

Trauma-Informed Care for Sexual and Gender Minority Survivors of Intimate Partner Violence

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Running head: TIC FOR LGBTQ SURVIVORS OF IPV

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Counseling Psychology

TRAUMA-INFORMED CARE FOR SEXUAL AND GENDER MINORITY SURVIVORS OF
INTIMATE PARTNER VIOLENCE

Dissertation

by

JILLIAN R. SCHEER

submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

May 2018

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2017

Abstract

Trauma-Informed Care for Sexual and Gender Minority Survivors of Intimate Partner Violence

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Intimate partner violence (IPV) occurs in LGBTQ (lesbian, gay, bisexual, transgender, queer) relationships at rates equal to or even higher than cisgender heterosexual relationships (Walters, Chen, & Breidig, 2013). The health consequences of IPV are well documented (Kwako et al., 2011). Trauma-informed care (TIC) is one service approach receiving increasing support for use with IPV survivors (Warshaw, Lyon, Phillips, & Hooper, 2014). Nevertheless, there is little research exploring the association between TIC and health among LGBTQ IPV survivors.

Immobilization is prevalent for IPV survivors for whom fight or flight may increase risk of violence during traumatic situations (van der Kolk, 1989). TIC might be well-positioned to counter these immobilizing effects in effort to facilitate mobilization and better health for IPV survivors. The relationship between TIC and health through mobilizing mechanisms has not yet been tested. This study examined several mobilizing mechanisms as mediating the relationship between TIC and health including: 1) lower social withdrawal; 2) lower shame; 3) greater emotion regulation; and, 4) greater empowerment.

Among 227 LGBTQ adults, structural equation modeling analyses tested the relationship between TIC and health, and the mediating effects of lower social withdrawal and shame, and greater emotion regulation and empowerment on the relationship between TIC and health. Results indicated that the direct effects of TIC on mental and physical health were not significant. Indirect effects of TIC on mental and physical health through the set of mobilizing mechanisms were not significant. However, TIC did predict greater empowerment and emotion regulation and lower social withdrawal. Lower social withdrawal and lower shame also predicted better mental health, while lower shame and emotion

regulation predicted better physical health. Practitioners need to uncover additional services and resources beyond TIC that could improve health among LGBTQ IPV survivors. Research should continue to examine the potential effects of TIC in addition to how it is applied in the context of evidence-based treatment programs that are adapted for sexual and gender minorities.

ACKNOWLEDGEMENTS

First, I want to thank Dr. Paul Poteat, my dissertation chair, advisor, and friend for his unwavering encouragement, support, and mentorship throughout my training at Boston College. I would also like to acknowledge my dissertation committee members: Drs. Lisa Goodman, Belle Liang, and Amanda Zelechoski for their feedback and dedication to this project. I would like to thank my supervisors from my clinical training placements for helping me to clarify and integrate my clinical and research interests. I am extremely thankful for the participants who completed my dissertation survey and provided me with comments about their experience as well as suggestions to improve future research. I want to also acknowledge the Lynch School of Education for their Dissertation Fellowship, the APA's Division 44 for their LGBT Dissertation Award, and the Boston College Graduate Student Association for their Research Grant. These organizations provided monetary support to make this project possible and believed in the importance of improving access to quality healthcare for LGBTQ individuals.

Finally, I want to thank my fiancé, Dr. Julie Woulfe for her loving spirit, wild heart, and creative energy that supports, inspires, and grounds me. I also want to thank my family, especially my mother, Donna Scheer for her boundless love and who instilled in me the value of hard work and perseverance. I also want to thank my grandmother, Catherine Gianfagna for modeling empathy and authenticity in our relationship which will forever help me in my clinical practice. Thank you to Robin Chalfin, LICSW for her unconditional warmth and support which kept me balanced and connected to myself throughout my doctoral career. Lastly, I want to thank my friends, colleagues, and mentors for their love and encouragement to dedicate my life's work to improving the wellbeing of marginalized communities.

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Chapter 1

Introduction

Intimate partner violence (IPV) is a public health concern primarily studied among cisgender heterosexual relationships (Dempsey, 2010; Poorman, Seelau, & Seelau, 2003). Nevertheless, there is growing evidence that IPV occurs in LGBTQ (lesbian, gay, bisexual, transgender, queer) relationships at equal or even higher rates as cisgender heterosexual relationships (Balsam, Rothblum, & Beauchaine, 2005; Carvalho et al., 2011; Duke & Davidson, 2009; Messinger, 2011; Walters, Chen, & Breidig, 2013). In fact, one study found that 61.1% of bisexual women, 43.8% of lesbians, 37.3% of bisexual men, and 26.0% of gay men reported experiencing rape, physical violence or stalking by a partner compared to 35.0% of heterosexual women and 29.0% of heterosexual men (Walters et al., 2013). Another study found that 50% of transgender-identified participants reported being physically or sexually assaulted by an intimate partner (Courvant & Cook-Daniels, 2000). Moreover, health consequences of IPV are well documented (e.g., sexual issues, physical injuries, somatic complaints, depression, posttraumatic stress disorder [PTSD], and substance abuse; Breiding, Black, & Ryan, 2008; Coker et al., 2002; Coker, Smith & Fadden, 2005; Kwako et al., 2011). As such, research on intervention approaches aimed at improving health for LGBTQ IPV survivors are critical.

Trauma-informed care (TIC) is one service provision approach receiving increasing support for use with IPV survivors (Phillips, Lyon, Warshaw & Fabri, 2013; Warshaw et al., 2014). One fundamental tenet of TIC is the assumption that all clients may have experienced trauma and using this awareness to inform services (e.g., avoiding triggering survivors when gathering history; Elliott et al., 2005; Harris & Fallot, 2001). Although TIC has been linked to improved well-being among trauma survivors in general (Morrissey et al., 2005), there has been limited research on TIC for IPV survivors specifically, and especially among LGBTQ IPV survivors. TIC holds promise for LGBTQ IPV

survivors who are not only at heightened risk for IPV (Balsam et al., 2005; Duke & Davidson, 2009), but who also face unique difficulty accessing culturally sensitive treatment due to discrimination and a limited understanding of LGBTQ IPV among providers (Calton, Cattaneo, & Gebhard, 2015; Lombardi, Wilchins, Priesing, & Malouf, 2001; Walker, 2015). This current study assessed specific mobilizing mechanisms by which TIC may promote better health for this population.

LGBTQ IPV in the Context of Minority Stress

In addition to risk factors that contribute to violence within cisgender heterosexual relationships (e.g., alcohol abuse, childhood exposure to IPV; Balsam & Szymanski, 2005; Fortunata & Kohn, 2003), LGBTQ IPV survivors face additional stressors related to their stigmatized identity (i.e., minority stress; Meyer, 2003) that may further elevate their IPV risk (Balsam & Szymanski, 2005; Otis, Rostosky, Riggle, & Hamrin, 2006; Roch, Ritchie, & Morton, 2010). According to the minority stress model (DiPlacido, 1998; Meyer, 2003), many LGBTQ individuals, including IPV survivors, experience chronic and additive adverse proximal stressors (e.g., internalized oppression, identity concealment) and distal stressors (e.g., parental rejection, institutional discrimination; Balsam et al., 2005; Corliss, Cochran, & Mays, 2002; Meyer, 2003; Tjaden, Thoennes, & Allison, 1999). Researchers have theorized that stigma-related stress elevates LGBTQ individuals' risk for maladaptive psychological processes (e.g., shame, affect dysregulation; Hatzenbuehler, 2009; Insel et al., 2010; Sanislow et al., 2010). In turn, this can lead to higher rates of syndemic (i.e., co-occurring and mutually exacerbating) health conditions including depression, substance abuse, and cardiovascular disease risk (Cochran & Mays, 2009; Meyer, Dietrich, & Schwartz, 2008). Many of these psychological processes are similar to the immobilizing effects of IPV (e.g., disempowerment), of which minority stress can indeed exacerbate (Allen & Oleson, 1999; Balsam, 2001; Mohr & Fassinger, 2006; Sherry, 2007). Immobilizing effects of trauma are also increasingly related to chronic health symptoms (D'Andrea et al., 2013; MacDonald et al., 2008; Perry

et al., 1995; Samuels-Dennis, Bailey, Killian, & Ray, 2013; Schore, 2013). As such, TIC may be even more critical to the care of LGBTQ IPV survivors to help alleviate some of these negative immobilizing effects and thus promote better health.

Culturally sensitive services are essential in mitigating health risk especially for marginalized populations (Cochran, 2001; Mayer et al., 2012). At the same time, LGBTQ individuals face unique barriers accessing health-promoting resources (Calton et al., 2015; Cruz & Firestone, 1998). For instance, many LGBTQ IPV survivors do not seek services following IPV in order to avoid providers' minimization of their abuse (Carvalho et al., 2011; Lewis et al., 2001; Lombardi et al., 2001). Even when LGBTQ individuals do seek help, many encounter non-affirming services (Brotman, Ryan, & Cormier, 2003; Maccio & Dueck, 2002; Pattavina et al., 2007). For instance, homeless shelters are often segregated based on sex assigned at birth, which may be incongruent with the affirmed gender identity of many transgender and gender nonconforming IPV survivors (Hassouneh & Glass, 2008; Hester et al., 2012; Simpson & Helfrich, 2005). Given these concerns, it is critical to explore the extent to which components of TIC may be relevant for working with LGBTQ individuals who experience IPV in a climate of social marginalization.

Trauma-Informed Care for LGBTQ IPV Survivors

At its core, a TIC approach involves providing culturally sensitive services that build on survivor strengths, facilitate opportunities for social connection, and foster empowerment to help survivors regain control (e.g., offering collaborative opportunities during treatment planning; Blanch, 2003; Elliott et al., 2005). Recent research has begun to evaluate the effectiveness of trauma-informed interventions at various time points as compared to control groups who receive treatment as usual and has found mixed results. Some studies have shown lower levels of PTSD, depression, somatic complaints, physical illnesses, and increased service utilization among trauma survivors receiving trauma-informed treatment

(Amaro et al., 2007; Gilbert, Domino, Morrissey, & Gaynes, 2012; López-Castro et al., 2015). Other studies, such as Cocozza et al., 2005 found that for women with experiences of trauma, interventions that were trauma-informed showed reductions in PTSD and substance use but did not significantly improve overall mental health status after 6 months of treatment. Also, Morrissey et al. (2005) found that clients receiving TIC that integrated mental health did not show reductions in substance use outcomes after 12 months of treatment. Building on these findings, recent efforts have been made to formally assess the degree to which IPV survivors report receiving components of TIC.

One assessment – the TIP Scales (Goodman et al., 2016) – targets the following six general domains of TIC: 1) perceived environment of agency and mutual respect (e.g., the extent to which survivors choose their own treatment goals), 2) access to information on trauma (e.g., opportunities for survivors to learn how IPV affects relationships and their body), 3) opportunities for connection (e.g., the degree to which survivors can provide and receive support from other survivors), 4) emphasis on strengths (e.g., perceptions of providers' level of respect for survivors' strengths), 5) cultural responsiveness and inclusivity (e.g., extent to which survivors feel their cultural backgrounds are respected), and 6) support for parenting (e.g., degree to which staff discuss the impact of witnessing IPV on children). The TIP Scales build on prior evaluation of TIC, yet these components have not been directly examined among LGBTQ IPV survivors. As such, researchers need to consider whether components of TIC are associated with better health outcomes for this population through specific mediating mechanisms.

Although TIC does not target specific sexual and gender minority stressors (e.g., identity concealment, institutional discrimination; Meyer, 2003), cultural sensitivity is increasingly central to healthcare service provision (Elliott et al., 2005). Thus, providers utilizing a TIC framework may aim to address stigma-related issues that are salient for LGBTQ IPV survivors (Balsam & Szymanski, 2005;

Mohr & Daly, 2008; Otis et al., 2006; Roch et al., 2010) to promote health outcomes for this population. As such, a measure of minority stress-related TIC was used explore the extent to which providers address minority stress issues with LGBTQ IPV survivors and the degree to which this component related to better overall health.

Mechanisms through which TIC Relates to Health Outcomes

There has been a call for research to identify common mediating pathways of health conditions experienced by LGBTQ IPV survivors through which interventions should aim to target (Farchione et al., 2012; Goldfried, 2013; Pachankis, 2015). This current study aimed to address this gap in the literature by examining whether TIC related to better health for LGBTQ IPV survivors through various mobilizing processes that could counter the immobilizing effects of IPV and ultimately improve health (see Figure 3). Prior research has mainly focused on the impact of fight or flight threat responses (i.e., autonomic arousal and reactivity) on health outcomes (D'Andrea et al., 2013). Nevertheless, immobilization or the freeze threat response (e.g., dissociating, numbing) may be most relevant for IPV survivors for whom fight or flight may increase risk of violence during traumatic situations (van der Kolk, 1989). Further, chronic experiences of immobilization can trigger the brain to continuously fire electrical circuits that secrete cortisol and other stress chemicals, resulting in PTSD and physical health conditions (van der Kolk, 2014).

TIC might be well-positioned to counter many immobilizing effects by bolstering survivors' mobilization. However, the relationship between TIC and health outcomes through mobilizing mechanisms has not yet been tested. Informed by relational trauma and minority stress literature, these primary mobilizing mechanisms were proposed as relevant mediators in this current study: 1) lower social withdrawal (e.g., isolation; Flanagan et al., 2014; Levine, 1997; Perry et al., 1995; Schore, 2013); 2) lower shame (e.g., self-blame; Beck et al., 2011; Street & Arias, 2001); 3) greater emotion regulation

(e.g., reducing overwhelming emotional responses; Gross & John, 2003); and, 4) greater empowerment (e.g., sense of control; Herman, 1992). Notably, similar cognitive and behavioral processes have been conceptualized as mediators of stigma-related stress and psychopathology among LGBTQ individuals (Hatzenbuehler; 2009), underscoring the need to examine these particular factors in relation to LGBTQ IPV survivors receiving various levels of TIC.

The association between TIC and health for LGBTQ IPV survivors was hypothesized to be partly explained by the extent to which TIC fosters mobilizing mechanisms that are associated with better mental health and physical health. Recovery from trauma involves increasing survivors' positive relationships with other survivors as well as community and family supports (Herman, 1997). Increasing connection opportunities with other survivors is another major component of TIC (Goodman et al., 2016); thus, this domain in particular might help survivors to reduce social withdrawal by fostering more supportive relationships and helping survivors to gain better skills in setting boundaries in relationships. One other core component of TIC is building on survivors' strengths (Elliott et al., 2005). For LGBTQ IPV survivors, identifying survivors' strengths and helping survivors accept that they did not cause their IPV experiences may help to counter the negative effect of IPV and social marginalization on feelings of shame and self-worth (Edwards & Sylaska, 2013; Otis et al., 2006). This could be especially important for LGBTQ IPV survivors who are more likely to engage in self-blame to cope with IPV and discrimination (Courtenay-Quirk, Wolitski, Parsons, & Gomez, 2006; Lehavot & Simoni, 2011; Newcomb & Mustanski, 2010; Sedlovska et al., 2013). Thus, TIC may be key in helping to mitigate the internalization of IPV and anti-LGBTQ experiences (i.e., lower shame).

TIC also aims to help survivors achieve safety (Elliott et al., 2005; National Center for Child Traumatic Stress, 2007). Thus, TIC may be particularly adept in providing survivors the opportunity to learn adequate coping skills to modulate their heightened arousal. Further, multicultural competent

service provision likely influences the degree to which LGBTQ individuals can access and authentically process their negative emotional experiences (Hill, 2009). Given that one core TIC component is cultural responsivity, it might also be true that TIC could increase LGBTQ IPV survivors' tolerance and regulation of their distressing emotions (i.e., greater emotion regulation). Finally, one other major domain of TIC is to foster an environment of agency and mutual respect (Elliott et al., 2005; Goodman et al., 2016). This component might be especially important to increase empowerment for LGBTQ IPV survivors who, in addition to the lack of control associated with IPV, also struggle with invisibility and helplessness resulting from stigma-related stress (Meyer, 2003; Otis et al., 2006).

Pertinent to this current study, TIC was hypothesized to promote better health for LGBTQ IPV survivors through its association with increased emotion regulation, reduced social withdrawal and shame, and increased empowerment. Treatment approaches that facilitate stress coping through encouraging emotion regulation have the potential to improve health and wellbeing for LGBTQ individuals (Pachankis, 2015; Webb, Miles, & Sheeran, 2012). Specifically, prior research suggests that higher levels of emotion-focused coping aimed to regulate emotions has been strongly related to reduced PTSD symptoms (Lilly & Graham-Bermann, 2010) as well as physical health concerns (e.g., chronic health issues) following IPV exposure (Dutton, 2009). In addition, healthcare providers are instrumental in helping IPV survivors to lower the health consequences of IPV through developing skills to access social supports. While not specific to LGBTQ IPV survivors, emerging research suggests that increased engagement with social support systems reduces the impact of abuse on mental health and physical health among female trauma survivors (Coker et al., 2002). For sexual and gender minorities, greater community connectedness and lower isolation can indeed improve overall health (Meyer, 2003).

