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Minority Stressors as Predictor Variables for Animal Abuse in LGBTQ Same-Sex Relationships with Interpersonal Violence

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Walden University
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MEd, Kutztown University, 1991

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

LGBTQ individuals face a distinct set of societal issues that can lead to intimate partner violence (IPV) and animal abuse together. Grounded in minority stress theory, the purpose of the study was to reduce animal abuse in LGBTQ male and female same-sex relationships by examining the co-occurrence of internalized homophobia, degree of outness, and IPV. The hypotheses for the study include whether internalized homophobia and degree of outness predict animal abuse in LGBTQ same-sex relationships experiencing IPV. This study was conducted with a population of individuals (N = 149) with inclusion criteria of being 18 years of age or older, having stable mental health, not suicidal, manic, or psychotic in the previous 6 months, participants do not have current charges against their partner in court, currently LGBTQ, and not currently involved/living with an abusive partner. The data for this research was gathered by an online survey that included four survey instruments and multiple regression analysis was conducted. The findings indicated that both internalized homophobia and the level of outness were weak predictors of animal abuse. The interaction between internalized homophobia and degree of outness combined had a stronger but still weak association with animal abuse. A key recommendation for counselors and shelters is to improve training on IPV and animal abuse that is inclusive of the unique needs of LGBTQ clients and their animals. The implications for positive social change include heightened awareness of LGBTQ IPV and animal abuse, enhanced services, policy reform guidance, and helping establish more equitable treatment.

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Chapter 1: Introduction to the Study

Introduction

Intimate partner violence (IPV) is a significant public health issue that affects millions of people in the United States each year. The Centers for Disease Control and Prevention (CDC) has conducted an ongoing telephone survey since 2010 that collects data on intimate partner violence and sexual violence. The recent data from the survey shows that in the heterosexual population, one in two women (47.3%) and one in four men (44.2%) reported experiencing IPV in their lifetime (Smith et al., 2018). In the lesbian, gay, and bisexual (LGB) population, 47.7% of gay men, 56.3% of lesbian women, 46.1% of bisexual men, and 69.3% of bisexual women reported experiencing IPV in their lifetime (Chen et al., 2023). Experiencing IPV comes with related physical health, mental health, and personal consequences. Overall, it has been estimated that the lifetime economic cost related to medical services for physical injury, lost productivity at work, criminal justice, and other expenses was $3.6 trillion (Chen et al., 2020; Peterson et al., 2018).

Additionally, research has found that one form of violence can be linked to other forms of violence (Taylor et al., 2017). Research conducted over the last 25 years has demonstrated that animal abuse is a significant indicator for further acts of violence, including violence toward people (Arluke et al., 1999; Ascione, 2007; Ascione et al., 2007a, 2007b; Barrett et al., 2020; Collins et al., 2018; Fitzgerald et al., 2020; Haden et al., 2018; Hartman et al., 2018; Longobardi & Badenes-Ribera, 2019; Monsalve et al., 2017; Newberry, 2017; Richard & Reese, 2019; Riggs et al., 2018). Levitt et al. (2016)

found a significant relationship between the perpetration of intimate partner violence and being actively cruel to animals. Although most research has been conducted with the heterosexual population, studies have shown that animal abuse occurs in the lesbian, gay, bisexual, transgender, and queer (LGBTQ) population experiencing intimate partner violence (Ayhan Balik & Bilgin, 2019; Riggs et al., 2018; Rosenberg et al., 2020; Taylor et al., 2017; Taylor et al., 2019).

Background

Early IPV research has focused primarily on heterosexual relationships, specifically on abuse perpetrated by men against women (Lantz, 2020). More recently, research has expanded to include the sexual minority population. In examining research from 2000 to 2015, only 3% of IPV research was explored in the LGBTQ community (Edwards et al., 2015). Still, the overall results indicate that IPV rates are the same or greater in LGBTQ relationships than in heterosexual relationships (Edwards et al., 2015). IPV has been studied primarily in the heterosexual population but has been found in LGBTQ relationships (Rosenberg et al., 2020; Taylor et al., 2019).

Risk factors are important in predicting the occurrence of IPV. Spencer et al. (2019) completed a meta-analysis of the literature from 1986 to 2016 to identify effect sizes for 50 risk markers of physical IPV for heterosexual couples. The risk markers were divided into ontogenetic, microsystem, and exosystem. The exosystem significant risk markers for women were stress, financial stress, and the number of children, and for men, stress was the only significant risk marker. The microsystem significant risk markers with a large effect size for women were previous IPV perpetration, previous injury caused by

an abuser, emotional IPV victimization, sexual IPV victimization, emotional IPV victimization, and stalking victimization. The significant risk factors with large effect sizes for men were previous injury caused by the perpetrator, emotional IPV victimization, abuse in past relationships, previous IPV perpetration, emotional IPV perpetration, relationship dissatisfaction, witnessing IPV in the family of origin, and child abuse in the family of origin. The ontogenetic significant risk markers with a medium effect size for women were a threat to harm self, PTSD, fear, depression, and drug use, and for men, PTSD, borderline personality disorder, anger, antisocial personality disorder, and drug use. Another study has found that men who were less out were at risk for IPV (Kelley et al., 2014).

Sexual minority persons experience the same types of risk factors as their heterosexual counterparts, but they experience additional minority stressors unique to the LGBTQ community (Meyer, 1995). Examples of minority stressors include internalized homophobia, discrimination, stigmatization, identity concealment, and level of outness. Kimmes et al. (2017) focused on risk factors, which included alcohol abuse, child abuse in the family of origin, education, perpetrating or victim of psychological abuse, witnessing IPV anger, self-esteem, poor mental health, and minority stressors for identifying perpetration or victimization of physical IPV only in same-sex relationships. Results show that internalized homophobia and fusion were the strongest predictors of the perpetrators of physical IPV in same-sex relationships. HIV status and internalized homophobia were the strongest predictors of victimization of physical IPV. Edwards et al. (2017) found that minority stressors contribute to increased rates of IPV in sexual

minority relationships and identified that internalized homophobia and stigma consciousness are linked to IPV. Ayhan Baylik and Bilgin (2021), in a study of lesbians and bisexual women, found that internalized homophobia was positively associated with the perpetration and victimization of sexual violence.

Research has shown that risk factors are essential in identifying the potential for IPV in both heterosexual and same-sex relationships. Identifying minority stressors is vital to determining the risk of IPV in sexual minority relationships (Kimmes et al., 2017; Longobardi & Badenes-Ribera, 2017). Identifying risk factors for IPV may contribute to determining the potential for animal abuse in LGBTQ relationships experiencing IPV.

Researchers have identified a link between IPV and animal abuse. In the 1990s, Ascione (1997) found that 71% of women in a battered women's shelter reported animal abuse. Arluke et al. (1999) discovered that animal abuse is associated with violence and used as a control method. Yet, during this early time, little research was conducted on IPV and sexual minority groups, and even less included animal abuse in the context of IPV. Renzetti (1992) was the first to explore IPV in lesbian relationships and found that 38% of lesbians reported animal abuse. More recently, Taylor et al. (2019) completed a study with lesbian, gay, transgender, bisexual, queer, and heterosexual participants. Results showed that animals are a source of emotional strength and were often protected by the victim. Victims left the abusive relationship when triggered by animal abuse. Studies have demonstrated the above trends and have further explored IPV in the LGBTQ community and the link to animal abuse (Ayhan Balik & Bilgin, 2019; Newberry, 2017; Riggs et al., 2018; Rosenberg et al., 2020; Taylor et al., 2017).

Problem Statement

The co-occurrence of IPV and animal abuse among LGBTQ individuals presents a unique combination of social problems. As Taylor et al. (2017) have noted, “where there is one form of abuse, there is often the other” (p. 821). Research on prevalence is lacking (Ummak et al., 2022). However, a recent study estimated that roughly 21% of LGBTQ males and females with IPV responded to an international survey and reported animal abuse by their partner (Riggs et al., 2018). The researchers admitted that due to numerous independent and dependent variables included in this study, the actual rate of animal abuse was overshadowed and likely underestimated. An additional study in Canada reports prevalence rates of 32.9% (Barrett et al., 2017), which lends credence to the assumption that prevalence rates were underestimated in the previous study. Indeed, a recent study reported a prevalence rate of 89% for animal abuse among heterosexual IPV female victims (Fitzgerald et al., 2019). Comparing LGBTQ to heterosexuals, there has been little research on IPV and animal abuse in the LGBTQ community (Dichter et al., 2018; Edwards et al., 2015; Fitzgerald et al., 2019; Riggs et al., 2018; Taylor et al., 2019).

Research about IPV among LGBTQ has indicated greater prevalence in some categories compared to IPV in heterosexual relationships. Chen et al. (2023) compiled the data from the surveyed intimate partners in a seminal CDC study for self-reported violence that consisted of physical, emotional, or sexual violence and lifetime serious violence. The researchers reported the following by intimate partners, for violence among females, 53.0% of females in same-sex relationships reported this, 57.9% of females in

bisexual relationships reported this, while only 41.3% of heterosexual females reported violence by an intimate partner. For violence among males, 41.1% in a same-sex relationship reported this, 42.1% of bisexual men reported this, and 42.4% of heterosexual males reported violence by an intimate partner. For lifetime serious injury physical violence, women in same-sex relationships reported 41.6% by an intimate partner, while heterosexual women reported 31.7%. Men in same-sex relationships reported 28.6%, and heterosexual men 24.4%. In sum, this research indicated that women in same-sex relationships and bisexual relationships had the highest rate of violence compared to any category of homosexual men and all heterosexuals (Chen et al., 2023). These findings are consistent with more recent research that has suggested that same-sex relationships are at greater risk of IPV, but more research is needed (Laskey et al., 2019).

An area of research about co-occurring factors in same-sex IPV that has also received attention is the effect of minority stressors on IPV (Kimmes et al., 2017; Longobardi & Badenes-Ribera, 2017). Minority stressors typically affect stigmatized groups, a group of people associated with a negative quality/stereotype, hold a marginalized position, and are usually discriminated against by society at large (Meyer, 2003). Meyer (2003) developed the Sexual Minority Stressors Model, which has identified stressors potent in affecting marginalized groups, such as discrimination, stigma consciousness, internalized homophobia, fear of outing, concealment, and prejudice.

Research has shown associations between the minority stressors of internalized homophobia and the degree of outness with IPV in same-sex relationships (Edwards et

al., 2015; Kelley et al., 2014; Kimmes et al., 2017; Milletich et al., 2014; Ronzón-Tirado et al., 2022). Internalized homophobia is defined as negative attitudes toward homosexuality that a person turns inward (Meyer, 2003). Degree of outness is the quantity of disclosure or identification an individual has concerning their sexual identity to the public, including family members, same-sex friends, heterosexual friends, and colleagues at the workplace (Meyer, 2003). Internalized homophobia has been observed primarily in male same-sex relationships, and the mean effect size for internalized homophobia and male same-sex perpetrators was .23 (Kimmes et al., 2017). A study conducted by Ronzón-Tirado and colleagues (2022) revealed that identity concealment (lower degree of outness) was associated with IPV victimization. Another study showed that both lower and higher levels of outness are related to the perpetration of physical IPV (Longobardi & Badenes-Ribera, 2017).

In summary, animal abuse has occurred during IPV among LGBTQ (Riggs et al., 2018) and heterosexuals (Fitzgerald et al., 2019), that there is a higher prevalence of IPV among LGBTQ women compared to LGBTQ men or both genders in heterosexuals (Chen et al., 2023), that minority stressors are more likely to affect IPV among LGBTQ compared to IPV among heterosexuals (Kimmes et al., 2017; Longobardi & Badenes-Ribera, 2017), that the minority stressor of internalized homophobia has occurred more often in men in same-sex relationships compared to women in same-sex relationships (Kimmes et al., 2017) and that the degree of outness and internalized homophobia in men's same-sex relationships contribute to incidents of IPV (Kelley et al., 2014) .

These studies have indicated that animal abuse, IPV, and LGBTQ have been examined in one study, and there have been studies to examine minority stressors among IPV and LGBTQ. Still, there is a gap in the research findings when it comes to finding studies in which animal abuse has been examined along with minority stressors such as internalized homophobia and degree of outness. Few scholars have explored the possible association between outness, internalized homophobia, and IPV with animal abuse. This research asserts results in an increasing literature body supporting the association between minority stressors of outness and internalized homophobia and IPV prevalence among LGBTQ and outlines the demand to tackle structural factors in IPV prevention programs that account for animal abuse in LGBTQ couples.

Purpose of the Study

In this study, I aimed to investigate IPV in LGBTQ male and female partners for the co-occurrence of the following relationships: internalized homophobia and animal abuse in these relationships, and then the degree of outness and animal abuse in these relationships. I addressed the gap in the literature regarding the need for more research on IPV in the LGBTQ community and animal abuse in the context of minority stressors such as internalized homophobia and degree of outness (see Dichter et al., 2018; Edwards et al., 2015; Fitzgerald et al., 2019; Riggs et al., 2018; Taylor et al., 2019). In this study, LGBTQ relationships with IPV were examined to determine whether the predictor variables, internalized homophobia or degree of outness, predict the criterion variable, animal abuse.

Research Questions and Hypotheses

RQ1: To what extent is animal abuse self-reported in the context of LGBTQ relationships with IPV and degree of outness?

$H_0$1: Degree of outness is not a predictor of animal abuse during intimate partner violence in LGBTQ relationships.

$H_1$1: Degree of outness is a predictor of animal abuse during intimate partner violence in LGBTQ relationships.

RQ2: To what extent is animal abuse self-reported in the context of LGBTQ relationships with IPV and internalized homophobia?

$H_0$2: Internalized homophobia is not a predictor of animal abuse during intimate partner violence in LGBTQ relationships.

$H_1$2: Internalized homophobia is a predictor of animal abuse during intimate partner violence in LGBTQ relationships.

Theoretical Framework for the Study

Minority stress theory developed by Meyer (2003) was the framework for the research study. This theory suggests that stigmatized groups can be exposed to unique stressors in addition to everyday stressors that everyone experiences (Meyer, 2003). This theory advances the concept that experiencing stressors unique to being a member of a minority group, such as LGBTQ, can include discrimination, prejudice, and stigma. These minority stressors can create a hostile and stressful environment for the person being stigmatized. When individuals belong to multiple minority groups, such as being both female and LGBTQ, the adverse effects of stressors can be additive (Stephenson &

Finneran, 2017). Minority stressors can be experienced in the LGBTQ community and can lead to a negative self-image and outright rejection of one's homosexual feelings (Meyer, 2003). Additionally, minority stress theory suggests that an individual's emersion into hostile and stressful environments with minority stressors can result in feelings of shame and worthlessness that can lead to problems in interpersonal relationships, harmful coping practices, and mental health problems including substance abuse, suicidality, depression, anxiety, mood disorders (Meyers, 2003).

Meyer (1995, 2003) identified three processes to describe how LGBTQ individuals can experience minority stressors. External sources spur the first process, and these can include experiences that individuals of LGBTQ are all too familiar with, such as being stigmatized and treated with prejudice and discrimination. The second process is a form of cognitive anxiety, anticipatory expectation, that adverse events, such as being stigmatized or discriminated against, could occur, and that hypervigilance to withstand this stress is prudent. The third process is experienced by the individual cognitively and includes two different perceptual problems that can arise in LGBTQ individuals. The first problem is called the degree of outness, in which one discloses or conceals one's sexual orientation. The second perceptual problem is internalized homophobia, which consists of accepting society's negative attitudes toward LGBTQ and projecting these onto oneself and self-denial of one's sexual orientation. In sum, all three of these processes, including the process with two perceptual problems, degree of outness, and internalized homophobia, can lead to maladaptive coping behaviors and adverse effects on mental health (Meyer, 2003).

Over the past 2 decades, IPV has been acknowledged as a critical public health challenge, and increased focus on violence in intimate partner associations has been given to heterosexual partners (Whitfield et al., 2021). Few studies explored how stress specific to living as bisexual or lesbian women could relate to IPV in these relationships, even though the vast majority of literature established the IPV rates among LGBTQ partners (Chen et al., 2020). Ayhan Balik and Bilgin (2021) investigated IPV and minority stress experiences among homosexual women (n=149). The researchers examined relationships among minority stressors and the occurrence of IPV among homosexual women in Turkey. The findings showed that perpetration and victimization of all the IPV forms occur; the prevalent victimization and perpetration were psychological violence (63.10%). Most participants (74.5%) reported moderate internalized homophobia levels and reported being usually exposed to discrimination in public areas. The outness level of participants related to sexual violence (perpetration r = 0.372, p = 0.00; victimization r = 0.184, p = 0.025), victimization and perpetration. Also, it was established that there were relationships between sexual violence and internalized homophobia levels (perpetration r = 0.164, p = .045; victimization r = 0.189, p = 0.021; Ayhan Balik & Bilgin, 2021). The results show a need for healthcare personnel to be aware of the IPV prevalence and minority stressors that affect this group. The mental health of homosexual people is at risk because of IPV and minority stressors. Moreover, these findings indicated the need for additional empirical studies to enhance interpersonal relationships among homosexual women (Ayhan Balik & Bilgin, 2021).

In sum, research has indicated that minority stressors need to be considered for LGBTQ individuals when considering the risk for IPV in LGBTQ relationships (Ayhan Balik & Bilgin, 2021; Kimmes et al., 2017; Longobardi & Badenes-Ribera, 2017). The research shows that minority stressors, such as degree of outness and internalized homophobia, have been identified as associated with IPV (Ayhan Balik & Bilgin, 2021; Kelley et al., 2014). This means that, potentially, these minority stressors may predict IPV among LGBTQ relationships. However, no studies have been found that have explored whether minority stressors, such as degree of outness and internalized homophobia in IPV among LGBTQ, are associated with animal abuse in these relationships. In this study, both degree of outness and internalized homophobia were used to predict animal abuse in LGBTQ relationships with IPV. These findings could contribute to the role that minority stressors, such as degree of outness and internalized homophobia, might play in IPV and animal abuse, and existing IPV literature.

Nature of the Study

In this study, I used a quantitative cross-sectional survey design. According to Creswell and Creswell (2018), the cross-sectional design examines the relationship between variables at a single point in time. In this study, the predictor variables were internalized homophobia and outness, and the criterion variable is animal abuse. The target population includes male and female members of the LGBTQ community experiencing IPV, defined as physical, emotional, and sexual threats or violence by a current or former partner. This design can be used to determine whether internalized

homophobia and degree of outness can predict the occurrence of animal abuse in LGBTQ relationships experiencing intimate partner violence.

Definitions

Degree of Outness: The disclosure or concealment of one's sexual orientation to family, friends, and coworkers (Meyer, 2003).

