

The Blame Game: Assessing Blame Placed on Gender Diverse Victims of HIV and the Impact of
Perspective Taking

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Abstract

Gender diverse individuals experience higher rates of HIV and are blamed for their diagnoses to a greater extent than cisgender individuals. Attribution Theory holds that victim blaming can be explained by understanding how people attribute causes to others' misfortunes (i.e., one's HIV diagnosis), whereby victims whose behavior is perceived as internal, controllable, and stable are blamed to a greater extent than victims whose behavior is perceived as external, uncontrollable, and unstable. Perspective-taking is a means to reduce blame by altering one's causal attributions. Despite the links between causal attributions and perspective taking, no study has applied these constructs to understand and reduce blame placed on gender diverse individuals with HIV. Thus, the current study examined the extent to which hypothetical gender diverse individuals were blamed for their HIV diagnosis to a greater extent than cisgender individuals, whether causal attributions explained this difference, and if perspective taking reduced blame. U.S. adults ($N = 513$) were randomly assigned to one of nine vignettes, depicting someone diagnosed with HIV. The gender identity of the target (transgender, cisgender man, cisgender woman) and the perspective-taking instructions (perspective taking, stay objective, and no instructions) were manipulated. Participants then completed scales assessing causal attributions (locus of causality, controllability, and stability) and blame (using three sub-measures: malice, unreliability, and recklessness). Results revealed the gender diverse target was perceived as more reckless than the cisgender targets, and locus of causality attributions partially explained these perceptions. The perspective-taking manipulation failed to reduce blame placed on gender diverse individuals. Results from this research have important implications for educators and practitioners working to reduce blame associated with HIV diagnoses and stigma placed on gender diverse individuals.

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Literature Review

Gender diverse is an umbrella term, referring to individuals whose gender identity differs from socially constructed gender norms (Thompson, Shortreed, Moore, & Carey-Butler, 2019). Gender diversity encompasses a variety of gender identities, including, but not limited to, gender queer, gender creative, and transgender (Janssen & Leibowitz, 2018). According to Thompson and colleagues (2019), gender diverse serves as a more positive and inclusive term for non-cisgender identities than other terms, such as gender minority or gender non-conforming, which are often used in academic literature. Gender minority normalizes cisgender identities (i.e., “people whose biological sex matched their gender identity”; Stryker, 2008), labeling those whose gender identities fall outside of the gender binary as abnormal. Gender diverse recognizes gender as fluid without reinforcing binary gender norms. In August of 2018, Germany’s cabinet passed a law which added gender diverse as a third option for individuals to select on official records because of its inclusive definition (Rodriguez, 2018).

Because the term gender diverse is relatively new, the number of gender diverse individuals nationally and internationally is unknown. One potential reason for the difficulty in estimating the number of gender diverse individuals relates to the changing labels placed upon and chosen by gender diverse individuals throughout history (Meerwijk & Sevelius, 2017). In a recent meta-analysis conducted by Meerwijk and Sevelius (2017), the estimated number of adults identifying as transgender (defined as “people whose biological sex does not match their gender identity;” Stryker, 2008) in the United States was roughly one in every 250 (i.e., nearly one million Americans). The results of the meta-analysis also found a significant increase in the number of transgender adults in the United States from 2007 to 2015. However, the authors noted that estimating the population of transgender people becomes complicated because of the

various existing gender identities excluded from the study, with twenty percent of respondents identifying as “gender non-conforming” or “genderqueer,” which was 1.5 times the number of people identifying as transgender. Gender non-conforming and genderqueer individuals were not included in the analysis; therefore, the population of gender diverse individuals is likely much higher than the estimated transgender population.

The Pathologization of Transgender Individuals

Although the population of gender diverse individuals remains unclear, research shows people have identified using terms under the gender diverse umbrella throughout history and across various cultures. Transsexualism became a diagnostic term in the early version of the Diagnostic and Statistical Manual of Mental Disorders (DSM) and was used primarily to determine who would qualify to undergo sex reassignment surgery and hormone therapy (Cohen-Kettenis & Pfäfflin, 2010). Transsexualism was eliminated from the DSM-IV-TR and replaced with Gender Identity Disorder, which was defined by an identification with a gender that does not match one’s biological sex and discomfort with one’s sex or gender role associated with their sex (American Psychiatric Association, 1994). In the most recent version of the DSM (the DSM-5), Gender Dysphoria replaced Gender Identity Disorder, to avoid pathologizing gender expressions that fail to conform to the gender binary and focus solely on the distress that may accompany the gender incongruence for some individuals (American Psychiatric Association, 2013). Some LGBT advocacy groups believe the inclusion of Gender Dysphoria in the DSM-5 may pressure gender diverse individuals to conform to gender norms or simply accept their natal gender to avoid being labeled with a mental disorder (Kruekels et al., 2014). However, the inclusion of Gender Dysphoria in the DSM-5 remains necessary to allow gender diverse individuals access to medical treatment.

Structural Stigma Facing Gender Diverse Individuals

Although the pathologization of individuals identifying as gender diverse made sex reassignment surgery and hormone therapies medically possible (Kreukels, Steensma, & Vries, 2014), it also contributed to the stigmatization of gender diverse individuals (Hughto et al., 2015). Structural stigma refers to the social norms, laws, and practices that deny stigmatized individuals and groups of equal access to the resources and opportunities available to non-stigmatized individuals and groups (Hughto et al., 2015). Lev (2013) explains the ways in which the inclusion of Gender Dysphoria in the DSM-5 may exacerbate the stigma experienced by gender diverse individuals. Diagnostic categories shape societal views of groups of people who deviate from social norms, so the diagnostic category of Gender Dysphoria will likely fail to eliminate the stigma surrounding the gender diverse community and others affected by the inclusion of Gender Dysphoria in the DSM-5 (Lev, 2013). Applied to the American social context, structural stigma helps explain the traditional, gender binary system that defines gender norms. The gender binary labels cisgender individuals as normal and labels gender diverse individuals as deviant (Hughto et al., 2015). By labeling individuals, who identify as gender diverse, pathological, society encourages gender diverse individuals to conform to the gender binary.

Discrimination Facing Gender Diverse Individuals

Law enforcement and the criminal justice discrimination. Gender diverse individuals experience stigma in various social contexts, such as the criminal justice system, employment, and healthcare (Cruz, 2014). In the 1950s and 1960s, the police targeted gender diverse individuals in the streets and demanded their identification. If their appearance did not match their identification cards, they were often arrested. According to Stotzer (2014), gender diverse

individuals currently experience some of the highest rates of arrest and incarceration compared to other vulnerable groups, which provides further evidence for the stigmatization and discrimination facing gender diverse individuals (Stotzer, 2014). In fact, according to a study conducted by Stotzer (2013), between 15% and 29% of transgender participants reported being arrested in the last year (Stotzer, 2014).

Employment discrimination. In addition to their experiences with criminalization, individuals identifying as gender diverse also experience housing and employment discrimination. In the 1960s, people who appeared transgender would experience greater difficulty finding work and housing than those who did not appear transgender, which forced many of them to live in underdeveloped areas and do sex work (Stryker, 2008). In addition, surveys in various states of the U.S. report high rates of employment discrimination among transgender individuals. For example, in a Massachusetts study conducted by Herman (2011), using The National Transgender Discrimination Survey, 76% of participants from the state experienced employment harassment, mistreatment, or discrimination. Similarly, 67% of Utah transgender respondents (Rosky, Mallory, Smith, & Badgett, 2011) and 70% of California respondents (Sears & Mallory, 2011) experienced employment discrimination. The survey also indicated that transgender discrimination contributed to loss of employment, wages, health insurance coverage, and housing stability for transgender individuals (Herman, 2011).

Healthcare discrimination. Structural stigma within the healthcare system also impacts gender diverse individuals. Many transgender individuals lack insurance, thereby limiting their access to care. Even for those who have insurance, many insurance companies refuse to cover gender affirming medical procedures because they are deemed “medically unnecessary” (Hughto et al., 2015, p. 224). Additionally, healthcare clinics often lack healthcare providers equipped to

care for gender diverse individuals, which reflects the lack of priority medical schools place on caring for gender diverse clients (Cruz, 2014). As a result of insufficient health, some transgender individuals turn to street hormones, which can cause HIV and other diseases through contaminated needles (Hughto et al., 2015).