Previous research suggests services for IPV survivors that aim to lower shame relate to better mental health including reduced PTSD (Beck et al., 2011). Other findings reveal a relationship between

shame proneness and increased depressive and anxious symptoms among men and women IPV survivors (Shorey et al., 2011) as well as increased sexual health risk behavior among women in general (Schooler, Ward, Merriwether, & Caruthers, 2005). Specific to young adult gay and bisexual men, a transdiagnostic cognitive behavioral treatment targeting internalized homophobia showed a reduction in depression, substance use outcomes, and sexual compulsivity (Pachankis et al., 2015a). In addition, Kaslow et al. (2010) tested the efficacy of an empowerment-focused intervention, revealing its overall positive effect on health. Other intervention studies incorporating empowerment as a central component consistently show a reduction in symptoms of PTSD and depression among trauma survivors (Johnson & Zlotnick, 2006) as well as substance use among female IPV survivors (Gilbert et al., 2006). Taken together, it was predicted that the association between TIC and several health outcomes might be partially indirect through specific mobilizing mechanisms.

Purpose of Proposed Study/Research Questions

The proposed study tested a set of theoretically informed mobilizing mechanisms that could partially mediate the association between TIC and mental health and physical health for LGBTQ IPV survivors (Figure 3). First, it was hypothesized that TIC would relate to better mental health and physical health. Second, it was hypothesized that this association between TIC and health would be partially mediated through several mobilizing mechanisms that TIC addresses in effort to improve health for LGBTQ IPV survivors (e.g., greater emotion regulation, lower social withdrawal, lower shame, and greater empowerment).

Significance

There has been a call to examine the application of TIC among diverse groups (Goodman et al., 2016), including LGBTQ IPV survivors given their heightened risk for IPV and subsequent health outcomes (Balsam et al., 2005). This study is unique because it addressed LGBTQ IPV survivors'

perceptions of the levels of TIC received as well as the degree to which this intervention approach relates to better mental health and physical health. By bridging minority stress, TIC, and IPV literature, this study tested a comprehensive model of mobilizing mechanisms as mediators of the process by which TIC may relate to health outcomes. This current study is important because of its effort to improve prevention and intervention efforts for LGBTQ IPV survivors.

Chapter 2

Literature Review

IPV research within the U.S. general population is extensive; however, research on IPV within LGBTQ communities is more limited. Despite this gap, emerging evidence suggests that the prevalence of IPV may be as high or even higher for LGBTQ individuals than cisgender heterosexuals (Edwards, Sylaska, & Neal, 2015; Stotzer, 2009). Moreover, IPV has immediate and long-term physical health and mental health consequences for survivors (Heintz & Melendez, 2006; Murray & Mobley, 2009). LGBTQ IPV survivors may be at particular risk for developing lasting health consequences (Balsam & Szymanski, 2005). LGBTQ IPV survivors also face unique barriers accessing services, such as systemic discrimination (Calton et al., 2015). Taken together, LGBTQ survivors are in need of effective intervention efforts following experiences of IPV.

There has been a call for trauma-informed service delivery approaches for IPV survivors (Elliott et al., 2005; Morrissey et al., 2005). It is important that TIC services are accessible and applicable across different populations who experience IPV (Warshaw, Sullivan, & Rivera, 2013). Given the heightened risk for IPV exposure within the LGBTQ community and its negative consequences, it is critical that TIC components are utilized with this population in particular. However, it is unknown whether TIC is accessible to LGBTQ IPV survivors and the degree to which TIC relates to better health outcomes. To this end, this study aimed to test a theoretically informed model of several mediators that could represent mobilizing mechanisms that counter the immobilizing effect of IPV as part of the process by which TIC may relate to better mental health and physical health.

In this chapter, first I broadly define IPV as well as note various IPV forms and their prevalence across LGBTQ subgroups. I then use minority stress theory to frame high rates of IPV and cumulative trauma exposure among LGBTQ individuals as well as note their unique service barriers. Additionally, I

describe mental health and physical health consequences for LGBTQ IPV survivors and discuss several immobilizing effects of relational trauma. Next, I describe fundamental assumptions and components of TIC, highlight relevant studies examining TIC outcomes, as well as note the accessibility and application of TIC for LGBTQ IPV survivors. Finally, I review several mobilizing mechanisms informed by minority stress and trauma literature that may counter the immobilizing effect of relational trauma through which TIC may relate to better health among LGBTQ IPV survivors.

LGBTQ IPV

IPV can be broadly defined as a pattern of coercive behavior, and domination and isolation tactics used to maintain control within an intimate relationship (Mitchell-Brody et al., 2010). The majority of IPV research has focused on cisgender heterosexual men using violence against cisgender heterosexual women (for a review, see Dillon, Hussain, Loxton, & Rahman, 2013). Further, the tendency to label IPV as a cisgender heterosexual female issue (e.g., battered women's shelters) limits the relevance of available resources for LGBTQ IPV survivors (Hassouneh & Glass, 2008; Poorman et al., 2003). Nevertheless, there have been recent attempts to better understand unique dynamics of LGBTQ IPV to inform intervention and prevention efforts for this population.

Types of LGBTQ IPV. IPV includes psychological, physical, emotional, and sexual abuse within intimate relationships (Edwards & Sylaska, 2013). According to the Centers for Disease Control and Prevention (CDC, 2011), physical violence includes hitting, kicking, grabbing, assaulting with a weapon, and other forms of physical force. Emotional abuse includes verbal and nonverbal behaviors to communicate intent to harm, and sexual violence includes behaviors used to force someone to participate in sexual acts against their consent. Finally, psychological IPV can include verbally controlling behavior (Messinger, 2011). The NCAVP 2014 report noted that physical IPV was most

common among LGBTQ survivors, alerting service providers to especially consider this form of IPV when working with this population.

Emerging research suggests that LGBTQ-specific identity abuse is a unique dimension of partner victimization faced by many sexual and gender minority IPV survivors. Identity abuse includes cissexist and heterosexist tactics that emphasize LGBTQ IPV survivors' marginalized position in society to maintain control of the relationship (e.g., a partner refusing to use affirmed gender pronouns; Bornstein et al., 2006). Additional examples of identity abuse include threatening to out a partner's sexual orientation or gender identity to their employer. Thirty-eight percent of LGBQ participants and 15% of transgender-identified participants reported experiencing LGBTQ identity abuse in their relationships (NCAVP, 2014). As such, it is important for providers to increase their awareness of identity abuse when screening for trauma exposure within LGBTQ intimate relationships.

While isolation from family and friends is a common abuse tactic in cisgender heterosexual relationships, it is particularly insidious in insular LGBTQ communities in which many supports are shared within relationships. Indeed, LGBTQ IPV survivors who leave their abusive partner may risk the loss of support from shared friends (Bergen, 1998). Also, many abusers who are closeted may deter survivors from forming close friendships and openly discussing their intimate relationship in effort to continue to conceal their minority identity (Walters, 2011). Limiting LGBTQ survivors' access to support may increase their dependence on abusive partners, another known IPV risk factor (Bornstein et al., 2006; Martin, Cromer, DePrince, & Freyd, 2013). Moreover, the LGBTQ community oftentimes fails to adequately respond to IPV disclosure due to minimization or denial of abuse (Alhusen, Lucea, & Glass, 2010; Ard & Makadon, 2011; Calton et al., 2015; Meyer & Dean, 1998).

LGBTQ IPV prevalence. The majority of extant research suggests that IPV occurs in LGBTQ relationships at rates equal to or higher than cisgender heterosexual relationships (Balsam et al., 2005;

Duke & Davidson, 2009; Walters et al., 2013). In fact, men and women with a history of same-sex relationships were more likely than heterosexuals to experience IPV in a nationally representative probability sample (Messinger, 2011). Further, it is important to identify unique IPV dynamics and estimates among specific subgroups given the diversity of the LGBTQ community.

Despite myths that IPV only occurs against cisgender heterosexual women, most studies indicate that on average, 30-40% of lesbian women have experienced IPV with rates as high as 73% (for reviews see Burke & Follingstad, 1999; West, 2002). Emerging evidence also suggests that IPV rates for gay and bisexual men may be even higher than for heterosexual women (Goldberg & Meyer, 2013; Greenwood et al., 2002). One study using a representative sample estimated that 26.9% of gay men had experienced IPV in their lifetime (Goldberg & Meyer, 2013). However, many IPV services (e.g., domestic violence homeless shelters) are inaccessible for men in general (NCAVP, 2014). Additional evidence suggests that bisexual-identified individuals are more likely to experience IPV than cisgender heterosexuals, gay men, and lesbian women (Messinger, 2011; Walters et al., 2013), particularly sexual abuse (NCAVP, 2014). Moreover, bisexuality bias can be employed as a unique identity abuse tactic by denying the bisexual identity of a partner or accusing bisexual survivors of infidelity and hypersexuality (André & Bessonova, 2007). These findings suggest that TIC interventions should pay particular attention to nonbinary-identified (e.g., bisexual and queer) subgroups within the LGBTQ community.

Those who identify as transgender or gender nonconforming are also at disproportionate risk for IPV, particularly transgender women (Langenderfer-Magruder et al., 2014; NCAVP, 2014). Additionally, transphobia can be used as a control tactic and thus should be considered a unique dimension of partner abuse. For example, partners may convince survivors to stay in abusive relationships by communicating to them that no one else will love them because of their transgender identity. Further, transphobia may increase survivors' feelings of isolation and shame as well as reduce

help-seeking behavior due to fear of rejection and discrimination from others, including providers (NCAVP, 2014). Some scholars note the “triple jeopardy” that many LGBTQ people of Color face: racism from providers and white LGBTQ communities, cissexism and heterosexism within communities of Color, and partner abuse (WCADV, 2014). In fact, people of Color made up slightly more than half of all survivors (51%) of the NCAVP 2014 IPV prevalence report. Transgender people of Color in particular face disproportionate levels of poverty, discrimination, and denial of health care, contributing to their overall greater risk for IPV and service barriers compared to other demographics within the LGBTQ community (WCADV, 2014). TIC intervention approaches should aim to consider the intersection of multiple marginalized identities when serving LGBTQ IPV survivors.

Mental Health and Physical Health Consequences of LGBTQ IPV

According to betrayal trauma theory, abuse perpetrated by someone the survivor trusts or depends on (i.e., high-betrayal trauma) can be more damaging to the survivor’s health than a noninterpersonal trauma (i.e., natural disaster; Martin et al., 2013). This may be due in part to IPV survivors’ incongruent states of love and fear toward their abusive partner, which can result in primary attachment disruptions and consequent emotion dysregulation, feelings of shame, and health ailments (Heller & LaPierre, 2012; Martin et al., 2013). Further, many serious health consequences can be highly disabling and if left untreated, can increase vulnerability to future violence (Bensley, van Eenwyk, & Simmons, 2003; Kelly, Skelton, Patel, & Bradley, 2011).

PTSD, depression, and substance use are primary mental health outcomes among IPV survivors (Dutton, 2006), and common physical health symptoms associated with IPV include sexual health risk, somatic symptoms, and chronic health conditions (Bonomi et al., 2006; Campbell, 2002; Coker, 2007). This study examined the extent to which LGBTQ IPV survivors endorsed these mental health and physical health consequences through specific mediating pathways of mobilizing mechanisms.

LGBTQ IPV and Health Outcomes within the Context of Minority Stress

LGBTQ individuals contend with similar risk factors to experiencing IPV as cisgender heterosexual survivors (e.g., homelessness, prior violence exposure) in addition to minority stressors (Balsam & Szymanski, 2005; Dardis, Dixon, Edwards, & Turchik, 2014; Meyer, 2003). Minority stress includes external stressors (e.g., hate crimes or parental rejection) as well as internal stressors (e.g., anticipated rejection or identity concealment; DiPlacido, 1998; Meyer, 2003). Internalizing these minority stressors may contribute to LGBTQ survivors' beliefs that they deserve abusive treatment (Girshick, 2002) as well as prevent many from fostering meaningful relationships with others, evoking greater isolation and dependency on abusive partners (Balsam, 2001). Also, some LGBTQ individuals may attempt to cope with minority stress through IPV perpetration (i.e., those who feel shame related to their marginalized identity may compensate by asserting their power in intimate relationships; Balsam & Szymanski, 2005; Carvalho et al., 2011; McKenry, Serovich, Mason, & Mosack, 2006). LGBTQ IPV survivors might also have difficulty negotiating safer sex practices related to unequal power distributions in relationships that are reflected by larger society (e.g., cissexism, racism; Greenwood et al., 2002; Heintz & Melendez, 2006). TIC providers must view LGBTQ IPV survivors' experiences with an additional lens of cultural and systemic discrimination.

Prior research has documented factors associated with increased risk for partner abuse including previous experiences of trauma (Balsam & Szymanski, 2005). Complex trauma exposure (i.e., various forms of chronic trauma from different sources) can trigger negative cascading events resulting in physical health and mental health issues that continue across the lifespan, especially among those most marginalized (Fullilove, 2009). Epidemiological studies suggest that sexual and gender minorities experience more frequent complex trauma including child maltreatment, bullying, sexual assault, family rejection, and hate crimes compared to cisgender heterosexuals (Alvy, Hughes, Kristjanson, &

Wilsnack, 2013; Goldbach, Tanner-Smith, Bagwell, & Dunlap, 2014; Katz-Wise & Hyde, 2012).

Pertinent to this current study, complex trauma is also associated with greater risk of LGBTQ IPV (Fortunata & Kohn, 2003; Koeppel & Bouffard, 2014).

The minority stress model highlights the deleterious health consequences of discrimination (e.g., substance use, depression, asthma, cardiovascular disease risk, and obesity; Cochran & Mays, 2007; Fingerhut, Peplau, & Gable, 2010; Kuyper & Fokkema, 2011). Hatzenbuehler (2009) theorized that minority stress affects physical and mental health through specific psychological processes (e.g., greater emotion dysregulation, isolation, shame, and hopelessness). Notably, mental health and physical health issues are syndemic and thus continue to impact each other (Cochran & Mays, 2007). For instance, sexual minority men who experience IPV are more likely to use substances which increases risk for engaging in unsafe sexual behaviors (Houston & McKirnan, 2007). As such, this current study sought to examine the impact of TIC on health more broadly by including mental health as well as physical health markers.

Service barriers for LGBTQ IPV survivors. While it is important to recognize individual and interpersonal factors related to IPV within the LGBTQ community, it is also critical to examine systems-level factors that impact service delivery for this population. In addition to the same service barriers faced by cisgender heterosexual IPV survivors, sexual and gender minorities experience unique challenges including a limited understanding of LGBTQ IPV, stigma, and institutional discrimination (Calton et al., 2015). Many LGBTQ IPV survivors manage these experiences by concealing their identity or IPV history to providers (Kulkin et al., 2007; McClenen, 2005). Moreover, many providers lack knowledge and skills related to LGBTQ issues despite wanting to improve services for this population (Helfrich & Simpson, 2006; Messinger, 2011). Many transgender IPV survivors in particular

report needing to educate their doctors about transgender issues in order to receive adequate care (Grant et al., 2011).

Beyond providers' lack of awareness of LGBTQ issues, many may express their non-affirming beliefs through their denial of same-sex IPV or culturally insensitive policies (Chavis & Hill, 2009; Hassouneh & Glass, 2008; Helfrich & Simpson, 2006). One study found that of the 15% of LGBTQ IPV survivors who sought shelter services, 21% were denied entry (NCAVP, 2014). Providers' lack of awareness of LGBTQ IPV as well as discrimination can impede LGBTQ IPV survivors' trauma recovery by preventing many from receiving adequate care. In addition, poverty indeed affects healthcare-seeking behavior and access to adequate healthcare (Stiehm, 2000). Thus, we aimed to control for socioeconomic status in our full model. The next section broadly highlights immobilizing effects of relational trauma that TIC providers may aim to counter when working with LGBTQ IPV survivors.

Immobilizing Effects of Relational Trauma for LGBTQ IPV Survivors

Survivors employ one of three biological defense strategies when faced with threat: fighting the danger, fleeing from it, or becoming immobilized (i.e., freezing; Heller & LaPierre, 2012). Fight or flight strategies can discharge cortisol from the nervous system and buffer against the debilitating effects of isolated traumatic incidents by mobilizing survivors toward self-defense actions (Levine, 1997). When trauma is chronic, inescapable, and unpredictable (as is the case for many IPV survivors), immobilization (i.e., freezing) may actually be the safest threat response strategy as fighting or fleeing might incite greater risk for violence (Heller & LaPierre, 2012; Levine, 1997; van der Kolk, 1989). Over time however, immobilization can lead to undischarged nervous system arousal, elevating risk for chronic hypervigilance, anxiety, and physical health issues (D'Andrea et al., 2013; MacDonald et al., 2008; Samuels-Dennis et al., 2013; Schore, 2013). There has been limited attention to the immobilizing

effects of IPV among LGBTQ survivors in particular; nevertheless, chronic and additive minority stressors may exacerbate these underlying freeze threat response factors. The following immobilizing effects of IPV faced by many LGBTQ survivors are discussed below: greater emotion dysregulation, social withdrawal, and shame, and lower empowerment.

One immobilizing effect of IPV is decreased capacity for emotion regulation, which often develops as a result of insecure attachment and a lack of safety in primary relationships (Fonagy & Bateman, 2008; Ford & Courtois, 2009). Effective emotion regulation might be especially difficult for LGBTQ IPV survivors living in a constant state of fear and hypervigilance due to minority stress as well as trauma exposure (Hatzenbuehler, 2009; Major & O'Brien, 2005). Further, emotion dysregulation can increase risk for mental health consequences including depression, substance use, and somatic symptoms (Stappenbeck & Fromme, 2014). Previous research also suggests that emotion dysregulation is associated with cardiovascular disease risk, immune system consequences, and greater susceptibility to illness (Salovey, Rothman, Detweiler, & Steward, 2000). Potential mechanisms through which greater emotion dysregulation relates to poorer physical health include greater engagement in health-risk behaviors (Kokkonen, 2001), decreased self-efficacy for tolerating negative affect (Greenberg, Wortman, & Stone, 1996), and lower awareness of emotions (Salovey et al., 2000).