Internalized homophobia: Per Meyer and Dean (1998), the gay person's negative social attitudes toward self, leading to a devaluation of self and resultant internal conflicts and poor self-regard (p. 161) or how much someone with an LGBTQ identity incorporates negative social attitudes toward self.

Intimate Partner Violence: Per the World Health Organization (2022), any behavior or behaviors between partners in an intimate relationship that causes physical, psychological, or sexual harm.

Minority Stressors: Discrimination, stigma consciousness, fear of discrimination resulting in hypervigilance, internalized homophobia, and degree of outness (Meyer, 2003).

Assumptions

The primary assumption of this study was that survey participants would accurately and honestly respond to survey questionnaires based on their experiences. The assumption of anonymity was paramount to obtaining responses due to barriers to disclosing IPV, such as shame and guilt (see Dichter, 2020). Anonymity is a protective factor used in many research surveys (Robertson et al., 2018). I also assumed that I could achieve a sufficient sample size to answer the research questions.

Scope and Delimitations

In this study, the scope was delimited to LGBTQ adults 18 years and older who have experienced animal abuse in the context of intimate partner abuse. These participants were selected using specific criteria. LGBTQ participants who have not experienced IPV and animal abuse were excluded as they did not fit the criteria for this study. Self-administered surveys were used to gather data on the predictive ability of the identified risk factor variables. Results may not be transferable to the general population due to the lack of minority stressors experienced in the heterosexual community.

Limitations

Potential ethical issues were a challenge in this study due to ensuring sensitivity to the needs (Creswell & Creswell, 2018) of a potentially vulnerable participant population (crime victims of IPV). Participant eligibility requirements would include (a) males or females 18 years of age or older who have experienced animal abuse in the context of IPV, (b) stable mental health, not suicidal, manic, or psychotic in the previous 6 months, (c) participants do not have current charges against their partner in court, (d) are not currently involved/living with the abuser and (e) currently LGBT or Q. These requirements decrease participant vulnerability. Another challenge is that the participants need to identify as LGBTQ and therefore may not want to volunteer for a study such as this. This challenge was addressed by privately recruiting LGBTQ participants from community settings and social media platforms known to be frequented by LGBTQ. These participants were guaranteed both anonymity and confidentiality. Another challenge was personal researcher bias; in this study, having an affinity towards animals

could have influenced my interpretation of results to benefit animals. Potential sampling bias may cause limitations in the results of the investigation. The sampling criteria for participants were clearly defined to reduce sampling bias (*see* Creswell & Creswell, 2018). Another limitation was related to finding a sufficient number of participants to meet the requirements for the type of statistical analyses proposed for the study. To mitigate this possibility, a sample size calculation was used to determine the sample size needed. Another challenge was that permission must be obtained to use standardized instruments, but fees were not involved. Organizations or authors from which permission was required were provided with the information that the study is a doctoral dissertation and about the purpose of the study.

Significance

With this research, I examined the association between the minority stressors, internalized homophobia and degree of outness, and the criterion variable animal abuse in same-sex relationships who experience IPV. I used a quantitative approach to investigate the extent to which internalized homophobia and degree of outness can predict animal abuse within same-sex IPV. The results of this research can foster a better understanding of the factors that can predict animal abuse in same-sex relationships with IPV. The results of this study provided the opportunity to contribute to social change. Identifying the presence of internalized homophobia and degree of outness within abusive same-sex relationships allows treatment providers the chance to address safeguards for the family pet. This research also intends to increase awareness of animal abuse and intimate partner

violence in the LGBTQ community so that domestic violence shelters realize there is a need for LGBTQ IPV-specific services that also address pet safety.

This study is aligned because I examined a gap in research findings, the strength of predictor variables of the minority stressors, internalized homophobia, and degree of outness, in predicting animal abuse in LGBTQ relationships experiencing intimate partner violence. In Meyer's (2003) seminal study, minority stress theory identifies factors unique to LGBTQ persons that affect stress levels, which increase the likelihood of intimate partner violence. Previous studies have documented a significant association with internalized homophobia, outness, and intimate partner violence (e.g., Kimmes et al., 2017; Longobardi & Badenes-Ribera, 2017). Additionally, research has documented the link between intimate partner violence and animal abuse (Newberry, 2017). My research may advance the current literature by exploring the association between specific minority stressors, gender, and same-sex relationships experiencing IPV and animal abuse.

Summary

In the current study, I sought to identify whether the variables of internalized homophobia and degree of outness are predictive of animal abuse in the context of IPV. To provide more focused information and data, I addressed minority stressors, animal abuse, and IPV victimization/perpetration. Researchers have noted that most studies on IPV have focused on heterosexual relationships and have neglected sexual minority relationships (Whitfield et al., 2021).

Chapter 2: Literature Review

Introduction

This chapter provides an overview of the literature search strategies, the theoretical foundation, and a review of literature related to key concepts that guide the study. The literature review section included an overview of the current literature and the strengths and weaknesses of the researched studies. In addition, I provided the rationale for the selected concepts. Finally, the chapter was summarized and concluded with a discussion of how this study contributed to the current gaps in the literature.

Literature Search Strategy

The Walden University Library was the primary institution for locating peer-reviewed journal articles. Google Scholar provided another research tool to find articles about IPV, animal abuse, and the LGBTQ community. I accessed articles predominantly within the last ten years due to the limited research in areas related to LGBTQ and accessed older pertinent articles that supplemented the current review. This comprehensive search allowed me to obtain scholarly research for the literature review. The articles included primary research, literature reviews, and academic presentations. The following databases were used: EBSCOhost, APA PsycARTICLES, APA PsycINFO, APA PsycTests, Directory of Open Access Journals, LGBTQ+ Source, ProQuest Central, PubMed, SAGE Journals, Springer, Taylor and Francis Online, and Thoreau Multi-Database Search. These databases contained numerous journals in the academic fields of psychology, sociology, public health, criminal justice, medicine, and others. The keywords that were used in the literature review search were *intimate partner*

violence, domestic violence, partner abuse, intimate partner aggression; intimate partner violence, domestic violence, partner abuse, intimate partner aggression AND *LGBTQ or lesbian or gay or homosexual or transgender or queer or sexual minority or same-sex; intimate partner violence, domestic violence, partner abuse, intimate partner aggression* AND *animal abuse, or animal cruelty or animal maltreatment; animal abuse and domestic violence; minority stress theory* AND *intimate partner violence, domestic violence, partner abuse,* and *intimate partner aggression*. The vast number of peer-reviewed articles found were examined and analyzed and are the basis of the current literature review, encompassing a comprehensive evaluation of the material and related theories. Since there were limited current research articles on animal abuse and intimate partner abuse, including the LGBTQ community, further exploration was needed, which included combing relevant articles' reference lists and searching dissertation databases in ProQuest. Keywords were combined within the categories with OR operators and the keyword sets with AND operators.

Theoretical Foundation

The minority stress model developed by Meyer (2003) was the foundation for the proposed research study. The minority stress model (Meyer, 2003) suggested that stigmatized groups are exposed to additional stress based on the diminished social position they hold in society at large. This model advanced the concept that experiencing additional minority stressors, such as discrimination, prejudice, or stigma, combined with everyday life stressors, created a hostile and stressful environment. These minority stressors are experienced in the LGBTQ community and can lead to a negative self-image

and outright rejection of one's homosexual feelings, which is referred to as internalized homophobia. These added stressors may lead to a negative impact on mental health (Meyer, 2003).

According to the minority stress model, LGBTQ members are in the minority in any community, which exposes them to a unique set of stressors that other people in society do not experience (Meyer, 2003). Many negative beliefs about LGBTQ members spread stressors among LGBTQ individuals. Meyer (1995, 2003) identified three processes described below for how LGBTQ individuals can experience minority stressors. The first process, one that LGBTQ individuals are familiar with, is being stigmatized and treated with prejudice and discrimination. The second process is a form of cognitive anxiety and/or anticipatory expectation. It serves as a warning sign that adverse events, such as being stigmatized or discriminated against, could occur, and that hypervigilance to withstand this stress is prudent. The third process is experienced by the individual cognitively and includes two different perceptual problems that can arise in LGBTQ individuals. The first problem is called the degree of outness in which one discloses or conceals one's sexual orientation. The second perceptual problem is called internalized homophobia, which consists of accepting society's negative attitudes toward homosexuality and projecting these onto oneself, triggering self-denial of one's sexual orientation or gender identity. Immersion into hostile and stressful environments ripe with minority stressors can result in feelings of shame and worthlessness, leading to problems in interpersonal relationships and harmful coping practices (Meyer, 2003).

IPV is one possible outcome of maladaptive coping in stressful environments, and an early study about the prevalence of IPV in heterosexuals compared to those in the LGBTQ community produced notable results. Goldberg and Meyer (2013) distributed over 50,000 surveys and conducted over 1,000 interviews in southern California to gather data about the population estimates for IPV. In this sample, the heterosexuals comprised roughly 95% of the entire sample. The study results included the following for lifetime IPV: 21.6% of heterosexuals reported IPV, and among LGBTQ, lesbian/gays reported 31.87%; bisexuals, 51.99%; and those who reported same gender sex, 32%. The group with the highest rate of IPV was gay men engaged in same-gender sex. Goldberg-Looney et al. (2016) examined the prevalence of four types of IPV, psychological, physical, sexual, and physical injury, in sexual minority men and evaluated their coping strategies. They reported the following: psychological abuse by 69.7%, physical abuse by 38.2%, sexual abuse by 34.8%, and 28.1% reported having been injured as a result of IPV. Reported coping strategies were as follows: victimization by physical or sexual IPV was significantly and negatively associated with the following coping strategies: acceptance, positive reframing, and active and planful coping. All four types of IPV were significantly and positively associated with maladaptive coping strategies such as denial and behavioral disengagement, i.e., social withdrawal, and IPV was positively associated with only one adaptive form of coping, participation in religious activities.

Research has shown that minority stressors have been associated with both physical and psychological intimate partner violence in male as well as female same-sex couples (Kimmes et al., 2017; Longobardi & Badenes-Ribera, 2017). In order to study

relationships between minority stressors and IPV, the minority stressors need to be specifically identified and measured. In one of the early attempts to measure the correlates of minority stressors with IPV perpetration among LGBTQ, Edwards and Sylaska (2013) measured four minority stressors and their relationships to the perpetration of three types of IPV: psychological, physical, and sexual. The four minority stressors included victimization perceived to be related to one's sexual orientation; stigma attached to being a member of the sexual minority; deliberate concealment of one's sexual identity and orientation; and internalized homonegativity (e.g., feeling negative about one's sexual orientation, similar to internalized homophobia). The results for comparisons with two variables revealed the following significant results: psychological IPV perpetration was significantly related to victimization perceived to be related to one's sexual orientation; physical perpetration was related to two minority stressors, concealment of one's sexual identity and orientation and internalized homonegativity; sexual perpetration was related to internalized homonegativity. Significant bivariate results included that physical perpetration was related to the same two minority stressors, concealment of one's sexual identity and orientation and internalized homonegativity.

Mental health problems can exacerbate this sequence. Meyer (2003) suggested in the minority stress model that increased incidences of mental health symptoms can occur as an ineffective means to manage minority stressors. The re-occurrence of minority stressors, especially those linked to the LGBTQ household, can lead to a "hostile and stressful environment" (Meyers, 2003, p. 674). Mental health symptoms and poor coping skills that co-occur under these conditions can escalate to IPV. Ramirez et al. (2019)

conducted a study with LGB people of color, which explored multiple minority stressors and mental health outcomes. The study focused on proximal stressors, such as self-stigma, and distal stressors, such as heterosexism, as predictors of mental health outcomes. The findings showed that distal stressors sufficiently predicted the rates of depression and anxiety symptomology (Ramirez et al., 2019). When combined with proximal stressors, the predictive ability of minority stressors increased to 33% of the variance of mental health scores. Findings additionally showed that bisexual participants reported higher levels of depression and anxiety than lesbian/gay participants (Ramirez et al., 2019). Another finding was that vicarious trauma was significantly correlated with adverse mental health outcomes. The study was one of the first to explore sexual minority persons of color with a minority stress framework to predict mental health outcomes. The limitations of the study were a lack of demographic diversity, as most participants were highly educated and middle class, and it did not include coping mechanisms as a potential confounding variable.

Additionally, Velez et al. (2023) tested an integrative mediation model of minority stress and predictor-mediator relationships. They explored proximal stressors (expectations of rejection, internalized heterosexism, outness), distal stressors (heterosexist discrimination), and general psychological processes, including affective processes (rumination), cognitive processes (self-esteem), interpersonal processes (social support), and internalized mental health symptoms (depression and anxiety) in a sample of (N = 434) sexual minority adults. The findings showed that heterosexist discrimination, expectations of rejection, internalized heterosexism, and rumination were

positively correlated with internalizing mental health symptoms (Velez et al., 2023). While outness, self-esteem, and social support were negatively correlated with internalized mental symptoms, the authors indicated that the strength of the study was the prospective design, which can make more robust conclusions about causal relationships. Limitations of the study included the lack of diversity in the sample, as it precludes the ability to make the findings generalizable to the broader population.

Moreover, research has shown that minority stress contributes to IPV in same-sex partnerships (Badenes-Ribera et al., 2019; Edwards et al., 2021; Edwards & Sylaska, 2013; Kelley et al., 2014; Kimmes et al., 2017; Lewis et al., 2017; Stephenson & Finneran, 2017; Ummak et al., 2021). The experience of minority stress may contribute to increases in IPV by fostering tension, poor communication, low self-esteem, and the adoption of maladaptive behaviors in relationships (Stephenson & Finneran, 2017), all of which have been linked to the negative outcomes associated with minority stress including substance use (Kelley et al., 2014; Kimmes et al., 2017), depression and anxiety (Ramirez et al., 2019; Velez et al., 2023), and emotional dysregulation (Trombetta et al., 2023). In this study, the use of the minority stress model was expanded to elicit whether incidences of animal abuse are associated with specific minority stressors and IPV in LGBTQ relationships. The minority stressors of internalized homophobia and degree of outness were explored as potential predictors of animal abuse since both are risk factors for many forms of IPV perpetration and victimization (Badenes-Ribera et al., 2019; Edwards & Sylaska, 2013; Kelley et al., 2014; Kimmes et al., 2017; Ummak et al., 2021).

Literature Review Related to Key Variables and/or Concepts

The literature review contains a synopsis of the results of previous research on the dependent variable, animal abuse, and the independent variables, internalized homophobia, and degree of outness. A summary of the results of each of the variables and their relationship to the current study is provided. Moreover, the themes identified in the previous research are discussed. This study's theoretical foundation, as well as its strengths and limitations, is discussed based on the existing literature.

Animal Abuse

The number of pets in the American household is sizable. Recent data has indicated that the number of households in the United States with pets is in the millions. According to the American Pet Products Association (2021), a 2021-2022 study showed that 70% of households in the United States own a pet, which translates to 90.5 million homes. In 2022, the Humane Society of the United States estimated that there are around 70 million pet dogs and cats in the United States. Unfortunately, within some of those households, animal abuse occurs, but the rate of animal abuse is not available.

Animal abuse occurs too often in the United States, but how often is not known. Data on the number of violent crimes against people are calculated by state and federal agencies in the United States. However, crimes against animals have not been aggregated in the same manner, therefore making it hard to identify how common the rate of abuse is against animals (Humane Society of the United States, 2022). In response, the Federal Bureau of Investigation's National Incident-Based Reporting System began compiling detailed data in 2016 about animal abuse, including acts of cruelty, torture, gross neglect,

sexual abuse, and organized abuse from participating law enforcement agencies (FBI Uniform Crime Reports, 2016). An example of organized abuse of animals would be dog fighting rings.

Between 2016 and 2019, 19,511 animal cruelty cases were reported in the United States (Palais, 2021). These numbers were compared with those of another country. In Australia, there are about 60,000 reported cases of animal abuse to the Royal Society for Prevention of Cruelty to Animals (RSPCA) each year (RSPCA Australia, 2019). These figures likely underestimate the approximate total incidences of animal abuse because, of over a quarter (25.70%) of the individuals surveyed in a single Australian research study that had observed animal abuse, only about nine percent (8.90%) had reported the incidents (Glanville et al., 2019). In the United States, animal cruelty reporting came from only 10%-20% of the total number of reporting agencies (Palais, 2021).

Animal Abuse General

The definition of animal abuse has been shown to differ across the literature. Researchers have used the words animal abuse, animal maltreatment, and animal cruelty to describe the same behaviors. The definition of these behaviors includes psychologically and emotionally abusive behaviors that IPV abusers engage in as a method of intimidation (Follingstad & DeHart, 2000). In another study, animal maltreatment was defined as all instances of significant animal suffering caused by a human, including both neglect and cruelty, regardless of intent (Glanville, 2019). Richard and Reese (2019) defined animal cruelty using Ascione's (1993) definition. In the current study, the term animal abuse is used, and the definition of animal abuse is described as

"all morally intolerable behaviors that deliberately cause unnecessary pains, sufferings, or distresses and deaths to animals" (Ascione, 1993, p. 83).

To further define the term animal abuse, it is essential to understand that the abuse consists of active and passive abuse. Active forms of animal abuse included physical abuse, drowning, burning, punching, kicking, scaring/intimidating, torturing, throwing, choking, stabbing, hitting with an object, shooting, sexual abuse, and animal fighting (Fitzgerald et al., 2016). Passive forms of abuse included neglect, refusing food, shelter, water, exercise, threatening to harm or get rid of a pet, and depriving a pet of veterinary care (Fitzgerald et al., 2016).

Animal abuse has been studied primarily with incarcerated males with histories of domestic violence, animal abuse, interpersonal violence, and other crimes. Previous seminal research centered around retrospective self-reports of violent incarcerated males and the link between childhood abuse against animals and later acts of violence against people (Arluke et al., 1999; Hellman & Blackman, 1966; Kellert & Felthous, 1985; Merz-Perez et al., 2001). Multiple studies have indicated that aggressive and violent criminals were more likely than nonviolent offenders to have perpetrated childhood animal abuse (Kellert & Felthous, 1985; Merz-Perez et al., 2001). To understand the connection, Keller and Felthous (1985) reviewed 152 adult male violent offenders. In their study of the link between childhood animal abuse and adult interpersonal violence, Kellert and Felthous discovered a significant difference between the violent criminal sample and the nonviolent criminal sample. In contrast, more than half of those who committed violent crimes admitted to having a history of animal cruelty, whereas only

8% of those who committed nonviolent crimes did so. They found that predictably, aggressive criminals were expected to report five or more prior acts of animal cruelty than nonviolent offenders or non-criminals.

