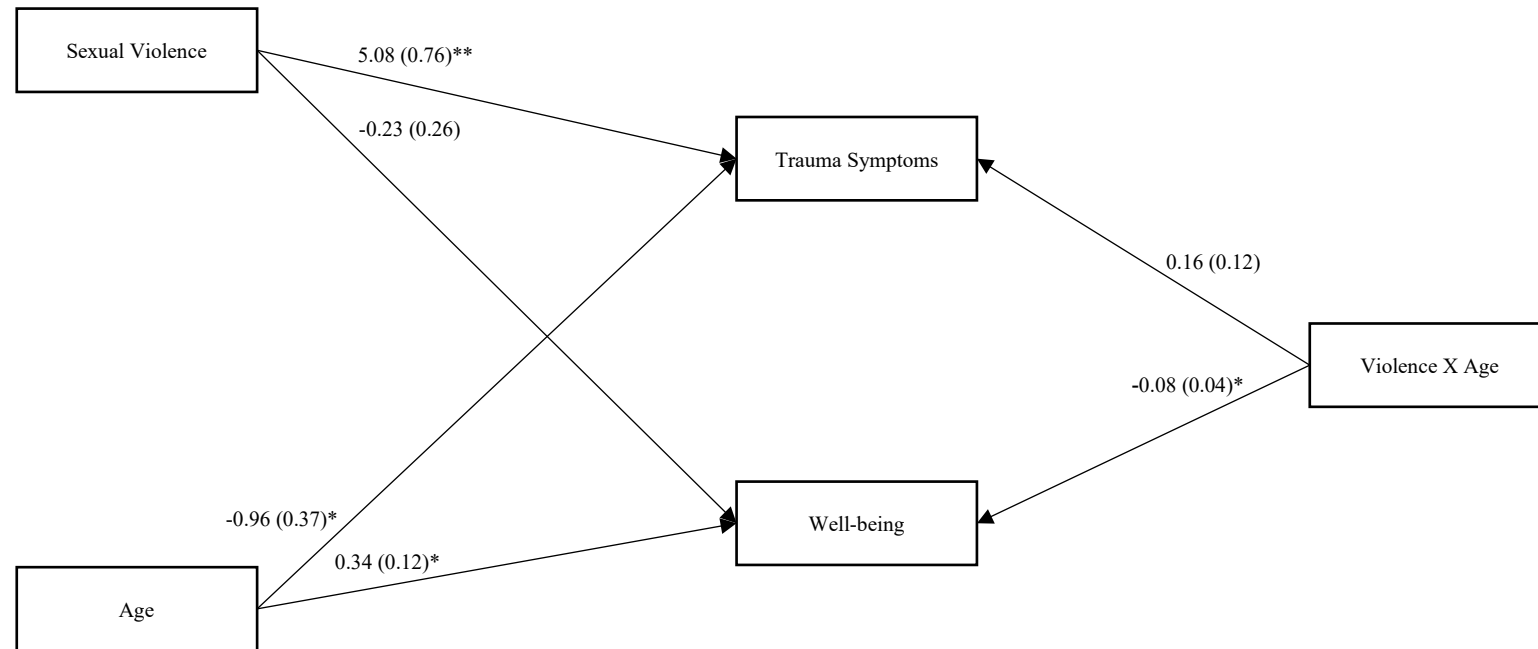


Figure 11. Proposed Model of Moderating Role of Age Between Violence and Resilience.



* $p < 0.05$
** $p < 0.001$

Figure 12. Model with Regression Weights.

DISCUSSION

The current study aimed to better understand resilience from violence in the transgender community and results from the current study underscore the need for this research. Specifically, high rates of sexual violence were documented: only 23% of participants reported no unwanted sexual experiences. Among those who reported a history of victimization, almost half (49%) indicated that their most severe experience had been rape. Although this is largely consistent with other research with transgender individuals (e.g., Clements-Nolle et al., 2006), this is incredibly troubling. Also consistent with previous research with cisgender and transgender victims of sexual violence (Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992; Wilson, 2013), experiencing sexual violence was found to be related to trauma symptoms across analysis in the present study.

As outlined in the Minority Stress Model as adapted for transgender individuals (Meyer, 2003; Henricks & Testa, 2012), internalized transphobia was found to mediate the relationship between sexual violence and trauma symptoms. This finding may be due to multiple reasons. First, Cook-Daniels and Munson (2010) suggested that transgender individuals may be targeted on the basis of their transgender identity. Specifically, results from their study with transgender individuals showed that between 55% and 89% of sexual violence survivors believed their assault was related to their gender identity or expression (Cook-Daniels & Munson, 2010). Thus, it appears possible that experiencing sexual violence that is perceived to be motivated by one's gender identity increases one's internalized transphobia. In addition, research has documented that sexual victimization

often first occurs at a young age in samples of transgender individuals (for a review see Stotzer, 2009). It is possible that experiencing sexual victimization during the developmental period of puberty could result in shame and thus increased internalized transphobia. Future research should further explore the impact of different abuse characteristics on transphobia. Overall, these findings suggest that clinicians may wish to pay particular attention to internalized transphobia among clients presenting with histories of violence. Of note, the other proximal stressors (negative expectations for the future and concealment) were not found to mediate this relationship. However, negative expectations for the future was directly related to trauma symptoms, suggesting that it may be an important clinical focus for all transgender individuals.

Overall, the current study failed to find support for the resilience factors suggested by the Minority Stress Model and previous research. First, the current study failed to document moderated mediation by the resilience factors (community connectedness and transgender identity pride) suggested by Testa and colleagues in their modified Minority Stress Model (2015). However, transgender identity pride was positively related to well-being. Of note, results showed that transphobia and transgender identity pride were correlated but did not suggest colinearity, indicating that they are distinct constructs. Thus, although the current study does not support transgender identity pride as a resilience factor from sexual violence, it appears that a focus on improving transgender identity may be helpful for many transgender individuals. Second, community connection was found to be related to well-being and trauma symptoms in correlational analyses among trauma survivors but not when examined simultaneously

with other minority stress variables in structural models. This is inconsistent with both qualitative and quantitative research (Bockting et al., 2013; Higa et al., 2012). It is possible that community connection serves as a resilience factor for other types of violence but not sexual violence. Given that research has shown that some transgender survivors of violence report discrimination from formal support services (for reviews see Nadal, Davidoff, & Fujii-Doe, 2014 and Seelman, 2015), transgender victims may be less likely to disclose sexual violence victimization to their peers because of anticipation of future discrimination and thus receive less support. Future research should examine disclosure rates to informal support services among transgender survivors of violence. It is also plausible that these relationships may be more complex. Specifically, recent research showed that community belongingness (similar to community connectedness) served as a mediator between transgender identity pride and well-being (Barr, Budge, & Adelson, 2016). Future research should explore the role of community connectedness on the relationship between transgender identity pride and trauma symptoms in order to inform clinical practice.

