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PREDICTORS OF ATTITUDES TOWARD INTIMATE PARTNER VIOLENCE
AMONG AFRICAN IMMIGRANTS: THE MODERATING EFFECTS OF
RELIGIOSITY AND PATRIARCHAL BELIEFS

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PREDICTORS OF INTIMATE PARTNER VIOLENCE AMONG AFRICAN
IMMIGRANTS: THE MODERATING EFFECTS OF RELIGIOSITY AND
PATRIARCHAL BELIEFS

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For my son, may you grow up embracing the sparkling brilliance of your Blackness, knowing how rich and beautiful your African heritage truly is!

For the survivors of intimate partner violence, and the families of those who experienced intimate partner homicides in the African immigrant community: Your powerful stories are why it all matters.

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Abstract

In recent years, there has been an increase in gender-based violence and intimate partner homicides among African immigrants living in the United States (Kalunta-Crumpton, 2017). Of the many risk factors theorized for intimate partner homicide, a history of intimate partner violence (IPV) has been cited consistently as salient (Garcia, Soria, & Hurwitz, 2007). A useful framework for conceptualizing IPV risk factors within diverse populations is the social ecological model of IPV (Heise, 1998). This contextually integrative perspective of IPV is particularly relevant among migrant populations given the complex interactions of immigration stressors and other factors that potentially normalize IPV within African cultures and the societies at large (Sabbah et. al., 2016). Extant studies have situated IPV among African immigrants in the context of varying levels of acculturation, adherence to traditional gender roles, religiosity, and gender roles reversal due to education and economic stressors (Nilsson et. al., 2008; Akinsulure-Smith et. al., 2013; West, 2016; Kalunta-Crumpton, 2017). The present study examined the relationships among acculturation strategies, ethnic identity, religious orientation, patriarchal beliefs, and IPV attitudes for first generation African immigrants. Ethnic identity, intrinsic religious orientation, and patriarchal beliefs were significant predictors of IPV attitudes. The relationship between ethnic identity and IPV tolerant attitudes was partially mediated by patriarchal beliefs. However, ethnic identity appeared to be a protective factor, having an inverse relationship with IPV tolerant attitudes that was moderated by religious orientation. Lastly, there were significant differences in the IPV attitudes endorsed by African immigrants based on gender and religious affiliation.

Keywords: intimate partner violence, African immigrants, acculturation, patriarchy

Introduction

A memorial of crosses and stuffed bears lie in the grass of a family home where a Colorado man confessed to killing his wife and daughters (Selk, 2018). In Texas and Oklahoma, two men bludgeoned their wives to death with a hammer, one while she was asleep. Another man in Maryland stabbed his wife to death with a kitchen knife (Kalunta-Crumpton & Onyeozili, 2011). The internet, social media, and news outlets in the United States (U.S.) and around the world are often bombarded with horror stories of unimaginable violence within the context of intimate relationships. Apart from being men, one thing the stories above have in common is that most of these acts of violence were committed by African immigrants in the U.S. (Kalunta-Crumpton, 2013; Kalunta-Crumpton & Onyeozili, 2011).

Regardless of the concerted efforts to address the issue, gender-based violence continues to be a worldwide epidemic (Goncalves & Mato, 2016). Gender-based violence has been defined as interpersonal violence perpetrated against a person's will, directed at an individual based on sex or gender identity, and resulting from power inequalities grounded in gender roles or socially defined norms of masculinity and femininity (Ballard, Witham, & Mittal, 2016). In 1993, the United Nations Declaration on the Elimination of Violence against Women defined gender-based violence as acts of violence "that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivations of liberty, whether occurring in public or in private life" (UN, 1993; Article 1). Among the most lethal of such acts of interpersonal violence are homicides perpetrated by an intimate partner (Garcia, Soria, & Hurwitz, 2007).

In examining global incidence rates, Stöckl et. al. (2013) found that 38.6% of women and 6.3% of men are killed by an intimate partner. Similar rates were found in the U.S. where women are believed to be nine times more likely to be killed by an intimate partner than a stranger (Catalano, 2013; Campbell, Glass, Sharps, Laughon, & Bloom, 2007). According to a recent report by the Centers for Disease Control and Prevention (CDC), intimate partners were implicated in 55.3% of the homicides committed against women from 2003-2014 (Petrosky et al., 2017). Of the many risk factors theorized for intimate partner homicide, a previous history of intimate partner violence (IPV) has been cited consistently as the most important (Campbell et. al., 2007; Garcia et. al., 2007).