HIV/AIDS and Gender Diverse Stigma

Another factor connected to the health-related discrimination experienced by the gender diverse community is the high prevalence of HIV/AIDS. Human Immunodeficiency Virus (HIV) attacks the body's immune system, causing one's immune system to break down, making fighting subsequent diseases increasingly difficult (CDC, 2018a). HIV is incurable, so a person with HIV has the virus for life. However, with proper treatment, a person's HIV can be controlled to prevent it from developing into Acquired Immunodeficiency Virus (AIDS), which is the most severe form of HIV (CDC, 2018a). The Center for Disease Control (CDC) reported the number of transgender people in the United States who were living with HIV in 2015 was three times greater than the national average, which was most recently estimated at 1.1 million people (CDC, 2018b).

The CDC suggests that stigma serves as one possible explanation for the high prevalence rates of HIV among individuals identifying as transgender. For example, it has been posited that stigma creates challenges for gender diverse individuals seeking appropriate healthcare, education, employment, and housing, which contributes to their health problems, including increasing their chances of developing HIV (CDC, 2018b). Furthermore, according to Stryker (2008), many gender diverse individuals depended on sex work for survival and often share needles to inject hormones to which they did not have access, ultimately putting them at high risk of developing HIV/AIDS.

Although research has yet to empirically examine the nature of the relationship between structural stigma and the high prevalence rates of HIV/AIDS within the gender diverse community, insight can be obtained by consulting the literature assessing other stigmatized groups with HIV/AIDS, particularly sexual minority groups (e.g., individuals identifying as gay, lesbian, bisexual, pansexual, asexual, etc.). In fact, in a recent study conducted by Oldenburg (2015), a relationship was discovered between structural stigma (operationalized as the proportion of same-sex couples living together in a state, the number of high schools with Gay-Straight Alliances per state, the number of state policies protecting sexual minority individuals, and results from national polls assessing social acceptance of sexual minorities) and HIV prevention among men who have sex with men (MSM) in the United States. High-level structural stigma (i.e. smaller proportions of same-sex couples living together, fewer high schools with Gay-Straight Alliances, etc.) was significantly related to higher sexual risk behavior, decreased awareness of HIV prevention methods, and decreased comfortability discussing sexual behavior with healthcare specialists among MSM living with HIV.

Research also suggests that high prevalence rates of HIV/AIDS among socially marginalized groups may exacerbate the stigma they experience, resulting in a vicious cycle involving stigma and HIV/AIDS. When HIV/AIDS spread throughout the United States, people often blamed the socially marginalized (e.g., racial, ethnic, gender, sexual minorities as well as those living in poverty), who tended to have higher prevalence rates of the infections (Herdt, 2001). According to Deacon and Campbell (2006), the stigma surrounding HIV/AIDS formed when society began to view illness as preventable, deem immoral behaviors as causes of illness, blame victims for their own illness, and associate those with low social status as carriers of the illness. Because of their marginalized identity, gender diverse individuals (among other social

minorities) were blamed for HIV/AIDS and became stigmatized. The stigmatization of minorities allowed members of the majority to project their fears upon the “other” and attempt to distance themselves from the disease by blaming vulnerable populations (Deacon & Campbell, 2006).

Attribution Theory: A Conceptual Framework for Assessing Victim Blaming

People tend to blame individuals who experience adverse events as being responsible for their own misfortunes (Lerner & Miller, 1978). Malle, Guglielmo, and Monroe (2014) define *blame* as a cognitive and social moral judgement. Blame regulates social relations by encouraging individuals to abide by societal expectations. Blame also relies on social cognition; one seeks to make sense of another’s behavior and must provide a reason for why they are assigning blame (Malle, Guglielmo, & Monroe, 2014). Research suggests that privileged groups tend to justify the oppression of marginalized groups by assigning blame to the oppressed group, making them seem deserving of their oppression. Victim blaming occurs because humans hold a cognitive bias that propels them to perceive a relationship between outcomes and virtue, causing them to believe people who act with goodness should receive good fortune, whereas people who act badly should receive misfortune (Lerner & Miller, 1978).

Many cognitive theories help to explain why people are prone to victim blaming; however, one of the most widely adopted theories used to explain victim blaming is Attribution Theory (Heider, 1958). The central component of this theory—*the attribution*—refers to “the interpretive process by which people make judgments about the causes of their own behavior and the behavior of others” (*attribution*, 2019). Attribution Theory helps explain victim blaming by describing the ways in which people assign causality for others’ behaviors (Weiner

& Hoffman, 1985). Behavior, according to Attribution Theory, must be observed, believed to be intentional, and attributed to internal or external causes (Weiner & Hoffman, 1985).

Attributions can be categorized according to three dimensions: locus of causality, stability, and controllability (Weiner & Hoffman, 1985). The first dimension, locus of causality, refers to whether a person makes internal or external attributions. Internal attributions are made when one attributes the causality of another person's behavior to internal factors, such as traits, abilities, or emotions. For example, when Jack's classmate, Sam, earns the top score on a math exam, Jack determines Sam earned the top score because Sam is highly skilled at math. External attributions, on the other hand, are made when one determines the causality of another person's behavior is due to external factors. If Jack makes an external attribution to explain why Sam earned the top score on the test, he would determine they scored high only because the teacher likes them better than the other students.

The second dimension, stability, explains whether a person believes the causes of one's behavior change over time (i.e., stable or unstable) (Weiner & Hoffman, 1985). Using the same example from above, Jack may believe Sam will always earn high test scores, reflecting a stable attribution, or he may believe Sam only succeeded on this exam, reflecting an unstable attribution.

Finally, the third dimension, controllability, focuses on the extent to which one believes another person can or cannot control something (i.e., controllable or uncontrollable) (Weiner & Hoffman, 1985). If Jack believes Sam's many hours of studying led them to perform well on the exam, he believes they had control over their success. However, if he believes they earned a high score by pure luck, he believes they had little to no control over their success.

The fundamental attribution error. People tend to make attributions differently, depending on whether they are making attributions about themselves or others (Weiner & Hoffman, 1985). When an individual experiences a positive event, they tend to make internal attributions, determining the positive event occurred because of their own traits or abilities. Conversely, when an individual makes attributions about positive events experienced by someone else, they tend to make external attributions, determining the positive event occurred because of the person's environment or situation. The opposite holds true when an individual makes attributions about negative events; people make external attributions regarding negative events that happen to themselves and internal attributions regarding negative events that happen to others; this phenomenon is known as the fundamental attribution error (Weiner & Hoffman, 1985). Fundamental attribution errors are biases that relate to victim blaming and are particularly problematic in healthcare settings. Healthcare staff tend to place more emphasis on a patient's personal factors when assigning causality for an illness and less emphasis on environmental factors (Hodgson, 1997).

The Application of Attribution Theory to Blame Placed on Victims of HIV/AIDS

Attribution theory, with respect to victim blaming, has long been applied to people with sexually transmitted infections (STIs), particularly those with HIV/AIDS (e.g., Yoo & Jang, 2012). Although all three dimensions of the attribution have never been simultaneously or directly applied to understand blame placed on gender diverse HIV victims, related research provides insight. For example, Cobb and De Chalbert (2002) assessed the controllability dimension of Attribution Theory and found that people from the general population tend to report more anger, less empathy, and less willingness to help individuals perceived as having more control over their HIV/AIDS compared to those perceived as having less control (Cobb &

De Chabert, 2002). A second study assessed controllability related to victim blaming and HIV and discovered stigmatized individuals are more respected when people believe their stigma is caused by uncontrollable (e.g., biological factors), as opposed to controllable factors (e.g., personal choices; Heagarty & Golden, 2008). A third related study indirectly assessed the locus of causality and stability dimensions by investigating judgments of sexual minority individuals diagnosed with HIV. Results revealed that 98% of respondents felt sympathy for a hypothetical sexual minority individual, described as contracting HIV from a blood transfusion (external locus of control), whereas 58.3% felt sympathy for a hypothetical sexual minority individual, described as contracting HIV from same-sex sexual behavior (internal locus on control). In addition to potentially serving as conditions related to locus of causality, the conditions could also relate to stability because a blood transfusion may be viewed as a more unstable event, as it likely occurs infrequently. Conversely, same-sex sexual behavior may be viewed as stable because a person may continuously engage in the behavior, compared to an individual receiving a blood transfusion which is likely a temporary behavior (Heagarty and Golden, 2008).