More recent studies have found similar results. Levitt et al. (2016) focused on examining the likelihood of individuals engaging in further criminal activities and identifying the predominant type of crime committed by those involved in acts of animal abuse. Levitt et al. examined the criminal histories of 150 males who were arrested for animal abuse, neglect, or sexual abuse. Most offenders studied had prior and subsequent arrests for other criminal offenses. Drug possession was the most prevalent crime, and assault was next, with 41% being arrested for intimate partner violence at least once. (Levitt et al., 2016). Levitt et al. found that a significant proportion (58%) of individuals convicted of active animal maltreatment had also been arrested for interpersonal violence. The findings of the study revealed a strong correlation between these two forms of violent conduct. It was also discovered that alcohol and substance abuse have a significant relationship with animal abuse (Levitt et al., 2016). Burchfield (2016) examined animal crime data from the Chicago Police Department to explore an association between sociological factors and animal abuse. Burchfield explored the effects of crime and poverty on animal crimes. Findings indicated that most animal crime was identified as abuse or neglect, not animal fighting. Predominantly, these animal crimes were found in areas that suffered from socioeconomic disadvantages and human crime. Researchers surmised that these areas may also support animal cruelty behaviors, leading to higher incidences of animal abuse (Burchfield, 2016).

In contrast, Richard and Reese (2019) found no relationship between animal cruelty and other criminal activity. In this study, researchers defined animal cruelty as dog fighting, shooting, poisoning, kicking/hitting with blunt force, stabbing, threats, neglect, and others. Results indicated that the abuse was caused by males (83%), owners (38%), and intimate partners (23%). Dogs were harmed in most cases (91%) with injuries resulting in the death of the dog (20%) (Richard & Reese, 2019). Most dog fighting cases were perpetrated by the owner (21%), as was found to be statistically significant. Motivation for animal abuse was also explored, and it was found that beating or kicking the animal was significantly related to hurting or intimidating another person, and social/economic motivations were related to dog fighting (Richard & Reese, 2019). VanWijk et al. (2018) found similar results in the Netherlands when they studied offender files obtained from the National Police, the National Inspectorate Animal Protection, and the National Reporting Station. Results showed that most offenders were male (89%), and in 52% of the cases, the animal abuse was unplanned, with 26% having some planning. Additionally, 47% of the animals were owned by the offender, with 79% of the animal abuse being toward companion animals, 8% being farm animals, and 13% being wild animals. Of note, in this study, researchers found that only 10% of the offenders had a history of domestic violence.

In a study done by Haden et al. (2018), the researchers investigated the association between animal cruelty, intimate partner violence (IPV), and antisocial personality disorders among a sample of incarcerated males. The study's findings revealed that 38% of participants acknowledged employing threats towards animals to

resolve conflicts within a romantic relationship. In comparison, 52% reported engaging in acts of abuse and/or causing the death of a pet. It is noteworthy that the research has shown a lack of association between antisocial personality disorder and acts of animal cruelty (Haden et al., 2018). Interestingly, the study did find a considerable correlation between childhood animal cruelty and the occurrence of threats and perpetration of animal abuse within the context of intimate relationship conflicts (Haden et al., 2018).

Research has expanded to participant samples other than incarcerated males (Alleyne & Parfitt, 2017; Newberry, 2018; Grugan, 2018; Ireland, 2022). In addition, these studies explored factors and characteristics that distinguish animal abusers from non-abusers. Alleyne and Parfitt (2018) explored finding a pathway to animal abuse that differs from other antisocial behaviors by identifying static and dynamic factors. The study had 384 participants, which included animal abusers, non-abusers, and non-offenders from a community sample. The main findings was that animal abusers were exposed to animal killing during childhood. More characteristics of animal abusers were having lower self-esteem, less empathy toward animals, and anger regulation issues. The researchers surmised that animal abusers are exposed to childhood experiences that desensitize them to animal abuse. Interestingly, the studies had results that showed animal abusers and other criminal offenders have similar sociodemographic characteristics.

Several studies explored the potential motivations for animal abuse (Kellert & Felthous, 1985; Newberry, 2018; Levitt et al., 2016; vanWijk et al., 2018). In the seminal study of Kellert and Felthous (1985) that interviewed criminals and non-criminals, nine

motivations for animal abuse were identified: to control the behavior of the animal; retaliation for unwanted behavior; bias against a specific species/breed; running illegal animal fights; enhancing one's aggression by owning an aggressive breed; retaliation against another person; shocking others for amusement; displacement of anger toward an animal; and sadism. More recent studies found similar motivations. Levitt et al. (2016), studying offenders arrested for animal abuse, found several motivations for animal abuse, which included animal misbehavior (21%), retaliation (8%), and a domestic violence dispute (13%). Van Wijk et al. (2018) found motivations for venting frustrations on the animal, such as not wanting to care for the animal, being motivated by power, or sadism. Newberry (2018) examined motivations with undergraduate students and found that the most common motivations were prejudice (63%), amusement (54%), control (46%), and retaliation (39%). Again, it appears that both criminals and non-criminals have similar motivations for animal abuse.

Expanding on the typology of offenses, Grugan (2018) explored 179 cases of animal cruelty in the United States. The study found four types of cruelty offenses: discrete, passive, organized, and peripheral. Discrete offenses were defined as being short-lived and spontaneous rather than premeditated (Grugan, 2018). The cruelty offense followed the offender having a negative attitude toward intimate partner violence or perceived provoking behavior of the animal. Beating the animal was the most often used method, presumably due to the spontaneous nature of the offense (Grugan, 2018). In cases that involved IPV abuse, cruelty toward the animal was used to release frustration or to hurt the other person. Passive offense was defined as a lack of primary care for

companion animals, including inadequate food, water, shelter, medical care, clean environment, and abandonment (Grugan, 2018).

Interestingly, 47.5% of offenders were women (Grugan, 2018). In this case, the offenders were not responding to a trigger, but rather a lack of understanding of the animal's needs, no resources, or not knowing what they were doing was wrong. In cases of organized offenses, all offenders were male and worked alone. Organized offenses comprised 10 % of cases and are defined as premeditated or planned active violence without any provocation (Grugan, 2018). Additionally, the researchers found that animal cruelty cases that were discrete or organized allowed the offender to achieve a desired outcome, which included changing the animal's behavior, getting rid of the animal, and for the offender's enjoyment. Many offenses involved torture and/or the killing of the animal for amusement. The researchers also found that 72% of the animals experiencing cruelty were dogs, even though cats are more common (Grugan, 2018).

When discussing passive and peripheral offenses, offenders felt justified in their inaction, even if it harmed the animal or appeared ignorant of the consequences to the animal (Grugan, 2018). Peripheral cases comprised only 3.4% of the cases and were defined as animal crimes during the commission of another crime, for example, an animal dying in an arson fire. In peripheral offenses, the animal is a bystander to the offender's actual intention (i.e., burglary), and the abuse is seen as a necessary action to prevent the offender from being arrested. The researchers noted they could not determine if the offender was aware of the harm their actions caused the animal (Grugan, 2018).

Parfitt and Alleyne (2015) identified a need for a validated assessment tool that assesses a tendency to engage in animal abuse among the general public. The researchers developed the Animal Abuse Proclivity Scale (AAPS), comprising six scenarios depicting either direct or indirect animal abuse, where participants respond to four questions related to the scenarios. The AAPS was found to be highly reliable. Parfitt and Alleyne (2016) conducted a study utilizing the AAPS to identify direct and indirect animal abuse factors. Direct animal abuse was defined as the animal being the provocateur, and indirect animal abuse was defined as the abuse being done to elicit a response from the provocateur. The variables studied were childhood animal abuse, empathy, and human-directed aggression. Results found that childhood animal abuse was a significant predictor of direct animal abuse proclivity, and killing a stray animal was a significant predictor of indirect animal abuse (Parfitt & Alleyne, 2016, 2018b). Empathy was found to be significantly related to indirect animal abuse proclivity.

Additionally, two proclivity studies were completed with a sample of women from the general population (Ireland, 2022). The first study focused on the relationship between animal abuse proclivity and aggression motivation with psychopathy traits, sadism, and general maladaptive personality. The second study focused on callous-unemotional traits. Results of the first study demonstrated that women (36.5%) have a proclivity toward animal abuse, which is associated with proactive aggression. Women (62.7%) demonstrated a proclivity toward animal abuse, with proactive aggression having a statistically significant indirect effect on animal abuse proclivity via callous-unemotional traits.

Animal Abuse and IPV

Intimate partner violence does not always end with violence directed at the intimate partner; it can be directed at the family pet/companion animal. In relationships with IPV, animal abuse can be common (Ascione et al., 1997, 2007a; Barrett et al., 2018, 2020; Collins et al., 2018; Fitzgerald et al., 2019; McDonald et al., 2015; Stevenson et al., 2018). Numerous research studies have found a significant relationship between IPV and animal abuse (Ascione, 1997; Ascione et al., 2007a; Barrett et al., 2020; Fitzgerald, 2019; Collins et al., 2018; Haden et al., 2018; Levitt et al., 2016; Newberry, 2017; Riggs et al., 2018; Tiplady et al., 2015). More recently, Fitzgerald et al. (2022) found that reporting of both physical and severe intimate partner abuse was significantly and sizably predicted by actual and threatened abuse of pets. Lockwood and Arkow (2016) inferred "that when animals are abused, people are at risk, and when people are abused, animals are at risk."

The seminal studies of Ascione (1997) and Ascione et al. (2007a) have shown a significant relationship between animal abuse and IPV. In his early studies, Ascione (1997) found that 71% of the women living in a domestic violence shelter reported threats or harm to a pet. Ascione et al. (2007a) conducted a study with both shelter IPV victims and non-shelter women who did not experience IPV, finding that shelter women were 11 times more likely to report threats or actual harm to a pet than non-shelter women. More recently, Barrett et al. (2020) conducted a study with 86 women receiving services at a domestic violence shelter in Canada to examine the relationship between pet abuse, types of IPV, and severity. Results showed that 89% of women with a companion animal reported that their partner abused the animal. Results showed that women who

reported more frequent and severe animal abuse also reported more minor physical abuse incidents and two incidents of severe IPV. Sexual abuse and psychological abuse were also found to be related to more types and more severe animal abuse. Another study by Barret et al. (2018) found that participants (35.2%) reported that their partner had harmed the pet, and the abuse escalated over time (Barrett et al., 2020; Fitzgerald et al., 2019). Collins et al. (2018) conducted a study with an ethnically diverse population and found that 75% of the participants reported that partners threatened the animal, and 66% harmed the animal. Fitzgerald et al. (2022) examined data from the GSS in Canada, which included a large community sample to explore the relationship between emotional IPV and animal violence. The results showed that animal abuse was significantly associated with emotional abuse (39% increased probability). The researchers also found that those with a disability, lower income, younger, and who identify as female are more likely to report their partner abusing the pet. In contrast to many research studies, Monsalve et al. (2018) found that animal neglect was not associated with domestic violence, and Hartman et al. (2018) found no relationship between animal maltreatment and physical IPV.

Research has explored the motivations of the abuser toward the animal, as IPV is often seen as a power and control issue. Potentially, these motivations can be used to predict pet abuse in family situations and intimate partner violence. Fitzgerald et al. (2019) surveyed women who were victims of abuse in sixteen shelters in Canada. A total of 55 female individuals disclosed incidents of animal cruelty and IPV. A significant predictor of pet maltreatment (emotional abuse, neglect, threats to harm, or physical

abuse) was the abuser's intention to upset the victim or children, regain control of an argument or situation, or exert power and control over the victim. This prediction remained consistent even after controlling for sociodemographic characteristics, minor/severe psychological aggression, minor/severe physical aggression, minor/severe sexual assault, and minor/severe physical assault that the survivor had experienced (Fitzgerald et al., 2019). None of the motivational variables examined significantly predicted severe animal abuse. Furthermore, the researchers discovered specific sociodemographic characteristics and varieties of IPV as predictors of severe animal maltreatment. According to the findings of this study, abused women perceive their partners' maltreatment of the companion as an attempt to assert dominance and control over them or to provoke distress in the victim or children.

Studies have explored the association between domestic violence and social disorganization (Blumenstein & Jasinski, 2015; Beyer et al., 2015). The correlation between social disorganization and criminal activity, including delinquency, has been extensively documented; however, there is a scarcity of research that extends this correlation to animal abuse (White & Quick, 2019). In order to study the relationship between social disorganization, domestic violence, and animal abuse, White and Quick (2019) reviewed police reports. This study defined social disorganization as encompassing the subsequent elements: familial disruption, ethnic heterogeneity, economic disadvantage, and residential instability. According to the researchers' hypothesis, an escalation in social unrest would indicate elevated levels of criminal activity and animal cruelty. Animal cruelty incidents are more prevalent in areas with less

social organization and more residential disorder, according to the research. Elevated levels of social and neighborhood disorganization were associated with heightened occurrences of both simple and aggravated forms of domestic violence. Animal cruelty violations were correlated with increased levels of aggravated domestic violence.

Studies for intimate partner violence and animal abuse have been conducted to identify factors that keep victims from seeking support or leaving abusive relationships (Ascione, 1997; Barrett et al., 2020, 2022; Collins et al., 2018; Giesbrecht, 2022a; Newberry, 2017; Tiplady, 2018; Taylor et al., 2019). The relationship between IPV, threats and violence against animal companions, fear of lethal violence, and assistance seeking was investigated by Barrett et al. (2022). The researchers examined an IPV survivor community sample in Canada. The researchers investigated the impact of lethal violence and concern on the willingness of survivors with pets to seek assistance. IPV survivors were more likely to discuss the abuse with family members than to seek assistance from healthcare professionals, according to the findings—a larger proportion of survivors of IPV who disclosed threats or abuse used crisis centers or hotlines. Notably, survivors of IPV who reported animal-related threats or maltreatment were 6.8 times more likely to experience life-threatening fear. A survivor was five times more likely to use any of the available services (shelter, transition houses, crisis centers, crisis lines) if they experienced life-threatening fears. The results of this study emphasize the criticality of incorporating an evaluation for animal maltreatment into the list of possible "red flags" when assisting survivors of violence. Giesbrecht (2022b) surveyed sixty survivors of intimate partner violence (IPV) residing in both urban and rural areas via the

Internet. This research study was carried out on women who, in contrast to most other studies, did not use the services provided by a shelter. In addition to canines and felines, this research also incorporated various other animal species, such as birds, guinea pigs, fish, and livestock (e.g., horses, donkeys, cows, sheep). More than one-third of the participants indicated that the maintenance of their animals prevented them from seeking assistance.

One obstacle to reporting abuse or seeking assistance was the partner's threat of inflicting harm on the animal. According to IPV survivors, animals were killed as a deterrent or retribution for attempting to flee (Giesbrecht, 2021). Additional factors impeding departure include financial constraints, particularly regarding livestock, inability to bring the companion, and lack of pet-friendly housing. Another finding showed that 61% of women reported that they postponed leaving an abusive partner out of apprehension for their pet's safety and the possibility of neglect on the part of the partner (Tiplady, 2018). Similar findings found that due to safety concerns for the pet, 56% of the women delayed seeking help (Barrett et al., 2020). Interestingly, individuals who experienced genuine abuse or threats against their pets were 6.8 times more likely to report feeling in danger for their lives due to IPV (Barrett et al., 2022). There was a higher propensity among survivors who had animals that were injured or threatened to seek aid from crisis centers or hotlines (Barrett et al., 2022).

Animal Abuse and LGBTQ

While considerable research has been conducted on intimate partner violence in the relationships of individuals of different sexual orientations, the relationship between

intimate partner violence and animal cruelty in same-sex relationships has received almost no attention (Riggs et al., 2018; Taylor et al., 2017). Based on the existing knowledge regarding the association between cisgender, heterosexual relationships, and animal cruelty, it is plausible to propose that instances of animal cruelty may also occur within intimate relationships involving individuals of diverse genders and/or sexual orientations (Riggs et al., 2018). In the seminal research of Renzetti (1992), although the research focused on violence in lesbian relationships, it was noted that 21% of lesbians reported animal abuse in their relationships. Also, Donovan and Hester (2014) mentioned in passing that in their study of 746 persons residing in the UK (the majority of whom were lesbians or gay males), they found that just 4% of respondents reported ever having been in a relationship in which an animal was mistreated. Although these numbers are low, it is reasonable to suggest that animal cruelty is likely to occur within the intimate relationships of people of diverse genders and/or sexualities, given what we know of the link in the context of heterosexual relationships (Riggs et al., 2018).

Companion animals in LGBTQ intimate relationships play a different role. Riggs et al. (2018) studied the roles of animal companions in the lives of LGBTQ people who experience intimate partner violence or family violence. In terms of this research on family violence, Riggs et al. (2018) found that relationships with animals appeared to play a protective role, potentially buffering violence perpetrated by family members. In their analysis of the qualitative data collected, Riggs et al. (2018) found that animal companions were seen as offering unconditional positive regard in the face of violence perpetrated by intimate partners or family members.

Animal companions play an important role in LBGTQ relationships in relation to mental health aspects. Belongingness and social support are critical aspects that foster healthy development and resilience of identity in the LGBTQ group, as they are well-known buffers of the relationship between mental health and adversity challenges (Chakrapani et al., 2017). Among LGBTQ people, animals are regularly considered family members and confidants (Riggs et al., 2018). Both animal ownership and positive engagement with animals have been recognized as aspects that mitigate relationships between mental stress and familial victimization (Rosenberg et al., 2020). This emotional attachment to animal companions can lead to negative mental health consequences when confronted with IPV and animal abuse. Lesbian and bisexual participants who had observed animal cruelty showed lower levels of social support (Riggs et al., 2018). Additionally, a study found that animals experienced emotional distress as a consequence of the abuse aimed at them or their human caregiver (Taylor et al., 2019). Considering the integral role that animal companions can play in the lives of LGBTQ individuals, reducing animal abuse may be one way to improve the mental health of those affected by IPV.

There are a limited number of studies that address IPV and animal abuse in the LGBTQ community, with most studies being qualitative. Riggs et al. (2018) showed that 21% of LGBTQ respondents who had experienced violence or abuse also claimed that their violent or abusive partner had committed animal cruelty. Regarding animal cruelty, 7.2% of participants reported emotional abuse, 3.8% physical abuse, 0.2% sexual abuse, and 0.4% financial abuse. The authors suggested that the decreased co-occurrence rate

might be attributed to the fact that the bulk of the sample consisted of lesbian women (Riggs et al., 2018), and women are often less inclined than males to commit animal cruelty (Grugan, 2018).