Defining Intimate Partner Violence (IPV)

In the 1970s, the feminist movement brought attention to what was considered an invisible and largely ignored problem - the interpersonal violence directed against women (Goncalves & Mato, 2016). Different terminologies, such as intra-family violence, spousal abuse, wife battering, dating violence, violence against women, and domestic violence have been used over the years to define IPV (Ali & Naylor, 2013). Within these definitions, specific attention is given to who is considered to be an intimate partner, and in what context the interpersonal violence is believed to occur (Ballard et. al., 2016; Hattery, 2009). Ultimately, there are many different ways of defining IPV based on one's own conceptualization of the problem and influenced by theoretical backgrounds, clinical training and experience, research methodology and political agenda (Nicolaidis & Paranjape, 2009). For the purpose of this present study,

IPV is defined as the physical, emotional, psychological and sexual abuse that takes place between intimate partners (Hattery, 2009; Campbell et. al., 2007).

Elaborating on this definition, the World Health Organization (WHO) describes IPV as a “behavior by an intimate partner or ex-partner that causes physical, sexual or psychological harm, including physical aggression, sexual coercion, psychological abuse and controlling behaviors” (WHO, 2010; p. 11). The CDC identified four primary types of IPV namely physical violence, sexual violence, stalking, and psychological aggression (Breiding, Basile, Smith, Black, & Mahendra, 2015).

Physical violence is “the intentional use of physical force with the potential for causing death, disability, injury, or harm” (Breiding et. al., 2015; pp. 11). Sexual violence includes both forcefully convincing a person into sexual acts against their wishes and any abusive sexual contact (Breiding et. al., 2015). Stalking is “a pattern of repeated, unwanted, attention and contact that causes fear or concern of one’s safety or the safety of someone else,” and psychological aggression involves the “use of verbal and non-verbal communication with the intent to a) harm another person mentally or emotionally; and/or b) exerting control over someone” (Breiding et. al., 2015; pp. 12-15). It is worth noting that these categories are not mutually exclusive. Furthermore, IPV can occur in a range of relationships including current spouses, current non-marital partners, former marital partners, and former non-marital partners (Ballard et. al., 2016).

When reviewing the global prevalence, risk factors, and consequences of IPV, the World Health Organization (WHO) stated that “the overwhelming burden of partner violence is borne by women at the hands of men” (WHO, 2010; p. 3). Yet, the role of gender in IPV remains inconclusive, with studies documenting a spectrum of IPV

involving both male and female perpetrators (Scarduzio, Carlyle, Harris, & Savage, 2017; Pornari, Dixon, & Humphreys, 2013), and occurring in the context of same-sex relationships (Loue, 2002). This necessitates the need for a more nuanced understanding of IPV and its gendered dynamics. Further, IPV experiences are often predicated on gender inequalities and cannot be fully understood outside of the social structures, gender roles, and socio-cultural norms that support and justify them (Alexander-Scott, Bell, & Holden, 2016).

Regardless, IPV has been associated with a myriad of negative consequences impacting the individual, families, and societies at large (WHO, 2010). In addition to physical health injuries, and fatalities, IPV has been implicated in a wide range of mental health consequences including depression, posttraumatic stress disorder, and high risks for suicidal behaviors (Paat, 2014; Mechanic, Weaver, & Resick, 2008). Calling attention to it as a “public health problem,” Petrosky et. al. (2017) noted that the occurrence of IPV cuts across all racial/ethnic groups. However, ethnic minorities have been found to be disproportionately affected by IPV (Stockman, Hayashi, & Campbell, 2015). Additionally, in recent years, there has been an alarming increase in IPV and intimate partner homicides among African immigrants living in the U.S. (Kalunta-Crumpton, 2017; Kalunta-Crumpton & Onyeozili, 2011). Unfortunately, there is limited research and inquiry into these experiences.

Significance of the Study

With the exception of a quantitative study on acculturation and IPV among Somali refugees (Nilsson, Brown, Russell, & Khamphakdy-Brown, 2008), majority of the studies exploring IPV experiences among African immigrants have been qualitative

in nature limiting the generalizability of findings (West, 2016). This present study seeks to fill a gap in the existing literature using quantitative methodology to examine the risk and protective factors for IPV among first generation African immigrants. However, a common methodological challenge in studying IPV within this population is the underreporting of IPV incidences, and the difficulty garnering participation from Africans due to cultural proscription against engaging in dialogue regarding IPV (Akinsulure-Smith et. al., 2013; Ting & Panchanadeswaran, 2009).