The current study also failed to find support for differing forms of social support as moderators of the relationship between sexual violence and resilience in the current sample. This is inconsistent with previous research with cisgender survivors of intimate partner violence that found that social support moderated the relationship between abuse history and quality of life (Beeble, Bybee, Sullivan, & Adams, 2009). However, the current study did document direct relationships. Similar to what has been found in the general population (Cohen & Wills, 1985), familial social support was found to be related to

well-being among transgender individuals. This is also consistent with both qualitative and quantitative research with transgender individuals (DiFulvio, 2014; Davey, Bouman, Arcelus, & Meyer, 2014). It is also important to note that peer social support was not found to be related to well-being in the presence of familial social support, suggesting that social support from one's family is especially important in this population. These findings appear to be meaningful, especially when considering that many transgender individuals report significantly less social support than their cisgender peers (Boza & Nicholson Perry, 2014). Future research is needed to understand how familial social support impacts well-being in this population. For example, future research could explore the impact of support from different family members or support regarding one's transgender identity on mental health outcomes and well-being. Interestingly, previous research suggests that demographic variables may play a role in social support. Specifically, Nemoto, Bodeker, and Iwamoto (2011) found that familial social support was higher among African American and Asian/Pacific Islanders than Latino and White individuals in their study with transgender individuals with histories of sex work. Thus, research that pays attention to diversity is needed when examining the role of familial social support.

Although findings on the impact of seeking social support online on mental health outcomes is inconsistent in the general population (e.g., Rains & Young, 2009; Shensa, Sidani, Lin, Bowman, & Primack, 2015), online support was also found to be related to both increased well-being and decreased trauma symptoms in the current study. These findings are timely, given that limited research has suggested that new technology may

increase access to social support (e.g., Ybarra, Mitchell, Palmer, & Reisner, 2015). In contrast, limited research with cisgender individuals has found that receiving support online was related to decreased well-being (van Ingen, Utz, & Toepoel, 2016). Thus, further research is needed to better understand these relationships in the transgender community. For example, a recent qualitative study with transgender individuals found that individuals sought out online support for multiple reasons, including maintaining existing transgender friendships, forming new friendships, and sharing resources (Metthe, 2016). Future research should examine the impact of differing forms of online support and examine online support as a mechanism to increase community connectedness. In contrast and inconsistent with qualitative research (Moody et al., 2015), the current study failed to find relationships between healthcare provider support and trauma symptoms or well-being. However, it appears likely that type of healthcare provider support is important. For example, a recent study examined perceived comfort of the healthcare provider with an individual's sexual identity among transgender and gender non-conforming individuals (Stanton, Ali, & Chaudhuri, 2017). Results showed that the perceived comfort of a healthcare provider was associated with well-being. Thus, future research should further assess whether increased education and awareness programming for healthcare providers may be necessary.

In addition, the current study did not document moderating roles of hope or optimism in the relationships between sexual violence and well-being or trauma symptoms. This is inconsistent with past research with cisgender survivors of violence (e.g., Hirsch, Wolford, LaLonde, Brunk, & Morris, 2007) and qualitative research with

transgender individuals (Singh & McKleroy, 2010). Optimism scores reported in the current study do not appear to vary greatly from scores reported in psychometric studies (Burke, Joyner, Czech, & Wilson, 2000) and hope scores appear to be similar to those reported by a stress center sample (Snyder et al., 1991). However, increased optimism was found to be related to increased well-being and decreased trauma symptoms. This is consistent with prospective research showing that optimism was related to increased well-being (for a review see Carver, Scheier, & Sergerstrom, 2010). On the other hand, hope was only found to be related to well-being. Overall, these findings suggest both hope and optimism are important areas of clinical focus for transgender individuals. Research also suggests that hope may impact the relationships between coping and psychological distress among trauma survivors. Specifically, among survivors of Hurricane Katrina, the relationship between avoidant coping and psychological distress was found to be slightly stronger at lower levels than at higher levels of hope (Glass, Flory, Hankin, Kloos, & Turecki, 2009). Thus, further research may be helpful in determining how hope may impact coping among transgender survivors of sexual violence.

Regarding coping, the current study again failed to document moderation. However, findings showed that avoidant coping was associated with increased trauma symptoms, consistent with previous research with transgender and cisgender survivors of violence (Budge et al., 2013; Ullman et al., 2007). The current study also showed that increased avoidant coping was related to decreased well-being. In contrast, facilitative coping was found to be related to well-being but not trauma symptoms. It is currently

unclear why facilitative coping was not found to be related to decreased trauma symptoms, as many trauma treatments often involve directly confronting trauma-related cognitions and stimuli (e.g., Resick & Schnicke, 1992). It is possible that the current study's assessment of facilitative coping was not an accurate measure, as it was modified in a previous study (Budge et al., 2013) and thus has not been widely used. In addition, scores of avoidant and facilitative coping in the current study appear to be less than reported in previous studies with transgender individuals (i.e., avoidant coping total 16.55 versus 34.12; Budge et al., 2013). Thus, it is possible that participants in the current study engaged in less coping overall than other samples of transgender individuals. Further research is needed to better understand the role of coping in transgender individuals who have experienced sexual victimization. Although not specific to violence, limited research does suggest that avoidant coping may play a role in the impact social support has on mental health in this population. Specifically, Budge and colleagues (2013) found that social support was both directly and indirectly related to psychological distress through avoidant coping among transgender individuals. It is also possible that coping plays a mediating, rather than moderating, role in the relationship between violence and resilience. Specifically, a recent study with transgender individuals showed that coping mediated the relationship between violence (a latent variable comprised of six forms of victimization) and depressive symptoms (Hughto, Pachankis, Wille, & Reisner, 2017). Further research is needed to better understand these complex relationships.