Fear that often develops in response to IPV can generalize to other relationships, leading to greater social withdrawal, another immobilizing effect of relational trauma (Pearlman & Courtois, 2005). Social withdrawal has been linked to poorer mental health (e.g., depression, PTSD, substance use) especially among LGBTQ individuals given the association between minority stress experiences and increased isolation and loneliness (Lehavot & Simoni, 2011; Szymanski & Chung, 2001). One study found that the effects of minority stress on physical health (e.g., acute physical symptoms, chronic pain) were mediated through feelings of loneliness (Mereish & Poteat, 2015). Social withdrawal is particularly

deleterious for sexual and gender minority IPV survivors because they may not only feel lonely in their overall heterosexist and cissexist context, but they also may feel isolated from their peers and the LGBTQ community.

Feelings of shame are negative global evaluations of the self with a corresponding sense of being worthless and powerless (Flinck, Paavilainen, & Astedt-Kurki, 2005; Herman, 1992; Levine, 1997). Further, shame can limit mobilization toward self-protective action (Levine, 1997) and contribute to greater isolation and relational disruption (Hartling, Rosen, Walker, & Jordan 2004; Street & Arias, 2001). Shame is likely to impact health symptomatology through both its cognitive and affective components (Street & Arias, 2001). Shame and its association with negative health is indeed prevalent among LGBTQ IPV survivors contending with internalized blame resulting from high betrayal trauma (i.e., IPV) as well as their marginalized status in society (Coleman, Rosser, & Strapko, 1992; Mohr & Fassinger, 2006; Otis et al., 2006; Schope, 2004). Studies have shown that among LGBTQ individuals, greater shame is associated with greater somatization, PTSD, and depression (Herek, Cogan, Gillis, & Glunt, 1998; Meyer & Dean, 1998) and poorer physical health such as engaging in health risk behaviors (Mereish & Poteat, 2015; Pachankis, 2007).

Empowerment (i.e., perceptions of control over one's life related to access of internal and external resources; Corrigan, 2006; Johnson, Worell, & Chandler, 2005) is lowered for LGBTQ survivors who, in addition to the lack of control associated with IPV, also struggle with invisibility and helplessness resulting from their minority identity (Meyer, 2003; Otis et al., 2006). Further, researchers have emphasized the association between lower empowerment and poorer mental and physical health among IPV survivors (Beck et al., 2011; Beck et al., 2015; Kubany & Manke, 1995; Street & Arias, 2001). Previous literature documents that empowerment increases individuals' sense of control over

their health, which contributes to greater motivation to engage in healthy behavior and ultimately leads to better health outcomes (Anderson & Funnell, 2010).

As indicated above, a growing amount of research has focused on the link between discrimination and negative health outcomes; nevertheless, a much less studied but equally important focus is on factors that promote better health. To this end, the relationship between TIC and health outcomes through countering the immobilizing effects of IPV warrants consideration. Through its impact on specific mobilizing mechanisms (e.g., increasing empowerment), TIC could potentially promote better health. The next section will discuss TIC and its relevance for LGBTQ IPV survivors in greater detail.

Trauma-Informed Care (TIC)

Although trauma survivors are among the most likely to utilize social services, many do not seek trauma-specific interventions due to denial of abuse and mistrust of others (Harris & Fallot, 2001). Further, outpatient behavioral health services, homeless shelters, and primary care facilities have worked with trauma survivors without acknowledging, understanding, or addressing the impact of trauma (Harris & Fallot, 2001). As a result, many social service settings can retraumatize clients by perpetuating feelings of helplessness (e.g., by not considering survivors' unique needs in treatment planning), ultimately lowering treatment retention rates among those most in need of services (Elliott et al., 2005; Harris & Fallot, 2001). Moreover, despite survivors' need for integrated and comprehensive treatment, many services are often fragmented and uncoordinated (SAMHSA, 2002). To address this issue, there has been a call for trauma-informed services that are comprehensive, culturally sensitive, and relevant to the specific population receiving care (SAMHSA, 2014; Warshaw et al., 2014).

TIC was first developed in the context of mental health and substance abuse services in direct response to the deleterious impact of trauma on survivors' psychological well-being and relapse rates

(Harris & Fallot, 2001; Morrissey et al., 2005). Trauma-informed interventions can encompass the following core service areas for survivors: outreach and community engagement, screening and assessment, resource coordination, advocacy, crisis intervention, mental health and substance abuse services, parenting support, and medical healthcare (Elliott et al., 2005; Goodman et al., 2016). TIC has gained increasing support for its use among IPV survivors especially given their wide range of issues including homelessness, employment difficulties, and poor health (Liebschutz, Mulvey, & Samet, 1997). Recently, TIC has become more widely recognized among various social service delivery organizations including primary care and homeless shelters (Hopper, Bassuk, & Olivet, 2010), and DV organizations (Warshaw et al., 2014). This current study will examine survivors' perceptions of receiving TIC across these various services.

Whereas trauma-specific services are designed to treat trauma symptoms (e.g., hypervigilance), TIC is a universal framework that is sensitive to trauma-related issues and ensures that providers utilize this awareness to inform services (Harris & Fallot, 2001; SAMHSA, 2014). TIC is built on an understanding of the impact of trauma on survivors and works to integrate this knowledge into policies and practices (Elliott et al., 2005; Harris & Fallot, 2001). Many TIC principles emphasize survivors' resilience, safety, validation, and a need for choice and control (Elliott et al., 2005; Harris & Fallot, 2001). Related to this, providers should be aware of the inherent power imbalance in a provider/client relationship in effort to create collaborative and empowering relationships with survivors (Miller & Guidry, 2001). Other aims of TIC include facilitating survivors' trauma recovery while also helping survivors become active participants in treatment and delivering services that help to foster new supportive relationships (Harris & Fallot, 2001).

Although many components of TIC are similar to ethical and competency standards (e.g., avoiding harm), a TIC approach involves several necessary components specifically targeted for trauma

survivors (Harris & Fallot, 2001). Further, TIC is promising for LGBTQ IPV survivors because it values culturally sensitive services. While TIC should be ethnically, linguistically, racially, and spiritually relevant, as well as gender-specific (Elliott et al., 2005), the relevance of TIC for sexual and gender minority IPV survivors remains unknown.

Major components of TIC. Many TIC components grew out of relational trauma literature in general (e.g., child abuse). In effort to gain greater awareness of the relevance of TIC for IPV survivors specifically, Wilson, Fauci, and Goodman (2015) conducted a qualitative content analysis of extant research highlighting the quality and type of services for IPV survivors. This review highlighted six broad domains of TIC: 1) establishing emotional safety (i.e., the extent to which survivors feel that provider responses are respectful and consistent); 2) restoring choice and control (i.e., the extent to which survivors feel providers respect their autonomy by offering choice in the healing process); 3) facilitating connections (i.e., the extent to which survivors feel their provider offers opportunities to develop relationships); 4) supporting coping (i.e., the extent to which survivors feel their provider offers trauma-related information with the aim to increase effective coping skills); 5) responding to identity and context (i.e., staff's level of awareness of survivors' culture impacting their healing), and 6) building strengths (i.e., the degree to which survivors perceive their providers value their unique strengths).

It is critical to provide tailored treatment for survivors based on their unique social context and identities; pertinent to this approach, one major domain of TIC is cultural sensitivity (Elliott et al., 2005; Goodman et al., 2016). This may be a particularly important dimension for serving LGBTQ IPV survivors who in addition to trauma-related stressors, also experience victimization based on their marginalized identity (e.g., transphobia; Meyer, 2003). Previous studies have also documented the impact of social context on health (Pickett & Pearl, 2001). Building on this point, TIC providers should consider how organizational culture (i.e., policies and practices) and physical space (e.g., brochures,

posters) impact service delivery and health outcomes (Harris & Fallot, 2001), especially for those with marginalized identities.

Drawing from the multicultural counseling competence literature, knowledge about LGBTQ issues, having LGBTQ-affirming beliefs, and being proactive in addressing LGBTQ concerns are critical components when serving sexual and gender minority clients (Matthews & Selvidge, 2005). Although TIC does not target specific minority stressors, it is critical for providers working within a TIC framework to consider the extent to which their services are affirming and inclusive (Bassuk, DeCandia, Tsartsadze, & Richard, 2014; Rivard, Bloom, McCorkle, & Abramovitz, 2005), which should also include assessing for discrimination experiences and other minority stressors among LGBTQ survivors (Pachankis, 2015). However, LGBTQ IPV survivors remain underrepresented across TIC research. Nevertheless, it is hypothesized that TIC, given its emphasis on valuing survivors' cultural practices, may relate to certain mobilizing mechanisms such as lower social withdrawal.

Outcomes associated with TIC for trauma survivors. TIC recognizes the adaptive function of trauma symptoms and aims to understand survivors' strengths and vulnerabilities in the context of their trauma (Harris & Fallot, 2001; Saakvitne, 2000). This approach may help reduce survivors' shame and increase empowerment, two important mobilizing mechanisms (Ardino, 2014). Additionally, a growing body of research suggests that for trauma survivors with co-occurring disorders (e.g., depression and substance use), a trauma-informed treatment approach is associated with better mental health outcomes than fragmented services targeting specific health symptoms (Cocozza et al., 2005; Morrissey et al., 2005; SAMHSA, 2002). Moreover, extant literature also suggests that trauma-informed treatment might be a cost-effective approach to addressing trauma as it considers survivors' health and social context more broadly (Domino, Morrissey, Nadlicki-Patterson, & Chung, 2005). Trauma-informed treatment is also associated with reduced treatment attrition, decreased program crises, greater safety, and increased

collaboration between services providers (Cocozza et al., 2005; Gilbert et al., 2012; Morrissey et al., 2005), all of which could lead to better health among survivors. Given that there is virtually no research examining the relationship between TIC and physical health outcomes, we aimed to address this by assessing the association between perceptions of TIC received and somatic symptoms, sexual health risk behaviors, and chronic health issues among LGBTQ IPV survivors.

TIC has been viewed as a universal treatment intervention for trauma survivors; however, extant literature documenting outcomes of TIC has primarily focused on heterosexual cisgender female survivors. As such, adequate TIC service provision for LGBTQ IPV survivors remains undocumented and thus poorly understood (Ford & Blaustein, 2013). Nevertheless, TIC is one integrated intervention approach that might be especially beneficial for LGBTQ IPV survivors who experience various mental health and physical health challenges due to their cumulative exposure to trauma as well as experiences of minority stress. Moreover, SAMHSA (2011) has identified a need for providing culturally appropriate services to sexual and gender minority clients in particular. As such, this study aimed to examine the relevance of TIC as one potential intervention framework for working with LGBTQ IPV survivors.

Measuring survivors' perceptions of receiving TIC. Social service agencies are becoming increasingly committed to providing TIC. Harris and Fallot (2001) identified several comprehensive strategies for organizations to become more trauma-informed and many organizations have engaged in self-assessment processes (DeCandia, Guarino, & Clervil, 2014). However, it is not only important for providers to integrate knowledge about violence in their intervention approaches, rather, there needs to be a continual review of current practices to ensure their safety and relevance to survivors (Harris & Fallot, 2001). To this end, Goodman et al. (2016) developed one of the first measures to facilitate ongoing formal evaluation of current TIC programs and practices.

The TIP Scales (Goodman et al., 2016) is a theory-driven and empirically-based measure that assesses survivors' perceptions of the extent to which services they receive are trauma-informed. The structure of the Main TIP and two supplementary scales (i.e., the TIP Scales) correspond with existing literature across several major domains of TIC for IPV survivors. The Main TIP subscales include: 1) perceived environment of agency and mutual respect (e.g., the extent to which survivors choose their own treatment goals), 2) access to information on trauma (e.g., opportunities for survivors to learn how IPV affects relationships and their body), 3) opportunities for connection (e.g., the degree to which survivors can provide and receive support from other survivors), 4) emphasis on strengths (e.g., perceptions of providers' level of respect for survivors' strengths), and the supplementary scales include: 5) cultural responsiveness and inclusivity (e.g., the extent to which survivors feel their cultural backgrounds are respected); and, 6) support for parenting (e.g., the degree to which staff discuss the impact of witnessing IPV on children).

The TIP Scales can help providers identify service quality, demonstrate the degree to which they are incorporating TIC principles, and document how TIC might relate to health outcomes (Goodman et al., 2016). However, TIC components have not yet been directly examined among LGBTQ IPV survivors. Moreover, despite inclusive language of the TIP Scales (e.g., items using gender neutral pronouns), it is unknown whether TIC is relevant for LGBTQ IPV survivors. This study attempted to address these issues by measuring perceived levels of TIC received and its association with mental and physical health outcomes among LGBTQ IPV survivors while controlling for length of service duration (i.e., engagement in services) and SES as these factors could affect patterns of results.

Mechanisms through which TIC Relates to Health

Mobilizing mechanisms. Immobilizing effects of trauma may lead to difficulties with trust, attachment, intimacy, and self-assertion (van der Kolk & Fisler, 1994). TIC might be well positioned to

address these immobilizing effects of IPV by increasing certain mobilizing mechanisms in effort to promote better health among IPV survivors. However, the relationship between TIC and health outcomes through mobilizing mechanisms has not yet been tested. Notably, similar cognitive and behavioral processes have been used to explain the pathways of stigma-related stress on syndemic health conditions among LGBTQ individuals (Hatzenbuehler, 2009; Hatzenbuehler, McLaughlin, & Nolen-Hoeksema, 2008; Insel et al., 2010; Sanislow et al., 2010), further suggesting the need to examine these effects in relation to TIC. By bridging minority stress and relational trauma literature, several primary mobilizing mechanisms that counter these immobilizing effects may be relevant as mediators in the proposed model of this study. Specifically, they may help explain the association between higher levels of TIC received and better health among LGBTQ IPV survivors. The following primary mobilizing mechanisms proposed as mediators for this study include: 1) greater emotion regulation; 2) lower social withdrawal; 3) lower shame; and, 4) greater empowerment.

Greater emotion regulation. Emotion regulation includes cognitive reappraisal processes that work to modify overwhelming negative thoughts and emotions (e.g., rumination, uncontrolled anger; Goldsmith & Davidson, 2004; Gross & John, 2003). LGBTQ individuals demonstrate poorer emotion regulation abilities than cisgender heterosexuals given their experiences of minority stress and multiple psychosocial and physical syndemic health conditions (Pachankis, 2015). Interventions can work to increase emotion regulation by increasing clients' capacity to modify negative thoughts and emotions (Gross & John, 2003). Interventions that target specific minority stress processes such as emotion regulation have been shown to improve sexual compulsivity among gay and bisexual men (Pachankis et al., 2015b). In addition, treatment approaches that facilitate stress coping through encouraging emotion regulation have the potential to reduce the emotional and physical impact of minority stress and violence exposure (Webb, Miles, & Sheeran, 2012). As relevant to this study, TIC aims to help survivors achieve

safety (Elliott et al., 2005; National Center for Child Traumatic Stress, 2007). Thus, TIC may be particularly adept in providing survivors the opportunity to learn adequate coping skills to modulate their negative arousal. Further, multicultural competent service provision influences the degree to which LGBTQ individuals can access and process their emotional experiences in the context of a healing relationship (Hill, 2009). Given that minority stress-related TIC and cultural responsiveness are major TIC domains as conceptualized in this study, TIC may be associated with better health among LGBTQ IPV survivors through promoting greater emotion regulation.

Lower social withdrawal. Recovery from trauma involves increasing survivors' positive and meaningful relationships with other survivors as well as community members and family (Herman, 1997). Healthcare providers are instrumental in helping IPV survivors to lower the health consequences of IPV through developing skills to build support networks. While not specific to LGBTQ IPV survivors, emerging research suggests that increased engagement with social support systems reduces the impact of abuse on mental health and physical health among female survivors (Coker et al., 2002). For sexual and gender minority IPV survivors, greater community connectedness and lower isolation can indeed improve health (Meyer, 2003). TIC can help survivors gain better skills in setting boundaries in relationships in order to feel safe and in control (Elliott et al., 2005). Further, TIC providers helping LGBTQ IPV survivors facilitate greater connections might help to promote better health by reducing social withdrawal.

Lower shame. Previous research suggests services for IPV survivors that aim to lower shame relate to better health (Beck et al., 2011). For LGBTQ IPV survivors, lowering shame may have an added benefit of countering the negative effect of IPV and minority status on self-worth (Otis et al., 2006). One core component of TIC is building on survivor strengths (Elliott et al., 2005). As such, TIC may be in a key position to help mitigate internalization of IPV and anti-LGBTQ experiences (i.e., lower

shame). This could be especially important for LGBTQ IPV survivors who are more likely to engage in self-blame to cope with experiences of IPV and marginalization (Courtenay-Quirk et al., 2006; Lehavot & Simoni, 2011; Newcomb & Mustanski, 2010; Sedlovskaya et al., 2013).

Greater empowerment. Fostering empowerment is crucial in the delivery of health services for IPV survivors given their experiences of helplessness and lack of agency (Jager & Carolan, 2010). Kaslow et al. (2010) tested the efficacy of a culturally-informed, empowerment-focused intervention, revealing its positive effect on mental and physical health. Intervention studies incorporating empowerment as a central component consistently show a reduction in symptoms of PTSD and depression among trauma survivors (Johnson & Zlotnick, 2006). Despite these findings, the extent to which TIC is associated with greater empowerment among LGBTQ IPV survivors remains unknown. Nevertheless, it is important for TIC interventions aimed at enhancing survivors' capacity to access internal and external resources to consider survivors' social context (Bloom et al., 2003) especially among those from marginalized backgrounds (Hopper et al., 2010). Cultural responsiveness and creating an environment of agency and mutual respect are two major TIC components (Goodman et al., 2016). By helping LBGTQ IPV survivors develop culturally appropriate techniques aimed at increasing their autonomy and control over their lives, TIC may ultimately relate to better health through promoting their greater empowerment.