Attitudes toward IPV

Nonetheless, extensive literature in health and social psychology highlights the importance of attitudes in the prediction of actual behaviors (Ajzen & Fishbein, 2005; Waltermaurer, 2012). Specifically, research has consistently shown that attitudes toward IPV are good predictors of the occurrence of IPV (McDermott & Lopez, 2013; Trott, Harman, & Kaufman, 2017). Further, the extent to which women and men condone IPV is regarded as a key indicator of actual IPV prevalence (Kalunta-Crumpton, 2017), and attitudes toward violence are often used as a proxy measure for IPV, particularly in contexts where existing measures of IPV experiences are unavailable (Trott et. al., 2017; Waltermaurer, 2012).

In addition to linking IPV acceptance attitudes to its occurrence, studies have also shown that women who express attitudes tolerating IPV are more vulnerable to experiencing it (Raj & Silverman, 2002; Trott et. al., 2017), and women who hold IPV acceptance attitudes may be at greater risk for prolonged IPV exposure (Raj & Silverman, 2002; McDermott, Naylor, McKelvey, Kantra, & Liu, 2017). This is true for African immigrants who report social or cultural beliefs and attitudes that normalize IPV

(Ting & Panchanadeswaran, 2009; Ogunsiji & Clisdell, 2017). Thus, this current study will attempt to understand the experiences of IPV among first generation African immigrants by exploring the attitudes towards IPV within this population.

Specifically, this study focuses on the complex interrelationships among acculturation, ethnic identity, gender, traditional gender roles adherence, religion, and other demographic variables in the IPV experiences of African immigrants. The impact of religiosity and patriarchal ideologies in predicting attitudes toward IPV among African immigrants in the U.S. is also examined. For the purposes of this study, gender is defined as a self-selected identity as male or female, while acknowledging that gender identity exists on a non-binary gender spectrum (Pornari et. al., 2013). Also, though IPV perpetration and occurrence is acknowledged in heterosexual, same-sex, and other framework of relationships, differentiating between the distinct IPV experiences of African immigrants based on sexual orientation and gender identity lies beyond the scope of this study.

Review of Literature

Cross-Cultural Studies of IPV

Cross-cultural studies of IPV in ethnic-minoritized communities is wrought with definitional and methodological challenges (Krahe, Bieneck, & Moller, 2005). Many studies exploring the experience of IPV in diverse cultures often take an *imposed etic* approach (Oxtoby, 2012), which tends to situate the discussion within a framework of the dominant narrative using the majority view of IPV as the standard.

Imposed etic approach. The underlying supposition of the imposed etic approach is that IPV, as a phenomenon, is universally defined (Malley-Morrison &

Hines, 2004). As a result, preconceived notions, and definitions of IPV from a Eurocentric perspective are applied indiscriminately to diverse cultures (Krahe et. al., 2005). Perhaps the *imposed etic* approach is further reinforced by the assumption that a homogenous non-White culture exists with universal themes and structures precluding the need for culturally diverse scholarship (Kasturirangan, Krishnan, & Rigner, 2004). Nonetheless, a problem inherent in the *imposed etic* approach of studying IPV in culturally diverse communities is the issue of functional equivalence, which involves the use of instruments normed against White populations based on the presupposition that the underlying construct is the same in *other* cultures (Ballard et. al., 2016).

On the contrary, some studies assert that certain ethnocentric theoretical constructs of IPV in the dominant U.S. culture are not always applicable or relevant to the experiences of IPV among culturally diverse groups (Kasturirangan et. al., 2004). For example, the Power and Control Wheel that is often utilized as a visual aid for conceptualizing abuse and interpersonal violence has been found to have significant gaps in its value to the New Zealand Samoan culture, despite the occurrences of IPV among this population. This was attributed to the unique cultural context and strength of the Samoan woman, which emphasizes the need for culturally relevant interventions or responses to IPV in such populations (Crichton-Hill, 2006).