Riggs (2021) conducted a questionnaire using the responses of 503 individuals of various sexual orientations and genders who reside in Australia or England. The research investigated the frequency of animal abuse and intimate partner violence, how individuals reacted to the abuse, variations in the nature of abuse and animal abuse, and the correlation between intimate partner violence and indicators of psychological distress, social support, and attitudes toward animals and humans in couples of diverse genders and sexualities. According to the findings, 21% of the participants who had experienced abuse also reported that their violent companion had abused animals. There was no significant relationship observed between gender, sexual orientation, or transgender status and the likelihood of encountering animal maltreatment. Female participants who were subjected to animal cruelty expressed greater psychological distress and less social support in comparison to their male or nonbinary counterparts. Lesbian and queer individuals who were subjected to animal maltreatment reported the least amount of social support compared to all other sexual orientation groups. Additionally, the research revealed that a small number of the participants sought assistance for their animals.

Taylor (2019) expanded upon the previous research and explored the responses of 137 participants who completed the open-ended questions. Since there were no statistically significant differences between England and Australia, it was treated as one sample. According to the findings, animal companions are a significant source of

emotional support and strength; individuals actively care for and protect their animal companions, and while witnessing animal abuse can induce additional feelings of guilt, it can also serve as a catalyst for individuals to end the abusive relationship. Three minor themes were identified: emotional impact on animals, impact on family and friends, and service implications. The participants reported that the animals offered physical solace, unconditional affection, relief from feelings of isolation and nonjudgment, and prevented suicidal ideation. In addition, participants revealed that they developed a heightened sense of caution towards their animal companions and themselves, even if it meant enduring additional mistreatment or infuriating the abuser. This included insisting that the victim be permitted to return and feed the animals. However, it also prevented them from leaving the abusive relationship in order to provide for the animal. In some instances, the animal's mistreatment resulted in the victim's immediate departure from the abusive partnership. Several victims have stated that the animal experienced an emotional reaction to the mistreatment and the changes incurred by relocating. By requesting assistance, family members and acquaintances may inadvertently become a target for the abuser. Additionally, the absence of services for individuals with animals or those of different genders and/or sexual orientations is an important finding.

In line with existing heterosexual literature, participants of diverse genders and sexualities frequently acknowledged animals as a source of assistance during moments of distress (Taylor et al., 2019). Nevertheless, for people of diverse genders and/or sexualities characterized by the prevalence of identity abuse, which is a noteworthy yet sometimes disregarded factor associated with worse mental health outcomes and

diminished social support, animals serve as a means of mitigating these effects by providing individuals with a validating perspective on their sexuality and/or gender (Taylor et al., 2019). This underscores the necessity for more investigation in this area since the current body of research on the connection between violence towards humans and animals fails to fully encompass the experiences of individuals with varied gender identities and/or sexual orientations (Taylor et al., 2019).

In summary, animal abuse and intimate partner violence have been studied extensively in the heterosexual community, yet minimal research exists for non-heterosexuals and/or varied gender identities. Findings showed that anywhere from 4%-89% of sheltered women reported that their partner had threatened or harmed a pet (Ascione, 1997; Barrett et al., 2017; Collins et al., 2018; Renzetti, 1992). In the LGBTQ community, research has identified that up to 21% of couples who experienced IPV reported animal abuse (Renzetti, 1992; Riggs, 2021). More research is needed in the LGBTQ community to determine the extent of the problem, as most LGBTQ persons who experience IPV do not seek help from shelters (Taylor et al., 2019). The research into the LGBTQ community shows that animal companions are an essential source of emotional support and strength during stressful situations (Taylor et al., 2019). Belongingness and social support were found to foster the development of a healthy identity in the LGBTQ group, which reduces IPV (Chakrapani et al., 2017).

Internalized Homophobia

The use of internalized homophobia in the literature has been expanded to internalized homonegativity, which is felt to be more inclusive of societal issues (Hudson

& Ricketts, 1980). Researchers have used the words interchangeably. In the current study, internalized homophobia was used. Internalized homophobia, as defined by Meyer and Dean (1998), consists of a gay person's negative social attitudes toward self, leading to a devaluation of self and resultant internal conflicts and poor self-regard (p.161). Specifically, it is how much someone with an LGBTQ identity incorporates negative social attitudes toward self (Meyer & Dean, 1998). Internalized homophobia is the failure of the coming out process that gays use to announce their sexual orientation that gays use to announce their sexual orientation to overcome negative self-perceptions (Meyer & Dean, 1998).

Research has demonstrated that internalized homophobia is significantly related to physical and sexual IPV perpetration (Edwards & Sylaska, 2013) and psychological abuse (Ummak, 2021). Additionally, research has demonstrated that internalized homophobia is a significant correlate with depression, anxiety, substance use, and difficulty with intimate relationships (Meyer & Dean, 1998; Puckett et al., 2015; Stephenson & Finneran, 2017; Kimmes et al., 2017; Li et al., 2019). Internalized homophobia is correlated with being victimized by physical violence, where the victim believes they deserve the abuse (Binion & Gray, 2020). These feelings of deserving the abuse also prohibit the victim from reporting the abuse (Binion & Gray, 2020). Additionally, these negative feelings may lead to the belief that one deserves to be treated poorly (Lewis et al., 2014). Considering the additive effect of minority stressors, internalized homophobia adds to the general stress and increases a sexual minority's psychological distress (Szymanski & Henrichs-Beck, 2014). It would follow that the

psychological distress combined with internalized homophobia could lead to IPV within a relationship.

Edwards and Sylaska (2013) explored factors associated with same-sex IPV perpetration in college youth. The purpose of the online study was to determine how externalized and internalized minority stressors related to the perpetration of IPV in LGBTQ college youth (N = 391, 49% identified as men). The externalized minority stressors included general sexual orientation victimization, perception of prejudice or discrimination, and internalized minority stressors, including internalized homonegativity and identity concealment (degree of outness). The findings showed that internalized homonegativity was related significantly and positively to physical and sexual IPV perpetration. The researchers hypothesized that internalized homonegativity might have a greater impact on the perpetration of same-sex partner violence than any other minority stressor, indicating that LGBTQ college students' levels of internalization of these experiences rather than externalized stressors are what have the most significant impact on the perpetration of same-sex partner violence (Edwards & Sylaska, 2013).

Kelley and colleagues (2014) studied the interaction between alcohol consumption and sexual minority stressors related to the perpetration of partner violence among sexual minority men (N = 107). The researchers hypothesized that higher levels of internalized homophobia and lower levels of outness would increase the likelihood of IPV perpetration from alcohol consumption. The findings showed that perpetrators of IPV significantly consumed more drinks per week, reported significantly higher levels of internalized homophobia, and reported significantly lower levels of outness (Kelley et al.,

2014). The results showed that internalized homophobia and increased alcohol consumption increase the likelihood of perpetrating partner violence.

More recent studies have addressed the relationship between minority stressors and same-sex IPV. Stephenson and Finneran (2017) explored the relationship between male same-sex IPV and internalized homophobia, sexuality-based discrimination, and racism in a venue-based sample of gay men in Atlanta (n = 1,075). Results found that internalized homophobia was significantly associated with all forms of IPV victimization and perpetration of any form of IPV. Researchers commented that experiencing minority stressors creates poor communication, lowered self-esteem, and the use of maladaptive behaviors, all of which increase the likelihood of IPV (Stephenson & Finneran, 2017).

Berke and colleagues (2023) examined pathways between emotional regulation difficulties, internalized homophobia, and childhood sexual abuse as it relates to IPV victimization in sexual minority men. This study used data from a longitudinal study of 940 sexual minority men. Results showed that sexual minority men who report childhood sexual abuse were 1.62 times more likely to report higher levels of internalized homophobia. Internalized homophobia was significantly associated with emotional regulation difficulties. The study showed significant temporal associations with emotional regulation difficulties and IPV.

Edwards et al. (2021) explored stigma consciousness, internalized homophobia, and identity concealment as predictors of sexual IPV perpetration and victimization in LGBTQ college students and the moderating role of hazardous alcohol use and social support. The study included 20 colleges and a sample of 1,221 students. The results were

mixed. Sexual IPV perpetration was not significantly related to minority stressors or social support. Sexual IPV victimization was significantly related to internalized homophobia and hazardous drinking, but not social support. Additionally, the minority stressors were associated with problem drinking, suggesting that individuals with a higher level of problem drinking are more likely to perpetrate and report victimization of sexual IPV (Edwards et al., 2021).

Totenhagen et al. (2018) examined relationship functioning related to higher levels of internalized homophobia and low levels of outness. The study surveyed 81 same-sex couples. Participants who reported greater daily stress and more severe conflicts also reported higher levels of internalized homophobia. Therefore, it would follow that the higher levels of daily stress and severe conflict would increase the likelihood of IPV (Totenhagen et al., 2018).

Li et al. (2019) explored the association between internalized homophobia and relationship quality and the mediating role of IPV in same-sex couples (n = 144 couples). The results showed small and medium effects that internalized homophobia was negatively associated with relationship quality through either the participants' psychological IPV or their partner's. Nevertheless, there was no significant pathway with internalized homophobia, relationship quality, and physical IPV. Researchers concluded that the low level of reported physical IPV may have interfered with finding statistical significance in a relationship between internalized homophobia and relationship quality (Li et al., 2019).

Researchers have also conducted studies with women in same-sex relationships to determine risk factors for IPV. Pepper and Sand (2015) conducted a study with a convenience sample of 40 young women. The researchers explored the relationship between internalized homophobia and perpetration and victimization of dating violence and its relationship with psychological maladjustment. Findings showed that internalized homophobia was not only correlated with sexual coercion but was also correlated with negative self-esteem and negative self-adequacy. Lewis et al. (2017) explored, in lesbian women, general risk factors and sexual minority risk factors for IPV. This study found that discrimination increased internalized homophobia. Internalized homophobia increases perpetrator anger and alcohol problems, which in turn increases perpetrator psychological aggression (Pepper & Sand, 2015). The increased psychological aggression additionally led to more perpetrator physical violence. Ummak et al. (2021) conducted a study of 449 lesbian and bisexual women in Turkey and Denmark. Researchers hypothesized that internalized homophobia would have a positive association with psychological IPV. Results showed that internalized homophobia was significantly related to psychological violence perpetration. Participants with higher levels of internalized homophobia were more likely to use psychological aggression toward their partners. Contrary to the other research findings, Milletich and colleagues (2014) found that internalized homophobia was not associated with more frequent perpetration of IPV. However, the indirect effect of internalized homophobia via fusion was positive and significant for IPV perpetration (Milletich et al., 2014).

Due to more recent reliance on computers for social interaction, Yang et al. (2023) explored the relationship between experiences of discrimination, internalized homophobia, and digital dating violence perpetration and victimization of sexual minority men in China (*n* = 491 gay and bisexual men). Results showed that internalized homophobia was positively associated with all forms of digital dating violence (Yang et al., 2023).

Degree of Outness

Degree of outness is the quantity of disclosure or identification an individual has concerning their sexual identity to the public, including family members, same-sex friends, heterosexual friends, and colleagues at the workplace (Meyer, 2003). In the seminal works of Harry (1993), his theory examined how outness is related to and conceptualized as feelings about fears and value of outness and concerns about disclosure of oneself. Hiding or concealing one's identity can lead to distress, considerable psychic toll, and disharmony (Meyer, 1995). Outness levels have been associated with adverse health effects, couple satisfaction levels, and minority stress (Meyer, 2003). Psychological and physical well-being has been revealed to have a positive relationship with showing oneself or being out. Lesbians and bisexual women who conceal their identity experience intensified stress, resulting in poor health effects (Meyer, 2003).

Edwards and Sylaska (2013) conducted a study with college students, and the findings revealed that identity concealment (lower degree of outness) was significantly and positively associated with physical IPV perpetration. Similarly, Kelley et al. (2014)

explained that increased outness might be associated with greater relationship satisfaction and less IPV.

More recent studies have found similar results. Ronzón-Tirado et al. (2022) explored latent classes of face-to-face IPV and cyber perpetration and victimization and the association with minority stressors, including outness. The study included 288 LGB adults. Results showed that the lower the degree of outness, the more likely the individual was to be in the IPV classes. Furthermore, it was found that the lower degree of outness was a risk factor for bidirectional face-to-face and cyber IPV classes (Ronzón-Tirado et al., 2022). Totenhagen et al. (2018) examined relationship functioning related to higher levels of internalized homophobia and low levels of outness. The study surveyed 81 same-sex couples. Results showed that levels of outness were not statistically significant in affecting daily stress, severe conflict, or relationship quality.

Ayhan Bilik and Bilgin (2019) conducted a study with lesbian women in Turkey. This study examined that minority stress, including internalized homophobia, outness, and discrimination, is associated with IPV, specifically in a society with sexist societal norms. Results showed that individuals had higher levels of outness when living with a partner (Ayhan Bilik & Bilgin, 2019). The degree of outness was found to be positively and significantly associated with the perpetration and victimization of psychological and sexual violence. Outness was positively correlated with both the perpetration and victimization of physical violence. Overall, individuals with a higher degree of outness reported more perpetration and victimization in all types of IPV (Ayhan Bilik & Bilgin, 2019).

Findings

The literature review contained a synopsis of the results of previous research on the dependent variable, animal abuse, and the independent variables, internalized homophobia and degree of outness. A summary of the results of each of the variables and their relationship to this study is provided. Moreover, the themes identified in the previous research are discussed. This study's theoretical foundation, as well as its strengths and limitations, was discussed based on the existing literature.

Animal abuse has been studied in many distinct areas, from slaughterhouses and meat markets to scientific experimentation and interpersonal violence. Most of these studies focus on heterosexual males or incarcerated heterosexual males. The current study specifically focuses on animal abuse and intimate partner violence with same-sex couples. Early animal abuse studies focused on incarcerated men who had been arrested for domestic violence, child abuse, interpersonal violence, and other crimes (Arluke et al., 1999; Hellman & Blackman, 1966; Kellert & Felthous, 1985). These studies found a connection between violent crimes and childhood animal cruelty (Kellert & Felthous, 1985). Other more recent studies found a relationship between animal abuse, alcohol, and an increase in areas containing socioeconomic disadvantage (Levitt et al., 2016; Burchfield, 2016).

Additionally, studies on animal abuse have explored motivations for animal abuse (Kellert & Felthous, 1985; Newberry, 2018; Parfitt & Alleyene, 2018a; Levitt et al., 2016; Van Wijk et al., 2018). In an early study of criminals and non-criminals, several motivations were identified as retaliation for an unwanted behavior, control of the animal,

and retaliation against another person (Kellert & Felthous, 1985). Similarly, control and retaliation were found in a study with undergraduate students (Newberry, 2018), which could be an area that needs further exploration in the LGBTQ community.

Animal abuse and intimate partner violence have been studied extensively in the heterosexual community. Findings showed that anywhere from 4%-89% of sheltered women reported that their partner had threatened or harmed a pet (Ascione, 1997; Barrett et al., 2018; Collins et al., 2018; Renzetti, 1992). In the LGBTQ community, researchers identified that up to 21% of couples who experienced IPV reported animal abuse (Renzetti, 1992; Riggs, 2021). More research is needed in the LGBTQ community to determine the extent of the problem, as most LGBTQ persons who experience IPV do not seek help from shelters (Taylor et al., 2019). The research into the LGBTQ community showed that animal companions are an essential source of emotional support and strength during stressful situations (Taylor et al., 2019). Belongingness and social support fostered the development of a healthy identity in the LGBTQ group (Chakrapani et al., 2017).

Additionally, researchers found an association between observing animal cruelty and lower levels of social support in lesbian and bisexual individuals (Riggs et al., 2018). In another study conducted by Riggs et al. (2021), lesbian and queer individuals reported the least amount of social support when exposed to animal cruelty. Since there is minimal research on intimate partner violence and animal abuse in the LGBTQ community (Riggs et al., 2018; Taylor et al., 2017), the current study was completed and found an association between two specific sexual minority stressors and animal abuse in same-sex relationships experiencing IPV. This study filled a gap in the literature of limited research

within the LGBTQ community and helped to find ways for therapists to identify and reduce the occurrence of animal abuse since animal companions provide extensive emotional support in the LGBTQ community.

Internalized homophobia has been associated with depression, anxiety, substance use, and difficulty with intimate relationships (Li et al., 2019; Stephenson & Finneran, 2017; Kimmes et al., 2017). Research has demonstrated that internalized homophobia is significantly related to physical and sexual IPV perpetration (Edwards & Sylaska, 2013). The researchers postulated that the internalization of negative attitudes towards homosexuality may have a more profound influence on the occurrence of violence within same-sex relationships compared to other sources of stress faced by sexual minority individuals. This suggested that the extent to which LGBTQ college students internalize these experiences, rather than external stressors, had the most significant impact on their likelihood to engage in violence within same-sex relationships. Kelley et al. (2014) explored the association between alcohol consumption and minority stressors. The findings demonstrated that individuals who committed acts of intimate partner violence (IPV) consumed a much larger quantity of alcohol every week, reported significantly higher levels of internalized homophobia, and reported significantly lower levels of outness.

Research results continued to show an association between internalized homophobia and IPV. Stephenson and Finneran (2017) reported results that show internalized homophobia was significantly associated with IPV victimization and perpetration of any form of IPV. In a sample of college students, results showed that

sexual IPV perpetration and victimization were significantly associated with internalized homophobia and hazardous drinking (Edwards et al., 2021). Higher levels of internalized homophobia were reported in same-sex couples who experience greater daily stress (Totenhagen et al., 2018). Researchers concluded that higher levels of daily stress would increase the occurrence of IPV (Totenhagen et al., 2018). Furthermore, a study on digital dating violence discovered a relationship between internalized homophobia and all forms of digital dating violence (Yang et al., 2023).

Internalized homophobia was linked to other negative factors that increase the likelihood of IPV. Pepper and Sand (2015) found that internalized homophobia was associated with not only IPV but also negative self-esteem and negative self-adequacy. Anger and alcohol problems were found to be related to internalized homophobia (Lewis et al., 2017). Another study found a significant association between internalized homophobia and emotional regulation difficulties (Berke et al., 2023). It would follow that the higher level of internalized homophobia was not only associated with IPV but other negative personal factors that increase the likelihood of IPV. Berke et al. (2023) proposed that reducing internalized homophobia may decrease incidents of violent IPV.

Degree of outness has been linked to adverse health effects and couple satisfaction levels (Meyer, 2003). Positive well-being has been associated with a higher level of outness (Meyer, 2003). Conversely, lesbians and bisexual women who have a lower level of outness were prone to intensified stress and poor health effects (Meyer, 2003). Prior research has shown that increased stress and poor health effects increase the

likelihood of IPV in same-sex relationships (Berke et al., 2023; Pepper & Sand, 2015; Lewis et al., 2017).