Age was the only variable examined in the current study that was found to act as a moderator between experiences of sexual violence and well-being. More specifically, the

current study found that the relationship between sexual violence and well-being was present among older individuals but not among younger individuals (in study analyses, older participants were classified in their late thirties and younger participants were in their early twenties), suggesting that older age was related to less resilience. Previous research (Nuttbrock et al., 2010) examined the relationship between mental health (i.e., depression) and violence at differing ages and found that it was strongest in adolescence and then decreased. However, they did not examine the relationships between violence and well-being at different ages. This discrepancy is consistent with Bariola and colleagues' (2015) suggestion that the predictors of pathology and well-being differ. It is currently unclear why the impact of sexual violence on well-being was only documented among older individuals. It is possible that younger individuals utilize more coping skills not assessed in the current study, although this appears unlikely after considering the current study's correlation findings reported below. Exploratory analyses also failed to show that older individuals reported more acts of sexual violence, which could have driven these findings. It should be noted that research has shown that samples recruited from Mechanical Turk are often younger (for a review, see Chandler & Shapiro, 2016). Thus, results may be different when examined in a sample with a greater age range. In sum, further research is needed to better understand and replicate the moderating role of age on the relationship between sexual violence victimization and well-being in transgender individuals.

In contrast, the current study found bivariate correlations between older age and increased hope, optimism, peer social support, online social support, healthcare provider

support, and well-being; and older age and decreased trauma symptoms among survivors of sexual violence. This is consistent with previous research which documented negative relationships between age and suicidality (Clements-Nolle et al., 2006) and psychological distress (Bariola et al., 2015) among transgender individuals and assertions made by researchers (i.e., Nuttbrock et al., 2010) that resilience is something that is formed over a lifetime. Among trauma survivors, bivariate relationships were also documented between demographic variables and the potential resilience factors examined in the current study. Specifically, being a person of color was associated with greater avoidant and facilitative coping. This is consistent with Meyer's (2003) assertion that being of a minority status involves experiencing greater minority stress, and thus requiring greater use of coping. Income was also found to be positively related to hope, social support (family, significant other, and peer), well-being, and optimism; and negatively related to avoidant coping and trauma symptoms. This is consistent with previous research with cisgender and transgender populations (e.g., Diener, Sandvick, Seidlitz, & Diener, 1993; Lombardi, 2009). It is possible that individuals with greater income have greater access to both formal and informal support services. Thus, clinicians may wish to pay particular attention to those clients reporting lower incomes and consider utilizing wrap-around services. In contrast to past research (Wilson, 2013), sexual orientation was not shown to be related to other variables in the current study, when examined in correlational analyses with trauma survivors. It is possible that quickly changing societal beliefs and social support of LGB individuals are responsible for this finding.

Although the current study did not find support for the resilience variables suggested by the literature, it did provide further information on variables correlated with well-being and trauma symptoms in the transgender population and suggest areas of focus for clinicians. Of note, researchers have commented on the paucity of research on well-being in the transgender community (Stanton et al., 2017). Examination of the correlates of well-being are important, as research has shown that transgender men report decreased quality of life compared to male and female norms (Newfield, Hart, Dibble, & Kohler, 2006). Even more, researchers have cautioned against combining transgender individuals in with sexual minority individuals in research (e.g., dickey, Hendricks, & Bockting, 2016; Kwon, 2013) and this highlights the need for research that examines well-being in the transgender population specifically. The current study found that increased well-being was related to increased age and greater community connectedness, consistent with previous research (Stanton et al., 2017). Unique to this study, increased well-being was also associated with increased transgender identity pride, hope, optimism, familial social support, online social support, facilitative coping; and decreased avoidant coping. The current study also provides further information on trauma symptoms in the transgender population. This is important given that a recent article in the *Lancet* noted that research on the correlates of post-traumatic stress disorder or traumatic stress in the transgender population is currently lacking and criticized previous research for utilizing unvalidated measures of violence (Reisner et al., 2016). In sum, the current study found that trauma symptoms were positively related to negative expectations for the future, transphobia, and avoidant coping; and negatively related to online social support,

optimism, and older age. Overall, findings from the current study suggest areas of clinical focus for mental healthcare providers working with transgender individuals.

Results from the current study should be interpreted in light of certain limitations. Individuals in the current study were recruited online and study results may not generalize to other populations. As mentioned above, participants recruited from Mechanical Turk are often younger (Chandler & Shapiro, 2016). However, researchers have called for recruitment strategies other than sampling from those seeking gender reassignment surgery (e.g., Kuper, Nussbaum, & Mustanski, 2012). In addition, the majority of the sample identified as Caucasian. Although the current study found that identifying as a person of color was associated with greater avoidant and facilitative coping among trauma survivors, larger and more diverse samples are needed to replicate these findings. Future studies could consider utilizing multiple sampling strategies. Even more, the current study did not further examine the impact of specific gender identities on resilience (e.g., genderqueer, MTF). This is important as previous research has suggested that individuals who identify as non-binary report greater depression (for a review, see Bockting et al., 2016). The current study also failed to include the impact of living in one's preferred gender. For example, MTF-spectrum individuals report being less likely to be living in their preferred gender (Scheim & Bauer, 2015). Future research should examine the impact of gender identity and satisfaction with one's appearance on experience of violence and resilience among transgender individuals. Finally, in analyses, individuals were categorized according to their most severe sexual victimization experience. Although this scoring method is commonly used in the field (e.g., Kelley &

Gidycz, 2016), it does not account for recency or frequency of victimization. Future research should examine how these variables may influence resilience from sexual violence in this population. As mentioned above, the current study provides information on the variables related to well-being and trauma symptoms in the transgender community. Importantly, findings from the current study underscore the need for further research examining resilience from sexual violence in the transgender community. In addition, the current study failed to find support for the resilience factors from sexual violence suggested by both theory and recent research. Thus, the current study cannot make suggestions on which specific variables may be helpful for transgender survivors of violence. It appears possible, that given the high rates of discrimination and stigma directed towards this population (e.g., White Hughto, Reisner, & Pachankis, 2015), the resilience factors identified in this study were not sufficient to overcome the burden of violence. Even more, it seems very likely that individual-level resilience factors are not sufficient and structural-level changes are necessary to facilitate well-being in this population. For example, a study with LGBTQ students found that students who attended schools with comprehensive bullying and harassment policies were less likely to experience victimization and victims were more likely to report victimization (Kosciw, Greytak, Giga, Villenas, & Danischewski, 2016). Even more, some research has suggested that inclusive laws may positively benefit the well-being and mental health of transgender individuals. For example, Blosnich and colleagues (2016) compared rates of mental health diagnoses among transgender veterans diagnosed with gender identity disorder in states who included or did not include transgender identity in employment

nondiscrimination laws and hate crime laws. Results showed that transgender individuals from states that included transgender identity in employment nondiscrimination laws were less likely to report mood disorders and self-directed violence. Although this research is limited, it is possible that individual-level variables have a smaller impact than structural- or macro-level variables. Thus, researchers should expand the focus of their research to include the impact of national and state wide policies in addition to individual level variables in order to best understand the factors that contribute to resilience in the transgender population.