Derived etic approach. Rather than using the *imposed etic* approach in cross-cultural studies of IPV, Krahe et. al. (2005) proposed a *derived etic* method that allows for the definition and measurement of the construct of IPV to be developed within each culture based on the shared views and values of the group members (Oxtoby, 2012). This approach allows for variations in the experiences of IPV based on cultural, social,

and historical influences (Hampton, 2005; West, 2005). Extant studies exploring the conceptualization of IPV across cultures have found global differences in the perspectives and understanding of IPV (Krahe et. al., 2005; Malley-Morrison, 2004).

For example, cross-cultural discrepancies have been found in what is labelled as abusive. In examining domestic violence among Asian women, Yoshihama (1999) found that Japanese women describe acts such as overturning the dining table or dousing a woman with liquid as cultural-specific forms of abuse, more severe than acts of physical and psychological abuse typically endorsed from a Eurocentric perspective like pushing, grabbing, slapping, etc. (Sokoloff & Dupont, 2005^b). Also, based on their collectivistic cultural backgrounds, it is not unusual to have IPV defined among African immigrants as acts of physical aggression, abuse, control, and intimidation carried out not only by an intimate partner or spouse, but also by members of the extended family and in-laws (Akinsulure-Smith et. al., 2013). Such definitional differences inform reporting and help-seeking behaviors within these communities (West, 2016). Regardless of how it is defined, IPV has been associated with deleterious effects on both the individual and group, as well as a public health crisis in the society at large (Balogun & Akinola, 2015).

Conceptualization and Theories of IPV

Over the years, many theories and frameworks have been developed for understanding and explaining IPV, coming from a wide range of perspectives such as the biological, psychological, feminist, evolutionary theory, and social learning models (Ali & Naylor, 2013; Pornari et. al., 2013). While an exhaustive discussion on the different theoretical perspectives of IPV is beyond the scope of this study (for review see

Ali & Naylor, 2013), four theories of particular relevance to this study are the social learning, general systems, the feminist, and the socioecological theories of IPV.

Social learning theory

IPV occurs as a result of a combination of contextual and situational factors such as individual, couple, and societal characteristics (Mitchell & Vanya, 2009). According to the social learning theory, IPV is based on the premise that aggression and interpersonal violence are learned behaviors (Pornari et. al., 2013). Consequently, both IPV perpetration and tolerant attitudes toward IPV are derived from the social context (Ali & Naylor, 2013). A variation of the social learning perspective is *the culture of violence theory*. Wolfgang and Ferracuti (1967) theorized that in large, pluralistic societies, certain subcultures develop norms that permit the use of physical force or violence to a greater degree than the dominant culture.

Others built on this premise to assert that IPV occurs more frequently in violent societies than in less violent ones (Loue, 2002). While support for the culture of violence theory has wavered over time (Pornari et. al., 2013), another robust variation of the social learning perspective is the *intergenerational transmission theory of IPV*, which believes that children who experience and/or witness intra-family violence within the home will learn that violence is appropriate in interpersonal settings, and they will in turn imitate these early childhood lessons of interpersonal violence in their adult relationships (Loue, 2002). To date, studies examining the evidence for intergenerational transmission of IPV have been modest but ultimately inconclusive (Stith et. al., 2000).

General systems theory

Murray Strauss (1973), in his seminal work on family violence, developed the general systems theory to explain how interpersonal violence in the family results from a positive, cyclical feedback system and operates at the individual, family, and societal levels. This complex system is believed to consist of factors and processes such as the level of conflict inherent in the family, high levels of violence in society, and family socialization to violence. Other factors include cultural traditions normalizing violence, sexism and heterosexism in the larger society, as well as the multitude of reasons for both IPV perpetration and tolerant attitudes toward IPV (Loue, 2002). This approach shifts the focus from the unidimensional perspective of male-perpetrated violence to how interpersonal violence is maintained in the relationship (Mitchell & Vanya, 2009).

Gender symmetry. Inherent to this perspective is the *gender symmetry* (similarity between males and females) assumption that both partners play a role in initiating, escalating, and reinforcing violence within the family systems (Straus & Gelles, 1990; Dixon & Graham-Kevan, 2011). To combine the gender symmetry idea with other gender specific theories of violence against women, Johnson (2006) proposed a framework highlighting four distinct types of IPV, these include: *intimate terrorism*, *situational couples' violence*, *violent resistance*, and *mutual violence control*.