There has been limited research conducted on the degree of outness and same-sex IPV. Research results found a relationship between the degree of outness and IPV but there were conflicting results. A study with college students found that a lower level of outness was associated with physical IPV perpetration (Edwards & Sylaska, 2013). More recent research explored latent classes of face-to-face IPV and cyber perpetration and victimization (Ronzón-Tirado et al., 2022). The study revealed that the lower the degree of outness, the more likely the individuals were to be in the IPV classes. Additionally, lower levels of outness were found to be a risk factor for bidirectional face-to-face and cyber IPV classes (Ronzón-Tirado et al., 2022). Conversely, Bilik and Bilgin (2019) studied women in Turkey and found that higher levels of outness were significantly related to the perpetration and victimization of psychological and sexual violence. Researchers surmised that living in a society with sexist societal norms may have contributed to the results showing that a higher level of outness was significant for IPV (Bilik & Bilgin, 2019).

Same-sex relationships are inherent with societal difficulties as they are not usually accepted and experience stigma, discrimination, and prejudice without much recourse. These societal issues and everyday life stressors created a hostile and stressful environment, which is the basis of the Minority Stress Model (Meyer, 2003). This model was used in the current study as it identified internalized homophobia and degree of outness as one of the added stressors that same-sex couples face. Research has shown that

minority stressors were associated with IPV (Kimmes et al., 2017; Longobardi & Badenes-Ribera, 2017).

Experiencing minority stress in same-sex relationships cultivated tension, poor communication, low self-esteem, and maladaptive behaviors (Stephenson & Finneran, 2017). This was ultimately associated with adverse outcomes such as substance use (Kelley et al., 2014), depression and anxiety (Ramirez et al., 2019; Velez et al, 2023), emotional dysregulation (Trombetta et al., 2023) and IPV perpetration and victimization (Kimmes et al., 2017; Badenes-Ribera et al., 2019; Edwards & Sylaska, 2013; Ummak et al., 2021; Kelley et al., 2014). Research has shown that minority stressors are risk factors for IPV, but there has been no research to date to link these stressors with animal abuse. However, there was research that demonstrated an association between low self-esteem, emotional dysregulation, maladaptive behaviors, substance use, and animal abuse in both heterosexual and same-sex relationships (Haden et al., 2018; Alleyene & Parfitt, 2017; Fitzgerald et al., 2019; Taylor et al., 2019). According to Meyer (1995, 2003), these adverse effects were created by the experience of minority stressors. The literature provided evidence for minority stress theory as the selected theory, as it explained the added challenges that are faced by the LGBTQ community, resulting in adverse outcomes. The gap in the literature regarding the lack of studies predicting animal abuse in same-sex relationships experiencing IPV using minority stressors as potential risk factors justified the current study.

Critique of Previous Research Methods

The literature review examined the theoretical and methodological direction provided by previous studies that specifically addressed intimate partner violence (IPV), animal abuse, and minority stressors. This segment comprised an evaluation of the study methodologies, tools employed, conflicting perspectives, and strengths and weaknesses. The evaluation of this section is based on the present study's factors, namely animal abuse, internalized homophobia, and level of openness about one's sexual orientation.

Sample Size

Significant variations were observed in the sample sizes across the literature reviews. The largest study included 1,221 LGBTQ college students for a study on stigma consciousness, internalized homophobia, and identity concealment as predictors of sexual IPV perpetration and victimization (Edwards et al. 2021), while the smallest study included 40 college women for a study on internalized homophobia and dating violence (Pepper & Sand, 2015). Edwards and colleagues (2021) recruited participants from 20 colleges via email, daily digest postings, news postings, social media, class announcements, and flyers posted on campus. Despite the sizeable student sample, the predominant demographic among the participants was female and White.

Pepper and Sand (2015) gathered a sample of participants from LGBTQ groups in various regions of the United States using a convenience sampling method. By recruiting from various regions, a diverse sample of ethnicity and socioeconomic status could be obtained (Pepper & Sand, 2015). This study struggled to address the methodological challenge of obtaining a sample that accurately represents the population, primarily

because of the challenges in recruiting individuals who are not forthcoming about their sexual orientation or who do not openly self-identify. Additionally, despite comprising a sizable sample of LGBTQ students, the majority of respondents identified as White and female. It is also probable that some selection bias occurred in the study's participant pool as those who encountered a greater number of minority stressors and/or sexual IPV, for instance, might have had a lower propensity to enroll (Pepper & Sand, 2015).

Ummak (2021) used a convenience sample recruited from non-governmental and LGBTQ organizations via a survey in Turkey and Denmark. Online data was gathered by using announcements made by LGBTQ groups on various social media platforms. This approach targeted lesbian and bisexual women who were more open about their sexual orientation, actively involved in the LGBTQ community and had internet access. Therefore, the sample might not accurately represent the perspectives of the broader lesbian and bisexual community. Stephenson and Finneran (2017) signed up men through venue-based recruitment. Although this strategy has been shown to generate samples that resemble those obtained through other recruiting approaches (Hernandez-Romieu et al., 2014), it resulted in the exclusion of homosexual and bisexual males who did not visit gay-themed or gay-friendly establishments throughout the sampling period.

Lewis et al. (2014) recruited a convenience sample of 220 women from a large market research firm. The convenience sample consisted primarily of White individuals who were comparatively well-educated and open about their sexual orientation (Lewis et al., 2014). Consequently, the results cannot be generalized to a broader population or individuals more prone to hiding their identity (Lewis et al., 2014). Totenhagen et al.

(2018) distributed flyers on listservs and social media accounts of LGB organizations to recruit same-sex couples. As in the previous research, this convenience sample consisted of primarily White participants with some college education (Totenhagen et al., 2018). These researchers suggested that future research needs to explore recruiting tactics that might effectively target groups that may not have access to LGB organizations since they could serve as a valuable source of support (Totenhagen et al., 2018). Berke (2023) recruited a sample that consisted predominantly of gay individuals who were White and possessed a high level of education (approximately 60% of the sample had completed college or graduate school). This restricted the applicability of the study's findings to more diverse samples that included individuals from different ethnic or racial backgrounds, as well as sexual minority men with varying educational achievements and those who do not identify as gay.

Yang et al. (2023) used Prolific.co, a crowdsourcing research website, to recruit gay and bisexual men. Prolific.co was similar to Amazon MTurk except that it used demographic data to limit participants to being able to access only studies that pertain to them (Yang et al., 2023). Researchers indicated that this strategy minimizes the potential of participants assuming false identities to register for a research project (Yang et al., 2023), a significant issue associated with MTurk (Chandler & Paolacci, 2017). Another method of collecting data was using participant samples from larger studies. Li et al. (2019) obtained data from a larger study that enlisted participants through online Craigslist and Facebook ads and targeted snowball sampling throughout all fifty states in

the United States. Researchers commented that the modest sample size may limit the statistical power of analyses (Li et al., 2021).

Measurement Scales

Alleyene et al. (2015) found limitations in reporting the prevalence of adult-perpetrated animal abuse, suggesting that many perpetrators are unapprehended. Assessing offence-supportive attitudes within the community enabled researchers to better understand the characteristics of the ones that got away (Alleyne et al., 2015). Animal Attitude Scale (AAS: Herzog, Bechart, & Pittman, 1991) was one of the initial attitudinal instruments devised to measure attitudes toward the treatment of animals. The scale consisted of 29 items rated on a 5-point Likert scale assessing respondents' differences in their attitudes. The AAS has internal consistency with a Cronbach alpha of 0.88 to 0.91 (Wilson & Netting, 2012). Henry (2004) followed this and developed the Attitudes Toward the Treatment of Animals Scale (ATTAS), which was developed to assess sensitivity to the maltreatment of animals. The findings revealed that individuals who had witnessed or engaged in acts of animal maltreatment exhibited elevated scores on a self-reported delinquency scale compared to those who had never witnessed or participated in such acts. (Henry, 2004).

Conversely, another type of measurement was the proclivity scale, a self-report method designed to measure the individual's propensity, or likelihood, to engage in a particular behavior. The Animal Abuse Proclivity Scale (AAPS: Alleyne, Tilston, Parfitt, & Butcher, 2015) was created to address the absence of a systematic approach for evaluating the occurrence of animal cruelty by adults. Its purpose was to assess the level

of interest in animal abuse (Alleyne et al., 2015). The subscales and the overall scale have demonstrated good internal consistency, with Cronbach's alphas above .85 (Alleyne et al., 2015). Researchers created the AAPS to explore the factors associated with the inclination to engage in animal cruelty among a group of people from a community. Some studies that explored motivations for animal abuse chose to use this scale (Parfitt et al., 2016, 2018; Ireland et al., 2022).

The Aggression Toward Animal Scale (ATAS: Gupta & Beach, 2001) was a 23-item scale meant to quantify the frequency with which an adult engages in aggressive behavior against animals. In a previous study conducted by Gupta and Beach (2003), it was found that the ATAS has excellent internal reliability with a Cronbach's alpha value of at least .86. The ATAS was used in two studies to assess the perpetration of animal abuse after age 18 (Febres et al., 2014; Alleyne et al., 2018).

Another type of scale was the Partners Treatment of Animals Scale (PTAS: Fitzgerald, Barrett, Shwom, Stevenson, & Chernyak, 2016), a 40-item measure that identified five distinct forms of pet abuse in domestic violence relationships. This included the emotional abuse of pets, threats to harm pets, physical neglect of pets, physical abuse of pets, and severe physical abuse of pets. Reliability analysis was conducted for each of the five subscales with a Cronbach's alpha of .80. Most studies used the scale to identify the type of animal abuse committed (Giesbrecht, 2022a; Fitzgerald et al., 2019, 2022; Barrett et al., 2018, 2020, 2022; Collins et al., 2018). The ability to identify types of abuse and acceptable reliability justified its use in the current study.

Internalized homophobia was measured mainly by the Internalized Homophobia Scale (IHP: Martin & Dean, 1987) and several versions that were derived from this scale. The current study used a revised version of the Internalized Homophobia Scale (IHP-R scale) developed by Herek, Gillis, and Cogan in 2009. This shorter version is correlated with the more extended version for all sexual orientation groups (Herek et al., 2009). The internal consistency was $\alpha = .82$ (Herek et al., 2009). Scales have also been developed for specific sexual minority groups, including the Lesbian Internalized Homophobia Scale (LIHS: Szymanski & Chung, 2001). The LIHS assessed the lesbians' self-perceptions and others' perceptions of their sexual orientation and attitudes about religious and moral issues and sexuality (Ayhan Bilik & Bilgin, 2019). Degree of outness had been measured mainly by the Outness Inventory (OI: Mohr & Fassinger, 2000), which assessed how open a person is about their sexual orientation to family, friends, co-workers, and religious community (Wilkerson et al., 2016; Mohr et al., 2017). Since the OI is the most widely used scale (DeLong et al., 2023), it was selected for this study.

Minority Stress Theory

Reviewing articles on sexual minorities and animal abuse has shown a limited number of research studies (Riggs et al., 2016, 2018, 2021; Taylor et al., 2017, 2019; Rosenberg, 2020). None of these articles used minority stress theory as its theoretical foundation. Most of the articles reviewed that used minority stress theory were researching LGBTQ and intimate partner violence (Fitzgerald et al., 2019; Jacobson et al., 2015; Kimmes et al., 2017; Longobardi & Badenes-Ribera, 2017; Lewis et al., 2017; Swan et al., 2021; Harden et al., 2022; Edwards et al., 2021; Puckett et al., 2015).

Minority stress theory (Meyer, 2003) explained the stresses the current study population experiences. The current study expanded the use of minority stress theory by identifying minority stressors that are risk factors for animal abuse in sexual minority relationships experiencing intimate partner violence.

Lewis et al. (2017) found that the overall model indicated that sexual minority stressors could potentially serve as a significant risk factor for lesbians, given their association with anger and alcohol consumption, both of which are potentially linked to relationship violence. In a study with Swan et al. (2021), experiences of discrimination were found to be associated with both the perpetration and victimization of physical assault, psychological violence, and sexual coercion. This corroborated the conclusions drawn from previous scholarly works about the possible influence of minority stress on the romantic partnerships of LGBTQ persons and IPV (Kimmes et al., 2017; Longobardi & Badenes-Ribera, 2017). Another study conducted by Edwards et al. (2021) showed that minority stress was associated with sexual IPV victimization but not perpetration. Consistent with the study's hypotheses, increased alcohol use showed that minority stress was associated with both victimization and perpetration of sexual IPV. In another study, Puckett et al. (2015) results indicated that the association between internalized homophobia and psychological discomfort could be explained by increased self-criticism and decreased sense of community connectivity with other individuals who identify as lesbian, gay, or bisexual. These studies' approaches followed Meyer's (2003) statement that experiencing minority stressors combined with everyday stressors creates a hostile and stressful environment. Immersion into hostile and stressful environments ripe with

minority stressors could result in feelings of shame and worthlessness, leading to problems in interpersonal relationships and harmful coping practices (Meyer, 2003). It is these harmful coping practices that could ultimately lead to animal abuse within relationships with IPV, which made minority stress theory an appropriate theoretical foundation for this study.

Qualitative and Quantitative Studies

Both qualitative and quantitative studies were reviewed that examined animal abuse and IPV, and animal abuse and IPV in same-sex relationships. As expected, quantitative studies were more widespread as the focus was on obtaining prevalence numbers and identifying risk factors (Ascione et al., 2007a; Barrett et al., 2018; Barrett et al., 2022; Burchfield, 2015; Campbell et al., 2021; Febres et al., 2014; Ireland et al., 2022; Newberry, 2018; Parfitt & Alleyne, 2018b; Richard & Reese, 2019; Riggs et al., 2021; Riggs et al., 2018; Alleyne & Parfitt, 2018; Barrett et al., 2020; Fitzgerald et al., 2019; Fitzgerald et al., 2022; Parfitt & Alleyene, 2016; Haden et al., 2018; Hartman et al., 2018; Levitt et al., 2016; Yang et al., 2023). Quantitative studies (Newberry, 2017; Hageman et al., 2018; Kellert & Felthous, 1985; Rosenberg et al., 2020; Taylor et al., 2019; Hardesty et al., 2013; Tiplady et al., 2015; Tiplady et al., 2018) and mixed method studies (Giesbrecht, 2021, 2022; Collins et al, 2018) were used to identify themes and experiences of individuals who experienced IPV and animal abuse. Quantitative studies could be an experimental design where a treatment may be provided to one group but not the other, or a survey design that explores the relationship between variables (Creswell & Creswell, 2018). In this review, the studies used a survey design and explored

associations between variables, which contributed to the current study. Riggs et al. (2018) explored the prevalence and forms of domestic violence and animal abuse in people of diverse genders and sexualities. The study found that 21% of participants reported animal abuse, and significant statistical correlations were seen between the experience of seeing animal cruelty committed by a partner and the levels of psychological distress and social connection. Both lesbian and bisexual participants who witnessed animal cruelty reported reduced levels of social support (Riggs et al., 2018). Newberry (2018) explored motivations for animal abuse and found that prejudice, amusement, control, and retaliation were the most common motivations. Edwards et al. (2021) found a correlation between engaging in risky alcohol consumption and being a victim of sexual intimate partner violence, but not with being the perpetrator of sexual IPV. Minority stress was found to be correlated with sexual IPV victimization but not perpetration. Nevertheless, when hazardous drinking reaches greater levels, markers of minority stress were associated with both being a victim and being a perpetrator of sexual IPV (S-IPV) (Edwards et al., 2021). In contrast, at lower levels of hazardous drinking, there was no connection between minority stress and S-IPV victimization and perpetration (Edwards et al., 2021). These studies demonstrated associations between variables rather than establishing causation. Noting the limitations of a survey design, the capacity to infer causation was restricted by the use of cross-sectional survey data, as it was collected at one point in time (Lewis et al., 2014; Lewis et al., 2017; Yang et al., 2023). In most studies, the researchers used self-report questionnaires to gather data on IPV, minority stressors, and animal abuse. However, it is important to note that this method may be

prone to memory bias, thus reducing the accuracy of the IPV rates (Ronzón-Tirado et al., 2022). Other limitations arose due to the researcher's inability to mitigate duplicate replies from the same individual (McRae et al., 2017). The current study used a quantitative approach to demonstrate an association between the independent variables and animal abuse.

There were a few studies that used a qualitative approach. Newberry (2017) used online forums to analyze victims' shared experiences. These identified four themes: victim-companion animal bond, companion animals used to control victims, victims' perceptions of abusers' behavior, and support for victims and companion animals. In a similar study, Hageman et al. (2018) conducted focus groups with similar themes: pets as family members, the need for comprehensive safety planning, and safe housing for survivors and their pets. The mixed method studies (Giesbrecht, 2021, 2022a, 2022b; Collins et al., 2018) explored the experiences of victims of IPV and animal abuse. Giesbrecht (2022a, 2022b) explored barriers to support and lived experiences of IPV victims and abuse toward their animals. Similar to the other qualitative studies, it was found that victims identified that animal abuse (including livestock) was to hurt and terrorize them, and a warning sign not to leave (Giesbrecht, 2022b). Collins et al. (2018) examined the response of victims to IPV and animal abuse and found similar results. One advantage of the qualitative design was that the researcher could learn the participants' meanings about the problem and gain hands-on experience with the participants (Creswell & Creswell, 2018). The disadvantages of the qualitative design were that the

researcher may have poor observational skills, the researcher could be seen as intrusive, or their presence may have biased the participant (Creswell & Creswell, 2018).

Summary and Conclusions

After reviewing the literature on animal abuse, IPV, and minority stressors, the need for the current study was established. The review has identified that the research was expanding on IPV and sexual minorities, but is very limited regarding animal abuse, IPV, and same-sex relationships. Meyer's (2003) minority stress theory explained the unique stressors that minority groups—in this case, sexual minorities—experience, and it was corroborated by other research (Fitzgerald et al., 2019; Jacobson et al. al., 2015; Kimmes et al., 2017; Longobardi & Badenes-Ribera, 2017; Lewis et al., 2017; Swan et al., 2021; Harden et al., 2022; Edwards et al., 2021; Puckett et al., 2017). Regarding internalized homophobia, studies showed a significant association with the perpetration and victimization of all types of IPV (Kimmes et al., 2017; Pepper & Sand, 2015; Badenes-Ribera et al., 2019; Edwards & Sylaska, 2013, 2015; Ummak, 2021; Longobardi & Badenes-Ribera, 2017; Stevenson & Finneran, 2017; Lewis et al., 2017; Kelley et al., 2014; Li et al., 2019). Edwards and Sylaska (2013), in a study with college youth, found that internalized homophobia was the most influential minority stress variable in IPV perpetration. Stevenson and Finneran (2017), in a study of gay males, found that internalized homophobia increased the risk of victimization or perpetration of IPV.