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APPENDIX A: STUDY MEASURES

Demographics Questionnaire

1. What is your age in years? _____

2. Are you Spanish/Hispanic/Latino? Mark the “no” box if not Spanish/Hispanic/Latino?
 - A. No, not Spanish/Hispanic/Latino
 - B. Yes, Mexican, Mexican Am., Chicano
 - C. Yes, Puerto Rican
 - D. Yes, Cuban
 - E. Yes, other Spanish/Hispanic/Latino (Please Specify): _____
 - F. Decline to State

3. What is your race/ethnicity? You may mark one or more to indicate what you consider yourself to be.
 - A. White
 - B. Black, African American
 - C. American Indian or Alaska Native
 - D. Native Hawaiian
 - E. Guamanian or Chamorro
 - F. Samoan
 - G. Other Pacific Islander (Please Specify): _____
 - H. Asian Indian
 - I. Chinese
 - J. Filipino
 - K. Japanese
 - L. Korean
 - M. Vietnamese
 - N. Other Asian (Please Specify): _____
 - O. Other Race (Please Specify): _____
 - P. Biracial or multiracial
 - Q. Decline to State

4. What is your religious affiliation?
 - A. Christian
 - B. Muslim
 - C. Jewish
 - D. Hinduism
 - E. Other (Please Specify): _____
 - F. Atheist
 - G. Decline to State

5. What is your current relationship status (select all that apply)?
- A. Single
 - B. Married
 - C. Civil union/Domestic partnership
 - D. Partnered in monogamous relationship, but not married, in a civil union, or domestic partnership
 - E. Partnered in an open relationship
 - F. Engaged
 - G. Divorced/separated
 - H. Cohabiting
 - I. Widowed
 - J. Other (Please Specify): _____
6. What is the highest grade (or year) of degree you have completed? (Check one.)
- A. 7th grade or less
 - B. Junior high school (8th or 9th grade)
 - C. Partial high school (10th or 11th grade)
 - D. High school diploma or GED
 - E. Associate's degree
 - F. Bachelor's degree
 - G. Master's degree (e.g. MA, MS, Med, MBA)
 - H. Doctoral degree (e.g. PhD, MD)
7. Which of the following best describes your current main daily activities and/or responsibilities?
- A. Working full time
 - B. Working part-time
 - C. Unemployed or laid off
 - D. Looking for work
 - E. Keeping house or raising children full-time
 - F. Retired
 - G. Disabled/SSI
8. Which of these categories best describes your total combined family income for the past 12 months? This should include income (before taxes) from all sources, wages, rent from properties, social security, disability and/or veteran's benefits, unemployment benefits, workman's compensation, help from relatives (including child payments and alimony), and so on.
- _____ Less than \$5,000

- _____ \$5,000 through \$11,999
- _____ \$12,000 through \$15,999
- _____ \$16,000 through \$24,999
- _____ \$25,000 through \$34,999
- _____ \$35,000 through \$49,999
- _____ \$50,000 through \$74,999
- _____ \$75,000 through \$99,999
- _____ \$100,000 and greater
- _____ Don't know
- _____ No response

9. In what Country do you reside? _____

10. If from the United States, select which region you reside in:

- A. Northeast
- B. Southeast
- C. South
- D. Midwest
- E. Southwest
- F. Northwest

11. Please briefly define your sexual orientation identity: _____

12. During the past 12 months, have you had sex with:

- A. Only biological women
- B. Only biological men
- C. Both biological women and men
- D. Only transwomen
- E. Only transmen
- F. Both transwomen and transmen
- G. Biological men and women and transwomen and transmen
- H. Androgynous individuals/Genderqueer individuals
- I. None (asexual)

13. Do you consider yourself to be:

- A. Asexual
- B. Heterosexual or straight
- C. Gay or lesbian
- D. Bisexual
- E. Pansexual
- F. Additional category (Please Specify): _____
- G. I haven't had sex in the past 12 months
- H. Additional category (Please Specify): _____

14. People are different in their sexual attraction to other people. Which best describes your feelings? Are you...

- A. Only attracted to biological women
- B. Mostly attracted to biological women
- C. Only attracted to biological men
- D. Mostly attracted to biological men
- E. Equally attracted to biological women and biological men
- F. Only attracted to transwomen
- G. Mostly attracted to transwomen
- H. Only attracted to transmen
- I. Mostly attracted to transwomen
- J. Equally attracted to transwomen and transmen
- K. Mostly attracted to androgynous individuals/Genderqueer individuals
- L. Only attracted to androgynous individuals/Genderqueer individuals
- M. Not sure
- N. None (asexual)
- O. Additional category (Please Specify): _____

GID

1. Please briefly define your gender identity.
2. What is your current gender? (Check all that apply)
 - A. Man
 - B. Woman
 - C. Transman
 - D. Transwoman
 - E. Genderqueer
 - F. Additional Category (Please Specify): _____
 - G. Decline to State
3. What sex were you assigned at birth?
 - A. Male
 - B. Female
 - C. Decline to State
4. Were you born with an intersex condition?
 - A. No
 - B. Yes

SES-SFV

The following questions concern sexual experiences that you may have had that were unwanted. We know that these are personal questions, so we do not ask your name or other identifying information. Your information is completely confidential. We hope that this helps you to feel comfortable answering each question honestly. Place a check mark in the box (□) showing the number of times each experience has happened to you. If several experiences occurred on the same occasion—for example, if one night someone told you some lies and had sex with you when you were drunk, you would check both boxes a and c. **"Since age 14"** refers to your life starting on your 14th birthday and stopping today.