Summary

IPV is a form of relational trauma including physical aggression, sexual coercion, and emotional, identity, and psychological abuse that occurs within an intimate relationship (CDC, 2008; World Health Organization, 2010). IPV survivors often experience an accumulation of problems related to violence, poverty, and social exclusion, which has numerous negative health consequences (Lako et al., 2013). Symptoms that often develop following IPV (e.g., fear, avoidance) can make it difficult for survivors to

engage in trauma-related treatment (Harris & Fallot, 2001). Moreover, when survivors are faced with chronic threat in their intimate relationships, they manage this internal distress by becoming immobilized (e.g., shutting down self-protective feelings of rage and agency). This current study examined the impact of TIC interventions targeting specific mobilizing mechanisms among LGBTQ IPV survivors.

LGBTQ IPV is a serious public health threat for reasons including: a) IPV is at least as likely to occur in LGBTQ relationships than among cisgender heterosexuals, b) power differentials associated with IPV may be heightened in LGBTQ relationships due to societal discrimination and increased dependence on abusive partners, c) many LGBTQ IPV survivors may feel higher levels of immobilization due to chronic experiences of threat (i.e., due to complex trauma as well as minority stress), and d) many LGBTQ IPV survivors may face disproportionate health concerns as compared to their cisgender heterosexual counterparts (Dillon et al., 2013; Ford & Blaustein, 2013; Messinger, 2011). In addition, many LGBTQ IPV survivors are reluctant to seek out or engage in formal services because of minimization of abuse or discrimination from providers (Bornstein et al., 2006). Given these concerns, it is critical to explore the extent to which TIC is accessible and relevant for LGBTQ IPV survivors.

Trauma-informed services are provided within the context of a healing relationship and have a critical role in helping survivors to re-establish safety and counter the lasting negative effects of relational trauma (Harris & Fallot, 2001; Herman, 1997). Although the TIP Scales (Goodman et al., 2016) enable the evaluation of the relevance of TIC approaches for IPV survivors, the application of TIC for LGBTQ IPV survivors remains unknown. This study addressed the degree to which TIC is associated with better health among LGBTQ IPV survivors through its impact on promoting specific mobilizing mechanisms.

Chapter 3

Method

This chapter proposes the research design, hypotheses, and methodology for this study. It also describes the participants and sampling strategy, identifies the measures and reviews prior reports of their psychometric properties, and finally presents the proposed procedures and analytic plan.

Review of Purpose and Hypotheses

The present study examined a mediational model of the association between trauma-informed care (TIC) and mental health and physical health through certain mobilizing factors among LGBTQ IPV survivors while controlling for socioeconomic status (SES) and length of service duration (Figure 3).

Hypothesis 1: TIC will be associated with mental health and physical health, where higher perceived levels of TIC will be associated with better mental health and physical health.

A model will test the mediating effects of mobilizing mechanisms (i.e., greater emotion regulation, lower social withdrawal, lower shame, and greater empowerment) on the relationship between TIC and mental health (Figure 3).

Hypothesis 2a: Higher levels of TIC will be associated with greater emotion regulation and empowerment, and lower social withdrawal, and shame.

Hypothesis 2b: Lower social withdrawal and shame, as well as greater emotion regulation and empowerment will be associated with better mental health and physical health.

Hypothesis 2c: The relationships between TIC and mental health and physical health will be partially indirect through the mobilizing factors of lower social withdrawal and shame, as well as greater emotion regulation and empowerment.

Research Design

This current study utilized a quantitative, descriptive correlational design (Heppner, Wampold, & Kivlighan, 2008). The exogenous variable in this proposed model is perceptions of levels of trauma-informed care received (i.e., environment of agency and mutual respect, access to information on trauma, opportunities for connection, emphasis on strengths, cultural responsiveness and inclusivity, and minority stress-related TIC). We decided to exclude the support for parenting subscale given that many participants reported that they did not have children (72.6%), thus this measure may have been less relevant for this sample in particular. The endogenous variables were the mediating mobilizing mechanisms (i.e., lower social withdrawal and shame, as well as greater emotion regulation and empowerment), and the dependent variables of mental health (i.e., PTSD, depression, and substance use), and physical health (i.e., sexual health risk behavior, chronic health conditions, and somatic symptoms).

Many IPV researchers have used time frames ranging from the past year to lifetime exposure when assessing for victimization experiences (Calton et al., 2015). For inclusion in this study, participants must have experienced victimization within the past year in order to anchor IPV and service utilization experiences in a similar time frame for all participants. Past year abuse exposure is the preferred assessment method in order to minimize recall bias of retrospective reporting (Balsam et al., 2005; Thompson et al., 2006). Participants were asked about a range of formal help-seeking efforts within the past year, some of which included counseling services, primary care, and shelters (Nurius, Macy, Nwabuzor, & Holt, 2011). Survivors who received multiple types of services had the option to check off each service received and to write in any additional services not already included in the list. Survivors were asked to note which service they utilized most in the past year. They were also asked to consider the service with which they spent the most time engaging when responding to the survey items.

An important issue in research design involves the determination of sufficient sample size to achieve adequate power for proposed hypotheses. However, there exists no specific formula to calculate adequate sample sizes for structural equation models (MacCallum & Austin, 2000). From a power analysis perspective, the minimum sample size necessary tends to be larger when the researcher desires greater power, is assessing whether the model tests for exact fit compared to close fit, and the model is more complex with greater parameters to be estimated (MacCallum, Browne, & Sugawara, 1996), as is the case for this current study. Given no severe issues with data characteristics (e.g., high levels of missingness and substantially non-normally distributed data), the minimum sample size (i.e., 200) for structural equation modeling was proposed (Weston & Gore, 2006).

Participants

Participants were 227 self-identified sexual and gender minority adults who reported currently experiencing or having experienced some form of intimate partner violence (IPV) within the past year, and who were currently seeking or who had sought services related to IPV experiences and its aftermath within the past year. Participants ranged in age from 18 to 78 years ($M = 27.83$, $SD = 9.74$). About half of the participants identified as cisgender women (48.0%), whereas 22.0% identified as nonbinary (e.g., genderqueer), 12.3% identified as cisgender men, 6.2% identified as transgender men, 6.2% identified as “other”, and 5.3% identified as transgender women. Most of the participants identified as bisexual (23.3%), followed by queer (22.9%), gay (17.2%), lesbian (16.7%), pansexual (10.1%), asexual (5.7%), “other” (2.2%), and heterosexual (1.8%). Those who identified as heterosexual also identified as transgender and so were included in the analyses. Participants identified as White (60.4%), Biracial or Multiracial (18.9%), Middle Eastern (4.4%), Hispanic or Latino/a (4.0%), “other” (2.5%), Asian or Asian American (2.6%), Native American or Alaska Native (2.6%), African American or Black (1.3%), and Hawaiian/Pacific Islander (0.4%). Due to small sample sizes in several of these ethnic groups ($n = 1$

to $n = 8$), racial/ethnic groups were collapsed into the following categories: White (72.5%) and people of Color (27.5%).

Participants varied across the following education levels: 9th - 11th grade (0.9%), high school graduate or GED equivalent (5.7%), vocational school (3.5%), some college (30.4%), college graduate (37.4%), advanced degree (9.7%), and graduate degree (12.3%). Participants also reported how long they had been receiving the healthcare service for which they are reporting. Some participants reported that they initially sought this service less than a month ago (6.2%), 16.7% of participants reported that they sought this service between 1 month and 6 months ago, 26.9% of participants reported that they sought this service between 6 months and a year ago, 36.1% of participants reported that they sought this service more than a year ago, and 14.1% of participants reported that they sought this service more than 5 years ago. A small percentage of participants reported that they do not worry about paying for things they want and need (7.5%), 24.2% reported that they can easily pay their bills but need to be careful, 43.2% can pay their regular bills but a bill that was bigger than usual would cause a hardship, 18.9% reported that they have trouble paying their regular bills, and 6.2% reported that they simply cannot pay their bills. Participants were single or not dating (28.6%), and in an intimate relationship (71.4%).

Participants reported the type of service provider/agency that they received the most ongoing care from during this past year and were instructed to answer the service provision questions related to this particular provider/agency. Over this past year, the majority of participants utilized therapy most frequently (83.7%), 42.7% utilized medication management, 30.4% sought services from support groups, 28.2% utilized advocacy services, 25.1% sought services from medical providers, 20.7% utilized a hotline, 14.6% utilized legal services, 5.8% utilized a shelter, and 2.40% utilized “other services”. Most participants reported that they utilized one health service related to IPV and its aftermath this past

year (34.4%), 27.3% utilized two health services this past year, 15.0% utilized three services this past year, 10.1% utilized four health services this past year, and 5.7% utilized five health services this past year. Over this past year, 38.8% of participants who experienced some form of IPV sought services related to IPV and its aftermath, and 57.6% sought services over the course of their life.

Procedures

Participants were recruited from national and local online forums and listservs (e.g., the Queer List, National Coalition Against Domestic Violence) that focus on IPV, LGBTQ concerns, or some combination. Listserv moderators were asked to contact group members by forwarding the study's announcement which included a link containing the consent form with additional information about the study if respondents wished to participate. Attempts to recruit racially and ethnically diverse participants were made by over-sampling participants of Color through culturally relevant online groups and community events (e.g., the Network La Red, QMOB).

The Boston College Institutional Review Board provided approval for the study. A secure online data collection tool (i.e., Qualtrics) was used to collect participants' responses to the survey. Online services represent low cost options for data collection and also promote a sense of anonymity (Wright, 2005), which may be particularly important for LGBTQ IPV survivors disclosing sensitive information. All potential participants received instructions directing them to a link to the Qualtrics website, where they viewed the consent form and chose to participate in the study. Upon completion of the survey, participants were invited to enter their email address at the end of the survey to be placed into a raffle for one of fifteen \$10, ten \$20, or three \$50 online gift cards upon completion of the survey. The survey offered a list of resources that participants could access should they need support.

Measures

Trauma-informed practice. The 33-item Trauma-Informed Practice Scales (TIP Scales, Goodman et al., 2016) was used to measure IPV survivors' perceptions of receiving five domains of TIC from a specific service provider/agency within the past year: environment of agency and mutual respect, access to information on trauma, opportunities for connection, emphasis on strengths, and one supplementary scale: cultural responsiveness/inclusivity. We did not include support for parenting subscale in this study because 72.6% of the sample did not have children. For this current study, each of the subscales was used as an observed indicator for the latent variable of TIC. Example items include, "staff respect the choices that I make" (environment of agency and mutual respect); "I have the opportunity to learn how abuse and other difficulties affect responses in the body" (access to information on trauma); "I have opportunities to help other survivors of abuse in this program" (opportunities for connection); "the strengths I bring to my relationships with my children, my family, or others are recognized in this program" (emphasis on strengths); and, "peoples' cultural backgrounds are respected in this program" (cultural responsiveness/inclusivity). Response options are on a 4-point scale ranging from 0 (*not at all true*) to 3 (*very true*). The TIP Scales has been previously correlated with therapeutic alliance and client satisfaction among IPV survivors during measurement development. Also, the TIP subscales have adequate discriminant validity and reliability, ranging from .85 to .98.

For this study, the Cronbach alpha reliability was .94 for the "Main TIP scales" which included the following subscales: environment of agency and mutual respect ($\alpha = .93$); access to information on trauma ($\alpha = .94$); opportunities for connection ($\alpha = .92$); and, emphasis on strengths ($\alpha = .86$). Reliability for the supplementary scale, cultural responsiveness/inclusivity was .86. For this study, the latent construct Trauma-Informed Care was measured by the following 6 observed variables: the "Main TIP scales", the cultural responsiveness/inclusivity subscale, and the minority stress-related TIC subscale (described below) given their relevance to this population.

Minority stress-related TIC. A 7-item subscale was created based on a review of the literature on LGBTQ cultural competence and attention to minority stressors (Boroughs, Bedoya, O’Cleirigh, & Safren, 2015) to measure IPV survivors’ perceptions of receiving TIC that targets minority stressors for sexual and gender minorities. Response options are on a 4-point scale ranging from 0 (*not at all*) to 3 (*very true*). Example items include, “Staff/individual provider respect my decision of who I am out to about my gender identity or sexual orientation” and “Staff/individual provider sees my gender identity or sexual orientation as a strength”. An exploratory factor analysis was conducted to determine if the items for this scale represented a unidimensional factor, and this was supported (eigenvalue = 4.69, variance accounted for = 66.97%, factor loadings = .88, .83, .79, .76, .75, .74, and .64). The internal consistency estimate was $\alpha = .91$ for the current study. A mean score was computed and higher average scale scores represent perceptions of having received greater levels of trauma-informed practice focused on minority stress.

Mediating factors. The four measures below assessed the four mediating factors of greater emotion regulation, lower social withdrawal and shame, and greater empowerment (i.e., mobilizing mechanisms).

Emotion regulation. The 6-item cognitive reappraisal scale of the Emotion Regulation Questionnaire (ERQ; Gross & John, 2003) was used to measure emotion regulation within the past year (i.e., the process by which individuals influence which emotions they have, when they have them, and how they experience and express them; Gross, 2002). Emotion regulation strategies rely on the particularity of the situation and do not assume an intrinsically positive or negative valence (Gross, 2002). Items contain the stem, “Within the past year...”; and sample items include, “I have controlled my emotions by changing the way I think about the situation I’m in” and “When I’ve wanted to feel less negative emotion, I’ve changed the way I’m thinking about the situation”. The ERQ is positively

associated with perceiving one's emotion regulation efforts as successful, positive emotion, coping through reinterpretation, and negatively correlated with neuroticism, and experience and expression of negative emotions (Gross & John, 2003). Response options are on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The ERQ shows good reliability as well as adequate convergent and discriminant validity (Gross & John, 2003). Additionally, previous research has reported adequate internal consistency ($\alpha = .87$; Danner, Sternheim, & Evers, 2014). The ERQ has been used with LGBTQ adults (Puckett, Woodward, & Mereish, 2012) as well as IPV survivors (Stappenbeck & Fromme, 2014). Based on individual items, there were 3 parcels as observed indicators for the latent construct of emotion regulation for the latent model. The internal consistency estimate was $\alpha = .88$ for the current study. A mean score was computed and higher average scale scores represent greater emotion regulation.

Social withdrawal. Feelings of social withdrawal over the past year were measured with the 6-item short form scale of the 11-item De Jong Gierveld Loneliness Scale (De Jong Gierveld & Van Tilburg, 2006). This scale measures feelings of loss of social and emotional companionship (e.g., "Over this past year I have missed having people around", "Over this past year I have experienced a general sense of emptiness"). Item response options are on a 5-point scale ranging from 1 (*Never experience the feeling*) to 5 (*Experience the feeling continuously or almost continuously*). In three studies ranging from 2,945 to 7,244 participants, this scale demonstrated high internal consistency ranging from $\alpha = .70$ to $\alpha = .76$ (De Jong Gierveld & Van Tilburg, 2006). Additionally, researchers found that the short form social withdrawal scale correlated well with health as well as partner status. Moreover, this measure has been associated with harassment, work/school discrimination, internalized homophobia, concealment, depression, anxiety, physical distress, and shame among sexual minorities (Mereish & Poteat, 2015) and has also been used with female IPV survivors (Lako et al., 2013). Based on individual items, there were

3 parcels as observed indices for the latent construct of social withdrawal for the latent model. The internal consistency estimate was $\alpha = .78$ for the current study. A mean score was computed and higher average scale scores represent greater social withdrawal.

Shame. Feelings of shame over the past year were measured with the 10-item shame subscale of the Personal Feelings Questionnaire-2 (PFQ2-Shame; Harder & Zalma, 1990), a modified version of the Personal Feelings Questionnaire (PFQ; Harder & Lewis, 1987). The PFQ-2 is an adjective-based checklist measure of shame that is experienced continuously rather than in relation to a specific antecedent event (Bybee & Quiles, 1998). Participants reported the frequency with which they experienced shame-based devaluations of the global self over the past year (e.g., “embarrassed,” “feeling humiliated,” and “self-consciousness”). Response options are on a 4-point scale ranging from 0 (*never experience the feeling*) to 3 (*experience the feeling continuously or almost continuously*). Previous studies have reported adequate alpha reliability coefficients ($\alpha = .94$; Shin et al., 2015), construct validity (Ferguson & Crowley, 1997), and high test-retest reliability ($r = .91$; Harder & Zalma, 1990). The PFQ2-Shame is correlated with state anxiety, guilt, hostility, depression, and self-consciousness (Averill et al., 2002), and grief and survivor guilt (Barr, 2012). The PFQ-2 Shame scale has been used with sexual minorities (Bybee, Sullivan, Zielonka, & Moes, 2009; Mereish & Poteat, 2015) and domestic violence survivors (Shin, Cho, Lee, & Chung, 2014). Based on individual items, there were 3 parcels as observed indicators for the latent construct of shame for the latent model. The internal consistency estimate was $\alpha = .90$ for the current study. A mean score was computed and higher average scale scores represent greater shame.