Degree of outness studies showed a significant association with the perpetration and victimization of all types of IPV (Edwards & Sylaska, 2013, 2015; Longobardi & Badenes-Ribera; Kelley et al., 2014; Ronzón-Tirado et al., 2022). In a study by Kelley et

al. (2014), outness was found to moderate the association between drinking and partner violence, meaning that men who are out are more vulnerable to partner violence and drinking. Conversely, Ronzón-Tirado et al. (2022) found that the lesser degree of outness, the more likely the experience of IPV. Consequently, those who harbored adverse sentiments regarding their LGB identities may resort to acts of violence against their intimate partners (Ronzón-Tirado et al., 2022). LGB individuals who harbored negative self-perceptions may manifest their negative self-image by engaging in violent behaviors towards their same-sex partner (Badenes-Ribera et al., 2019; Ummak et al., 2021). What was not found in the literature review was identifying risk factors for animal abuse in same-sex relationships. Considering the information found in the literature review, it would follow that minority stressors may be risk factors for animal abuse in same-sex relationships experiencing IPV, and this confirms the need for the current study. Researchers have stated that subsequent investigations were necessary to confirm, expand upon, and gain a deeper comprehension of the complex associations between minority stress variables and various forms of intimate partner violence, particularly in diverse sexual minority populations (Sylaska & Edwards, 2015). Further investigation was required to evaluate the circumstances in which violent actions take place between partners in order to determine the specific form of partner violence and execute effective treatments (Longobardi & Badenes-Ribera, 2017).

Chapter 3: Research Method

Introduction

In this study, I aimed to further expand upon animal abuse research in the context of IPV in the LGBTQ community. The study's overarching goal was to learn more about the connection between internalized homophobia, degree of outness, and animal abuse in LGBTQ couples experiencing IPV. As Fitzgerald et al. (2019), Riggs et al. (2018), Taylor et al. (2019), Dichter et al. (2018), Edwards et al. (2015), and others have pointed out, there is a scarcity of studies examining IPV and the link to animal abuse in the context of minority stressors like internalized homophobia and outness in the LGBTQ community. The purpose of this research was to determine whether or not same-sex male or female relationships with IPV have predictor variables of internalized homophobia or outness and whether or not these variables predict the criterion variable of animal abuse among LGBTQ individuals.

Research Design and Rationale

In this quantitative study, I employed a nonexperimental design. Three questionnaires were used to identify participants who have experienced IPV and the target independent variables, internalized homophobia and degree of outness, and the dependent variable, animal abuse. The research tested the hypotheses regarding the relationship between minority stressors, outness, internalized homophobia, and animal abuse in the context of IPV, using a convenience sample of LGBTQ individuals. A linear regression model and correlation coefficients were used to examine the predictive ability of the independent variables.

This quantitative study followed a cross-sectional design that employed the PTAS, IHP-R, and the OI. Data was gathered via an online survey. Because of the resource constraints and limited time for study, the sample frame used was greatly limited to a few respondents. The selection was founded on a simple random sampling technique. To ease and limit the analyses of response variations among respondents, structured survey questionnaires with clear-cut questions were used through SurveyMonkey. Chapter 3 included details of the study's research method and design. I also outlined the methods and procedures for the correlational design. The research approach, study population, sampling, question and hypothesis, ethical considerations, reliability and validity, data collection, instrumentation, and data analysis procedures were also detailed.

Participants included 149 LGBTQ individuals. Understanding the correlation between minority stressors as predictor variables for animal abuse in LGBTQ relationships with IPV may inform the development and implementation of provider training protocols to improve LGBTQ relationships and ensure the safety of their companion animals. The results of my research could foster a better understanding of the factors that can predict animal abuse in same-sex relationships with IPV. The results of this study provided the opportunity to contribute to social change. Identifying the presence of internalized homophobia and a high/low degree of outness within abusive same-sex relationships allows treatment providers the chance to address safeguards for the family pet. My research also intended to increase awareness of animal abuse and IPV in the LGBTQ community so that domestic violence shelters realize there is a need for LGBTQ IPV-specific services that also address pet safety.

Depending on the research aim, scientific study projects could be categorized into explanatory, exploratory, and descriptive. Bhattacherjee (2012) defined these types of research projects as follows: Exploratory research projects were conducted in new inquiry domains to highlight the significance of specific phenomena, gain some original understanding of those phenomena, and examine the possibilities of conducting more extensive studies further concerning those phenomena. Descriptive study projects were conducted to offer descriptions and observations about specific phenomena. Explanatory study projects seek to offer explanations of observed phenomena. Also, Bhattacherjee (2012) noted that explanatory studies seek to offer responses to how and why questions, while descriptive studies aim to answer where, what, and when questions. Bhattacherjee argued that explanatory studies try to link dots in studies by determining causal elements and results of the target phenomena. The existing knowledge body concerning minority stressors as predictor variables for animal abuse in LGBTQ relationships with IPV was limited, on the one hand, and a comparatively detailed description of minority stressors as predictor variables in LGBTQ relationships with IPV. Therefore, the current study was explanatory in nature. I aimed to establish minority stressors as predictor variables for animal abuse in LGBTQ relationships with IPV.

The dependent variable of interest in this study was animal abuse. The independent variables include internalized homophobia and degree of outness. I used a nonexperimental survey design because the variables in the study could not be observed or manipulated, and no intervention was provided, eliminating the experimental design. A cross-sectional survey design was used as the data was collected at a given point in time

(see Creswell & Creswell, 2018; Jaccard & Becker, 2002). The advantages of using a survey methodology were ease of administration from all locations, financial feasibility, and the ability to describe characteristics of a large sample population. A large enough sample was surveyed to find statistically significant outcomes. I used standardized instruments, which ensure higher reliability outcomes (see Iarossi, 2006). The disadvantages of using a survey methodology included: relying on a large pool of participants to respond, the possibility of the participants not responding to the survey truthfully, and the fact that surveys could only look at variables concerning the participants' current perspective (Iarossi, 2006; Jaccard & Becker, 2002). Multiple linear regression analysis was appropriate in a study of this nature, as this method assessed the unique interactions of the minority stressors and their relationship with animal abuse. One variable under analysis may have influenced another variable. Multiple regression analyses were used to understand the independent variables' predictive strength on the dependent variable.

I relied upon a quantitative research approach to examine the relationship between minority stressors as predictor variables for animal abuse in LGBTQ relationships with IPV. Following a quantitative research approach, an online survey was provided to research participants drawn from the LGBTQ population. To answer the research questions, I employed a quantitative research design, including using SurveyMonkey to provide the online survey. The research design was adequately described to ensure the data is credible, dependable, confirmable, and transferable.

The existing methodological differences between qualitative and quantitative research informed the selection of a quantitative research approach. The decision to use quantitative research was also informed by the need for the methodology to offer suitable solutions to the research inquiries. Taylor et al. (2015) stated that qualitative research concentrates on the association between the researcher and the research focus within a process. Creamer and Tendhar (2015) differentiated between qualitative and quantitative methods when they contended that qualitative research relies heavily on deductions, opinions, illustrations, personality, and representation of objects, while quantitative research was linked to the assessment of specific objects and their related factors. Therefore, the research questions in the current study were more suitable for a quantitative approach.

Design Appropriateness

To explore the relationship between the minority stressors as predictive variables for animal abuse in LGBTQ relationships with IPV, a correlational design and nonexperimental approach were selected. Relational theories were used to examine the minority stressors as predictor variables for animal abuse in LGBTQ relationships with intimate partner violence. There was a need to focus on theory development from the research variables, research design, and theoretical inference, which can be determined from the relationship among variables. To ensure reliability, using validated tests required a correlational design to reduce the number of options that translate to the relationship between variables. For example, a high coefficient between two variables would imply a more robust inference for the developed theory (Lin et al., 2015). After

exploring data collected from the research subjects, efforts were made to develop theories based on the relationship between variables.

Methodology

Population

The target population in this study was a population of LGBTQ participants who have experienced IPV and animal abuse. The population was comprised of individuals from a wide range of professions, organizations, geographical locations, socioeconomic backgrounds, and education levels. Participants were 18 years of age or older, and eligibility requirements included (a) stable mental health, not suicidal, manic, or psychotic in the previous six months; (b) participants do not have current charges against their partner in court; (c) currently LGBTQ, and (d) not currently involved/living with an abusive partner. These requirements decreased participant vulnerability.

Sampling and Sampling Procedures

The research sample consisted of LGBTQ individuals. A simple random sampling technique was employed. Inclusion criteria were as follows: (a) must have experienced an LGBTQ same-sex relationship with IPV, and (b) must have had a pet during this relationship. The calculated sample size for this research is $N \geq 66$, which was drawn from LGBTQ individuals. Green's (1991) contemporary view of multiple regression statistical power analysis was used to determine the sample size for this study. I attempted to ensure that the maximum number of responses was obtained from the participant pool. In order to do this, data were retrieved from research subjects who completed the online survey. An 80% medium confidence level with a 5% confidence

interval is planned for this study. Participants were recruited via a simple random sampling technique. Respondents were invited to participate in the research only if they met the study's aforementioned inclusion criteria.

Procedures for Recruitment, Participation, and Data Collection

The proposed participants were L, G, B, T, or Q, who might not want to volunteer for a study such as this. This challenge was addressed by privately recruiting LGBTQ participants from social media platforms known to be frequented by LGBTQ. These participants were guaranteed both anonymity and confidentiality, including recruiting on Amazon MTurk.

The population for this study consisted of people who have been in LGBTQ same-sex relationships. The approximate population size, which includes all LGBTQ individuals, is very large. The study's designated sample of 149 LGBTQ individuals possessed adequate LGBTQ couples experiencing IPV with animal abuse to provide the information needed to examine the research questions. Participants included a simple random sample of LGBTQ individuals. Participants were forwarded a hyperlink to SurveyMonkey by a link posted on a Facebook social media platform or Amazon’s Mechanical Turk.

The formulated sample size was obtained for the study using an online survey for data collection. However, because the target population is so large, it was impossible to include all LGBTQ individuals. This is attributed to the cost factor of collecting data from the target population. Because the research involved human research subjects, it is anticipated that some or many LGBTQ individuals would not agree to participate in the

research for various reasons, such as personal or professional confidentiality reasons, privacy issues, and concerns regarding the actual goal of the study. To overcome this problem, I concentrated on a sample that is realistic, practical, and representative of the population.

The study participants were recruited to complete the online survey via a SurveyMonkey hyperlink sent to them through Facebook LGBTQ social media platforms, or if needed, flyers posted in establishments catering to the LGBTQ community. Since I know the LGBTQ community, a social media invitation was placed on an appropriate Facebook social media platform and posted to Amazon's Mechanical Turk. If needed, flyers were to be posted in establishments catering to the LGBTQ community. The participants recruited by social media, another platform, or another study participant(s) were required to meet the study's inclusion criteria (LGBTQ individuals). The survey invitation explained the participants' inclusion criteria and requested that participants who do not meet the study's inclusion criteria refrain from taking the survey. Likewise, participants meeting the study's inclusion criteria were encouraged to continue the survey. Participants found by other methods, such as social media or posted flyers, were also encouraged to forward the study link to potential participants. SurveyMonkey's "anonymous response" mode was applied to ensure anonymous participant responses when setting up the survey design in SurveyMonkey.

Instrumentation

Data for this research was collected via an online survey that consisted of four instruments. The PTAS was used to measure whether animal abuse occurred in the

relationship. The IHP-R was used to identify participants scoring high or low in internalized homophobia. The OI survey was used to identify participants who were scoring high or low in degree of outness. A demographics instrument survey questionnaire was used to collect demographic information. The following paragraphs contain further information on each of these instruments.

Partner's Treatment of Animal Scale

The PTAS (Fitzgerald et al., 2016) was comprised of five scales (emotional animal abuse, threats to harm animals, animal neglect, physical animal abuse, and severe animal abuse) and had strong demonstrated reliability. The PTAS was designed to measure behavioral acts of omission and commission perpetrated by one's partner to cause physical or emotional harm to one's companion animal (Fitzgerald et al., 2016). Reliability analysis had been conducted for each of the five subscales, with each demonstrating acceptable reliability ($\alpha > .80$; Fitzgerald et al., 2016). Several issues with the scales were identified by the researchers, including responses that are dependent upon only the accounts of victimized women on how their abusers treated animals, and there is no way to tell if cases of animal abuse are under- or overreported (Fitzgerald et al., 2016). Additionally, researchers reported being unable to evaluate the exterior consistency or validity but were able to evaluate the measures of internal consistency (Fitzgerald et al., 2016). The PTAS was used to gather data from LGBTQ individuals regarding the types of animal abuse that have occurred. In this study, the instrument was used to identify LGBTQ couples who have experienced animal abuse. The reliability of the PTAS for

each factor ranges from .80 to .94, which is higher than the generally acceptable level of .70 (Avolio et al., 1991).

Internalized Homophobia Scale-Revised

The original IHP (Herek et al., 1998; Herek et al., 2009; Martin & Dean, 1987) was a nine-item scale developed for use with gay men. Herek et al. (1998) conducted another study with both sexual minority men and women and discovered that the scale was reliable for both men and women. Subsequently, Herek et al. (2009) developed the IHP-R, a revised five-item version of the IHP.

The IHP-R was one of the commonly applied instruments to assess internalized homophobia (Huynh et al., 2020). The self-administered IHP-R version has acceptable internal consistency. The internal reliability for the 5-item IHP-R scale was $\alpha = .82$ (vs. $\alpha = .85$ for the original nine-item IHP; Herek et a., 2009). Scores on the IHP-R were highly correlated with the full IHP for all sexual orientation groups (all *rs* > .90; Herek et al., 2009). Scores at baseline and one year later demonstrated a test-retest reliability of a positive correlation ($r = .67$; Herek et al., 2009). The IHP-R was used to gather data for LGBTQ individuals regarding feelings of internalized homophobia.

Outness Inventory

The OI (Mohr & Fassinger, 2000) is an 11-item scale developed to measure the extent to which LGBTQ people are free about their sexual orientation. The answers to the outness inventory questions showed the extent to which the sexual orientations of the respondents are known by and freely talked about with different groups of people. The scaled responses were rated ranging from 1 (person definitely does NOT know about

your sexual orientation status) to 7 (person definitely knows about your sexual orientation status, and it is openly talked about). Participants could also respond that an item does not apply to them. Scoring produced an overall outness index (Cronbach's alpha = 0.88; Mohr & Fassinger, 2000). The outness inventory was used to offer information about outness levels.

Demographic Questionnaire

Finally, demographic data was collected from each participant via a researcher-developed questionnaire. Information gathered from the demographic questionnaire was used to provide descriptive statistics of the sample.

Instrument Appropriateness

These described instruments were appropriate for collecting data needed to address the research questions for several reasons. SurveyMonkey was an efficient strategy for collecting survey data from a diverse, geographically distributed sample due to its ease of use and accessibility. Second, the availability of the research participants was a crucial factor when assessing sample size. It was critical to provide all participants with close-ended questions that were easily responded to (Cone & Foster, 2006). Lastly, I adopted the use of a Likert-scale system to obtain responses from participants. This was attributed to the fact that the data being collected does not have any applicable measurement method.

Data Collection

I relied upon a quantitative research approach to examine the relationship between minority stressors and animal abuse in LGBTQ relationships with intimate partner

violence. Following a quantitative research approach, research participants accessed an online survey drawn from the respondents' population that meets the criteria. Data was collected via survey using SurveyMonkey, an online platform survey service. The study's survey was posted on social media networks like Facebook, Amazon's Mechanical Turk, and gay-friendly networks. Initial respondents were asked via the study's survey invitation to identify others who met the inclusion criteria, as aforementioned, to participate in the study. This research participant recruitment method continued until 156 respondents completed the online survey via SurveyMonkey. All invited study-survey participants were required to provide informed consent by agreeing to participate by completing the surveys. Additionally, if the potential respondent chose "yes", meaning that they have experienced both IPV and animal abuse, the individual was able to access the survey, but if they chose "no," they were not able to access the survey. Additionally, the online survey included explicit instructions for respondents to accurately complete the self-assessed research instruments.

The self-assessed PTAS was used to measure types of animal abuse experienced in the relationship, and the measure ensured that the respondents had witnessed animal abuse. The IHP-R was used to measure internalized homophobia, and the OI was used to measure the degree of outness. These three instruments required author or publisher permissions, which were included in the Appendix. A demographics instrument survey questionnaire was used to collect demographic information from respondents. No publisher permissions were needed for this questionnaire since I solely created it to include it in this study.

The combined research instruments were administered via SurveyMonkey. Participants accessed the SurveyMonkey hyperlink via text or email provided by a previous participant, a Human Intelligence Task (HIT) on Amazon's Mechanical Turk, or through Facebook social media, which directed them to complete the survey. Once the requested number of participants was obtained, SurveyMonkey automatically locked the hyperlink to prevent further participation. The required minimum number of 66 participants was obtained, and I did not need to execute a more exhaustive search for participants. In this case, it was unnecessary to post flyers, and it was unnecessary to expand access to more gay-friendly establishments, websites, or social media platforms.

Data collection was completed in less than the anticipated three months using SurveyMonkey and Amazon's Mechanical Turk. Since the sample was achieved during this period, the data collection phase did not need to be extended. If extending the data collection phase of the survey in SurveyMonkey was needed, it would have been accomplished directly by the user/researcher by changing the cutoff date and time for the collected responses to a new date within the online program. Survey data collected for this study via SurveyMonkey was downloaded to offline copies. This study's survey data was exported from SurveyMonkey via an offline usable SPSS file, which was used for the purposes of this study's SPSS statistical analysis.

Additionally, this study's survey data was exported from SurveyMonkey via an offline PDF file to have a backup of the research data in a different format. The data analysis phase began after the required number of responses was collected from

SurveyMonkey. Study results were expected to be informational in nature, although they may be helpful in other nonexperimental studies.

Data Analysis Plan

The objective of the current quantitative, correlational study was to explore if, and to what extent, correlations exist among the minority stressors as predictor variables for animal abuse in LGBTQ relationships with IPV. SPSS version 28.0 statistical software was used to analyze the relationships among the research variables. Correlational analysis was employed to examine the study's data. This type of analysis assessed associations between two or more measurable research variables. Correlational analysis was the most appropriate because the data could be examined regarding relationships and strengths between variables (Ary et al., 2013). Correlational analysis could additionally be used in future studies to examine new variables against the variables in this study, which could aid in enhancing empirical literature in the future. Lastly, correlational analysis provided an outline of the selected sample and evaluations taken via the survey.