	Sexual Experiences	How many times in the since age 14?			
1.	Someone fondled, kissed, or rubbed up against the private areas of my body (lips, breast/chest, crotch or butt) or removed some of my clothes without my consent (<i>but did not attempt sexual penetration</i>) by:	0	1	2	3+
	a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c. Taking advantage of me when I was too drunk or out of it to stop what was happening.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d. Threatening to physically harm me or someone close to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Someone had oral sex with me or made me have oral sex with them without my consent by:	0	1	2	3+
	a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	c. Taking advantage of me when I was too drunk or out of it to stop what was happening.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d. Threatening to physically harm me or someone close to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	If you were assigned male sex at birth and/or identify as MTF and have not had bottom surgery, check this box and skip to item 4. A man put his penis into my vagina, or someone inserted fingers or objects without my consent by:	0	1	2	3+
	a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c. Taking advantage of me when I was too drunk or out of it to stop what was happening.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d. Threatening to physically harm me or someone close to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	A man put his penis into my butt, or someone inserted fingers or objects without my consent by:	0	1	2	3+
	a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c. Taking advantage of me when I was too drunk or out of it to stop what was happening.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d. Threatening to physically harm me or someone close to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Even though it did not happen, someone TRIED to have oral sex with me, or make me have oral sex with them without my consent by:	0	1	2	3+
	a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.				
	b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c. Taking advantage of me when I was too drunk or out of it to stop what was happening.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d. Threatening to physically harm me or someone close to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	If you were assigned male sex at birth and/or identify as MTF and have not had bottom surgery, check this box and skip to item 7. Even though it did not happen, a man TRIED to put his penis into my vagina, or someone tried to stick in fingers or objects without my consent by:	0	1	2	3+
	a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c. Taking advantage of me when I was too drunk or out of it to stop what was happening.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d. Threatening to physically harm me or someone close to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Even though it did not happen, a man TRIED to put his penis into my butt, or someone tried to stick in objects or fingers without my consent by:	0	1	2	3+
	a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c. Taking advantage of me when I was too drunk or out of it to stop what was happening.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	d. Threatening to physically harm me or someone close to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thinking about the above sexual experiences collectively:

1. Have you ever been raped?
 - a. Yes
 - b. No
2. How frequently have the above occurred in the past year?
 - a. Never
 - b. Sometimes
 - c. Once or twice a month
 - d. Once a week
 - e. Several times a week
 - f. Everyday
 - g. Not in the past year, but it did happen before
 - h. Never happened
3. How often to you feel these sexual experiences have occurred because of your gender identity?
 - a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Always
 - f. I had no experiences
4. The person/people who did this to you was/were most often
 - A. stranger
 - b. A person you knew (neighbor, friend, acquaintance, co-worker, etc.)
 - c. An immediate family member (mother, father, or sibling)
 - d. An extended family member (aunt, uncle, cousin, or grandparent)
 - e. An intimate partner (sexual partner, committed partner, spouse)
 - f. Don't know
 - g I had no experiences
5. The gender of the person/people who did this to you most often was?
 - a. Man
 - b. Woman
 - c. Transgender man
 - d. Transgender woman
 - e. Don't know
 - f. I had no experiences

6. How often have you been physically injured from these incidents?
 - a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Always
 - f. I had no experiences
7. If you were injured, how often did your injuries require medical treatment?
 - a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Always
 - f. I had no experiences
8. How often did you report these incidents to the police?
 - a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Always
 - f. I had no experiences

VVS

Since the age of 14 how many times has another adult or group of adults done the following to you:

	How many times since age 14?					
	Once	2-5 times	6-10 times	11-20 times	20+ times	Never
1. Refused to talk to you?						
2. Called you names?						
3. Tried to humiliate you?						
4. Ridiculed or criticized you in public?						
5. Ridiculed or insulted your beliefs?						
6. Ridiculed or insulted an aspect of your identity?						
7. Criticized your intelligence?						
8. Criticized your physical appearance and/or sexual attractiveness?						
9. Threatened to hurt you?						
10. Threatened to hurt your family or friends?						
11. Harassed your family or friends in some way?						

Thinking about the list of experiences you just completed

1. How frequently have the above occurred in the past year?
 - a. Never
 - b. Sometimes
 - c. Once or twice a month
 - d. Once a week
 - e. Several times a week

- f. Everyday
 - g. Not in the past year, but it did happen before
 - h. Never happened
2. How often to you feel these events have occurred because of your gender identity?
- a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Always
 - f. I had no experiences
3. The person/people who did this to you was/were most often?
- a. A stranger
 - b. A person you knew (neighbor, friend, acquaintance, co-worker, etc.)
 - c. An immediate family member (mother, father, or sibling)
 - d. An extended family member (aunt, uncle, cousin, or grandparent)
 - e. An intimate partner (sexual partner, committed partner, spouse)
 - f. Don't know
 - g. I had no experiences
4. The gender of the person/people who did this to you most often was?
- a. Man
 - b. Woman
 - c. Transgender man
 - d. Transgender woman
 - e. Don't know
 - f. I had no experiences
5. How often did you report these incidents to the police?
- a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Always
 - f. I had no experiences

CTS - G

No matter how well people get along, there are times when they disagree on things, get annoyed with each other, or have spats or fights because they are in a bad mood, or tired, or for some other reason. People may also use many different ways to settle their differences. Listed below are some things that you may have experienced when you had a dispute:

Thrown something at the other person.
Pushed, grabbed, or shoved.
Twisted arm or pulled hair.
Slapped.
Slammed against a wall.
Kicked, bit, punched, or hit with a fist.
Hit or tried to hit with something.
Burned or scalded on purpose.
Beat up.
Choked.
Threatened with a knife or gun.
Used a knife or fired a gun.

How many times have you experienced any of these behaviors from:
(Please circle your answers)

	Never	Once	Twice	3-5 times	6-10 times	11-20 times	20+ times
1. ADULT relatives (not including partner)							
Since the age of 18:	0	1	2	3	4	5	6
In the past 6 months:	0	1	2	3	4	5	6
2. ADULT friends							
Since the age of 18:	0	1	2	3	4	5	6
In the past 6 months:	0	1	2	3	4	5	6
3. Co-workers							
Since the age of 18:	0	1	2	3	4	5	6
In the past 6 months:	0	1	2	3	4	5	6
4. Bosses							
Since the age of 18:	0	1	2	3	4	5	6
In the past 6 months:	0	1	2	3	4	5	6
5. Acquaintances							

Since the age of 18:	0	1	2	3	4	5	6
In the past 6 months:	0	1	2	3	4	5	6
6. Strangers							
Since the age of 18:	0	1	2	3	4	5	6
In the past 6 months:	0	1	2	3	4	5	6
7. Police officers							
Since the age of 18:	0	1	2	3	4	5	6
In the past 6 months:	0	1	2	3	4	5	6
8. Gang or group							
Since the age of 18:	0	1	2	3	4	5	6
In the past 6 months:	0	1	2	3	4	5	6
9. Other							
Since the age of 18:	0	1	2	3	4	5	6
In the past 6 months:	0	1	2	3	4	5	6

GMSRM

Please indicate how much you agree with the following statements.