Based on the literature review, gender diverse individuals experience higher levels of stigma and higher rates of HIV/AIDS than cisgender individuals. However, research has yet to apply Attribution Theory, particularly regarding victim blaming, to gender diverse individuals who have been diagnosed with HIV/AIDS. Thus, the present study sought to determine whether hypothetical gender diverse individuals were blamed to a greater extent for their HIV diagnosis compared to cisgender individuals and whether the three dimensions of causal attributions can help to explain this difference.

Applying Perspective Taking to Reduce Victim Blaming

Victims of blame can experience a vast array of negative outcomes, including emotional, cognitive, biological, and behavioral responses (Feagin & Sikes, 1994; Miller & Major, 2000). Consequently, the ability to reduce the negative outcomes of blame is important for the overall well-being of the victim. One method that may prove useful when reducing victim blaming is perspective taking (i.e., cognitive empathy), or the ability to see a situation from another's point of view (Feffer & Suchotliff, 1966). In fact, research reveals that individuals with more empathy attribute less blame to victims (e.g., Deitz, Blackwell, Daley, & Bentley, 1982). For example, a study conducted by Takaku (2001) assessed the effects of perspective taking on interpersonal forgiveness. All participants in the study read a scenario in which a classmate asked another classmate to borrow their notes, kept the notes for longer than expected, tore the notes on accident, and apologized. The researcher assessed participants' attributions (ex: locus of causality, stability, and controllability), emotions, and behavioral intentions. Prior to reading the scenario, participants were randomly assigned to one of four conditions, three of which were perspective-taking conditions, and one of which was a control condition. They were asked to either (a) recall a time when they acted as a transgressor (perspective taking), (b) imagine how the classmate who tore the notes would feel (perspective taking), (c) imagine how the person whose notes were torn would feel (perspective taking), and (d) imagine how they would feel if their notes were torn (control). The results of the study revealed that those in the perspective taking conditions were more likely to perceive the cause of the transgression as more unstable and external, experience more positive emotions, and forgive the transgressor than were those in the control condition.

Another study, conducted by Vescio, Sechrist, and Paolucci (2003), assessed whether perspective taking reduced prejudice. All participants listened to an interview with an African

American male, who discussed challenges he experienced based on his racial identity. Participants were then randomly assigned to one of two conditions, a perspective-taking condition (in which participants were asked to imagine how the interviewee felt about their experience) and a stay objective condition (in which participants were asked to remain objective and detached). The researchers then examined participants' empathy, attributions, stereotype endorsement, and intergroup attitudes about the target. The results indicated that those who adopted the African American male's perspective made more situational (external) attributions and expressed more empathy and more positive attitudes toward African Americans in general than did those in the stay objective condition (Vescio, Sechrist, & Paolucci, 2003).

Mechanisms Underlying Perspective Taking

Several mechanisms have been posited to account for the positive effects of perspective taking. The dissonance-reduction hypothesis (Takaku, 2001) and the attribution-emotion-behavior framework (Weiner, 1986) are some of the most prominent and extensively studied. According to the dissonance-reduction hypothesis, people often experience cognitive dissonance (i.e., acting in a way that conflicts with one's beliefs; Davis & Jones, 1960) when asked to recall a time when they were a transgressor while also wanting to blame someone else for a similar transgression. To reduce the cognitive dissonance they experience, people are likely to view the causes of the transgression as more external rather than internal. This may provoke a more positive emotional response to the transgressor and thus reverse the fundamental attribution error (Takaku, 2001). For example, in the study by Takaku (2001), described in the previous section, individuals in the perspective-taking conditions (i.e., participants asked to imagine a time when they were transgressors, those asked to imagine how the transgressor would feel, and those asked to imagine how the victim would feel) were more likely to forgive the transgressor than were

those in the control condition (i.e., participants asked to imagine how they would feel in the victim's situation). The authors also found that those asked to imagine a time when they were transgressors had the most positive emotional reactions to the transgressor and were the most likely to forgive compared to the other two perspective-taking groups. The author therefore concluded these results aligned with the dissonance-reduction hypothesis. Although cognitive dissonance was not directly measured, the study reasoned that by asking participants to simultaneously think of themselves as transgressors while also thinking of the transgressor in the situation, the participants experienced cognitive dissonance. The participants wanted forgiveness for themselves, yet they held a conflicting cognition (not wanting forgiveness for the transgressor in the hypothetical scenario). Therefore, to reduce their cognitive dissonance, the participants likely forgave the transgressor to feel they were also worthy of forgiveness (Takaku, 2001).

Proponents of the attribution-emotion-behavior framework posit that the act of taking another's point of view encourages an individual to attribute the negative behaviors of others to situational causes, rather than dispositional characteristics (Epley, Caruso, & Bazerman, 2006). Furthermore, this shift away from relying on internal attributions results in less blame placed on victims by encouraging people to explain negative outcomes involving others in a similar way to how people explain negative outcomes involving themselves (Vescio, Sechrist, & Paolucci, 2003). In a study conducted by Vescio and colleagues (2003), described in the previous section, individuals in the perspective-taking condition (i.e., participants asked to imagine how the African American male target, who experienced challenges based on his identity, felt) made more situational (external) attributions and expressed more empathy and more positive attitudes toward African Americans in general than did those in the stay objective condition. The increase in positive attitudes toward African Americans partially depended upon the extent to which

participants made situational (external) rather than dispositional (internal) attributions about African Americans (Vescio et al., 2003).

Thus, given that Attribution Theory relates to victim blaming, based on its ability to explain how people determine causality for others' experiences (Weiner & Hoffman, 1985), and perspective taking has been found to change how people make causal attributions, the present study sought to experimentally examine the effects of perspective taking on victim blaming via causal attributions.

The Current Study

To expand on the research related to victim blaming as it applies to gender diverse individuals and HIV/AIDS stigma, the current study assessed discrepancies in victim blaming between hypothetical gender diverse and cisgender individuals diagnosed with HIV and explored the extent to which the three dimensions of causal attributions explained and mediated these discrepancies. Then, the utility of perspective taking and the extent to which it reduced victim blaming was investigated. Based on Attribution Theory and related research, the following hypotheses were developed:

H1 – Hypothetical, gender diverse targets diagnosed with HIV were expected to be blamed to a greater extent than a hypothetical cisgender man or woman. No hypotheses were drawn regarding differences between the man and woman targets, but both were included in separate vignettes for the purpose of using specific pronouns.

H2 - Participants were expected to make more internal, controllable, and stable attributions regarding the cause of a gender diverse individual's HIV diagnosis and more external, uncontrollable, and unstable attributions regarding the cause of a cisgender individual's HIV diagnosis.

H3 – Hypothetical targets for whom the causality of their HIV diagnosis was perceived as internal, controllable, and stable were expected to be blamed to a greater extent than those for whom the causality of their HIV diagnosis was perceived as external, uncontrollable, and unstable.

H4 – The relationship between one’s gender identity and blame was expected to be reduced when accounting for one’s causal attributions (locus of causality, controllability, stability).

H5 – Participants receiving the perspective-taking manipulation were expected to blame gender diverse targets diagnosed with HIV to a lesser extent than those receiving the stay-objective or control conditions.

H6 – Participants receiving the perspective taking manipulation were expected to make more external, uncontrollable, and unstable attributions regarding the causality of a gender diverse individual’s HIV diagnosis compared to those receiving the stay-objective and control condition.