Empowerment. Feelings of empowerment over the past year were measured with the 13-item Measure of Victim Empowerment in Relation to Safety (MOVERS; Goodman et al., 2014). MOVERS provides a tool for assessing key dimensions of survivors’ experience and enables the evaluation of

domestic violence program practices in ways consistent with core program and survivors' goals (Goodman et al., 2014). MOVERS has 3 subscales: 1) Internal tools (i.e., the extent to which survivors have developed a set of safety-related goals and a belief in their ability to accomplish them), 2) Expectations of support (i.e., survivors' perceptions of support they need to move toward safety), and 3) Trade-offs (i.e., survivors' sense that their actions toward safety will not cause new problems in other domains). Participants responded using a 5-point Likert scale from 1 (*never true*) to 5 (*always true*). The measure introduction defined safety as freedom from physical or emotional abuse from another person and encouraged respondents to think broadly, if applicable (i.e., when you are responding to these questions, it is fine to think about your family's safety along with your own if that is what you usually do). Research suggests adequate internal consistency ($\alpha = .87$; Goodman et al., 2014; Thomas, Goodman, & Putnins, 2015). MOVERS is negatively associated with depressive symptom scores on the CES-D ($r = .42$), and positively associated with General Self-Efficacy ($r = .50$), the Social Support Network Scale ($r = .35$), and the Client Satisfaction Questionnaire ($r = .35$). Although research has not yet looked at MOVERS among LGBTQ individuals, there are studies examining MOVERS among IPV survivors (Thomas et al., 2015). There were 3 subscales used as observed indicators for the latent construct of empowerment in this current study. The internal consistency estimate was $\alpha = .86$ for the current study. A mean score was computed and higher average scale scores represent greater empowerment.

Mental health outcomes. Three observed indicators were used to assess mental health: depression, PTSD, and substance use.

Depression. The 9-item Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001) was used to assess symptoms of depression over the last 2 weeks. The PHQ-9 is a reliable and valid continuous measure for assessing and monitoring depression severity. Scores range from 0 to 27

with cutpoints of 5, 10, 15, and 20 to represent mild, moderate, moderately severe, and severe levels of depressive symptoms, respectively. Response options are on a 4-point scale and range from 0 (*not at all*) to 3 (*nearly every day*). The PHQ-9 has high internal consistency ($\alpha = .75$ to $\alpha = .91$; Corson, Gerrity, & Dobscha, 2004; Stiles-Shields et al., 2015). Williams, Pignone, Ramirez, and Stellato (2002) concluded from 38 studies involving more than 32,000 primary care patients that the PHQ-9 was a superior depression measure and performs similarly across sex, age, and racial groups. The PHQ-9 has been used with IPV survivors (Armour & Sleath, 2014) and sexual and gender minorities generally (Bazargan & Galvan, 2012), but not yet with LGBTQ IPV survivors specifically. Depression was used as an observed indicator of mental health for the latent model. The internal consistency estimate was $\alpha = .89$ for the current study. A mean score was computed and higher average scale scores represent greater depression.

PTSD. The 17-item PTSD Checklist-Civilian Version (PCL-C) is a self-report measure that corresponds to the DSM-IV symptoms of PTSD over the prior 30 days (Weathers et al., 1993). The PCL-C was used to assess re-experiencing, avoidance, and hyperarousal symptoms in relation to traumatic experiences and is reliable and valid in civilian populations (Ruggiero, Del Ben, Scotti, & Rabalais, 2003). The internal consistency for the PCL-C was found to be acceptable in 14 studies examining psychometrics in military samples, adults with severe mental illness, dually diagnosed patients with HIV, women with substance use disorders, women treated for breast cancer, adults with recent limb loss, female undergraduates, and community adults (see Wilkins, Lang, & Norman, 2011). All reported total score reliability estimates above .75. A total symptom severity score ranging from 17 to 85 can be obtained by summing scores from each of the 17 items. Response options are on a 5-point scale and range from 1 (*not at all*) to 5 (*extremely*). A study found high correlations with the PCL-C and the Clinician-administered PTSD Scale (CAPS; $r = .93$; Blanchard, Jones-Alexander, Buckley, & Forneris, 1996). The PCL-C has been used with sexual and gender minority populations (Cochran et al.,

2013) and among IPV survivors (Stover, Berkman, Desai, & Marans, 2010). PTSD was used as an observed indicator for mental health for the latent model. The internal consistency estimate was $\alpha = .93$ for the current study. A mean score was computed and higher average scale scores represent greater PTSD.

Substance use. Substance use was assessed using eight items asking participants about alcohol and drug use during the past 6 months. Participants reported on the use of the following substances: tobacco, alcohol, marijuana, cocaine, uppers (e.g., speed), downers (e.g., Valium), heroin, and hallucinogens. Similar items were assessed among LGBTQ populations in prior research (D'Augelli, Pilkington, & Hershberger, 2002). Response options range from 0 (*never*) to 6 (*every day*). An index of substance use was computed by averaging the items. Substance use was used as an observed indicator for mental health for the latent model. The internal consistency estimate was $\alpha = .66$ for the current study. A mean score was computed and higher average scale scores represent greater substance use.

Physical health outcomes. Three observed indicators measured participants' physical health: sexual health risk behavior, chronic health conditions, and somatic symptoms.

Sexual health risk behavior. Sexual health risk behavior over the past month was assessed using a 5-item scale that measures survivors' self-reports of sexual activity (Díaz, Ayala, & Bein, 2004). Items assess the following domains: number of casual sex partners, frequency of unprotected sex with casual partners, and frequency of sex with casual partners while under the influence of alcohol or drugs, all of which are common indicators of sexual health risk among sexual minority youth IPV survivors in particular (Santana et al., 2006) and sexual minority youth in general (Mustanski, Greene, Ryna, & Whitton, 2015). Response options are on a 6-point scale from 0 to 5⁺. By assessing casual sex arrangements, this classification of sexual risk avoids classifying unprotected intercourse between monogamous or primary partners as a sign of sexual risk. Higher values on this scale indicate

engagement in higher risk behaviors. Sexual health risk behavior was used as an observed indicator for physical health for the latent model. The internal consistency estimate was $\alpha = .90$ for the current study. A mean score was computed and higher average scale scores represent greater sexual health risk behavior.

Chronic health conditions. Chronic health conditions over the past year were assessed for the following nine conditions: migraines, respiratory problems, sexually transmitted diseases (STDs), diabetes, heart attack, hypertension, arthritis, visual or hearing impairment, and stomach or gall bladder trouble (Lown & Vega, 2001). Response options were 0 (*no*) and 1 (*yes*) for each problem experienced during the previous 12 months. Prior research used some of these markers for chronic health conditions in a population-based study (Golding, 1994) as well as among IPV survivors (Lown & Vega, 2001). There is emerging research on the presence of STDs among LGBTQ IPV survivors given their difficulty in negotiating safer sex for reasons including a decreased perception of control over sex, fear of violence, and unequal power distributions within the relationship (Heintz & Melendez, 2006). As such, an item assessing for STDs within the past year was added to this measure of chronic health conditions. Chronic health conditions were used as an observed indicator for physical health for the latent model. The internal consistency estimate was $\alpha = .63$ for the current study. A mean score was computed and higher average scale scores represent greater chronic health conditions.

Somatic symptoms. The 7-item Somatization Subscale of the Brief Symptom Inventory (BSI; Derogatis, 1993) was used to assess for somatic symptoms within the past week. This assessment specifically targets level of physical distress related to several symptoms. Response options range from 0 (*not at all*) to 4 (*extremely*). The BSI has demonstrated good internal consistency and test-retest reliability (Shorey et al., 2011). Prior research has utilized this scale with IPV survivors (Shorey et al., 2011) and LGBTQ populations (D'Augelli et al., 2002) including LGBTQ young adult IPV survivors

(Reuter, Newcomb, Whitton, & Mustanski, 2016). Somatic symptoms were used as an observed indicator for physical health for the latent model. The internal consistency estimate was $\alpha = .83$ for the current study. A mean score was computed and higher average scale scores represent greater somatic symptoms.

Chapter 4

Results

Preliminary Analyses

Data cleaning. There was minimal to moderate missing data across the included measures (from 4.0% for sexual orientation to 29.5% for race). Imputation in LISREL 8.80 (Jöreskog & Sörbom, 2006) at the item level was used to impute missing values with plausible simulated values based on the actual data. Imputation is an optimal method for handling missing data and is preferable over list-wise deletion or mean substitution as these latter methods can introduce statistical bias (Schafer & Graham, 2002; Schlomer, Bauman, & Card, 2010).

Diagnostic testing was conducted after cleaning the data and computing the measures. Skewness and kurtosis patterns were examined to analyze the data distribution. As reported in Table 1, most variables were within the range of -1 to 1 (i.e., nearing normal distribution). However, the TIP culture subscale had a skewness value less than -1.5, indicative of negative skew of the data (i.e., most participants had high scores on this measure). Additionally, substance use, sexual health risk behaviors, and chronic health measures had a skewness value above 1.5, indicating a positive skew of the data (i.e., most participants had low scores on these measures). These variables also had large positive kurtosis values, indicative of high peaks in their distribution. Analyses to address these non-normally distributed data will be later discussed in the Bootstrapping section of this chapter.

Correlations. Bivariate correlations are reported in Table 3 for descriptive purposes.

Correlations among age, the exogenous (i.e., TIP subscales), endogenous (i.e., mental health and physical health), mediating (i.e., emotion regulation, loneliness, shame, and empowerment) variables, and covariates (i.e., socioeconomic status and service duration) are reported in Table 3. The correlations are based on computed scale scores (e.g., TIP culture, shame, depression), and should not be confounded

with the latent factors in the structural model. Most variables were associated in conceptually consistent directions and these patterns are more thoroughly explained in the tested latent structural models.

Basic group comparisons. Three ANOVAs were conducted to test for demographic group differences (i.e., gender identity, race/ethnicity, and sexual orientation) on service seeking behavior and IPV experiences among LGBTQ IPV survivors. In addition, three MANOVAs were conducted to test for sampling and demographic group differences (i.e., gender identity, race/ethnicity, and sexual orientation) on all 18 measures including the two covariates: socioeconomic status (SES) and how long ago participants sought services (service duration). The gender identity categories were: cisgender men, cisgender women, and transgender/non-binary. The sexual orientation categories were: lesbian; gay; bisexual; queer; pansexual; and, asexual. The racial/ethnic categories were: people of Color and White people. To reduce the possibility of a Type 1 error, the Bonferroni adjustment was used (i.e., a higher alpha level value was set for follow-up ANOVAs for gender identity and sexual orientation).

Gender identity. An ANOVA was used to test for gender identity differences on whether participants sought services during this past year. There was a significant effect, $F(2, 388) = 6.58, p < .01, \eta^2_p = .03$. Bonferroni post-hoc analyses indicated that cisgender men and cisgender women reported seeking services at lower rates than transgender/non-binary individuals. In addition, a MANOVA was used to test for gender identity differences on IPV experiences within the past year. There was a significant effect, Wilks' $\Lambda = .95, F(6, 740) = 3.24, p < .01, \eta^2_p = .03$. Bonferroni post-hoc analyses indicated that cisgender men reported lower levels of physical abuse exposure during this past year, cisgender woman and cisgender men reported lower levels of psychological abuse, and cisgender women and cisgender men reported lower levels of identity abuse exposure over this past year than transgender/non-binary individuals.

A MANOVA was used to test for gender identity differences on 18 measures. There was a significant effect, Wilks' $\Lambda = .62$, $F(38, 412) = 2.94$, $p < .001$, $\eta_p^2 = .22$. Follow-up ANOVAs revealed significant gender identity differences on two measures, although trivial based on effect sizes: depression and PTSD (see Table 4). Bonferroni post-hoc analyses indicated that cisgender women reported lower scores on depression and PTSD than transgender/non-binary individuals. In addition, cisgender men and cisgender women reported lower levels of somatic symptoms than transgender/non-binary individuals. Cisgender women reported higher levels of SES than transgender/non-binary individuals.

Sexual orientation. An ANOVA was used to test for sexual orientation differences on whether participants sought services during this past year; there was not a significant effect. A MANOVA was used to test for sexual orientation differences on IPV experiences within the past year; there was not a significant effect. A MANOVA was also used to test for sexual orientation differences on 18 measures. There was a significant effect, Wilks' $\Lambda = .53$, $F(95, 992.37) = 1.46$, $p < .01$, $\eta_p^2 = .12$. Follow-up ANOVAs revealed significant sexual orientation differences on one measure, although trivial in some cases based on effect size: sexual health risk behavior (see Table 5). Bonferroni post-hoc analyses indicated that bisexual, pansexual, queer, and lesbian-identified individuals reported lower rates of sexual health risk behavior than gay identified men.

Race/ethnicity. An ANOVA was used to test for racial/ethnic group differences on whether participants sought services during this past year; there was not a significant effect. A MANOVA was used to test for racial/ethnic group differences on IPV experiences within the past year; there was not a significant effect. A MANOVA was used to test for racial/ethnic group differences on 18 measures. There was a significant effect, Wilks's $\Lambda = .85$, $F(19, 207) = 1.92$, $p < .05$, $\eta_p^2 = .10$. Follow-up ANOVAs revealed significant racial/ethnic group differences on five measures, although trivial in some

cases based on effect sizes: environment of agency and mutual respect, cultural responsiveness and inclusivity, emotion regulation, shame, and PTSD (see Table 6). People of Color reported lower levels of environment of agency and mutual respect, cultural responsiveness and inclusivity, and emotion regulation than White people. White people reported lower levels of shame and PTSD than people of Color.

Structural Equation Modeling

Structural equation modeling (SEM) with LISREL 8.80 (Jöreskog & Sörbom, 2006) was used to test (a) the measurement model of the scales, (b) the direct effects of the exogenous variable (TIC) on the latent mediating variable (mobilizing mechanisms), (c) the direct effects of the exogenous variable (TIC) on the endogenous variables (mental health and physical health), (d) the direct effect of the mediating latent variable (mobilizing mechanisms) on the latent dependent variables (mental health and physical health); and, (e) the indirect effects of the exogenous variable (TIC) on mental health and physical health while controlling for SES and service duration. A measurement model was examined to determine whether the observed variables appropriately identified the latent constructs. A structural model of the mediation hypotheses was also used to compare a full mediation model examining the indirect effect of TIC on health through its direct relationship with mobilizing mechanisms and partial mediation models where the variance is attributable to the direct and mediated paths and specified structural paths while controlling for SES and service duration.

LISREL 8.80 (Jöreskog & Sörbom, 2006) produces a number of goodness of fit statistics to assess whether each model is a good fit to the data: standardized root mean square residual (SRMR), root-mean-square error of approximation (RMSEA), incremental fit index (IFI), comparative fit index (CFI), and non-normed fit index (NNFI). The SRMR has an acceptable level when less than .05 (Diamantopoulos & Siguaw, 2000), however values of .08 are also acceptable (Hu & Bentler, 1999).

RMSEA values of .08 or below are indicators for good model fit (Hu & Bentler, 1999). Values of at least .90 for the IFI, CFI, and NNFI are indicators that the model is a good fit to the data (Kline, 1998). Additionally, the t-values for each individual parameter estimates for each path in the model should be statistically significant ($t < 1.96$) with the magnitude and direction of the parameter estimates in anticipated directions. The chi-square fit statistic was not used as many methodologists note its limitations with large sample sizes (Cheung & Rensvold, 2002).

Model specification. Three indicators were used to specify each latent factor. The mental health factor was composed of depression, PTSD, and substance use. The physical health factor was composed of sexual health risk behavior, chronic health issues, and somatic symptoms. Three-item parcels per factor were indicators for each mediating latent construct (i.e., emotion regulation, social withdrawal, shame, and empowerment) to improve reliability and minimize potential violations of multivariate normality assumptions (Weston & Gore, 2006). Although correlations among the factors were free to be estimated, measurement errors of the indicators were not allowed to correlate in the initial model (Schumacker & Lomax, 2010). Exploratory factor analyses for the observed constructs were conducted and parcels were computed based on the factor loadings of the items to ensure that the items with higher or lower factor loadings were evenly distributed. Confirmatory factor analyses for the latent constructs were then conducted and each indicator (i.e., parcel or subscale) was constrained to load only on its respective factor (Figure 2).

Model identification. Once an SEM model had been specified, the next step was to determine whether the model was identified prior to the estimation of parameters. Examining the initial parameter estimates can help to identify a misspecified model (Schumacker & Lomax, 2010). Model identification was conducted by assigning the first observed variable of each factor to equal 1 so as to be used as a reference indicator. Some methodologists suggest that covarying residuals is permitted if a correlation is

desired between endogenous variables in the structural model (Kenny, 2011). Standardized and unstandardized path coefficients as well as the proportion of variance explained (R^2) were examined for all dependent variables to determine which indicators contained the most and least measurement error.

Model modification. The final step in structural equation modeling was to consider changes to a specified model with poor model-fit indices. In the structural model, latent factors shame and social withdrawal were allowed to covary, as were social withdrawal and empowerment based on modification indices and earlier bivariate correlations that indicated that these variables were correlated with one another, respectively. In the measurement model, the errors between the first and second parcels and between the first and third parcels for the latent construct of empowerment were allowed to covary based on the modification indices. In addition, the observed indicators culture and agency, and culture and information of the latent construct, TIC, were allowed to covary based on modification indices. Finally, the errors between the first and third parcels of the observed indicator social withdrawal were allowed to covary based on modification indices. After making these modifications, the value for SRMR remained at .10 for the measurement model and had a slightly less acceptable fit at .12 for the structural model. Values for RMSEA improved after making these modifications, from .088 to .087 for the measurement model, and .099 to .085 for the structural model. Values for the NNFI, IFI, and CFI improved slightly for both the structural and measurement model after these modifications (see Table 7).