Specifically, this study applied Pearson's product-moment correlation and Spearman's rank-order correlation coefficient analysis to assess if and to what extent associations exist between minority stressors and animal abuse in LGBTQ relationships with intimate partner violence. Spearman's rank-order correlation coefficient statistical analysis, a non-parametric version, was employed to measure the monotonic relationship between the variables in the study, while Pearson's product-moment correlation coefficient was used to measure the linear relationship between the variables (Vaismoradi, Turunen, & Bonas, 2013).

First, correlation coefficients were run in SPSS (Pearson's *r* and Spearman's rank-order) with the study's dependent variable (animal abuse) and the study's two independent variables (internalized homophobia and degree of outness). Second, the study's variables were analyzed via Spearman's rank-order, non-parametric, correlational analysis to compare with Pearson's r, parametric, correlational results. Lastly, variables found to be correlated were analyzed via multiple linear regression analysis. Linear regression provided a linear approach to examining the relationship, form, and direction of scaled responses among variables (Vaismoradi, Turunen, & Bondas, 2013), which were used to enhance the results. Findings were presented in Chapter 4 of this study.

IBM SPSS (Statistical Package for the Social Sciences) was used to statistically analyze the data collected for this research's key variables, including internalized homophobia, degree of outness, and animal abuse. SPSS can perform highly complex data manipulation and analysis operations (Schwartz et al., 2018; Bala et al., 2016). The statistical package (SPSS) was one of the most popular data analysis programs among researchers (Schwartz et al., 2018). The authors additionally suggested that SPSS was an easy program to operate with simple instructions, which was one of the primary reasons it was chosen to be included in this study. SPSS's data analysis output results were easy to understand and interpret, which was another motive for incorporating this statistical package into this research.

Threats to Validity

Informed Consent and Confidentiality

The study invitation was distributed to eligible participants by forwarding a SurveyMonkey hyperlink via text, email, Facebook, or another method. The invitation explained the purpose of the study, and participants were invited to click on a link on their social media platform or Amazon's Mechanical Turk if they were interested in participating in the study. The link took them to a screen with the informed consent form. Participants who completed the surveys indicated their consent. Participants who refused to provide informed consent were taken to a screen where they were thanked for their time and excluded from the survey. This way, assurance was achieved that everyone who completed the study's survey had provided informed consent.

The identities of all participants remained completely anonymous. Study participants' question/answer response raw data cannot be matched with any personal participant identification information. Confidentiality was guaranteed by the precise development of the study's survey, including integrating SurveyMonkey's data collection anonymous response option (SurveyMonkey, 2018).

Methodological Limitations

Limitations to the current study included a larger sample size than the minimum power calculation required, which can increase Type 1 errors. Although the sample was proposed to be randomly selected from a larger population, sampling bias may limit the results. The sample may not be representative and may be limited to a specific geographical location. Quantitative studies, although using precise measurements in data

collection, may not cover the full complexity of the participants. Statistical analyses can be used to find a correlation between the variables, but cannot determine causation (Theofanidis & Fountouki, 2018).

Ethical Procedures

The rights of the participants were considered and protected throughout the research process. I participated in Walden University's IRB approval process to show minimal risk associated with the human participants and that their rights and welfare were protected throughout the process. All data was handled with sensitivity and confidentiality throughout the research process. Pseudonyms were always used; the only people who could access the data obtained were the principal investigator and I. Multiple safeguards were considered when ethically developing this research.

For confidentiality purposes, the surveys did not include names and personally identifiable information. The respondents were assured of confidentiality, and the information provided was only used for research and to provide more knowledge for organizations to provide better service to clients. Additionally, to protect clients' data in the current digital world, where access to data by authorized persons is on the rise and can lead to serious consequences, all confidentiality and privacy protocols were followed.

Summary

To conclude, this chapter provided information about this nonexperimental research study. A rationale was given, explaining my reasoning behind this nonexperimental and explanatory approach. This chapter also explained the stages of data collection and how the data was analyzed. Finally, the chapter concluded with the

methodological limitations and ethical considerations recognized. The following chapter explained the data findings, themes, results, and research interpretations.

This chapter provided details of the study's method and procedures. The purpose of this research was to explore minority stressors as predictor variables for animal abuse in LGBTQ relationships with IPV. This quantitative study followed a correlational design to examine the relationship between the variables. The study relied on four instruments incorporated into the final survey: the PTAS, IHP-R, OI, and a brief demographics questionnaire.

Data was collected via an online survey using Likert-scaled responses to assess the variables. The Likert scale enables research data to be gathered from the research participants, which can be scrutinized to understand the relationship. After data was collected, a correlational analysis was used to examine relationships between the variables, using Pearson's r and Spearman's rank-order correlation coefficient and linear regression analysis. Findings from this study may form a basis for future correlational studies.

The next chapter, Chapter 4, included the analysis and results of the study data and provided information on the informed consent and data collection procedures applied in this study. Additionally, Chapter 4 described the participant demographics and statistical analysis. Lastly, Chapter 4 explained the processes and the statistical analysis techniques used to analyze data related to the research questions.

Chapter 4: Results

Introduction

The purpose of this quantitative, nonexperimental study was to investigate whether internalized homophobia or degree of outness could predict animal abuse in LGBTQ relationships experiencing IPV. Internalized homophobia was measured using the IHP-R, the degree of outness was measured using the OI, and animal abuse was measured using the PTAS. The predictor variables were internalized homophobia and degree of outness, and the criterion variable was animal abuse. The data was analyzed using IBM's Statistical Package for Social Sciences (SPSS) version 28. First, Pearson's *r* and Spearman *rho* correlations were conducted, and then a multiple linear regression was used to analyze the data and to answer the following research questions:

RQ1: To what extent is animal abuse self-reported in the context of LGBTQ relationships with IPV and degree of outness?

$H_0$1: Degree of outness is not a predictor of animal abuse during intimate partner violence in LGBTQ relationships.

$H_1$1: Degree of outness is a predictor of animal abuse during intimate partner violence in LGBTQ relationships.

RQ2: To what extent is animal abuse self-reported in the context of LGBTQ relationships with IPV and internalized homophobia?

$H_0$2: Internalized homophobia is not a predictor of animal abuse during intimate partner violence in LGBTQ relationships.

$H_1$2: Internalized homophobia is a predictor of animal abuse during intimate partner violence in LGBTQ relationships.

In this chapter, I explained the data collection procedures, sample demographic characteristics, and correlation and regression analysis.

Data Collection

Data collection followed the procedures outlined in the research proposal to ensure the minimum number of 66 usable responses was obtained; a total of 156 responses were gathered. This allowed for a total of 149 usable responses. IRB approval was granted on November 5, 2024, with approval number 11-05-24-0752963. Once my approval was given, the 64-question survey was created on SurveyMonkey, and a link was made to access the survey. I posted the link to Amazon Mechanical Turk, requesting the participation of LGBTQ respondents who experienced intimate partner violence and animal abuse. Amazon Mechanical Turk provides compensation for the respondents who complete surveys. Each respondent was compensated $1.50 by Amazon Mechanical Turk. The link was posted on November 23, 2024. Participants reviewed the informed consent and provided consent by completing the surveys. Amazon Mechanical Turk returned 127 surveys. I then found an error in the study and noted that a question was omitted from one of the surveys. Therefore, all the responses were discarded. The survey was corrected, and a new link was created and posted on December 27, 2024. Another link was provided on an LGBTQ social media platform, which was posted on 1/18/24. Amazon Mechanical Turk returned 155 responses (compensation was $1.25). Of the 155 responses, 148 were kept. The remaining seven were discarded due to the surveys not

being completed. The LGBTQ social media platform returned one response for a total of 149 responses. Missing data was coded with 99.00, which SPSS does not include when calculating statistical figures.

Results

Demographic Characteristics

Demographic information was collected in part to identify that respondents were LGBTQ and were over 18 years of age. Other demographic information was collected to explore each respondent's gender, ethnicity, and educational level. Of the 149 respondents, 25 were aged 18-29, 112 were 30-39, 8 were 40-49, and 3 were 60+. Of the respondents, 45 identified as lesbian, 20 as gay, 78 as bisexual, three as transgender, and two as queer. The demographic information was provided in Table 1 which follows:

Table 11

Descriptive and Demographic Characteristics

Characteristic		Number (N = 149)	Percentage
Age			
	18-29	25	16.8%
	30-39	112	75.2%
	40-49	8	5.4%
	60+	3	2.0%
	Missing (coded 99.00)	1	0.7%
Sexual orientation			
	Lesbian	45	30.2%
	Gay	20	13.4%
	Bisexual	78	52.3%
	Transgender	3	2.0%
	Queer	2	1.3%
	Missing (coded 99.00)	1	0.7%
Gender			
	Female	43	29.1%
	Male	101	68.2%
	Other	1	0.7%
	Missing (coded 99.00)	3	2.0%
Ethnicity			
	White/Caucasian	145	97.3%
	Asian	4	2.7%
Educational level			
	High school diploma	3	2.0%
	Associate’s degree	1	0.7%
	Bachelor’s degree	106	71.8%
	Postgraduate degree	37	24.8%

It appeared that the respondents were predominantly White/Caucasian, generally well-educated, and had a median age of 30-39. To ensure the confidentiality of the survey participants, I collected only the bare minimum of demographic information. Despite the reasonableness of the decision to withhold demographic information, it has been noted in the limitations portion of this study because it is possible that other demographic factors could affect the results.

External Validity of the Population Sample

The findings of this study may not accurately reflect the actual LGBTQ population due to a considerable deficiency in ethnic diversity, the elevated educational level of respondents, and the absence of socioeconomic status. Before commencing the survey, the Amazon Mechanical Turk and LGBTQ social media platform post specified the following criteria: (a) the individual must be at least 18 years of age, (b) identify as LGBTQ, and (c) have been in a same-sex relationship with IPV. Consequently, I assumed that the respondents were all LGBTQ adults, and as a result, the findings can be applied to the LGBTQ community. Furthermore, the generalizability of the findings was restricted due to the responses being from individuals who are more likely to participate in surveys and possess higher levels of education. Response rates may be influenced by additional factors that have not been considered, which limits the generalizability of the findings.

Coding of Survey Responses

The survey data was collected based on a Likert scale, and no reverse coding was used. The IHP-R was coded as 1 = *disagree strongly*; 2 = *disagree*; 3 = *neutral*; 4 =

agree; 5 = *agree strongly*. The higher the score, the higher the levels of internalized homophobia. The OI was coded as 1 = *person definitely does not know about your sexual orientation status*; 2 = *person might know about your sexual orientation status, but it is never talked about*; 3 = *person probably knows about your sexual orientation status, but it is never talked about*; 4 = *person probably knows about your sexual orientation status, but it is rarely talked about*; 5 = *person definitely knows about your sexual orientation status, but it is rarely talked about*; 6 = *person definitely knows about your sexual orientation status, and it is sometimes talked about*; 7 = *person definitely knows about your sexual orientation status, and it is openly talked about*; 0 = *not applicable to your situation; there is no such person or group of people in your life.* The higher the score, the higher the degree of outness. The PTAS was coded as 0 = *Don't know*; 1 = *Never*; 2 = *Rarely; 3 = Occasionally*; 4 = *Frequently*; 5 = *Very Frequently.* Additionally, using the same coding, the PTAS can be divided into five subscales (emotional animal abuse, threats to harm animals, animal neglect, physical animal abuse, and severe animal abuse). For this study, only the overall score was used. Means were computed for each respondent across all scales. The means served as the animal abuse variable for the final analysis.

Analysis of Normality

The independent and dependent variables were tested for distribution normality and outliers. Casewise diagnostics were used to identify outliers. No outliers were identified beyond 3.3 standard deviations from the mean (see Tabachnick & Fidell, 2007). The data was analyzed for skewness and kurtosis. The dependent variable

(AVG_AA) had a *Z*-score in the bounds of -1.96 and +1.96, showing a normal distribution (Figure 1). The two independent variables were an exception. AVG_OI had a *Z*-score of -2.85, demonstrating that the distribution is too flat (Figure 3). AVG_IH had a *Z*-score of -3.87, which indicates that the data is skewed toward higher values (Figure 2).

Figure 11

Animal Abuse

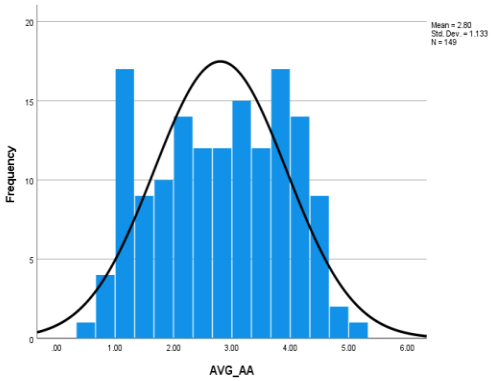


Figure 22

Internalized Homophobia

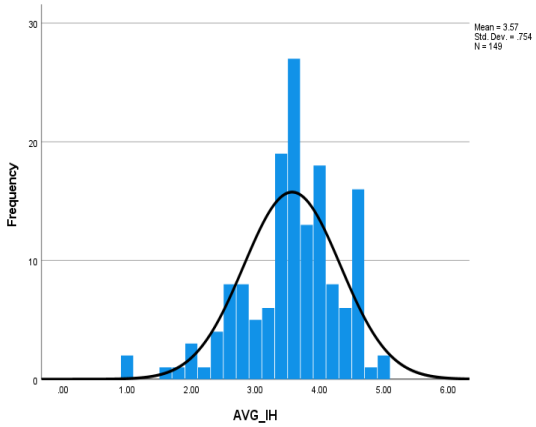
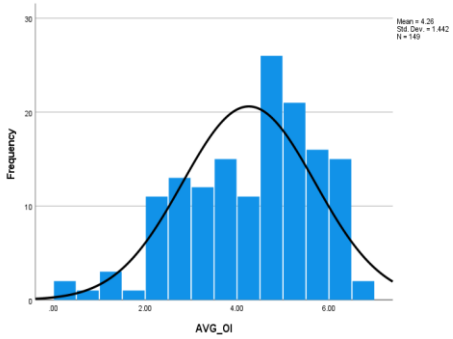


Figure 33

Degree of Outness



The Shapiro-Wilk test (Table 2) was employed to further investigate the normality of the independent and dependent variables. The distribution was interpreted as deviating from a normal distribution, as all three variables exhibited statistical significance. Given the substantially higher sample size, this test may identify a statistically significant impact; nevertheless, the effect size may be negligible in practical terms (Tabachnick & Fidell, 2007).

Table 22

Tests of Normality-Shapiro Wilk

	Shapiro-Wilk		
	Statistic	*df*	Sig.
AVG_AA	.962	149	<.001
AVG_OI	.962	149	<.001
AVG_IH	.951	149	<.001

a. Lilliefors Significance Correction

Analysis and Results

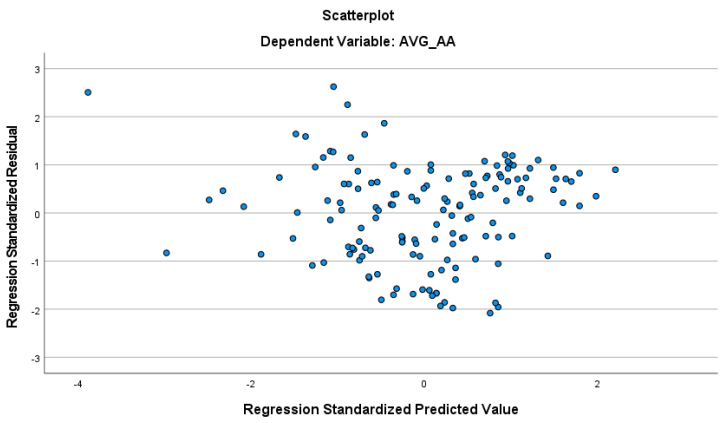
Assumptions

The assumptions for linear regression were evaluated to determine the presence of a linear connection between the independent and dependent variables, homoscedasticity,

absence of multicollinearity, and normality of residuals. The dependent variable AVG_AA exhibited homoscedasticity, as seen in Figure 4. Tabachnick and Fidell (2007) suggested that the residuals of the dependent variable and the projected scores of the dependent variable must be consistent across all predicted scores. Tabachnick and Fidell (2007) identified extreme anomalies using Casewise Diagnostics, and the results of this study showed that no items deviated from the mean by more than 3.3 standard deviations. The detection of an outlier has the potential to bias the mean (Field, 2009).

Figure 44

Homoscedasticity of AVG-AA



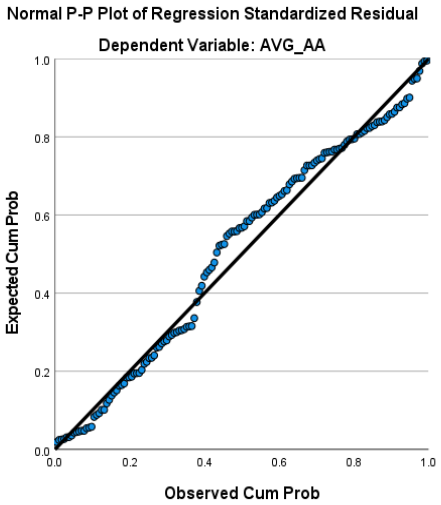
The tolerance statistic, as shown in Table 6, was used to determine the degree of collinearity between the two predictor variables (AVG_IH, AVG_OI). The results were all greater than or equal to 0.1. The tolerance statistic of the variable internalized homophobia (AVG_IH) was (T =.959), with a squared multiple correlation of .083. Similarly, the tolerance statistic of the variable degree of outness (AVG_OI) was (T =.959), with a squared multiple correlation of .063. All squared multiple correlation values were less than the .90 threshold. The degree of outness (AVG_OI) and the

Variance Inflation Factor (VIF) for internalized homophobia (AVG_IH) were both 1.042. According to Field (2009), VIF suggests a linear relationship between predictors. The tolerance levels should exceed 0.1, and the VIF should be less than 10 (Field, 2009).

The assumption of linearity, which assumes that all independent variables will be significantly correlated with the dependent variable (Tabachnick & Fidell, 2007), was tested using a correlational model. The data was initially analyzed using Pearson's *r* and Spearman's *rho* to identify any correlation between the variables. Pearson's *r* is the correlation between the two variables and is quantified by a numerical value ranging from −1 to +1. A value of zero indicates the absence of correlation, whereas a value of one signifies a complete or perfect correlation. The sign of *r* indicates the direction of the association (Sreedevi, 2022). Spearman's *rho* measures the strength of the relationship between two variables (Schmid & Schmidt, 2007). Multivariate normality using a P-P plot and best-fit line (Figure 5) shows that the data is mostly normally distributed.