Method

Participants. A total of 752 adults, aged 18 years or older and residing in the United States, were recruited to participate in the current study. All participants ranged in age from 19 to 75 ($M = 37.39$, $SD = 11.58$) A total of 222 identified as men (43.30%), 278 identified as women (54.20%), two identified as transgender men (0.40%), two identified as transgender women (0.40%), four identified as gender queer/gender nonconforming (0.80%), three preferred not to disclose (0.60%), and two identified as a gender other than what was listed (0.40%). Most participants identified as heterosexual (430; 83.80%), 15 identified as gay (2.90%), 11 as lesbian (2.10%), 40 as bisexual (7.80%), eight as queer (1.60%), five as unlabeled (.66%), and four

selected the “other” response (0.80%). Sixty participants (8.78%) reported being diagnosed with a sexually transmitted infection and 261 participants (35.50%) reported knowing someone who has been diagnosed with a sexually transmitted infection. A total of 242 participants (32.18%) reported knowing someone who identifies as transgender.

Measures and materials.

Vignettes and perspective-taking conditions. After providing consent, participants were randomly assigned to one of nine vignettes in which the gender identity of the hypothetical target (transgender, man, or woman) as well the perspective-taking instructions (perspective taking, stay objective, and control) were manipulated. In the vignettes, Sam (the target), was diagnosed with HIV and experienced the same symptoms of fatigue, fever, and body aches, persisting for three weeks. The symptoms the targets displayed were chosen based on the early HIV symptoms listed by HIV.gov (2017). A brief description of HIV was also included to inform participants unfamiliar with the virus; information about HIV came from CDC (2018a). A transgender individual was chosen to represent the gender diverse community because although the term *gender diverse* is viewed as a more inclusive term, the words *transgender* and *gender non-conforming* are more commonly used by the general public (Thompson et al., 2019). In addition, prior to reading the information about the targets, participants in the perspective-taking condition read: *While reading the following scenario, please try to take on Sam’s perspective, and imagine what they might be thinking or feeling regarding their situation.* Participants in the stay-objective condition read: *While reading the following scenario, please try to be as objective and detached as possible.* Lastly, participants in the control condition were given no instructions prior to reading the vignette. This perspective-taking manipulation has been used effectively in previous research (e.g., Kulibert & Thompson, 2019).

Victim blaming. After reading the vignette, participants' victim blaming was assessed via the Perceptions of Victim Blame Scale (PVBS-R; Cramer et al., 2013), adapted for the present study. Participants were asked to rate the target, to whom they were randomly assigned, on 13 characteristics. Participants also rated the targets for each characteristic on a seven-point Likert scale. Six items (1, 3, 5, 7, 8, and 9) were reverse scored. The scale consisted of three subscales: Malice (nine items), Recklessness (two items), and Unreliability (two items). The nine items on the Malice subscale included: violent/nonviolent, gentle/forceful, maniacal/sane, good natured/vicious, malicious/kind, blameless/blameworthy, fault/faultless, harmful/harmless, and hurtful/innocuous. The two Recklessness items included: careful/reckless and conscientious/careless. Lastly, the two Unreliability items included reliable/unreliable and dependable/undependable. Higher scores on the PVBS-R subscales indicated that participants placed higher amounts of blame on the target. The Malice subscale yielded a Cronbach's alpha of .83, the Recklessness subscale yielded a Cronbach's alpha of .90, and the Unreliability subscale yielded a Cronbach's alpha of .95.

Attributions. The 9-item Causal Dimension Scale (CDS; McAuley, Duncan, & Russell, 1992) consisted of nine items assessing Weiner's (1985) original three dimensions of interpersonal attributions (resulting in three subscales). All items were rated using 9-point Likert scales with the Locus of Causality subscale ranging from "reflects an aspect of Sam" to "reflects an aspect of the situation," the Stability subscale from "permanent" to "temporary," and the Controllability subscale from "manageable by Sam" to "not manageable by Sam." The CDSII produced three subscale scores (Locus of Causality, Stability, Controllability) with each subscale producing a potential total score from 3 to 27. A Cronbach's alpha of .67 was found for the CDSII.

Demographics questionnaire. The participants completed a demographics questionnaire including items assessing age, gender identity, sexual orientation, ethnicity, education, income, relationship status, and sexually transmitted infection (STI) history (See Appendix F for items from the Demographics Questionnaire).

Manipulation checks. To ensure participants read the vignette, a manipulation check was included, a multiple-choice question, asking participants the gender of the target to whom they were assigned, including man, woman, or transgender. Participants who reported a gender different from the one they were assigned were deleted from the final sample. Another manipulation check was included to assess the perspective-taking manipulation. Participants were asked: “To what extent did you try to imagine what Sam might be thinking, feeling, and experiencing?” and “To what extent did you try to stay objective and remain emotionally detached regarding Sam?” Participants rated both of their answers on a scale from 0-7 (0 = not at all; 7 = very much) (See Appendix G).

Procedure. After obtaining approval from the institutional review board, participants were recruited via MTurk®. MTurk® was chosen as a recruitment tool because research suggests participants recruited via MTurk® represent a more diverse population, consisting of people of various ages, education levels, and socioeconomic statuses, than other convenience samples (Ross, Zaldivar, Irani, & Silberman, 2010). All participants were informed of their participation in a 15-minute, anonymous, online survey about the psychology of HIV (See Appendix A). Those interested in participating were provided with additional information about the study via an informed consent form (See Appendix B). Participants who gave their informed consent were randomly assigned to one of the nine conditions described above. After reading their assigned vignette, each participant completed the 13-item PVBS (PVBS-R; Cramer et al.,

2013), the 9-item CDS (McAuley, Duncan, & Russell, 1992), and a demographics questionnaire. Lastly, participants received a debriefing statement, outlining the purposes of the study and the researchers' contact information (See Appendix H). The entire online survey took no longer than 20 minutes to complete, and all participants were compensated with \$1.00 for their time.

Results

Data Cleaning

Before conducting the analyses, missing data were examined at the participant and item level from the final sample. A total of 58 participants had missing data. Because the sample was large, they were deleted from the sample. Fifty-five participants, who failed one or more of the four attention checks, were also deleted from the final sample to control for careless responding and inattentiveness. Lastly, 126 participants failed the manipulation check and were deleted from the final sample to ensure conclusions were drawn only based on participants who perceived the manipulation of the independent variable, gender. Upon completion of data screening, a total of 239 participants were deleted from the sample due to incomplete responding, missing data, and failed attention and manipulation checks, leaving a final sample of 513 participants (222 men, 278 women, 2 transgender men, 2 transgender women, 4 gender non-conforming/gender queer, and 5 other).

An assessment for outliers was also conducted on the dependent variables by standardizing all raw scores, which included blame and the attributions. An outlier cutoff score of ± 3.00 was used because the sample is considered large, according to the guidelines of Field (2013). No outliers were identified for any of the three subscales of the blame measure. For the CDSII subscales, 11 outliers were identified, but because all values remained continuous, they were not deleted or transformed. The dependent variables were also assessed for skew (by taking

the skew statistic and dividing it by the skew standard error). Using a cutoff score of ± 2.58 , as suggested by Field (2013) only stability had significant skew (skew z score = 2.74). A square root transformation was applied to the stability variable, yielding a new skew z score of -2.50. This transformed variable was used in all primary analyses. However, to assist with the interpretation, all descriptive statistics were reported in raw values.

For the primary mediational analysis, an a priori power analysis using the software G*Power revealed 395 participants were needed to detect a small effect ($f^2 = .02$) with a total of two predictors and a power of .80; thus, a final sample of 513 participants was more than enough to detect significant results with sufficient power.

Preliminary Analysis

Three one-way analyses of variance (ANOVAs) were conducted to assess the effectiveness of the perspective-taking manipulation. Results revealed participants in the perspective-taking condition ($M = 5.96$, $SD = 1.23$) imagined what Sam might be thinking and feeling to a greater extent than those in the stay-objective ($M = 4.51$, $SD = 1.99$) and control conditions ($M = 5.49$, $SD = 1.51$), $F(2, 507) = 35.93$, $p < .001$, $\eta p^2 = .12$. Participants in the perspective-taking condition ($M = 5.04$, $SD = 1.64$) also reported experiencing what Sam was thinking and feeling to a greater extent than those in the stay-objective ($M = 4.07$, $SD = 1.78$) and control ($M = 4.57$, $SD = 1.71$) conditions, $F(2, 505) = 13.71$, $p < .001$, $\eta p^2 = .05$. Lastly, participants in the stay-objective condition ($M = 5.76$, $SD = 1.43$) reported remaining more detached and objective than did those in the perspective-taking condition ($M = 4.31$, $SD = 1.96$), and the difference between the stay-objective and control conditions reached traditional levels of significance ($M = 4.74$, $SD = 1.71$), $F(2, 504) = 32.72$, $p < .001$, $\eta p^2 = .12$.