Bootstrapping. Some of the measures (i.e., TIP culture subscale, substance use; see Table 1) were negatively or positively skewed. Thus, bootstrapping procedures were conducted to address non-normally distributed data to obtain indirect effect estimates. Compared to other bootstrapping techniques, bias-corrected bootstrapping is preferred as it corrects for skew in the population and bias in the central tendency of the estimate and thus offers greater precision (MacKinnon, Lockwood, & Williams, 2004). If the 95% confidence interval does not include 0, then the indirect effect is significant

at $p < .05$ (Mallinckrodt, Abraham, Wei, & Russel, 2006). The bias-corrected bootstrapping procedure with 95% confidence intervals for 1000 samples from the original dataset was used (Lunneborg, 1987).

Testing the Hypotheses

Hypothesis 1: *TIC will be associated with mental health and physical health, where higher perceived levels of TIC will be associated with better mental health and physical health.*

The measurement and structural models were both good fits to the data (see Table 7; Figure 1). Contrary to what was hypothesized; however, the structural model indicated that trauma-informed care did not directly relate to better mental health and physical health.

Hypothesis 2a: *Higher levels of TIC will be associated with greater emotion regulation and empowerment, and lower social withdrawal and shame.*

Hypothesis 2b: *Lower social withdrawal and shame, as well as greater emotion regulation and empowerment, will be associated with better mental health and physical health.*

Hypothesis 2c: *The relationships between TIC and mental health and physical health will be partially indirect through the mobilizing factors of lower social withdrawal and shame, as well as greater emotion regulation and empowerment.*

The measurement and structural models were good fits to the data (see Table 7). Two covariates were included in the model: SES and service duration. As hypothesized, TIC predicted greater empowerment and emotion regulation, and lower social withdrawal but did not predict lower shame. As hypothesized, lower social withdrawal and lower shame predicted better mental health. Contrary to what was hypothesized, greater empowerment and emotion regulation did not predict better mental health. As hypothesized, lower shame predicted better physical health; however, lower social withdrawal and greater empowerment did not. In a surprisingly inconsistent direction, lower emotion regulation predicted better physical health. Finally, contrary to what was expected, the indirect effects of trauma-

informed care on mental health and physical health through greater emotion regulation and empowerment, and lower social withdrawal and shame, were not significant (Figure 3).

Chapter 5

Discussion

There has been emerging research suggesting the potential benefit of TIC for survivors of relational trauma (Goodman et al., 2016). LGBTQ individuals are at an increased risk for IPV exposure and its associated physical and mental health issues (Walters et al., 2013). However, we know little about the relevance of TIC for sexual and gender minority IPV survivors. These current findings indicate that when controlling for SES and service duration, TIC was not directly or indirectly related to mental or physical health through mobilizing mechanisms. However, TIC did relate to several mobilizing mechanisms, including greater empowerment and emotion regulation, and lower social withdrawal; however, it did not relate to lower shame. Finally, lower social withdrawal and shame predicted better mental health, and lower shame and emotion regulation predicted better physical health.

LGBTQ IPV Survivors' Perceptions of Receiving TIC

Therapy and medical care were services most utilized by participants, a finding consistent with nationally representative studies indicating that trauma exposure relates to greater mental health and medical service utilization (Rosenheck & Massari, 1993; Sorenson & Siegel, 1992). Broadly, participants' perceptions of receiving TIC components spanned the entire range (see Table 1). On average, survivors' perceptions of receiving care from providers who create an environment of agency and mutual respect was in the higher range, and who create opportunities for connection with other survivors was in the lower range. Consistent with emerging literature, providers who work with domestic violence survivors are often trained from an empowerment framework that encourages survivors to take control of their lives after experiencing IPV (Kasturirangan, 2008). Building on past research, providers may be less knowledgeable or feel less competent in connecting survivors to other survivors in their community (Stotzer, 2009).

LGBTQ IPV survivors of Color reported lower rates of receiving care from providers who were culturally responsive and inclusive and who were less likely to foster an environment of agency and mutual respect than White LGBTQ survivors. These findings extend prior research indicating that many LGBTQ people of Color experience multiple layers of oppression as they contend with negative reactions related to their sexual orientation or gender identity as well as racial prejudice and implicit bias from their healthcare providers (Battle & Lemelle, 2002; Grant et al., 2011; Miller et al., 2016). These results also build on previous findings that suggest that many people of Color experience fewer positive emotions, infrequent requests for input about treatment decisions, and less patient-centered care from their providers than their White counterparts (Johnson, Roter, Powe, & Cooper, 2004).

People of Color also reported greater shame and lower emotion regulation than White participants. This finding is congruent with previous literature suggesting that many people with multiple minority statuses experience greater shame and difficulty regulating emotions, especially in the context of ongoing discrimination (Hatzenbuehler, 2009). Notably, shame and emotion regulation operate as key mechanisms for perpetuating negative health outcomes (e.g., PTSD) in minority stress models (Hatzenbuehler, 2009; Pachankis et al., 2015a). Therefore, providers should work to increase their cultural competence and foster an environment of agency and mutual respect when working with LGBTQ IPV survivors of Color so as to improve their psychological functioning and wellbeing (Hall et al., 2015).

Differences in IPV and LGBTQ Service Use

Given the diversity of the LGBTQ community, group differences in IPV exposure and service use within the past year were examined (see Tables 4-6). There were no sexual orientation or race/ethnicity group differences in IPV or service use within the past year. However, there were gender identity differences: transgender/non-binary identified individuals experienced more physical abuse than

cisgender men, and more psychological and identity abuse than cisgender men and women. This finding substantiates prior literature documenting that transgender/non-binary identified people are more likely to experience IPV as well as other forms of violence across the lifespan as compared to cisgender heterosexuals in part due to their marginalization within mainstream culture (Goodmark, 2013). In addition, transgender/non-binary identified people were more likely to seek services than cisgender men and women. This finding is supported by prior research suggesting that greater exposure to extreme forms of violence could lead survivors to access more formal support (e.g., hotlines, shelters). Taken together, it is important for providers to better understand the unique experiences of transgender/non-binary identified survivors given the likelihood of serving this population based on the current and extant findings.

TIC Components and Health Indices: Bivariate Associations

Mental health. Inconsistent with our hypotheses, results of bivariate associations demonstrate that perceived levels of environment of agency and mutual respect, opportunities for connection, emphasis on strengths, cultural responsiveness and inclusivity, and minority stress-related TIC were not related to depression, PTSD, or substance use. Thus, TIC as conceptualized in this study was not associated with better mental health outcomes for this population. In a surprising direction, access to information on trauma was positively associated with higher levels of PTSD, which could be an issue of directionality (i.e., providers may have provided greater access to information on trauma to those with higher levels of PTSD). Future research should examine these nuanced connections in more detail, given that these findings are only among the first of a limited literature base among this population.

Physical health. Unexpectedly, bivariate association results demonstrate that perceived levels of access to information, emphasis on strengths, cultural responsiveness and inclusivity, and minority stress-related TIC were not related to sexual health risk behavior, chronic health issues, or somatic

symptoms. As such, TIC as conceptualized in this study was not broadly associated with overall better physical health for LGBTQ IPV survivors. In an anticipated direction, LGBTQ IPV survivors who reported greater perceptions of receiving care that emphasized an environment of agency and mutual respect reported lower chronic health issues. This finding builds on previous literature to suggest that interventions that encourage patient agency may be effective in promoting self-management of chronic conditions (Gibson et al., 2002). It could also be the case that those who reported lower chronic health issues experienced providers who were more invested in fostering agency in the context of a respectful relationship. To this end, it is important that TIC providers continue to help encourage agency among patients with chronic health issues. LGBTQ IPV survivors who reported greater opportunities for connection also reported greater sexual health risk behavior. This finding could be an issue of directionality as prior research has documented that engaging in sexually risky behavior is one coping mechanism for dealing with loneliness (Banyard, Williams, & Siegel, 2001), particularly among gay men (Martin & Knox, 1997). Follow up studies should examine the extent to which loneliness exacerbates sexual health risk behavior among other diverse groups within the LGBTQ community.

Minority stress-related TIC. While the original TIC construct as defined by Goodman et al. (2016) included cultural responsiveness and inclusivity as a core component, it did not specifically assess for minority stress issues experienced by many LGBTQ individuals. In effort to explore the extent to which TIC was relevant for sexual and gender minorities beyond general cultural sensitivity, we included minority stress issues as one specific indicator of the latent construct of TIC. Inconsistent with our hypotheses, however, minority stress-related TIC was not associated with any health indicator. Minority stress theory points to health-promoting interventions not only at the individual level (e.g., therapy) but also at the societal level (e.g., policies that eliminate structural forms of discrimination; Meyer, 2003). To this end, improving health among LGBTQ individuals may require interventions

targeting both individual and social/structural level processes to reduce health concerns at a level that is significant.

Latent Associations between TIC and Health

This is one of the first studies to examine concrete dimensions of TIC (Goodman et al., 2016; Wilson et al., 2015) as they are applied to sexual and gender minorities. While some TIC indices were related to specific health outcomes at the bivariate level, TIC as a broadly defined construct was not directly or indirectly related to mental health or physical health in the overall latent model. As an extension of previous literature, this study provides empirical evidence to suggest that TIC is a framework to help providers better understand the impact of trauma in effort to avoid triggering survivors and to provide immediate safety and stabilization rather than a trauma-specific treatment protocol intended to improve health symptoms over time (Elliot et al., 2005; Harris & Fallot, 2001; Jennings et al., 2004). Taken together, this could explain why TIC was more proximally associated with the set of mediating mechanisms that work to mobilize survivors toward safety and stabilization but not with broader health.

While contrary to our expectations, these results are congruent with at least one other study that found that TIC (while not formally measured and in the context of other intervention components) did not demonstrate improved substance use outcomes (Morrissey et al., 2005). Taken together, TIC might not in and of itself relate to better health but rather may need to be delivered in the context of evidence-based trauma-specific treatment protocols (e.g., Cognitive Processing Therapy) to enhance its effects in reducing health symptoms for sexual and gender minorities. Future research should not only look at TIC components as they are relevant across marginalized populations, but also how TIC is applied to specific treatment programs and protocols.

There are several potential reasons why this study's findings do not align with those of others among predominantly heterosexual populations (e.g., Amaro et al., 2007; Coccozza et al., 2005; Covington et al., 2008; Gatz et al., 2007; Gilbert, Domino, López-Castro et al., 2015; Morrissey et al., 2005; Morrissey, & Gaynes, 2012). Previous research has primarily focused on heterosexual female samples and thus these studies' findings may not generalize to LGBTQ IPV populations. Further, existing literature documenting TIC's effect on improved health has not examined TIC in isolation but rather in conjunction with trauma-specific treatment protocols and integrated substance abuse and mental health counseling (e.g., Morrissey et al., 2005). Thus, this study is among the first to attempt to identify a potential primary effect of TIC on mental health and physical health for LGBTQ IPV survivors. In addition, TIC may need to be more broadly conceptualized in order to be more relevant to sexual and gender minority survivors. For instance, in addition to including minority stress related-TIC as an indicator of TIC, future research should consider supplementary dimensions of TIC that were not captured in this study (e.g., encouraging survivors to seek support from the LGBTQ community) in order to build its effect on health for this population. Also, there may be components of TIC (e.g., providing information on the stigmatizing effect of trauma and minority stress) that may need to be strengthened when working with the LGBTQ community in order to improve their overall health.

The Role of TIC in Bolstering Mobilization

The relationship between TIC and health was not mediated through mobilizing mechanisms among LGBTQ IPV survivors. Nevertheless, our findings suggest that TIC could promote mobilization among LGBTQ IPV survivors. Specifically, greater TIC received was directly related to greater empowerment, emotion regulation, and lower social withdrawal at the latent level. These findings build on previous research by providing evidence to suggest that TIC providers who aim to bolster survivors' strengths may increase survivor empowerment (Harris & Fallot, 2001; Saakvitne, 2000). These results

are also consistent with previous literature asserting that trauma-informed providers who aim to help survivors strengthen their skills for self-care and safety may help survivors better regulate their emotional responses when triggered (Cohen, Berliner, & Mannarino, 2010; Ford & Russo, 2006; Harris & Fallot, 2001). The current results extend beyond existing relational trauma literature (e.g., Herman, 1997) to demonstrate that specifically for LGBTQ IPV survivors, working with trauma-informed practitioners in the context of a secure and reliable professional relationship is related to lower social withdrawal. Building on limited research on the effectiveness of existing interventions that are applied specifically to LGBTQ individuals (e.g., Pachankis et al., 2015b), this study's findings assert that TIC as a treatment framework addresses cognitive, behavioral, and affective processes (i.e., mobilizing mechanisms) that may be necessary to promote better health. This finding underscores the need to consider other mechanisms in clinical interventions adapted for LGBTQ individuals that aim to improve their health.

Pertinent to this current study, minority stress-related TIC was associated with several mobilizing mechanisms: greater emotion regulation and empowerment, and lower social withdrawal. As other studies suggest, providers who talk with LGBTQ IPV survivors about their discrimination experiences may help them to better monitor, evaluate, and modify their emotional reactions and to develop strategies to feel more empowered when coping with stressful conditions (Meyer, 2003). There is emerging research that suggests that psychosocial treatments that target minority stress experiences among gay and bisexual men may serve to reduce social isolation (Insel et al., 2010; Pachankis, 2015; Sanislow et al., 2010). This current study's findings extend beyond this literature base to suggest that assessing for and talking about minority stress experiences does relate to greater social connectedness among LGBTQ IPV survivors who contend with both minority stress and violence exposure.

What about shame? In this study, TIC did not significantly relate to lower levels of shame. There are several potential reasons for this unanticipated but important finding. Many LGBTQ IPV survivors experience lifelong internalized stigma given the prevalence of early and ongoing experiences of minority stress among this community (Newcomb & Mustanski, 2010). It may be that TIC as an overarching treatment framework bolsters LGBTQ IPV survivors' immediate sense of empowerment, emotion regulation skills, and desire for social connection, however it does not adequately address pervasive negative core beliefs related to identity and IPV that contribute to poorer health. Nevertheless, it is critical for providers adopting a trauma-informed approach to work to address shame among LGBTQ IPV survivors as they may not only attribute their experiences of IPV to their own perceived inadequacies (Platt & Freyd, 2012), but LGBTQ IPV survivors also contend with internalized heterosexism and cissexism (Sherry, 2007). This underscores the need for healthcare providers to normalize the adverse impact of IPV and identity-based stigma to help shift the blame toward society rather than oneself (Pachankis, 2015). Doing so could help to reduce the negative shame-based cognitive, affective, and behavioral pathways that lead to chronic health issues experienced by LGBTQ individuals (Pachankis, 2015).

In order to more effectively serve LGBTQ IPV survivors who contend with learned negative self-evaluations as a result of discrimination and IPV experiences, TIC may need to be delivered in the context of evidence-based interventions that target cognitive, behavioral, and affective minority stress processes adapted specifically for LGBTQ populations (e.g., transdiagnostic CBT treatment; Pachankis et al., 2015a). Of the limited research that does exist, studies suggest that standard cognitive restructuring treatment approaches can be adapted to specifically reduce minority stress-fueled cognitive biases by teaching stigma coping or encouraging adaptive cognitive reactions to stigma (e.g., by locating the source of mental health issues in structural forces of oppression; Pachankis, 2015). To this end,

future research is needed to demonstrate treatment protocols for LGBTQ survivors that may promote better health through specifically targeting internalized negative affective and cognitive reactions to IPV and marginalization. Future research should also unpack the extent to which shame-based evaluations are related to IPV experiences as compared to identity-based minority stressors to help assess the effect of TIC intervention approaches on these particular pathways. Doing so could potentially strengthen the association between TIC and shame and may lead to stronger effects of TIC improving health outcomes for LGBTQ IPV survivors.

Mobilizing Pathways to Better Mental and Physical Health

This is one of the first studies to investigate the association between greater mobilization following IPV experiences and mental and physical health outcomes among LGBTQ survivors. Consistent with our hypotheses, lower social withdrawal and shame were associated with better mental health, and lower shame and emotion regulation were related to better physical health at the latent level. At the bivariate level, we found that higher levels of social withdrawal were related to higher levels of depression, PTSD, and sexual health risk behaviors which is consistent with previous research demonstrating that social isolation is a major risk factor for engaging in poorer health behaviors which in turn relates to poorer mental health (House, Landis, & Umberson, 1988). Also, findings at the bivariate level suggest that higher levels of emotion regulation were related to higher levels of somatic symptoms, which is congruent with previous research asserting that those who are more attuned to their affective processes may be more in touch with their internal physiological sensations and thus may report greater symptoms (Salovey, Stroud, Woolery, & Epel, 2002). Inconsistent with our hypotheses, greater empowerment and emotion regulation were not related to mental health; and empowerment and social withdrawal were not related to physical health at the latent level. Future research should examine these associations in more detail. Further, greater empowerment was not connected to any health

indicator at the bivariate level. There could be a potential moderator that may determine for whom greater empowerment might connect to better health (e.g., age).