	Strongly disagree 1	2	3	4	Strongly agree 5
1. I have to repeatedly explain my gender identity to people or correct the pronouns people use.	1	2	3	4	5
2. I have difficulty being perceived as my gender.	1	2	3	4	5
3. I have to work hard for people to see my gender accurately.	1	2	3	4	5
4. I have to be “hypermasculine” or “hyperfeminine” in order for people to accept my gender.	1	2	3	4	5
5. People don’t respect my gender identity because of my appearance or body.	1	2	3	4	5
6. People don’t understand me because they don’t see my gender as I do.	1	2	3	4	5

Please indicate how much you agree with the following statements.

	Strongly disagree 1	2	3	4	Strongly agree 5
1. I resent my gender identity or expression.	1	2	3	4	5

2. My gender identity or expression makes me feel like a freak.	1	2	3	4	5
3. When I think of my gender identity or expression, I feel depressed.	1	2	3	4	5
4. When I think about my gender identity or expression, I feel unhappy.	1	2	3	4	5
5. Because my gender identity or expression, I feel like an outcast.	1	2	3	4	5
6. I often ask myself: Why can't my gender identity or expression just be normal?	1	2	3	4	5
7. I feel that my gender identity or expression is embarrassing	1	2	3	4	5
8. I envy people who do not have a gender identity or expression like mine.	1	2	3	4	5

Please indicate how much you agree with the following statements.

	Strongly disagree 1	2	3	4	Strongly agree 5
1. My gender identity or expression makes me feel special and unique.	1	2	3	4	5
2. It is okay for me to have people know that my gender identity is different from my sex assigned at birth.	1	2	3	4	5

3. I have no problem talking about my gender identity and gender history to almost anyone.	1	2	3	4	5
4. It is a gift that my gender identity is different from my sex assigned at birth.	1	2	3	4	5
5. I am like other people but I am also special because my gender identity is different from my sex assigned at birth.	1	2	3	4	5
6. I am proud to be a person whose gender identity is different from my sex assigned at birth.	1	2	3	4	5
7. I am comfortable revealing to others that my gender identity is different from my sex assigned at birth.	1	2	3	4	5
8. I'd rather have people know everything and accept me with my gender identity and gender history.	1	2	3	4	5

Question to determine appropriate wording for items regarding negative expectations for the future and nondisclosure:

1. Do you currently live in your affirmed gender* all or almost all of the time? (*Your affirmed gender is the one you see as accurate for yourself.)

A. Yes, I live in my affirmed gender most or all of the time

B. No, I don't live in my affirmed gender most or all of the time

If yes: use "history" in items below. If no: use "identity" in items below.

Negative expectations for the future^a

Please indicate how much you agree with the following statements.

	Strongly disagree 1	2	3	4	Strongly agree 5
1. If I express my gender IDENTITY/HISTORY, others wouldn't accept me.	1	2	3	4	5
2. If I express my gender IDENTITY/HISTORY, employers would not hire me.	1	2	3	4	5
3. If I express my gender IDENTITY/HISTORY, people would think I am mentally ill or "crazy."	1	2	3	4	5
4. If I express my gender IDENTITY/HISTORY, people would think I am disgusting or sinful.	1	2	3	4	5
5. If I express my gender IDENTITY/HISTORY, most people would think less of me.	1	2	3	4	5
6. If I express my gender IDENTITY/HISTORY, most people would look down on me.	1	2	3	4	5
7. If I express my gender IDENTITY/HISTORY, I could be a victim of crime or violence.	1	2	3	4	5
8. If I express my gender IDENTITY/HISTORY, I could be arrested or harassed by police.	1	2	3	4	5
9. If I express my gender IDENTITY/HISTORY, I could	1	2	3	4	5

be denied good medical care.					
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Please indicate how much you agree with the following statements.

	Strongly disagree 1	2	3	4	Strongly agree 5
1. Because I don't want others to know my gender IDENTITY/HISTORY, I don't talk about certain experiences from my past or change parts of what I will tell people.	1	2	3	4	5
2. Because I don't want others to know my gender IDENTITY/HISTORY, I modify my way of speaking.	1	2	3	4	5
3. Because I don't want others to know my gender IDENTITY/HISTORY, I pay special attention to the way I dress or groom myself.	1	2	3	4	5
4. Because I don't want others to know my gender IDENTITY/HISTORY, I avoid exposing my body, such as wearing a bathing suit or nudity in locker rooms.	1	2	3	4	5

5. Because I don't want others to know my gender IDENTITY/HISTORY, I change the way I walk, gesture, sit, or stand.	1	2	3	4	5
---------------------------------------------------------------------------------------------------------------------	---	---	---	---	---

Please indicate how much you agree with the following statements.

	Strongly disagree 1	2	3	4	Strongly agree 5
1. I feel part of a community of people who share my gender identity.	1	2	3	4	5
2. I feel connected to other people who share my gender identity.	1	2	3	4	5
3. When interacting with members of the community that shares my gender identity, I feel like I belong.	1	2	3	4	5
4. I'm not like other people who share my gender identity. (R)	1	2	3	4	5
5. I feel isolated and separate from other people who share my gender identity. (R)	1	2	3	4	5

MSPSS

Instructions: We are interested in how you feel about the following statements. Read each statement carefully.

Indicate how you feel about each statement.

Healthcare providers refer to medical doctors, therapists, social workers, physician's assistants, and other mental and physical health professionals.

Circle the "1" if you Very Strongly Disagree

Circle the "2" if you Strongly Disagree

Circle the "3" if you Mildly Disagree

Circle the "4" if you are Neutral

Circle the "5" if you Mildly Agree

Circle the "6" if you Strongly Agree

Circle the "7" if you Very Strongly Agree

The following questions refer to your interactions with others that you met and interact with primarily in-person.