Differences in Blame According to Gender Identity and Perspective Taking

A 3 (gender of target) x 3 (perspective-taking condition) x 3 (blame) between-subject multivariate analysis of variance (MANOVA) was conducted to assess variations in blame according to the perspective-taking and gender manipulations. The three levels of the gender independent variable included: man, woman, and transgender. The three levels of the perspective-taking independent variable included: perspective taking, stay-objective, and control. The dependent measures were the three subscales of the PVBS: Malice, Unreliability, and Recklessness. The assumption of homogeneity of covariance matrices was assessed via Box's test, which indicated the assumption was met (Box's $M = 59.11$, $F = 1.21$, $p = 0.16$). Thus, Wilks' Lambda test statistics were used when interpreting the MANOVA. Additionally, Levene's test of equality of error variances revealed no violation of the assumption of homogeneity of variance for the dependent measures.

Consistent with H1, the results of the MANOVA revealed the multivariate main effect of gender reached statistical significance, Wilks' Lambda = 0.96, $F(6, 1004) = 3.12$, $p = .004$, $\eta p^2 = 0.02$. However, univariate follow-up tests indicated that only the recklessness subscale was significant $F(2, 504) = 6.97$, $p = .001$, $\eta p^2 = .03$. To determine the nature of this effect, planned contrasts were performed. The first contrast compared the recklessness level for the gender diverse target to that of the cisgender target (combined man and woman targets). The second contrast compared the recklessness level for the man target to that of the woman target. The results of contrast one revealed the gender diverse target ($M = 8.79$, $SD = 3.00$) was deemed more reckless than the cisgender targets ($M = 7.86$, $SD = 2.99$), $t(510) = 3.30$, $p = .001$, $d = 0.31$. The results of the second contrast indicated the difference between the cisgender man target ($M = 8.14$, $SD = 2.92$) and the cisgender woman target ($M = 7.57$, $SD = 3.04$) was not statistically significant, $t(510) = 1.79$, $p = .07$. H5, which predicted that participants receiving the

perspective-taking manipulation would blame gender diverse targets to a lesser extent than those receiving the stay-objective or control conditions, did not reach statistical significance.

The Role of Causal Attributions in Victim Blaming

Although not included in the hypotheses, three independent samples *t*-tests were conducted to compare how participants rated the cisgender targets and the gender diverse target on each of the three causal attributions. The cisgender man and woman target variables were combined into one because the present study focused on comparing only cisgender and gender diverse targets and because no differences were detected between the man and woman in previous analyses. The first *t*-test, assessing locus of causality, revealed that participants attributed the cisgender targets' HIV diagnosis ($M = 18.05$, $SD = 4.03$) to more external factors (i.e., the situation) compared to the gender diverse target's HIV diagnosis ($M = 16.91$, $SD = 4.25$), $t(511) = 2.94$, $p = .003$, $d = .28$). The second and third *t*-tests revealed no significant differences in participants' attributions of stability ($t[511] = 1.67$, $p = .10$, $d = .16$) and controllability ($t[511] = .70$, $p = .48$, $d = .07$) for the cisgender targets compared to the gender diverse target (See Table 3).

Finally, to examine whether participants' attributions mediated the relationship between gender identity and blame (H4), three mediational models were tested using Hayes' PROCESS Macro (Model 1; Hayes, 2013; See Figure 1). The requirements for concluding significant mediation were: (1) the mediator (M) is significantly associated with the independent variable (X) and the dependent variable (Y), (2) the direct effect is significantly different from zero, and (3) the indirect effect of $X \rightarrow Y$ via M is statistically different from zero (Preacher & Hayes, 2008; Zimmer-Gembeck et al., 2006). To assess the significance of the indirect effect (c-c'), confidence intervals and a Sobel test were computed (Fritz et al., 2012; Sobel, 1982).

To satisfy the first requirement for concluding significant mediation, a series of correlational analyses were run on the three blame subscales and the three causal dimension subscales. In line with H4, Locus of causality (a causal dimension subscale) significantly negatively correlated with all three blame subscales: recklessness, malice, and unreliability; it also significantly correlated with the other two causal dimension subscales: stability and controllability. Also, as predicted with H4, stability (a causal dimension subscale) significantly negatively correlated with recklessness and unreliability; it also significantly correlated with controllability. Lastly, aligning with H4, controllability (a causal dimension subscale) was statistically significantly negatively correlated with all three blame subscales. Recklessness significantly negatively correlated with the other two blame subscales. Lastly, malice and unreliability significantly correlated (See Table 4 for all bivariate correlations).

After satisfying the first requirement for significant mediation, three mediational analyses were conducted. Because only the recklessness subscale was found to be statistically significant for the MANOVA, it was the only subscale of the PVBS included in the mediational analysis and was used as the dependent variable (Y). Gender served as the independent variable (X), which compared cisgender (man and woman combined) to gender diverse targets. The man and woman targets were combined because statistically significant differences in blame were found between the man and gender diverse targets and the woman and gender diverse targets, but not the man and woman targets. The three causal dimensions (locus of causality, stability, and controllability) served as the mediator (M) variables. Results of the first mediational analysis indicated that locus of causality partially mediated the effect of gender on the perceived recklessness of the target (See Figure 1). After locus of causality was added to the model, the coefficient was reduced from $\beta = -0.20$ to $\beta = -0.12$ and was still significant but was less

significant (from a $p < .001$ to a $p = .02$). The Sobel test provided further evidence that the reduction in the effect of the independent variable, after including the mediator in the model, was statistically significant ($Z = -3.50, p < .001$).

The second mediational analysis indicated that stability did not mediate the effect of gender on perceived recklessness of the target. The β -coefficient between gender of target (X) and stability (M) (path a) was -0.10 ($p = .06$), which was not statistically significant. The third mediational analysis indicated that controllability also did not mediate the effect of gender on perceived recklessness of the target. The β -coefficient between gender of target (X) and controllability (M) (path a) was 0.04 ($p = .41$), which was not statistically significant. Therefore, the only causal attribution dimension found to partially mediate the effect of gender on perceived recklessness of the target was locus of causality.

Discussion

The current study assessed whether hypothetical gender diverse individuals were blamed for their HIV diagnosis to a greater extent than cisgender individuals and whether the dimensions of causal attributions helped to explain this difference. Perspective taking was also assessed as a means by which to reduce blame. Results revealed the gender diverse target was judged to be more reckless than the cisgender targets. This difference was partially explained by participants being more likely to attribute the gender diverse target's diagnosis to internal rather than external factors. Perspective taking did not reduce blame placed on any of the targets.

Differences in Blame According to Gender Identity

The results revealed that blame placed on the targets with HIV varied according to the targets' gender identity, but only with respect to perceptions of recklessness, not malice or unreliability. In particular, the gender diverse target was viewed as more reckless than the

cisgender (man and woman) targets. The gender diverse target was likely viewed as more reckless than the cisgender targets because gender diverse individuals are typically viewed as “higher risk” than cisgender individuals (Dwyer, 2014). For example, Brown, Outlaw, and Simpson (2000) suggest that individuals from minority groups may share a culture that those in the majority tend to see as different from the majority culture. Those in the majority then perceive the minority population as being riskier to deny their own risk of danger.

Although it is not clear why the unreliability or the malice subscales failed to produce differences, one possible explanation for why the malice subscale failed to produce differences could be that participants were less likely to view the target’s behavior as “intentionally harmful” (definition of *Malice* according to Cramer, Nobles, Amacker, & Dovoedo, 2013). According to Cramer and colleagues (2013), people who view victims as intending harm may also view the victim as a “bad person”. In the present study, participants did not seem to view the gender diverse target as a “bad person,” who intentionally acquired HIV. Instead, participants viewed the target’s behavior as more reckless than the cisgender target’s behavior.