Internalizing cissexism and heterosexism, accepting IPV experiences as deserved, and feeling negative attitudes toward the self (e.g., shame) are both prevalent among LGBTQ IPV survivors and may contribute to lasting health consequences (Balsam & Szymanski, 2005). Findings from this study provide empirical evidence to suggest that higher levels of shame were related to greater depression, PTSD, substance use, sexual health risk behaviors, and somatic symptoms among LGBTQ IPV survivors. These findings are congruent with previous research documenting that shame may lead to poorer mental health (e.g., PTSD; Hartling et al., 2004) and physical health (e.g., increased cortisol levels; Dickerson, Gruenewald, & Kemeny, 2004). This study also builds on prior research by documenting that the effects of social stigma and identity-related shame may interfere with the negotiation of safer sex practices (Bockting, Robinson, Forberg, & Scheltema, 2010). Healthcare providers are in a prime position to provide education, advocacy, and supportive services to help increase awareness and motivation to address the insidious nature of shame with sexual and gender minority IPV survivors (Murray, Mobley, Buford, & Seaman-DeJohn, 2007). Moreover, it is critical for future research to continue to examine mental and physical health outcomes of clinical interventions that work to reduce internalized heterosexism and cissexism (i.e., primary minority stress processes; Meyer, 2003), as well as shame related to partner abuse among LGBTQ IPV survivors.

Limitations

Although the results of this study advance research on LGBTQ IPV survivors' experience of TIC, there are some limitations to consider. The data were cross-sectional, thus we cannot speak to causality or the order of associations among the variables. Experimental research is needed to examine potential causal processes. In addition, longitudinal research could help to examine the long-term impact

of TIC on health. Indeed, TIC may be a treatment framework designed to stabilize and promote recovery among survivors (Tompkins & Neale, 2016) but it remains unclear the extent to which it could lead to improved functioning over time specifically for this population. Also, the sample was comprised predominantly of young adults who identified as White; thus, the study's generalizability to older LGBTQ individuals and sexual and gender minority survivors of Color is limited. Indeed, emerging scholarship on oppressed populations documents the importance of understanding the intersections of minority identities (Meyer, 2010).

There are also limitations to some of the scales and conceptual constructs. This study relied on participants' perceptions of receiving TIC from services sought within the past year. Thus, results are based on self-report and not corroborated by agency service records or other independent data. Future studies should examine providers' perceptions of delivering TIC services. In addition, participants based TIC answers on the service that they sought most in the past year; however, this service might not have been the most helpful in terms of reducing health consequences of IPV. Future research should examine potential health benefits of multiple services that survivors may have accessed. In addition, we did not examine how long it had been since participants had received treatment, which would have helped to uncover short- and long-term health benefits of TIC. We also did not assess whether survivors were out to their providers about their sexual orientation or gender identity, or the sexual orientation or gender identity of their provider. This information would be important for future studies to consider in making conclusions about the quality of care received and the potential health benefits of TIC for survivors with marginalized identities.

This study relied on self-reported health, which might not be as accurately assessed as medical providers' reports. For example, avoidance and dissociation are common post-trauma symptoms which can affect participants' ability to accurately assess their current levels of physiological distress (van der

Kolk, Pelcovitz, Roth, & Mandel, 1996). Objective measures of health used in the field of neurophysiology and health psychology (e.g., HPA axis activity, cortisol) may be helpful in future studies. In addition, some items used dichotomous response options (e.g., chronic health issues), which could have limited potentially important variance.

Implications for Future Research

Despite these limitations, this study provides several directions for future research in addition to those previously mentioned. Future research should examine this mediation model for TIC received in specific types of service providers/agencies. For example, it could be that TIC received from medical providers has a stronger effect on health than TIC received from support groups. Future research should also conduct a latent profile analysis to assess which subgroups in the LGBTQ community receive different levels of TIC components. It would also be important to include whether LGBTQ IPV survivors are still currently in abusive relationships when seeking treatment, whether they are experiencing complex trauma, how long it had been since they sought services, and the number of service providers seen, as each of these factors could moderate the associations examined in this study. Finally, it would also be important to compare this model across specific populations of sexual and gender minority – as well as majority (i.e., cisgender heterosexuals) – IPV survivors to examine nuanced patterns across these groups.

Attention to plausible buffers of the effect of TIC on health is critical in effort to understand for whom and when TIC could promote better health. Researchers have identified common symptoms among survivors of chronic interpersonal trauma including affect regulation and attachment issues (Cook et al., 2005; van der Kolk et al., 2005). These factors could make it difficult for survivors to establish trusting relationships with providers, which may attenuate the health benefits of TIC (Tompkins & Neale, 2016). Future research should also examine TIC in conjunction with trauma-

specific treatments, which are particular interventions designed to address trauma symptoms (Harris, 1998) in order to better understand their combined effect on improving health outcomes. Further, an important aspect of TIC is an organizational commitment to trauma-informed practice by ensuring necessary training and support for staff. Thus, it is important to examine the extent to which systems-level factors, such as training for providers, has an effect on health outcomes.

Implications for Healthcare Providers

Results from this study provide empirical support for the extent to which TIC may ameliorate immobilizing effects of IPV for LGBTQ survivors. More specifically, healthcare providers who are culturally inclusive and provide psychoeducation to survivors, who emphasize survivors' strengths, who encourage survivors to connect with other survivors, who create a treatment environment of agency and mutual respect, and who address minority stressors may help LGBTQ IPV survivors better regulate negative thoughts and emotions as well as help them to feel more in control of their body and their healing process. By continuing to incorporate a TIC framework in service delivery, providers may help survivors to increase their tolerance for negative experiences as well as help them to mobilize themselves toward safety and recovery, thus avoiding chronic immobilization.

In coping with IPV, many survivors seek informal support from friends, family, and community members (e.g., asking others for a safe place to stay; Du Mont et al., 2005). However, not only are many LGBTQ people estranged from their family, but many may not have access to affirming institutional supports such as churches, workplaces, and schools (Bornstein et al., 2006). Thus, it is even more critical that service providers work to increase LGBTQ IPV survivors' engagement with affirming community and support networks. One way that TIC might help to reduce social withdrawal among LGBTQ IPV survivors is through motivating survivors to seek out relationships that are meaningful and

growth-fostering. Thus, an ongoing assessment of support systems could provide information when making referrals and treatment recommendations for this population.

In order to provide services that are maximally effective for LGBTQ IPV survivors, it is necessary to better understand the ways in which immobilizing processes resulting from trauma may lead to health consequences. While TIC interventions may not by themselves promote better health for LGBTQ IPV survivors, promoting specific mobilizing mechanisms was in fact related to better overall health. Specifically, the results help to inform clinical practice because they provide empirical support for the ways in which healthcare providers could work to improve mental and physical health among LGBTQ individuals by improving their emotion regulation, increasing their connection to others, and reducing shame. Indeed, overcoming internalized discrimination is necessary for healing (Frost & Meyer, 2009), however these results suggest that TIC did not relate to lower shame. Nevertheless, it may be helpful for providers to learn more about the insidious impact of IPV as well as internalized oppression on identity and relationships among marginalized populations. It also may be useful for TIC providers to integrate evidence-based cognitive-behavioral models that have been shown to lower shame among LGBTQ individuals (e.g., Pachankis et al., 2015a). Taken together, researchers and practitioners need to uncover additional services and resources complementary to TIC that could ameliorate the effect of IPV on LGBTQ survivors' health.

Conclusion

There has been a call to examine the application of TIC among diverse groups (Goodman et al., 2016), including LGBTQ IPV survivors given their heightened risk for IPV, minority stressors, and subsequent health risk outcomes (Balsam et al., 2005). By bridging the minority stress, TIC, and IPV literature, this study addresses LGBTQ IPV survivors' perceptions of the levels of TIC received as well as the degree to which this intervention approach relates to better mental health and physical health

through specific mobilizing mechanisms. Our findings indicate that TIC does not directly relate to better mental health and physical health. Further, TIC does not relate to better health through greater empowerment, emotion regulation, and lower shame and social withdrawal. However, TIC does bolster mobilization among LGBTQ IPV survivors, including greater emotion regulation, empowerment, and lower social withdrawal. Further, lower social withdrawal and shame were related to better mental health, and lower shame and emotion regulation were associated with better physical health. Higher levels of shame were related to poorer health across almost all health indices; however, TIC did not reduce shame. TIC as an overarching framework may have a potential direct effect on improving health outcomes when delivered in the context of an evidence-based treatment protocol that is specifically adapted for LGBTQ individuals and works to reduce shame. These results help us better understand ways to improve TIC intervention efforts for LGBTQ IPV survivors.

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Table 1
Skewness and Kurtosis Patterns of the Data

Variable	Mean	SD	Min	Max	Skewness	Kurtosis
TIP Agency	3.48	.63	1.33	4.00	-1.34	1.06
TIP Information	2.94	.97	1.00	4.00	-.41	-1.17
TIP Connection	1.85	1.03	1.00	4.00	.88	-.45
TIP Strengths	3.11	.88	1.00	4.00	-.68	-.62
TIP Culture	3.39	.70	1.00	4.00	-1.72	2.68
TIP Minority stress	2.94	.83	1.00	4.00	-.47	-.76
Emotion regulation	4.85	1.12	1.00	7.00	-.86	1.40
Loneliness	2.62	.61	1.00	4.00	.20	.85
Shame	2.40	.64	1.00	4.00	.32	-.29
Empowerment	3.05	.61	1.00	5.00	-.02	.18
Depression	2.40	.70	1.00	4.00	.14	-.45
PTSD	2.77	.88	1.00	5.00	.22	-.48
Substance use	1.70	.62	1.00	5.25	2.08	7.80
Sexual health risk behaviors	1.33	.59	1.00	4.00	2.08	4.86
Chronic health issues	1.21	.21	1.00	2.00	1.26	2.29
Somatic symptoms	2.00	.78	1.00	5.00	1.05	1.32
SES	2.92	.99	1.00	5.00	.08	-.22
Service duration	3.35	1.10	1.00	5.00	-.38	-.58

Note. SD = Standard Deviation; Min = Minimum actual reported value; and Max = Maximum actual reported value.

Table 2
Frequencies of Demographic Variables

Variable	Frequency
Gender Identity	
Cisgender woman	48.0%
Cisgender man	12.3%
Transman	6.2%
Transwoman	5.3%
Non-binary	22.0%
Other	6.2%
Sexual Orientation Identity	
Heterosexual/Straight	1.8%
Lesbian	16.7%
Gay	17.2%
Bisexual	23.3%
Pansexual	10.1%
Queer	22.9%
Asexual	5.7%
Other	2.2%
Race/Ethnicity	
African American/Black	1.3%
Asian/Asian American	2.6%
Hispanic/Latino	4.0%
Hawaiian/Pacific Islander	0.4%
Native American/Alaska Native	2.6%
Middle Eastern	4.4%
Biracial or Multiracial	18.9%
White	60.4%
Other	5.3%
Education	
9-11 th grade	0.9%
High school graduate or GED	5.7%
Vocational school	3.5%
Some college	30.4%
College graduate	37.4%
Advanced degree	9.7%
Graduate degree	12.3%
SES	
I do not worry about paying for things I want and need	7.5%
I can easily pay my bills but need to be careful	24.2%
I can pay my regular bills, but a bill that was bigger than usual would cause hardship	43.2%
I have trouble paying my regular bills	18.9%
I simply can't pay my bills	6.2%
How long ago services were sought	
Less than a month ago	6.2%
Between 1 month and 6 months ago	16.7%
Between 6 months and one year ago	26.9%
More than one year ago	36.1%
More than 5 years ago	14.1%

Note. SES = Socioeconomic status.

Table 3
Correlations among the Measures

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Agency	—																		
2. Info	.60***	—																	
3. Conn	.17*	.33***	—																
4. Strength	.71***	.65***	.27***	—															
5. Culture	.72***	.57***	.16*	.64***	—														
6. Minority	.60***	.63***	.26***	.61***	.65***	—													
7. Emo	.27***	.36***	.07	.30***	.33***	.30***	—												
8. Lonely	-.27***	-.12	-.09	-.15*	-.15*	-.20**	-.05	—											
9. Shame	-.05	.09	.09	.04	.02	.03	.09	.35***	—										
10. Power	.39***	.50***	.21***	.27***	.36***	.37***	.30***	-.39***	.07	—									
11. Dep	-.07	.08	.06	.03	.02	-.05	.03	.47***	.60***	.08	—								
12. PTSD	-.05	.17*	.10	.09	.10	.07	.11	.38***	.59***	.10	.75**	—							
13. SubUse	-.04	-.04	.10	-.02	-.03	.01	-.11	.09	.21**	.05	.24***	.28***	—						
14. Sexhlth	-.10	.01	.21**	-.05	-.01	.01	.01	.16*	.31***	.10	.30***	.26***	.44***	—					
15. Chron	-.18**	-.04	-.07	-.10	-.06	-.10	.09	-.29***	.10	-.07	.21**	.16*	.10	.07	—				
16. Somat	-.13	.03	.09	-.05	-.05	.04	.13*	.31***	.48***	.03	.62***	.61**	.32***	.32***	.32***	—			
17. SES	-.10	-.11	-.05	-.08	-.13	-.12	.02	.21***	.22***	-.06	.27***	.24**	.06	.02	.18**	.23***	—		
18. Age	-.13*	-.08	.01	-.11	-.08	-.03	.29***	.13*	-.15*	-.17**	-.04	-.01	.05	-.02	.34***	.17*	-.01	—	
19. Service	.06	-.04	-.10	.09	.14*	.17**	.10	-.08	-.19**	-.02	-.23***	-.18**	-.06	-.06	.17*	-.02	-.04	.24***	—
<i>M</i>	3.48	2.94	1.85	3.11	3.39	2.94	4.85	2.62	2.40	3.05	2.40	2.77	1.70	1.33	1.21	2.00	2.92	27.83	3.35
(SD)	(.63)	(.97)	(1.03)	(.88)	(.70)	(.83)	(1.12)	(.61)	(.62)	(.61)	(.70)	(.86)	(.62)	(.59)	(.21)	(.78)	(.99)	(9.74)	(1.10)

Note. Agency = environment of agency and mutual respect (TIP subscale); Info = access to information to trauma (TIP subscale); Conn = opportunities for connection (TIP subscale); Strength = emphasis on strengths (TIP subscale); Culture = cultural responsiveness and inclusivity (TIP subscale); Minority = Minority stress; Emo = level of emotion regulation; Lonely = degree of social withdrawal; Power = level of empowerment; Dep = depression; SubUse = frequency of current substance use; Sexhlth = sexual health risk behavior; Chron = chronic health issues; Somat = somatic symptoms; SES = socioeconomic status; Service = how long ago services were sought. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4
Basic Group Differences on Account of Gender Identity

Measure	<i>F</i> (df, N)	η_p^2	Gender Identity <i>M</i> (<i>SD</i>)			Results
			Cismen <i>n</i> = 28	Ciswomen <i>n</i> = 109	Trans/non-bin <i>n</i> = 90	
Agency	2.16 (2, 227)	.02	3.56 (.56)	3.54 (.52)	3.37 (.74)	---
Information	2.43 (2, 227)	.02	2.63 (1.04)	3.06 (.94)	2.89 (.98)	---
Connection	.70 (2, 227)	.01	1.97 (.98)	1.77 (1.00)	1.91 (1.07)	---
Strengths	.36 (2, 227)	.00	2.98 (.86)	3.13 (.89)	3.13 (.88)	---
Culture	1.36 (2, 227)	.01	3.50 (.62)	3.44 (.63)	3.30 (.81)	---
Minority Stress	.19 (2, 227)	.01	2.92 (.79)	2.92 (.78)	2.99 (.91)	---
Emotion	1.09 (2, 227)	.01	5.05 (1.01)	4.74 (1.13)	4.91 (1.13)	---
Loneliness	1.01 (2, 227)	.01	2.57 (.59)	2.67 (.66)	2.66 (.62)	---
Shame	1.07 (2, 227)	.01	2.34 (.61)	2.36 (.65)	2.48 (.63)	---
Empowerment	.18 (2, 227)	.00	3.06 (.55)	3.07 (.55)	3.02 (.71)	---
Depression	4.43 (2, 227)	.04	2.41 (.78)	2.26 (.64)	2.56 (.72)	W < T
PTSD	4.06 (2, 227)*	.04	2.65 (.80)	2.61 (.85)	2.96 (.93)	W < T
Substance use	.80 (2, 227)	.01	1.76 (.51)	1.64 (.59)	1.74 (.69)	---
Sexual health	2.81 (2, 227)	.03	1.52 (.69)	1.25 (.47)	1.33 (.59)	---
Chronic health	2.24 (2, 227)	.02	1.16 (.23)	1.20 (.17)	1.24 (.25)	---
Somatic	6.30 (2, 227)**	.05	1.67 (.60)	1.93 (.76)	2.20 (.80)	M & W < T
SES	12.67 (2, 227)***	.10	2.93 (1.05)	2.61 (.89)	3.29 (.96)	W < T
Service duration	1.15 (2, 227)	.01	3.25 (1.14)	3.47 (1.08)	3.24 (1.12)	---

Note. Agency = environment of agency and mutual respect (TIP subscale); Information = access to information to trauma (TIP subscale); Connection = opportunities for connection (TIP subscale); Strengths = emphasis on strengths (TIP subscale); Culture = cultural responsiveness and inclusivity (TIP subscale); Sexual health = sexual health risk behavior; Chronic health = chronic health issues; Somatic = somatic symptoms; SES = socioeconomic status; Service duration = how long ago services were sought; M = Cisgender man; W = Cisgender woman; T = Transgender/non-binary. Follow-up post-hoc comparisons are based on Bonferroni corrections. Standard deviations are provided in parentheses.