		1	2	3	4	5	6	7
1.	There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2.	There is a special person with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
3.	My family really tries to help me.	1	2	3	4	5	6	7
4.	I get the emotional help and support I need from my family.	1	2	3	4	5	6	7
5.	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6.	My friends really try to help me.	1	2	3	4	5	6	7
7.	I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8.	I can talk about my problems with my family.	1	2	3	4	5	6	7
9.	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10.	There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11.	My family is willing to help me make decisions.	1	2	3	4	5	6	7
12.	I can talk about my problems with my friends.	1	2	3	4	5	6	7
13.	My healthcare providers really try to help me.	1	2	3	4	5	6	7
14.	I can count on my healthcare providers when things go wrong.	1	2	3	4	5	6	7
15.	My healthcare providers are willing to help me make decisions.	1	2	3	4	5	6	7
16.	I can talk about my problems with my healthcare	1	2	3	4	5	6	7

	providers.							
The following questions refer to your interactions with others that you met and interact with primarily online.								
17.	My friends really try to help me.	1	2	3	4	5	6	7
18.	I can count on my friends when things go wrong.	1	2	3	4	5	6	7
19.	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
20.	I can talk about my problems with my friends.	1	2	3	4	5	6	7

LOT-R

Please be as honest and accurate as you can throughout. Try not to let your response to one statement influence your responses to other statements. There are no "correct" or "incorrect" answers. Answer according to your own feelings, rather than how you think "most people" would answer.

A = I agree a lot

B = I agree a little

C = I neither agree nor disagree

D = I DISagree a little

E = I DISagree a lot

- _____ 1. In uncertain times, I usually expect the best.
- _____ [2. It's easy for me to relax.]
- _____ 3. If something can go wrong for me, it will.
- _____ 4. I'm always optimistic about my future.
- _____ [5. I enjoy my friends a lot.]
- _____ [6. It's important for me to keep busy.]
- _____ 7. I hardly ever expect things to go my way.
- _____ [8. I don't get upset too easily.]
- _____ 9. I rarely count on good things happening to me.
- _____ 10. Overall, I expect more good things to happen to me than bad.

HS

Directions: Read each item carefully. Using the scale shown below, please select the number that best describes YOU and put that number in the blank provided.

1 = Definitely False

2 = Mostly False

3 = Mostly True

4 = Definitely True

- _____ 1. I can think of many ways to get out of a jam. (Pathways)
- _____ 2. I energetically pursue my goals. (Agency)
- _____ 3. I feel tired most of the time. (Filler)
- _____ 4. There are lots of ways around any problem. (Pathways)
- _____ 5. I am easily downed in an argument. (Filler)
- _____ 6. I can think of many ways to get the things in life that are important to me.
(Pathways)
- _____ 7. I worry about my health. (Filler)
- _____ 8. Even when others get discouraged, I know I can find a way to solve the
problem. (Pathways)
- _____ 9. My past experiences have prepared me well for my future. (Agency)
- _____ 10. I've been pretty successful in life. (Agency)
- _____ 11. I usually find myself worrying about something. (Filler)
- _____ 12. I meet the goals that I set for myself. (Agency).

WC-R

The next set of questions asks about how you reacted to the unwanted sexual experience that you described above in the SES, VVS, and G-CTS Sections. Please answer with respect to the item you endorse that you found most upsetting. We realize that your reactions may have changed over time. Please think about the experience you described above, and how you have reacted since the experience occurred.

Remember: think about the most upsetting experience that you have experienced in the from the questions in this section. Please keep this experience in mind as you read each statement and indicate to what extent you used it in the experience.

--OR--

To respond to the statements in this questionnaire, you must have a specific stressful situation in mind. Take a few moments and think about the most stressful situation that you have experienced in the *past week*.

By "stressful" we mean a situation that was difficult or troubling for you, either because you felt distressed about what happened, or because you had to use considerable effort to deal with the situation. The situation may have involved your family, your job, your friends, or something else important to you. Before responding to the statements, think about the details of this stressful situation, such as where it happened, who was involved, how you acted, and why it was important to you. While you may still be involved in the situation, or it could have already happened, it should be the most stressful situation that you experienced during the week.

Remember: think about the most stressful situation that you have experienced in the past week. Please keep this stressful situation in mind as you read each statement and indicate to what extent you used it in the situation.

You can describe the stressful situation you have experienced below.

Please read each item below and indicate, by using the following rating scale, to what extent you used it in the situation you have just described.

Not Used	Used Somewhat	Used Quite a Bit	Used a Great Deal
0	1	2	3

- _____ 1. Just concentrated on what I had to do next – the next step.
- _____ 2. I tried to analyze the problem in order to understand it better.
- _____ 3. Turned to work or substitute activity to take my mind off things.
- _____ 4. I felt that time would make a difference – the only thing to do was to wait.
- _____ 5. Bargained or compromised to get something positive from the situation.

- _____ 6. I did something which I didn't think would work, but at least I was doing something.
- _____ 7. Tried to get the person responsible to change his or her mind.
- _____ 8. Talked to someone to find out more about the situation.
- _____ 9. Criticized or lectured myself.
- _____ 10. Tried not to burn my bridges, but leave things open somewhat.
- _____ 11. Hoped a miracle would happen.
- _____ 12. Went along with fate; sometimes I just have bad luck.
- _____ 13. Went on as if nothing had happened.
- _____ 14. I tried to keep my feelings to myself.
- _____ 15. Looked for the silver lining, so to speak; tried to look on the bright side of things.
- _____ 16. Slept more than usual.
- _____ 17. I expressed anger to the person(s) who caused the problem.
- _____ 18. Accepted sympathy and understanding from someone.
- _____ 19. I told myself things that helped me to feel better.
- _____ 20. I was inspired to do something creative.
- _____ 21. Tried to forget the whole thing.
- _____ 22. I got professional help.
- _____ 23. Changed or grew as a person in a good way.
- _____ 24. I waited to see what would happen before doing anything.
- _____ 25. I apologized or did something to make up.
- _____ 26. I made a plan of action and followed it.
- _____ 27. I accepted the next best thing to what I wanted.
- _____ 28. I let my feelings out somehow.
- _____ 29. Realized I brought the problem on myself.
- _____ 30. I came out of the experience better than when I went in.
- _____ 31. Talked to someone who could do something concrete about the problem.
- _____ 32. Got away from it for a while; tried to rest or take a vacation.
- _____ 33. Tried to make myself feel better by eating, drinking, smoking, using drugs or medication, etc.
- _____ 34. Took a big chance or did something very risky.
- _____ 35. I tried not to act too hastily or follow my first hunch.
- _____ 36. Found new faith.
- _____ 37. Maintained my pride and kept a stiff upper lip.
- _____ 38. Rediscovered what is important in life.
- _____ 39. Changed something so things would turn out all right.
- _____ 40. Avoided being with people in general.
- _____ 41. Didn't let it get to me; refused to think too much about it.
- _____ 42. I asked a relative or friend I respected for advice.
- _____ 43. Kept others from knowing how bad things were.
- _____ 44. Made light of the situation; refused to get too serious about it.
- _____ 45. Talked to someone about how I was feeling.
- _____ 46. Stood my ground and fought for what I wanted.