The Role of Causal Attributions in Victim Blaming

As expected, locus of causality partially mediated the effect of gender on the perceived recklessness of the target, such that the cause of the gender diverse target’s diagnosis was perceived to be a result of internal factors to a greater extent than the cisgender individual’s diagnosis. It is no surprise that locus of causality explained variations in blame because it is most closely associated with the fundamental attribution error (defined as the tendency to make external attributions for one’s own negative behavior and internal attributions for the negative behavior of others; Weiner & Hoffman, 1985). In fact, research suggests the fundamental

attribution error is the most common cognitive bias made when assigning blame to people living with an STI (Speakes-Lewis, 2011).

It is not entirely clear why controllability and stability failed to mediate the effect of gender. With respect to controllability, HIV and other STIs are often perceived as controllable, regardless of whether information about the cause of the illness is provided. STIs tend to be viewed as having behavioral causes, such that they are contracted because of one's personal choice to have unprotected sex or sex in general (Peters, Den Boer, Kok, & Schaalma, 1994). Some evidence suggests people perceive STIs as punishment because they are viewed as illnesses that can be prevented. For example, among the Igbo of Anambra State, Nigeria, AIDS was deemed a "just reward" for immoral behavior, specifically "sexual promiscuity" and was often seen as a punishment from God (Muoghalu & Jegede, 2013). Consequently, the cause of one's HIV diagnosis is likely to be viewed as controllable and stable regardless of one's gender identity.

Perspective Taking to Reduce Victim Blaming

Although it was expected that the act of perspective taking would reduce blame, the results indicated that the perspective-taking manipulation resulted in no significant differences in blame. The failure for perspective taking to reduce blame likely occurred because the perspective-taking manipulation in the present study was not salient enough to produce an effect. Other types of perspective-taking manipulations, such as asking participants to watch a video, listen to an audio clip, or write about the target, have changed participants' attitudes, cognitions, and feelings toward targets (Todd & Galinsky, 2014). Previous research suggests asking participants to complete a writing exercise as part of a perspective-taking manipulation can increase perspective-taking because it can induce stronger emotions from participants (Galinsky

& Moskowitz, 2000). Research has not yet compared the efficacy of various perspective-taking manipulations, but more effortful and engaging perspective-taking tasks is likely to produce more significant changes.

An additional explanation for the inability for perspective-taking to reduce blame in the present study could be explained by participants' lack of perceived similarity to the target. According to Galinsky and Moskowitz (2000), the positive effects of perspective taking were significantly reduced when accounting for one's self-other overlap. In other words, the participants in the present study may not have perceived the gender diverse target with HIV as sharing commonalities with themselves. Only 1.06% of the sample identified as gender diverse and 8.78% reported being diagnosed with a sexually transmitted infection. Therefore, most of the sample likely did not perceive themselves as similar to Sam, given participants' predominantly cisgender gender identity and lack of an STI diagnosis. This may have decreased the effectiveness of the perspective-taking manipulation in reducing blame. Lastly, existing research suggests relationship closeness as a contributing factor to the effectiveness of perspective taking (Cialdini et al., 1997). Participants in the present study may not have perceived themselves as relationally close to Sam, which may have also contributed to the lack of reduction in blame following the perspective-taking manipulation.

Limitations and Future Directions

Although the present study provides insight into differences in blame placed on individuals with HIV based on one's gender and suggests locus of causality as a potential link between blame and gender, several limitations exist. First, the information provided and omitted in the vignettes may serve as a potential limitation. Specifically, the lack of explanation regarding the causality of Sam's HIV diagnosis in the vignette may explain the lack of

significance for controllability and stability. Future research should consider adding a question to ask clients how they thought Sam acquired HIV to clarify whether they thought the causality was due to sexual behaviors (e.g., rather than injection drug use).

A second limitation may be that the PVBS scale assessed victim denigration rather than blame. Victim denigration refers to “the action of saying someone or something is not good or important” (*denigration*, 2020). However, a single measure of blame (i.e. “To what extent do you blame Sam for the HIV diagnosis”) was included for exploratory purposes to assess the convergent validity of the PVBS. According to an exploratory analysis, in which Pearson product-moment correlation coefficients were conducted, the single-item blame measure was significantly and moderately to strongly associated with all three facets of the PVBS (Unreliability: $r = .53, p < .001$; Recklessness: $r = .61, p < .001$; Malice: $r = .40, p < .001$). These findings suggest the PVBS does seem to be tapping into blame. Nevertheless, more research is needed to better distinguish blame and denigration.

A third limitation is the minimal detail provided in the perspective-taking manipulation. The present study provided brief instructions, asking participants to remain objective (in the stay-objective condition) or think about Sam’s situation from their point of view (in the perspective-taking condition) before reading the vignette. Future research should consider asking participants in the perspective-taking condition to write a few sentences about how the target might be feeling to increase the strength of the perspective-taking manipulation.

Lastly, because the study was experimental and used hypothetical vignettes, one cannot be sure how participants would respond in the real world. A major criticism of using experimental vignettes is that they may reveal that certain outcomes occur but do not necessarily indicate such outcomes would result outside of an experimental setting (Aguinis & Bradley,

2014). In fact, Aguinis and Bradley (2014) suggest that researchers improve experimental realism to enhance the generalizability of experimental vignettes. For example, Hughes and Huby (2002) state that using video vignettes to display real humans in a real-world setting can better simulate reality. Future research should consider incorporating audio or video elements into vignettes to present participants with a more immersive view of the targets and situation, thus increasing the generalizability of the study.

Conclusion and Implications

The results of the current study revealed that gender diverse individuals were judged to be more reckless than the cisgender targets, based on their HIV diagnosis. The cause of gender diverse individuals' HIV diagnosis was attributed to more internal factors (i.e., one's personality) than external factors (i.e., one's situation). Perceived recklessness served as a facet of blame, meaning gender diverse individuals were blamed to a greater extent for their HIV diagnosis than cisgender individuals. These results align with existing research on the relationship among sexual minorities, HIV, and blame in that people tend to hold same-sex individuals more responsible for their HIV diagnosis than heterosexual individuals, if the mode of transmission is unspecified (Dowell, Presto, & Sherman, 1991). Thus, the results of this study indicate that sex and gender may still be viewed as synonymous, though one's gender identity is distinct from their sexual preference or behaviors. This suggests that gender diverse individuals experience high levels of stigma for their HIV diagnosis, like the stigma same-sex individuals experience.

The findings of this study hold important implications regarding the relationship between stigma and health among LGBT individuals, particularly members of the gender diverse community. Social stigma serves as a major contributor to health disparities among the LGBT community (Whitehead, Shaver, & Stephenson, 2016). LGBT individuals may be at risk of

acquiring HIV, primarily because they are deemed “risky” (Dwyer, 2014). Therefore, because gender diverse individuals were deemed more reckless in the present study, they may be less likely to seek healthcare treatment. Existing research indicates LGBT populations have lower rates of primary care usage than cisgender and heterosexual individuals, which may be explained by the gender- and sexuality-based stigma and fear of discrimination they experience (Whitehead et al., 2016). Therefore, the healthcare system should work to address healthcare disparities among LGBT individuals with HIV by equipping more providers with knowledge and skills to provide culturally sensitive care to such populations. To address LGBT individuals’ fear of discrimination, more gender- and sexuality-affirming clinics should open and advertise their commitment to meeting the healthcare needs of LGBT individuals.

The present study also holds important implications for educators and healthcare providers. Because the perspective-taking manipulation failed to reduce blame, educators and healthcare providers may want to consider other means to foster students’ and clients’ ability to empathize. Perhaps simply imagining oneself in another person’s situation is not enough to reduce blame. Reducing blame may require a task that involves more effort and critical thinking, such as writing about oneself in another’s situation or directly conversing with the person being blamed. A study as part of the Horizons program, a research program focused on studying stigma associated with HIV and how to reduce the stigma, exemplifies the way in which direct contact with a stigmatized group can reduce stigma. The study indicated the media in Senegal told negative stories about men who have sex with men (MSM), thus largely contributing to the stigma attached to them. To combat the stigmatization exacerbated by the media, the researchers held a workshop for journalists to communicate with MSM to better understand the impact of stigma on their lives. For 18 months following the workshop, the research team reviewed the

media in Senegal and found no stigmatizing articles written on MSM (Pulerwitz, Weiss, Brown, & Mahendra, 2010). By holding workshops to allow students and staff within educational and healthcare settings to listen to the stories of gender diverse individuals, they may be more likely to reduce attributions of blame placed gender diverse individuals.