According to this model, *intimate terrorism* represents the more severe forms of IPV that is characterized by the domination of one's partner via coercive control and violence (Johnson, 2006; Johnson, 2008). The underlying assumption here is that intimate terrorism is largely perpetrated by men against women, and it is a type of violence that tends to progressively escalate over time (Johnson, 2006; Nicolaidis &

Paranjape, 2009). The *situational couples' violence* does not necessarily involve coercive power and control tactics, but it is characterized by specific arguments within the context of intimate relationships that may escalate into violence (Nicolaidis & Paranjape, 2009). Johnson (2006) hypothesized that this second form of situational couples' violence is likely to be perpetrated equally by both men and women.

Building on this framework, Johnson (2008) highlighted a third type of IPV that occurs when the victim of an intimate terrorist responds with violence. This was described as *violent resistance* and is believed to occur within the context of a power differential system that casts males more likely as intimate terrorists and females as violent resisters (Johnson, 2008; Nicolaidis & Paranjape, 2009). The last type of IPV described by Johnson is one of *mutual violent control*, in which two intimate terrorists are believed to compete for control of the relationship by engaging in coercive power and control tactics resulting in violence (Johnson, 2008; Nicolaidis & Paranjape, 2009).

Although Johnson believed that men and women are equally capable of being intimate terrorists engaging in mutual violent control, he also hypothesized that this form of IPV is relatively rare (Nicolaidis & Paranjape, 2009). Johnson's framework has been subjected to empirical research producing inconclusive findings with studies showing support for both gender symmetry and asymmetry specifically in the intimate terrorism IPV type (Johnson, 2006; Johnson, 2008; Hattery, 2009; Nicolaidis & Paranjape, 2009).

Feminist theory of IPV

The feminist conceptualization of IPV is diametrically opposed to the notion of gender symmetry and believes IPV to be the inherently gendered outcome of a patriarchal society that normalizes male domination and the subjugation of women

(Hattery, 2009). Feminist analyses of IPV asserts that general theoretical models would be ineffective in addressing IPV because they do not take into consideration traditional gender roles of male dominance that privilege men and limit women's access to political, legal, and economic resources (Hetero et. al., 2017). Consequently, gender inequalities and patriarchal norms are believed to be at the root of male-perpetrated violence against women (Hattery, 2009; Campbell et. al., 2007). Support for this theory is found in the literature linking traditional gender roles to increased IPV perpetration (Raj & Silverman, 2002) and IPV tolerant attitudes (McDermott et. al., 2017).

Despite its contributions to addressing the issues of interpersonal violence against women, the feminist perspective has been criticized as having a narrow focus. According to Mills (2003), the assumptions underlying mainstream Feminist advocacy efforts are that "all intimate abuse is heterosexual, that violence is a one-way street (male to female), that all violence warrants a state response, and that women want to leave rather than stay in their abusive relationships" (pp. 6-7). These assumptions have been disconfirmed in studies showing female-perpetrated IPV against men (Scarduzio et. al., 2017), and IPV occurrences in same-sex relationships (Pornari et. al., 2013). Additionally, the feminist theory has been criticized as lacking adequate applicability to IPV experiences in diverse populations (Yicks, 2007).

Intersectionality

Advocating for intersectionality, Crenshaw (1991) stated that the IPV experiences of White, middle class women is not representative of the experiences of Black women from low-income households. Furthermore, feminism has been criticized as ethnocentric and oblivious to the unique experiences of women from developing

countries. Ali and Naylor (2013) noted that Western feminism often perceives “women from the developing world (non-Western women) as an oppressed, submissive, and a voiceless group as opposed to the Western women’s projection of being modern, educated, assertive, and powerful” (p. 615).

The theory of Intersectionality addresses some of the shortcomings of the Feminist theory of IPV. According to Collins and Bilge (2016), intersectionality refers to the complex and cumulative ways in which our multiplicative identities are interconnected and mutually influencing. Originally coined to address the various ways in which race and gender interact to shape the dimensions of oppression that Black women experience, intersectionality addresses the IPV experiences of diverse populations by emphasizing the interlocking power relations and discriminations based on gender, race, immigration status, class, and sexuality (Sokoloff & Dupont, 2005^a; Hill, Glasser, & Harden, 1998).

Applying the theory of intersectionality, IPV experiences within the context of African immigrants is best understood by accounting for the ways in which these multidimensional identities impact IPV perpetration and acceptance attitudes. Specifically highlighting the experiences of African immigrant women, Nazraddin (2017) emphasized the intersectional identities of Black Immigrant Women as “Black, foreign, and woman,” which renders the population especially vulnerable to IPV due to multifaceted layers of oppression and specific cultural and religious implications (Nazraddin, 2017, p. 6; Akinsulure-Smith et. al., 2013).