Figure 55

P-P Plot of Standardized Residuals



Major Findings

Simple bivariate correlations between internalized homophobia (AVG_IH), degree of outness (AVG_OI), and animal abuse (AVG_AA) were calculated using Pearson's *r*. According to the correlations in Table 3, Animal Abuse was significantly but weakly related to internalized homophobia ($r = .317$, $p < .001$, $r^2 = .100$) and degree of outness ($r = .346$, $p < .001$, $r^2 = .120$). Internalized homophobia and degree of outness were significant but weakly related ($r = .203$, $p < .013$, $r^2 = .041$). Next, Spearman's *rho* was conducted, and results in Table 4 showed that Animal Abuse was weakly associated with internalized homophobia ($\rho(147) = .347$, $p = <.001$) and degree of outness ($\rho(147) = .435$, $p = <.001$). Internalized homophobia and degree of outness were weakly related ($\rho(147) = .210$, $p = .010$).

Table 33

Correlations for AVG_IH, AVG_OI, AVG_AA

		AVG_IH	AVG_OI	AVG_AA
AVG_IH	Pearson Correlation	1	.203*	.317**
	Sig. (1-tailed)		.013	<.001
	N	149	149	149
AVG_OI	Pearson Correlation	.203*	1	.346**
	Sig. (1-tailed)	.013		<.001
	N	149	149	149
AVG_AA	Pearson Correlation	.317**	.346**	1
	Sig. (1-tailed)	<.001	<.001	
	N	149	149	149

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Table 44

Nonparametric Correlations for AVG_IH, AVG_OI, AVG_AA

	.			AVG_IH	AVG_OI	AVG_AA
Spearman's rho	AVG_IH	Correlation Coefficient		1.000	.210*	.347**
		Sig. (2-tailed)			.010	<.001
		N		149	149	149
	AVG_OI	Correlation Coefficient		.210*	1.000	.435**
		Sig. (2-tailed)		.010		<.001
		N		149	149	149
	AVG_AA	Correlation Coefficient		.347**	.435**	1.000
		Sig. (2-tailed)	<	.001	<.001	
		N		149	149	149

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

The combined and relative effects of internalized homophobia and degree of outness in predicting animal abuse were analyzed using multiple regression. Concurrently, the two predictor variables were introduced into the regression. The results of the multiple regression analysis were presented in Tables 5 and 6. Although the multiple correlation (R = .428) was weak, it was significantly different from zero ($F(2,146) = 16.412$, $p < .001$). The R^2 value was .184 (adjusted $R^2 = .172$), indicating that internalized homophobia and degree of outness together were modest predictors of animal abuse, accounting for 18.4% of the variability in animal abuse. Individually, the standardized regression coefficient (Table 7) for internalized homophobia ($\beta = .387$) was statistically significant ($p < .001$), with a squared semi-partial correlation ($sr^2 = .063$) accounting for 6.3% of the variability in animal abuse. The standardized regression coefficient (Table 7) for degree of outness ($\beta = .231$, $p < .001$) was statistically significant at the $p < .01$ level, with a squared semi-partial correlation ($sr^2 = .083$) that explains 8.3% of the variability in animal abuse.

Table 55

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
	.428[a]	.184	.172	1.031	2.151

a. Predictors: (Constant), AVG_OI, AVG_IH
b. Dependent Variable: AVG_AA

Table 66

ANOVA[a]

Model		SS	*df*	*MS*	F	R^2	*p*
1	Regression	34.890	2	17.445	16.412	.184	<.001[b]
	Residual	155.186	146	1.063			
	Total	190.076	149				

a. Dependent Variable: AVG_AA
b. Predictors: (Constant), AVG_OI, AVG_IH

Table 77

Summary of Regression Analysis for Variables Predicting Animal Abuse

Measure	*b*	*SE B*	*β*	t	sr^2	*p*	Tolerance	VIF
1 (Constant)	.436	.445		.980		.329		
AVG_IH	.387	.115	.258	3.373	.063	<.001	.959	1.042
AVG_OI	.231	.060	.294	3.852	.083	<.001	.959	1.042

a. Dependent Variable: AVG_AA

Hypothesis 1

The hypothesis that internalized homophobia significantly predicts animal abuse in LGBTQ relationships with IPV was tested using multiple linear regression. Internalized homophobia and degree of outness, predictor variables, were entered into the first block, with animal abuse as the dependent variable. The results indicated that the independent variables weakly predicted the dependent variable, $F(2,146) = 16.412$, $p < .001$. The R^2 value of 0.184 indicated that internalized homophobia and degree of outness account for 18.4% of the variation in animal abuse. The standardized regression

coefficient for internalized homophobia (β = .387) was statistically significant (p <.001) with a squared semi-partial correlation (sr^2 = .063), which accounts for 6.3% of the variability in animal abuse. Therefore, hypothesis 1 was accepted, and the null hypothesis was rejected.

Hypothesis 2

The hypothesis that degree of outness significantly predicts animal abuse in LGBTQ relationships with IPV was tested using multiple linear regression. Degree of outness and internalized homophobia were entered into the first block, and animal abuse remained the dependent variable. The results indicated that the internalized homophobia and degree of outness weakly predicted animal abuse, $F(2,146) = 16.412$, $p < .001$. The R^2 value of 0.184 indicates that internalized homophobia and degree of outness account for 18.4% of the variation in animal abuse. The standardized regression coefficient for degree of outness (β = .231) was statistically significant (p <.001) with a squared semi-partial correlation (sr^2 = .083), which accounts for 8.3% of the variability in Animal Abuse. Therefore, hypothesis 2 was accepted, and the null hypothesis was rejected.

Summary

The objective of this study was to ascertain whether animal cruelty was predicted by internalized homophobia and the degree of outness. The two hypotheses were subjected to Pearson's *r*, Spearman's *rho*, and multiple linear regression. The results of both Pearson's *r* and Spearman's *rho* indicated that there was a significant relationship between the variables. The results of the multiple linear regression analysis indicated that both internalized homophobia and degree of outness marginally predict animal abuse.

Furthermore, the analysis revealed that the dependent variable, animal abuse, exhibited a greater degree of variability when the degree of outness and internalized homophobia were combined.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The objective of this dissertation was to identify the complicated interaction between minority stressors and animal abuse in LGBTQ relationships in which intimate partner violence occurs. This relationship is a research area of crucial importance because it responds to an evident literature gap, one which has been neglected, to examine the distinctive concerns of LGBTQ victims of intimate partner violence and especially animal abuse within those relationships. Identifying the unique contribution of minority stressors, like internalized homophobia and level of outness, can assist in informing more effective interventions and support services for this population. Participants in the study (n = 149) were asked to complete three surveys: OI (Mohr & Fassinger, 2000), IHP-R (Herek et al., 2009), and PTAS (Fitzgerald et al., 2016). Demographic information was collected, including age, gender, ethnicity, and LGBTQ status. The two hypotheses were addressed using correlational analysis and multiple linear regression.

Interpretation of the Findings

Two primary research questions guided the study, each used to examine one aspect of how minority stressors relate to animal abuse. The first research question looked at the extent to which animal abuse is self-reported within LGBTQ relationships that are experiencing intimate partner violence, which concerned the victim's level of outness. I aimed to discover whether the openness of a person regarding their sexuality affects whether abuse of animals was more or less likely within their relationship. The second study question examined the degree to which self-reporting of animal abuse in

intimate partner violence in LGBTQ relationships is present concerning internalized homophobia. This question was used to determine if an individual's internalization of society's negative attitudes towards LGBTQ people was associated with animal abuse within their relationship. These research questions were operationalized into a set of null and alternative hypotheses. The null hypotheses were that neither outness level nor internalized homophobia would be predictive of animal abuse, while the alternative hypotheses were that each of these minority stressors would, in fact, be a predictor. These hypotheses informed the statistical analyses conducted to evaluate the relationships between the variables.

The correlational analysis showed that the variables were significantly correlated with a weak positive interaction. Additionally, the results of the multiple regression also showed a weak positive relationship. The results of the study implied that both outness level and internalized homophobia were significantly associated with animal abuse, indicating a relationship between these minority stressors and animal violence in LGBTQ relationships that are also subject to IPV. Another result was that when the minority stressors were combined, they performed better in predicting animal abuse. Considering that the combination of the two independent variables increased the variability in the criterion variable, it is possible that when the independent variables are combined with other variables that predict IPV, the variability in animal abuse will increase.

The results of this study can be associated with the foundations of minority stress theory (Meyer, 2003) in that minority stressors contribute to mental health issues, which in turn lead to maladaptive coping skills such as IPV and animal abuse. The minority

stress theory also provided an explanation for the increase in variance when the minority stressors were combined. The theory suggested that the more stressors experienced by the LGBTQ individual, the greater the additive effect. Presumably, the more stressors added increases the likelihood of IPV and, by extension, animal abuse within LGBTQ relationships.

Although the results of this study were weak, counselors and shelters can use these results when working with the LGBTQ population experiencing IPV. Counselors may have an awareness of the potential for co-occurring animal abuse in relationships with IPV. This may allow the counselor to assist the client in creating a safety plan for themselves and their animal(s). Shelters can use this information to implement policy changes so that they are providing appropriate service to the LGBTQ community and including alternatives for the care of animals. This study also brings awareness to the idea that IPV is not only against the victim; it can spread to other people in the household as well as the animals.

Limitations of the Study

There are several limitations to the study that should be kept in mind when considering the results. First, the sample was firmly White/Caucasian and highly educated, and thus, the generalizability of the results to the LGBTQ population as a whole is potentially restricted. The life experiences of LGBTQ individuals of various racial, ethnic, and socioeconomic backgrounds may be highly dissimilar, and future studies would do well to sample more varied groups. Additionally, the sample size was larger than the minimum required, which is better in quantitative studies but may cause a

Type I error. Second, this study used self-report questionnaires, which are prone to social desirability bias and memory recall bias. Respondents may have kept underreporting or misreporting sensitive information (e.g., experience with IPV and animal abuse) due to fear of judgment, shame, or guilt. Although anonymity and confidentiality were employed, such biases cannot be eliminated when employing self-report studies. More than one data source (e.g., interviews or observational data) should be used in future research to validate self-report data and allow for a more complete understanding of the phenomenon.

Third, the study's cross-sectional design limits the degree to which relationships between variables can be determined. The data was collected at a single time point, and as such, it is difficult to determine the temporal ordering of minority stressors and animal abuse. Longitudinal studies are needed to address the directionality of the relationship between the variables and to uncover potential changes in the relationship between the variables that occur over time. Fourth, while there was an attempt to sample a diverse population, there may have been built-in sampling biases due to the use of online recruitment methods. More active users on social media or from LGBTQ communities may have been more cooperative and therefore biased the sample. In future research, other recruitment strategies, such as community-based sampling, could reduce sampling bias and increase the sample's representativeness. Fifth, the use of victims in the sample may have contributed to the weakness of the results, and as such, it may be essential to focus on the perpetrators of IPV and animal abuse instead.

Finally, I focused on internalized homophobia and degree of outness, excluding other variables that might be relevant in the presence of animal abuse in LGBTQ relationships. Variables such as substance use, mental health disorders, social support, and levels of discrimination may play a role in the dynamics of IPV and animal abuse within this population. Future research should consider incorporating these variables to better explain the complex interaction of such factors.

Recommendations for Future Research

To be able to make a positive contribution towards an understanding of the complex interactions of minority stressors, IPV, and animal abuse in LGBTQ relationships, the following recommendations were made for future research in pursuing a multifaceted approach in building on the strengths of previous research but also addressing gaps in limitations. One of the most important expansion areas is the continued utilization of longitudinal study designs. Cross-sectional studies can establish association, not causality. Longitudinal studies, where participants are tracked over time, are a powerful tool for discovering the complex processes involved. For instance, future research can investigate if higher levels of internalized homophobia at an earlier time are linked to a higher risk of IPV perpetration or victimization and animal cruelty at a later time. These investigations can also assess how change over time in the level of outness influences relational dynamics and violence risk. Second, longitudinal studies can also offer insight into crucial risk factors and protective factors that may serve as a buffer for the adverse effects of minority stress. By tracing individuals' experiences over time,

researchers are in a better position to understand the developmental processes of IPV and animal abuse in LGBTQ relationships.

Another significant recommendation for future research is to use representative and diverse samples. The current research and most of the literature had a sample predominantly composed of White/Caucasians who were highly educated. This absence of diversity makes it harder to generalize findings to the broader LGBTQ community, which is highly diverse on dimensions of race, ethnicity, socioeconomic status, geographic location, gender identity, sexual orientation, and other demographic characteristics. In the future, studies should make ongoing efforts to enroll participants from various backgrounds to make findings generalizable to a larger percentage of the LGBTQ population. To this end, researchers can use several recruitment strategies, such as community-based sampling, collaboration with LGBTQ organizations, and targeted recruitment of specific subgroups in the population. Researchers must also collect broad demographic information to have the possibility of subgroup analysis and investigation of potential differences within and across different LGBTQ populations. For example, a study can consider whether the association between minority stressors and IPV/animal abuse differs by transgender versus cisgender participants and LGBTQ individuals of color versus White LGBTQ individuals.

In addition to tightening the research design and sampling strategy, future research must include more variables that might be involved in the commission of animal abuse in LGBTQ relationships. Research in this study examined internalized homophobia and degree of outness, but only two of the numerous factors that are involved in the

dynamics of relationship violence. Researchers of future studies should attempt to incorporate variables such as substance abuse, mental health, social support, discriminatory experiences, relationship patterns, and attachment styles. Substance abuse, for instance, has been consistently linked with a heightened risk of IPV in both heterosexual and LGBTQ relationships. Future research should examine alcohol and drug use and abuse with minority stressors and the potential for animal abuse. Mental health issues such as depression, anxiety, and PTSD, which are also prevalent among LGBTQ individuals and have been identified as one of the causes of increased risk of violence, should be explored with minority stressors for a relationship with animal abuse.

Since this study showed an increased significance when the minority stressors were combined, victimization and discrimination based on sexual orientation/gender identity or other types of oppression that can cause further risk of violence and stress should be explored in combination. The impact of the additive nature of stressors, including the many kinds of discrimination, has a destructive influence on people's mental health and well-being. Researchers ought to investigate how minority stress influences relationship and attachment styles, leading to the escalation of IPV/animal abuse in LGBTQ relationships.

Finally, future research must integrate qualitative research approaches to complement quantitative information and attain a more informative and richer level of knowledge about the lived experiences of LGBTQ IPV and animal abuse victims. Quantitative research, as much as it can provide statistical information, cannot provide the depth of response typically needed to provide a complete picture of human

difficulties. Qualitative methods, such as one-to-one interviews and focus groups, can access rich, contextualized accounts of people's lives to allow researchers to analyze the meaning and interpretation given to experiences by individuals. Mixed-methods research, where quantitative and qualitative methods are employed, is promising since it will enable researchers to take advantage of the strengths of both approaches to develop a stronger understanding of the phenomenon under investigation.

Implications for Positive Social Change

The outcomes of this research, and the research literature more broadly on IPV and animal abuse within the LGBTQ population, carry important implications for generating constructive social change. These are heightened awareness, enhanced services, policy reform guidance, and helping establish more equitable treatment. Perhaps the most significant contribution of this research is that it has the potential to raise public awareness of the prevalence of IPV and animal abuse in LGBTQ relationships. So far, it has been poorly established, based on underreporting and lack of understanding due to prejudice and assumptions within society about the nature of LGBTQ relationships. The myth that IPV is a heterosexual issue has resulted in a lack of awareness and denial in providing attention and resources to violence in LGBTQ relationships. Through the presentation of the prevalence and severity of IPV and animal abuse in the population, researchers can challenge such myths and stereotypes and increase knowledge regarding the reality of LGBTQ life. Growing awareness is also a central concern in reducing stigma, both within society and among LGBTQ individuals. Stigma is a highly efficient prevention mechanism against seeking help since LGBTQ people are afraid of judgment,

discrimination, or misunderstanding from service providers. Fostering a more positive and affirming environment will encourage people out of closets and into the services they deserve. In addition, increased visibility can facilitate the creation of more sensitive and impactful support services that can respond to the particular needs of LGBTQ survivors.

Another significant implication of this research is the need for increased and more comprehensive services for LGBTQ IPV survivors and their animals. Mainstream IPV services, as vital as they are, may not be best equipped to deal with LGBTQ survivors' unique challenges and barriers. These difficulties can also comprise a fear of discrimination by care providers, insensitive services in cultures, fear of revealing gender identity or sexual orientation, and minority stress's influence on relationship functioning. To this end, care providers must be trained in LGBTQ issues. This training can cover such topics as LGBTQ identities and terminology, minority stress impact on mental health and relationships, unique needs of diverse populations (trans population or LGBTQ of color), optimal practices for assuring affirming culturally competent services; service providers also need to develop culturally responsive policies and procedures that are inclusive of LGBTQ clients and their animals. It will encompass respectful language, compliance with the client's preference of names and pronouns, management of confidentiality issues, support and housing for their animals, and other barriers.

Additionally, the findings of this research have significant implications for informing the development of training guidelines for a wide range of professionals with whom LGBTQ individuals will be in contact. These professionals include healthcare providers, social workers, mental health professionals, police officers, teachers, and

attorneys. Therefore, these professionals must be educated, competent, and proficient in addressing IPV and animal abuse. Knowledge of intervention processes that would address the problems while being culturally competent and sensitive toward these individuals would be extremely helpful in preventing IPV among these groups. These curricula also need to enhance the understanding and awareness of minority stress among these groups regarding issues like their relationships and mental health. Counselors and shelter staff must be trained to recognize the signs and symptoms of IPV and animal abuse among LGBTQ clients, which may be distinct from those experienced in heterosexual relationships. They must be trained to use inclusive language, honor clients' identities, and avoid assumptions about their relationships. A safe and non-judgmental environment is critical in facilitating disclosure and encouraging help-seeking behavior. Lastly, training must stress the significance of working with LGBTQ-affirming community resources and building strong referral networks.

Conclusion

This dissertation explored the complex interface of minority stressors and animal abuse in intimate partner violence for LGBTQ populations. The findings from this research study contributed to a limited pool of literature exploring the unique problems of LGBTQ individuals who are in abusive relationships with animal abuse. While the study showed significant correlations between minority stressors and animal abuse, it also pointed to the complex nature of the correlations and the limitations of using only individual minority stressors as predictors. The study's limitations, including sample characteristics, the use of self-report data, and a cross-sectional design, emphasize the

need for future studies to use stronger designs and control for a broader range of variables. Future research directions, including the use of longitudinal designs, heterogeneous samples, qualitative methods, and intervention studies, provide us with a roadmap to better understand IPV and animal abuse in the LGBTQ community and develop more effective prevention and intervention programs. The impacts of positive social change are lasting, and this research raises awareness, improves services, guides training curricula, and achieves policy changes that better serve LGBTQ individuals and their animals.

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