It is also possible that blame reduction, particularly blame placed on gender diverse individuals with HIV, requires people to be made aware of their biases before blame can be reduced. Another Horizons program study involved hospital staff at three public and private hospitals in New Delhi, India and revealed misconceptions about HIV transmission and judgmental attitudes toward patients with HIV among hospital staff. After disseminating the results of the study, the hospitals began to address misconceptions and judgmental attitudes (Pulerwitz, Weiss, Brown, & Mahendra, 2010). Horizons noted that in order to begin to reduce stigma associated with HIV, people needed to recognize their own biases and the structural stigma present in the organization. Pulerwitz, Weiss, Brown, and Mahendra (2010) also suggested the ease by which HIV stigma can be reduced varies depending on the group being stigmatized. For example, the study found that stigma associated with MSM and sex workers with HIV was less likely to be reduced than other forms of stigma. The present study revealed the ways in which gender diverse individuals experience high rates of stigma because of their gender identity and how the stigma they face can increase when they also live with HIV. Therefore, reducing blame placed on gender diverse victims of HIV may require more structural change, since the stigmatization of gender diverse individuals and victims of HIV remains embedded in the framework of United States culture. Although the present study failed to reduce stigma placed on gender diverse victims of HIV, it calls for larger, structural changes to spread

awareness regarding the stigmatization of gender diverse individuals with HIV and the ways in which stigmatization negatively effects their various life domains.

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Appendix A

Amazon Mechanical Turk™ Recruitment Message

You are invited to participate in a research study titled “The Psychology of HIV”. This study is conducted by Dr. Ashley Thompson and Emma Deihl from the Department of Psychology at the University of Minnesota Duluth. The purpose of this research study is to examine people’s thoughts and feelings related to sexually transmitted infections (STIs). The study will require that you complete a variety of online questionnaires which should take no longer than 15 minutes.

To participate in the study, you must be:

- 18 years of age or older
- Currently a resident of the United States

If you agree to participate:

- The online survey will take approximately 15 minutes of your time.
- You will be compensated \$1.00.

In order to participate:

- You must click on survey link below.

Appendix B

Informed Consent Document

The Department of Psychology at the University of Minnesota Duluth supports the practice of protecting human participants in research. The following information is provided so that you can decide whether you wish to participate in the present study.

Why is this study being done and what do you want me to do? This study is designed to assess people's thoughts and feelings related to sexually transmitted infections (STIs). If you decide to participate in this study, you will complete several surveys assessing your background, relationship/sexual history, your thoughts and feelings toward sexting, and your sexting experiences. Completion of all study components will take about 15 minutes.

Are there any benefits to participating? Yes. You will receive a deposit of \$1.00 into your MTurk™ account. In addition, you can choose to receive a summary of the findings of this research by providing your email on the debriefing form at the end of the study.

Are there any risks? It is unlikely that you will experience any discomfort during the study. However, feel free stop the study or skip any questions that make you uncomfortable. Participation in the study is completely voluntary and you may stop answering questions without the loss of compensation. Any information collected from you that makes you feel uncomfortable can be destroyed if you so desire.

Are my answers confidential? Yes. Although the researchers will be asking for your worker ID, it will not be connected to your survey responses in any way. Please be aware that any work performed on Amazon MTurk™ can potentially be linked to information about you on your Amazon® public profile page, depending on the settings that you have for your Amazon® profile. We will not be accessing any personally identifying information about you that you may have put on your Amazon® public profile page. We will store your MTurk™ worker ID separately from the other information you provide to us to ensure confidentiality. If you do choose to provide your e-mail address for a summary of the results, it will not be connected with your survey responses in any way.

Who will have access to my data? Only the primary investigators (Ashley Thompson, Ph.D. and Emma Deihl, B.A.), will have access to your information and answers (but not your identities). Your consent form (containing your signature and email address, should you choose to provide them) will be stored separately from your survey responses, thus any identifying information will not be connected with your survey responses in any way.

How can I get more information about this research project? If you have any questions before, during, or after the study, or if you would like to learn more about our research, please feel free to contact the primary investigators:

Dr. Ashley Thompson

Department of Psychology

1049 University Drive

thompsoa@d.umn.edu

Emma Deihl

Department of Psychology

1049 University Drive

deihl001@d.umn.edu

If you have any complaints about your treatment as a participant in this study, please call or write:

Executive Director, Institutional Review Board

c/o Human Research Protection Program

University of Minnesota

(612) 626-5654

Consent Statement: By selecting “yes, I agree to participate” below, I am confirming that I am at least 18 years old, currently residing in the United States, and have received an explanation of the study. I agree to participate. I understand that my participation in this study is strictly voluntary and that I may withdraw at any time without penalty.

If you do not wish to participate, please click “no, I do not agree to participate”

- Yes, I agree to participate
- No, I do not agree to participate

Appendix C

Experimental Vignettes

1. Woman target

Sam is a 27-year-old **woman**, who lives and works as a lawyer. **She** leads a balanced and healthy lifestyle, exercising daily and eating a balanced diet. **She** maintains a strong social circle, and **her** friends and family describe **her** as “personable, funny, and intelligent”. One day, Sam became fatigued and developed a fever and body aches. **She** assumed **she** acquired the flu, but **her** symptoms persisted for about three weeks, so **she** began to grow concerned. Sam decided to schedule an appointment with **her** physician, who told Sam **she** tested positive for HIV, an autoimmune virus. Sam’s doctor told **her** that with proper treatment, Sam’s HIV could be managed, but the virus is incurable.

2. Man target

Sam is a 27-year-old **man**, who lives and works as a lawyer. **He** leads a balanced and healthy lifestyle, exercising daily and eating a balanced diet. **He** maintains a strong social circle, and **his** friends and family describe **him** as “personable, funny, and intelligent”. One day, Sam became fatigued and developed a fever and body aches. **He** assumed **he** acquired the flu, but **his** symptoms persisted for about three weeks, so **he** began to grow concerned. Sam decided to schedule an appointment with **his** physician, who told Sam **he** tested positive for HIV, an autoimmune virus. His doctor told **him** that with proper treatment, Sam’s HIV could be managed, but the virus is incurable.

3. Transgender target

Sam is a 27-year-old **transgender individual** (an individual whose biological sex differs from their gender identity), who lives and works as a lawyer. **They** lead a balanced and healthy lifestyle, exercising daily and eating a balanced diet. **They** maintain a strong social circle, and **their** friends and family describe **them** as “personable, funny, and intelligent”. One day, Sam became fatigued and developed a fever and body aches. **They** assumed **they** acquired the flu, but **their** symptoms persisted for about three weeks, so **they** began to grow concerned. Sam decided to schedule an appointment with **their** physician, who told **them** they tested positive for HIV, an autoimmune virus. Sam’s doctor told **them** that with proper treatment, Sam’s HIV could be managed, but the virus is incurable.

Appendix D

Perceptions of Victim Blame Scale—Revised (PVBS-R)

Instructions: Please rate Sam on the following characteristics. Please indicate your answer.

Violent	1	2	3	4	5	6	7	nonviolent*
Gentle	1	2	3	4	5	6	7	forceful
Maniacle	1	2	3	4	5	6	7	sane*
Good natured	1	2	3	4	5	6	7	vicious
Malicious	1	2	3	4	5	6	7	kind*
Blameless	1	2	3	4	5	6	7	blameworthy
Fault	1	2	3	4	5	6	7	faultless*
Harmful	1	2	3	4	5	6	7	harmless*
Hurtful	1	2	3	4	5	6	7	innocuous*
Careful	1	2	3	4	5	6	7	reckless
Conscientious	1	2	3	4	5	6	7	careless
Reliable	1	2	3	4	5	6	7	unreliable
Dependable	1	2	3	4	5	6	7	undependable

Note. *Denotes a reverse-scored item.

Appendix E

Revised Causal Dimension Scale (CDSII)

Think about the reasons why Sam may have been diagnosed with HIV. The next set of items will assess your impressions and opinions of the causes behind Sam's diagnoses. Please indicate the number the best corresponds to the extent to which the following relates to the cause of Sam's behavior.