Theoretical Framework: Social Ecological Model of IPV

The present study is based on the social ecological model of IPV. Building on the theory of intersectionality that calls for examining factors such as gender, race, class, and immigration status contextually, the social ecological model is a useful framework for the global assessment of IPV. This theoretical framework breaks down factors associated with IPV into four levels of risk: individual, relationship, community, and societal levels (Heise, 1998; Smith Slep, Foran, Heyman, & Kaslow, 2014; see figure 1).

Bronfenbrenner's ecological theory. The social ecological model of IPV is based on Bronfenbrenner ecological theory, a complex and integrative framework that examines the contextual factors impacting human development (Bronfenbrenner & Morris, 2006). Bronfenbrenner's ecology theory states that a child's environment is made up of a set of interrelated structures and ecosystems, all of which are interconnecting and impacting the child's development over time (Bronfenbrenner & Morris, 2006; Sabbah, Chang, & Campbell-Heider, 2016).

The first level, micro-level, is the innermost environment in which the child spends significant time consisting of the family, daycare, and school (Bronfenbrenner & Morris, 2006). The exosystem is focused on how the community supports the child's development and consists of the social structures that influence the microsystem, which includes community level variables, social media, as well as the local, state, and federal agencies involved in the child's life (Bronfenbrenner & Morris, 2006). The meso systems is made up of the interactions between the microsystem and exosystem, including interactions within the child's parents or primary care givers, the school, mental health professionals, social institutions like the school and faith communities, and other

individuals and structures invested in the child's development (Bronfenbrenner & Morris, 2006). The macrosystem is the overarching system in which all the other systems are embedded, and it consists of societal and cultural norms, beliefs, and ideologies, and policies that impact all other systems and the child's overall development (Bronfenbrenner & Morris, 2006).

Social Ecological Model of IPV. Applying Bronfenbrenner's theory, Heise's (1998) social ecological model of IPV was developed consisting of four concentric circles. The innermost circle represents the individual level or personal history factors, such as a past history of child abuse, intrafamily violence, or personality traits that each individual brings to the relationship which could potentially impact IPV (Heise, 1998; WHO, 2010). For African immigrants, the individual level could also include demographic variables like being a woman, being unable to conceive, or unable to conceive a male child (Akinsulure-Smith et. al., 2013).

Next is the micro level, which is made up of the immediate context of family, work and peer relationships, all interactions in which individuals engage with each other as well as the subjective meanings attached to these exchanges (Heise, 1998). It is worth mentioning that among African immigrants, the micro level may include relationships with extended family members that are often implicated in IPV experiences (Kalunta-Crumpton, 2015). The exosystem follows, encompassing the interconnectedness existing among the institutions and social networks in which the microsystem is embedded, including the schools, communities, and religious organizations (Heise, 1998). The outermost circle is the macrosystem, which consists of overarching views and ideologies

present in the culture and society at large such as racism, sexism, heterosexism, and patriarchal ideologies (Sabbah et. al., 2016; Smith et. al., 2014; Heise, 1998).

The social ecological model has been adopted by WHO in understanding IPV and designing appropriate interventions (WHO, 2010). The premise of this model is that no single factor can fully explain the phenomenon of IPV. Rather, it is important to take into account the biological, social, psychological, and economic factors that impact IPV (Heise, 1998; Smith et. al., 2014). Further, the social ecological model of IPV adopts a multidimensional and structural approach to conceptualizing the risk factors that could potentially cause and/or maintain IPV perpetration and tolerance within diverse populations (Heise, 1998; Dixon & Graham-Kevan, 2011; Smith et. al., 2014). Such a structural perspective of IPV is particularly relevant given the complex interactions of the stressors of immigration, acculturative stress, as well as the interplay of religion, traditional gender roles, and patriarchal ideologies that normalize IPV within the culture and the society at large for African immigrants in the U.S. (Sabbah et. al., 2016).

Immigration and IPV

Not surprisingly, the link between immigration and IPV has been a recurring theme in the literature (Wang, 2016; Raj & Silverman, 2002). The relationship between IPV and the immigration status has been proposed with empirical studies finding an increase in the risk for IPV at each step of the immigration process, including filing for naturalization and accessing the available resources (Erez, Adelman, & Gregory, 2009). Immigration has been linked to increased stressors with undocumented immigrant women being at a greater risk for IPV due to a lack of legal rights (Raj & Silverman, 2003; Mose & Gillum, 2016).