- _____ 47. Took it out on other people.
- _____ 48. Drew on my past experiences; I was in a similar situation before.
- _____ 49. I knew what had to be done, so I doubled my efforts to make things work.
- _____ 50. Refused to believe that it had happened.
- _____ 51. I made a promise to myself that things would be different next time.
- _____ 52. Came up with a couple of different solutions to the problem.
- _____ 53. Accepted it, since nothing could be done.
- _____ 54. I tried to keep my feelings from interfering with other things too much.
- _____ 55. Wished that I could change what had happened or how I felt.
- _____ 56. I changed something about myself.
- _____ 57. I daydreamed or imagined a better time or place than the one I was in.
- _____ 58. Wished that the situation would go away or somehow be over with.
- _____ 59. Had fantasies or wishes about how things might turn out.
- _____ 60. I prayed.
- _____ 61. I prepared myself for the worst.
- _____ 62. I went over in my mind what I would say or do.
- _____ 63. I thought about how a person I admire would handle this situation and used that as a model.
- _____ 64. I tried to see things from the other person's point of view.
- _____ 65. I reminded myself how much worse things could be.
- _____ 66. I jogged or exercised.

TSC

Directions: We are interested in how have felt, in general, over the past 2 months?

0 = Never 3 = Often

1. Headaches	0	1	2	3
2. Insomnia (trouble getting to sleep)	0	1	2	3
3. Weight loss (without dieting)	0	1	2	3
4. Stomach problems	0	1	2	3
5. Sexual problems	0	1	2	3
6. Feeling isolated from others	0	1	2	3
7. "Flashbacks" (sudden, vivid, distracting memories)	0	1	2	3
8. Restless sleep	0	1	2	3
9. Low sex drive	0	1	2	3
10. Anxiety attacks	0	1	2	3
11. Sexual overactivity	0	1	2	3
12. Loneliness	0	1	2	3
13. Nightmares	0	1	2	3
14. "Spacing out" (going away in your mind)	0	1	2	3
15. Sadness	0	1	2	3
16. Dizziness	0	1	2	3
17. Not feeling satisfied with your sex life	0	1	2	3
18. Trouble controlling your temper	0	1	2	3
19. Waking up early in the morning and can't get back to sleep	0	1	2	3
20. Uncontrollable crying	0	1	2	3
21. Fear of men	0	1	2	3
22. Not feeling rested in the morning	0	1	2	3
23. Having sex that you didn't enjoy	0	1	2	3
24. Trouble getting along with others	0	1	2	3

25. Memory problems	0	1	2	3
26. Desire to physically hurt yourself	0	1	2	3
27. Fear of women	0	1	2	3
28. Waking up in the middle of the night	0	1	2	3
29. Bad thoughts or feelings during sex	0	1	2	3
30. Passing out	0	1	2	3
31. Feeling that things are "unreal"	0	1	2	3
32. Unnecessary or over-frequent washing	0	1	2	3
33. Feelings of inferiority	0	1	2	3
34. Feeling tense all the time	0	1	2	3
35. Being confused about your sexual feelings	0	1	2	3
36. Desire to physically hurt others	0	1	2	3
37. Feelings of guilt	0	1	2	3
38. Feelings that you are not always in your body	0	1	2	3
39. Having trouble breathing	0	1	2	3
40. Sexual feelings when you shouldn't have them	0	1	2	3

SWLS

Not included due to copyright.

APPENDIX B: CORRELATION MATRIX WITH VARIABLES OF INTEREST

Table
Correlation Matrix with Variables of Interest

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Age	--	-.08	.16*	.08	.05	.12	.22**	-.24**	-.01	.25**	.16*	.20**	-.12	-.08	.15*	-.20**	-.08	-.08	.01
2. Race		--			.10	-.06	.03	.01	-.07	-.07	.03	.08	.17*	.18*	.01	.09	.11	.12	.01
3. Income			--		.09	.04	.19**	-.23**	.27**	.18*	.05	.04	-.18*	-.08	.28*	-.16*	-.14*	-.07	-.13
4. Sexual orientation				--	.03	.03	-.07	.06	-.05	-.07	-.09	-.07	-.02	-.14	-.12	.07S	.00	-.15*	.05
5. Community Connectedness					--	.40**	.44**	-.41**	.24**	.45**	.44**	.40**	-.15*	.05	.26**	-.30**	-.16*	-.11	.21**
6. Transgender Identity Pride						--	.61**	-.42**	.36**	.50**	.45**	.43**	-.02	.21**	.50**	-.18**	-.02	.09	.07
7. Hope							--	-.52**	.28**	.58**	.43**	.38**	-.08	.14	.53**	-.29**	-.09	-.03	.14
8. Optimism								--	-.26**	-.38**	-.26**	-.34**	.31**	.09	-.59**	.40**	.12	.12	.13
9. Familial Social Support									--	.46**	.38**	.31**	-.07	.11	.40**	-.15*	-.03	.05	-.11
10. Peer Social Support										--	.70**	.58**	-.04	.16*	.42**	-.24**	-.03	.06	.14
11. Online Social Support											--	.50**	-.03	.12	.31**	-.21**	-.06	.06	.13
12. Healthcare Provider Support												--	-.02	.14	.30**	-.10	-.15*	.14	.22**
13. Avoidant Coping													--	.75**	-.24**	.56**	.40**	.37**	.37**
14. Facilitative Coping														--	.02	.32**	.26**	.36**	.24**
15. Well-being															--	-.39**	-.04	.05	-.11

16. Trauma Symptoms																--	.30**	.46**	.30**
17. Sexual Violence																	--	.23**	.15*
18. Physical Violence																		--	.36**
19. Psychological Violence																			--

* $p < .05$, ** $p < .005$



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