Is the cause(s) something:

- | | | | |
|---|--------------------------------|--------------------------|--|
| 1 | That reflects an aspect of Sam | 9 8 7 6 5 4 3 2 1 | That reflects an aspect of the situation |
| 2 | Manageable by Sam | 9 8 7 6 5 4 3 2 1 | Not manageable by Sam |
| 3 | Permanent | 9 8 7 6 5 4 3 2 1 | Temporary |
| 4 | Inside of Sam | 9 8 7 6 5 4 3 2 1 | Outside of Sam |
| 5 | Stable over time | 9 8 7 6 5 4 3 2 1 | Variable over time |
| 6 | Sam could have regulated | 9 8 7 6 5 4 3 2 1 | Sam could not have regulated |
| 7 | Something about Sam | 9 8 7 6 5 4 3 2 1 | Something about others |
| 8 | Over which Sam had power | 9 8 7 6 5 4 3 2 1 | Over which Sam had no power |
| 9 | Unchangeable | 9 8 7 6 5 4 3 2 1 | Changeable |

Appendix F
Demographics Questionnaire

Please provide a response for the following questions. All information provided will be kept confidential and will be used only for the purposes of this study.

1. Age: _____ (in years)

2. What was Sam's gender in the vignette you read?
 - a. Man
 - b. Woman
 - c. Transgender

3. To what extent did you try to imagine what Sam might be thinking, feeling, and experiencing? Please rate your answer on a scale from 0-7 (0 = not at all; 7 = very much)?

Not at all 1 2 3 4 5 6 7 very much

4. To what extent did you try to stay objective and remain emotionally detached regarding Sam (0 = not at all; 7 = very much)?

Not at all 1 2 3 4 5 6 7 very much

5. What gender do you identify with?
- a. Man
 - b. Woman
 - c. Transgender man
 - d. Transgender woman
 - e. Gender queer/gender nonconforming
 - f. I would prefer not to disclose
 - g. Other (please specify): _____
6. What is the highest level of education you have completed?
- a. ___ Some high school
 - b. ___ High school or equivalent
 - c. ___ Some college/university
 - d. ___ Completed college/university
 - e. ___ Post graduate training/degree
 - f. ___ Other: please specify: _____
7. What is your family or household's income level?
- a. ___ Less than \$10,000
 - b. ___ \$10,000-\$20,000
 - c. ___ \$20,000-\$55,000
 - d. ___ \$55,000-\$75,000

- e. ___ \$75,000-\$100,000
- f. ___ \$100,000+
- g. ___ Don't know or prefer not to answer
8. Which of the following best describes your sexual orientation?
- a. ___ Heterosexual (Straight)
- b. ___ Gay
- c. ___ Lesbian
- d. ___ Bisexual
- e. ___ Queer
- f. ___ Unlabeled
- g. ___ Don't know
- h. ___ Other, please specify: _____

9. Circle the number that best describes your sexual experience:

Entirely with the same sex 1 2 3 4 5 6 7 Entirely with the opposite sex

10. Circle the number that best describes your current feelings of sexual attraction:

Entirely to the same sex 1 2 3 4 5 6 7 Entirely to the opposite sex

11. Current relationship status

- a. Single
- b. Dating
- c. In a monogamous relationship
- d. In a polyamorous relationship

- e. In an open relationship
 - f. Cohabiting
 - g. Married
 - h. Divorced
 - i. Other (please specify): _____
12. With how many people have you engaged in oral, anal, and/or vaginal sex? _____
13. How old were you the first time you engaged in (put a zero if you have never engaged in this activity)?:
- Oral sex _____
 - Vaginal sex _____
 - Anal sex _____
14. Do you have an STI?
- a. Yes
 - b. No
15. Do you know someone who has an STI?
- a. Yes
 - b. No
16. Do you know someone who identifies as gender diverse?

- a. Yes
- b. No

Appendix G

Debriefing Statement

Thank you for participating in our study. Your responses on the survey and the experiences you have provided us will greatly improve our research and understanding of the psychology of HIV. We would now like to give you some additional information about the study.

Your completion code is: 86198919

You **MUST** enter this code on the Mechanical Turk HIT in order to complete the work and receive compensation. Once your survey completion has been confirmed you will receive compensation. We try to approve work as quickly as possible, although sometimes this can take up to 24 hours.

Victims of blame can experience a vast array of negative responses, including emotional, cognitive, biological, and behavioral responses (Feagin & Sikes, 1994; Miller & Major, 2000). Gender diverse individuals (i.e., individuals whose gender identity differs from the socially constructed gender norms; Thompson, Shortreed, Moore, & Carey-Butler, 2019) experience higher levels of stigma and higher rates of HIV/AIDS than do cisgender individuals (Cruz, 2014; CDC, 2018). Research suggests that the socially marginalized, like gender diverse individuals, are often blamed for their HIV/AIDS (Herdt, 2001). The blame experienced by individuals with HIV/AIDS can be partially explained by the way in which people attribute the cause of how someone acquired the illness. According to Attribution Theory, when people make attributions

about negative events that occur to someone else, they tend to blame the other person rather than accounting for external factors (Weiner & Hoffman, 1985). The first primary objective of the present study is to determine whether hypothetical gender diverse individuals are blamed to a greater extent for their HIV diagnosis as compared to cisgender individuals and whether the way in which people assign blame can help to explain this difference. The second primary objective was to assess whether or not adopting another person's point of view can reduce the extent to which people blame someone else and change how they makes attributions about the person whose perspective they adopted.

We want you to know that we appreciate your time in helping us with this research. We think that one way to understand sexual behavior is to learn more about the kinds of issues we investigated today. We hope that your responses provided in today's study will help us answer these questions.

Because discussions about sexually transmitted infections and gender diverse stigmatization can sometimes result in negative outcomes, it is possible that some may have experienced negative outcomes. If you experienced any distress while participating in this study, we urge you to utilize the following resources:

Trevor Project: 1-866-488-7386

Planned Parenthood U.S. National Sexual Health Hotline: 1-800-239-PLAN (7526)

CDC-INFO (Formerly known as the CDC National STD Hotline): 1-800-232-4636

If you have any additional questions about the study, you may reach the Primary Investigator, Dr. Ashley Thompson and/or the co-investigator, Emma Deihl, by mail or email:

Dr. Ashley Thompson

Emma Deihl

Department of Psychology

Department of Psychology

1049 University Drive

1049 University Drive

thompsa@d.umn.edu

deihl001@d.umn.edu

To be compensated for taking part in the study, please provide your Mechanical Turk® worker ID in the space provided.

Thank you again for your participation. You will receive credit for the study on Amazon Mechanical Turk within the next 24 hours.

Table 1.

Planned Contrasts for Gender

	Transgender	Man	Woman
Contrast One	-2	+1	+1
Contrast Two	0	+1	-1

Note: The first planned contrast will compare the transgender target to the cisgender targets (combined man and woman). The second planned contrast will compare the man target to the woman target for exploratory purposes.

Table 2.

Planned Contrasts for Perspective Taking

	Perspective Taking	Stay Objective	Control
Contrast One	-2	+1	+1
Contrast Two	0	+1	-1

Note: The first planned contrast will compare the perspective taking group to the non-perspective taking groups (combined stay objective and control). The second planned contrast will compare the stay objective group to the control group.

Table 3.

Differences in causal attributions according to gender of target

	Locus of Causality		Controllability		Stability	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Cisgender	18.05	4.03	16.10	3.61	11.61	4.61
Gender Diverse	16.91	4.25	15.86	3.49	10.90	4.24

Note. $N = 513$

Table 4.

Bivariate Correlations.

	Locus of Causality	Controllability	Stability	Recklessness	Malice	Unreliability
Locus of Causality	—	.46**	.39**	-.41**	-.37**	-.33**
Controllability	—	—	.35**	-.14**	-.10*	-.09*
Stability	—	—	—	-.32**	-.08	-.09*
Recklessness	—	—	—	—	.39**	.62**
Malice	—	—	—	—	—	.58**
Unreliability	—	—	—	—	—	—

Note. $N = 513$. ** = $p < .001$. * = $p < .05$.

Figure 1. *Mediation model*