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

Table 5

Basic Group Differences on Account of Sexual Orientation

Measure	F (df, N)	η^2_p	Sexual Orientation <i>M</i> (<i>SD</i>)						Results
			Lesbian <i>n</i> = 42	Gay <i>n</i> = 39	Bisexual <i>n</i> = 53	Pansexual <i>n</i> = 24	Queer <i>n</i> = 55	Asexual <i>n</i> = 14	
Agency	.92 (5, 227)	.02	3.31 (.73)	3.44 (.63)	3.51 (.57)	3.50 (.57)	3.58 (.63)	3.47 (.52)	---
Information	.52 (5, 227)	.01	2.91 (.93)	2.84 (.94)	2.95 (1.04)	2.80 (1.06)	3.11 (.93)	2.86 (1.05)	---
Connection	.78 (5, 227)	.02	1.72 (.92)	2.08 (.97)	1.86 (1.08)	1.90 (1.17)	1.72 (.98)	2.00 (1.24)	---
Strengths	1.08 (5, 227)	.02	2.98 (.93)	2.93 (.80)	3.10 (.95)	3.17 (.88)	3.28 (.85)	3.29 (.80)	---
Culture	1.22 (5, 227)	.03	3.38 (.79)	3.55 (.59)	3.28 (.75)	3.24 (.76)	3.50 (.63)	3.32 (.68)	---
Minority	1.20 (5, 227)	.03	3.02 (.84)	3.06 (.79)	2.79 (.79)	2.73 (.92)	2.99 (.86)	3.20 (.75)	---
Emotion	1.77 (5, 227)	.04	4.82 (1.24)	5.17 (.91)	4.65 (1.13)	4.50 (1.27)	5.01 (.98)	4.73 (1.32)	---
Loneliness	1.24 (5, 227)	.03	2.62 (.61)	2.65 (.63)	2.55 (.58)	2.90 (.56)	2.57 (.64)	2.57 (.58)	---
Shame	.88 (5, 227)	.02	2.38 (.62)	2.46 (.72)	2.28 (.65)	2.39 (.60)	2.46 (.61)	2.62 (.69)	---
Power	.08 (5, 227)	.00	3.03 (.61)	3.05 (.58)	3.03 (.62)	3.03 (.65)	3.09 (.60)	3.10 (.78)	---
Depression	1.85 (5, 227)	.04	2.18 (.67)	2.55 (.77)	2.36 (.69)	2.56 (.58)	2.37 (.71)	2.64 (.68)	---
PTSD	1.28 (5, 227)	.03	2.58 (.90)	2.79 (.84)	2.65 (.87)	2.83 (.70)	2.81 (.92)	3.20 (1.16)	---
Substance use	.95 (5, 227)	.02	1.62 (.57)	1.89 (.84)	1.64 (.50)	1.66 (.52)	1.68 (.51)	1.74 (1.03)	---
Sexual health	6.13 (5, 227)***	.12	1.16 (.41)	1.73 (.85)	1.16 (.37)	1.24 (.39)	1.34 (.48)	1.43 (.91)	P, B, Q, & L < G
Chronic	.78 (5, 227)	.02	1.21 (.20)	1.18 (.23)	1.20 (.17)	1.18 (.18)	1.25 (.26)	1.25 (.17)	---
Somatic	.94 (5, 227)	.02	1.91 (.72)	2.06 (.93)	1.96 (.74)	2.00 (.54)	1.98 (.76)	2.40 (1.00)	---
SES	1.28 (5, 227)	.03	2.79 (1.05)	2.90 (.97)	2.74 (1.02)	2.96 (.81)	3.13 (.94)	3.21 (1.12)	---
Service duration	.22 (5, 227)	.01	3.31 (1.22)	3.38 (1.07)	3.30 (1.14)	3.25 (1.15)	3.47 (1.03)	3.29 (1.07)	---

Note. Agency = environment of agency and mutual respect (TIP subscale); Information = access to information to trauma (TIP subscale); Connection = opportunities for connection (TIP subscale); Strengths = emphasis on strengths (TIP subscale); Culture = cultural responsiveness and inclusivity (TIP subscale); Sexual health = sexual health risk behavior; Chronic health = chronic health issues; Somatic = somatic symptoms; SES = socioeconomic status; Service = how long ago services were sought; L = Lesbians; G = Gay men; B = Bisexual individuals; Q = Queer; P = Pansexual individuals; A = Asexual individuals. Follow-up post-hoc comparisons are based on Bonferroni corrections. Standard Deviations are provided in parentheses.

*** $p < .001$.

Table 6
Basic Group Differences on Account of Race/Ethnic Identity

Measure	<i>F</i> (df, N)	η^2_{pb}	Racial Identity <i>M</i> (<i>SD</i>)		Results
			People of Color <i>n</i> = 63	White People <i>n</i> = 164	
Agency	4.24 (1, 227)*	.02	3.34 (.74)	3.53 (.57)	POC < W
Information	.58 (1, 227)	.00	2.86 (1.05)	2.97 (.95)	---
Connection	2.12 (1, 227)	.01	2.01 (1.05)	1.79	---
Strengths	.56 (1, 227)	.00	3.04 (.89)	3.14 (.88)	---
Culture	7.54 (1, 227)**	.03	3.19 (.86)	3.47 (.62)	POC < W
Minority	1.68 (1, 227)	.01	2.83 (.93)	2.99 (.79)	---
Emotion	5.06 (1, 227)*	.02	4.58 (1.24)	4.95 (1.05)	POC < W
Loneliness	.01 (1, 227)	.00	2.72 (.51)	2.59 (.61)	---
Shame	4.15 (1, 227)*	.02	2.55 (.63)	2.35 (.64)	W < POC
Power	.78 (1, 227)	.00	2.99 (.66)	3.07 (.60)	---
Depression	2.68 (1, 227)	.01	2.52 (.73)	2.35 (.69)	---
PTSD	5.78 (1, 227)*	.03	2.98 (.92)	2.67 (.87)	W < POC
Substance use	2.03 (1, 227)	.01	1.79 (.77)	1.66 (.55)	---
Sexual health	1.45 (1, 227)	.01	1.40 (.62)	1.30 (.57)	---
Chronic	1.99 (1, 227)	.00	1.21 (.23)	1.21 (.21)	---
Somatic	.48 (1, 227)	.00	2.06 (.79)	1.98 (.77)	---
SES	2.74 (1, 227)	.01	3.10 (1.16)	2.85 (.91)	---
Service duration	1.53 (1, 227)	.01	3.21 (1.06)	3.41 (1.12)	---

Note. Agency = environment of agency and mutual respect (TIP subscale); Information = access to information to trauma (TIP subscale); Connection = opportunities for connection (TIP subscale); Strengths = emphasis on strengths (TIP subscale); Culture = cultural responsiveness and inclusivity (TIP subscale); Sexual health = sexual health risk behavior; Chronic health = chronic health issues; Somatic = somatic symptoms; SES = socioeconomic status; Service duration = how long ago services were sought; POC = people of Color; W = White people. Standard Deviations are provided in parentheses.

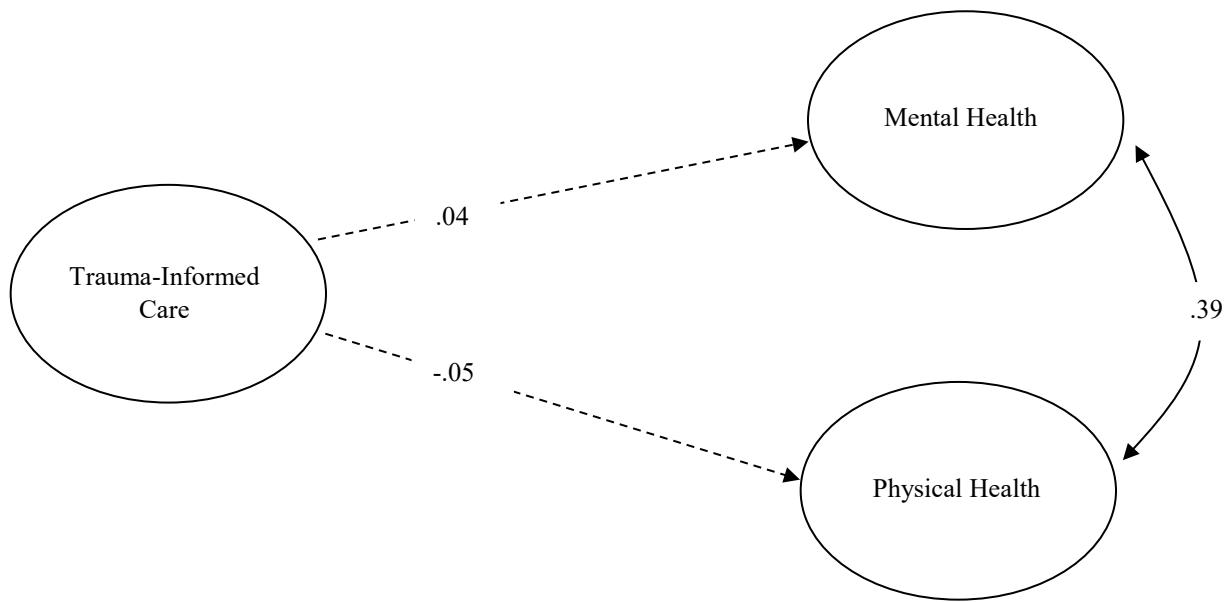
* $p < .05$.

Table 7
Goodness of Fit for the Measurement and Structural Model

Model	<i>Fit Indices</i>				
	NNFI	IFI	SRMR	CFI	RMSEA (90% CI)
Initial Measurement Model	.88	.90	.10	.90	.088 (.080, .096)
Modified Measurement Model	.89	.91	.10	.91	.087 (.087, .096)
Initial Structural Mediation Model	.85	.87	.15	.86	.099 (.090, .110)
Modified Structural Mediation Model	.88	.90	.12	.90	.085 (.080, .090)

Note. NNFI = non-normed fit index; IFI = incremental fit index; SRMR = standardized root mean square residual; CFI = comparative fit index; RMSEA = root-mean-square error of approximation; 90% CI = confidence interval. Parentheses indicate upper and lower bounds of the 90% CI.

Figure 1. A model of the direct effect of TIC on health



Note. Values are standardized coefficient estimates.

Figure 2. Factor loadings of latent constructs and observed factors

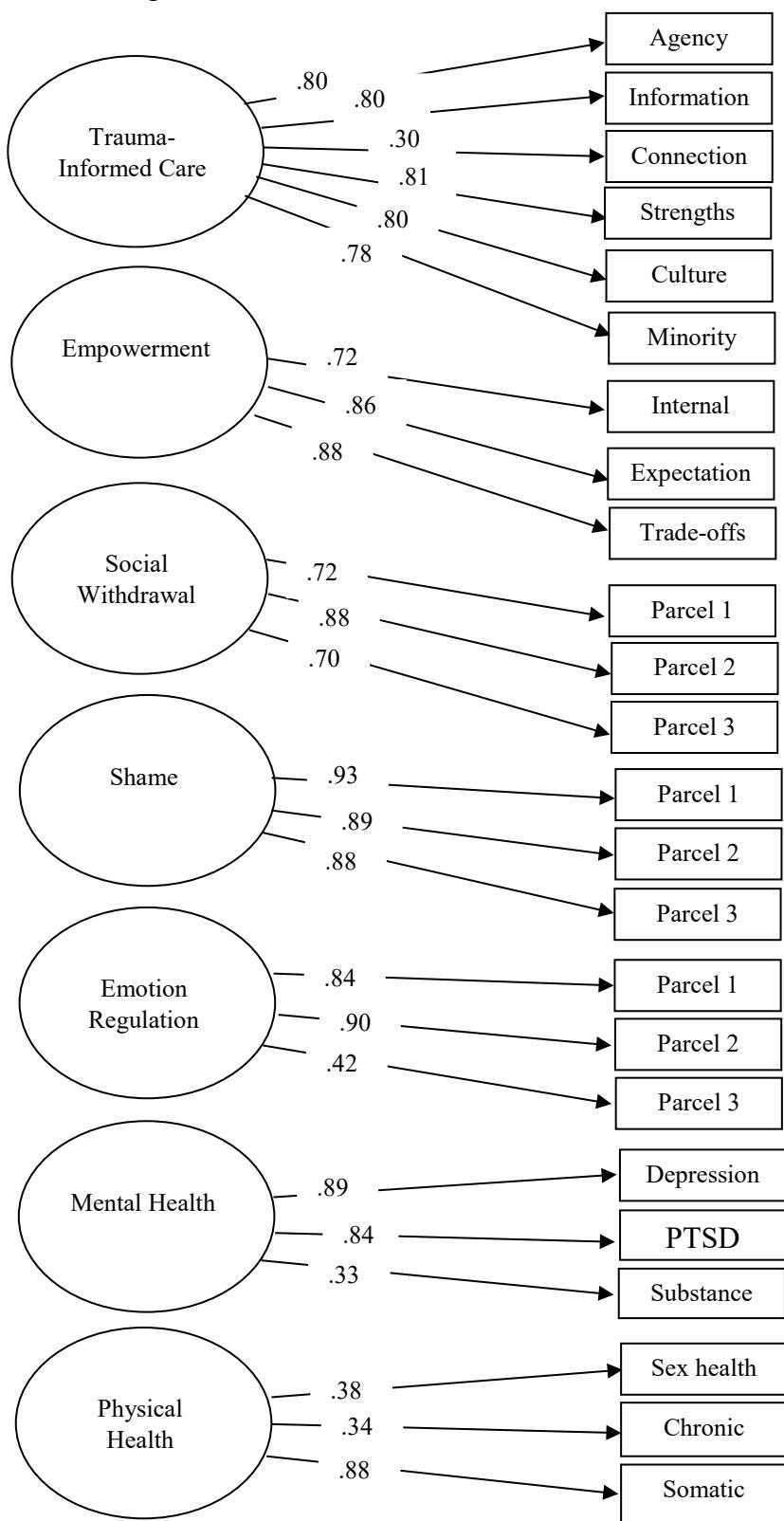
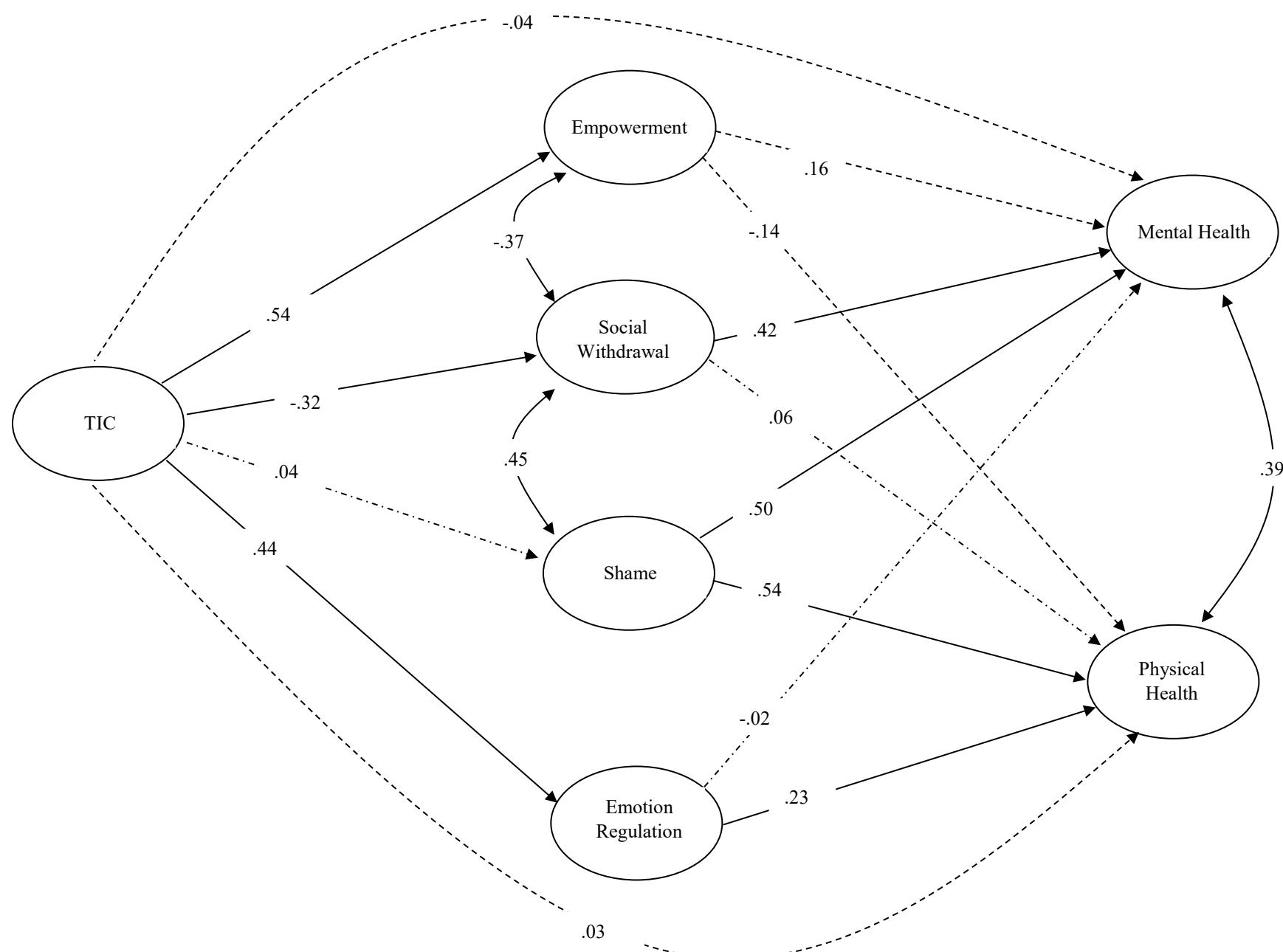


Figure 3. A mediation model of TIC and LGBTQ IPV Survivors' health



Note. Values are standardized coefficient estimates. The model controls for SES and service duration.