Consequently, there has been considerable research into the experiences of IPV among Hispanic and Asian immigrants (Wang, 2016; Raj & Silverman, 2003). However, little is known about IPV among African immigrants (Akinsulure-Smith et. al., 2013). This noticeable gap in the literature has been attributed to “ethnic lumping” - the subsuming of foreign-born Africans with African Americans due to presumed similarity in race, conflating race with identity (West, 2016; Ting & Panchanadeswaran, 2009). In addition, most of the studies that do examine IPV among African immigrants often combine this population with other groups of immigrants, such as Middle Eastern and Northern Africans (Choi, Elkins, & Disney, 2016). Nevertheless, considering the recent increase in IPV and the number of Intimate partner homicides among foreign-born Africans in the U.S. (Kalunta-Crumpton, 2017; Kalunta-Crumpton & Onyeozili, 2011), it has become fundamentally important to understand the unique experiences of IPV among African immigrants in order to develop culturally relevant policies and interventions.

African Immigrants in the U.S.

Despite anti-immigration rhetoric in the current socio-political climate, the influx of African immigrants to the United States (U.S.) has increased by 41% (Zong & Batalova, 2017). Prior to recent migration trend, the 16th century transatlantic slave trade spanning four centuries brought large numbers of Africans to the U.S. as forced migrants (Capps, McCabe, & Fix, 2011). The historical importance of slavery and the creation of a unique Black identity among Africans in the diaspora cannot be overemphasized (Jackson & Cothran, 2003).

However, there has been an increase in the voluntary migration from Africa to the U.S. after the political independence of many African countries from colonial rule (Shaw-Taylor, 2007). The 1965 U.S. Immigration and Naturalization Act eliminated the quota system based on national origin that was previously in place, and opened up opportunities for immigration from Asia, Latin America, and Africa, increasing the racial, ethnic, and religious, diversity of the U.S. (Bell, Funk, Joshi, & Valdivia, 2016). Further, the 1990 U.S. Immigration Law created “diversity visas,” leading to a varied topology of Sub-Sahara African immigrants in the U.S., from migrant skilled workers to refugees and asylum seekers (Bell et. al., 2016).

Since then, there has been an upsurge in voluntary migration to the U.S. by foreign-born Africans in the past two decades (Anderson & Lopez, 2018). In 2015, there were over two million African immigrants living in the U.S. from countries such as Nigeria, Ethiopia, Egypt, and Kenya (Anderson, 2017). Only a year later, the number of foreign-born Africans doubled with the Pew Research Center reporting about four million African immigrants living in the U.S. in 2016, making up about 10 percent of the Black population in the U.S. (Anderson & Lopez, 2018). Given the growing number of foreign-born Africans in the U.S., it is surprising that there are very few studies on the unique experiences of these African immigrants (Anderson, 2017; Akinsulure-Smith, Chu, Keatley, & Rasmussen, 2013).

African Immigrants and IPV Risk Factors

African immigrants, like other migrant populations, encounter certain challenges that are unique to the immigration experience. These include potential language barriers, economic stressors, discrimination, lack of access to resources, as well as isolation and

disconnection from support systems in countries of origin (Akinsulure-Smith et. al., 2013). Some of these challenges have been identified among immigrant populations as risk factors for health disparities and gender-based violence such as IPV (Goncalves & Mato, 2016). Other studies, mostly qualitative in nature, have named immigration as an indirect link to IPV experiences among foreign-born Africans in the U.S. For example, extant studies have situated IPV among African immigrants in the context of varying levels of acculturation, with more acculturated individuals reporting greater frequency of IPV experiences (Nilsson et. al., 2008; Sabbah et. al., 2016; Kalunta-Crumpton, 2017).

Acculturation and Immigration

Acculturation has been described as “the process of cultural change that occurs when individuals from different cultural backgrounds come into prolonged, continuous, first-hand contact with each other” (Redfield, Linton, & Herskovits, 1936, p. 146). Similarly, Berry (2005) defined acculturation as a dual process of cultural and psychological exchange between two or more cultural groups and their individual members. Rather than a unidimensional model, which connotes shedding off one’s culture of origin and taking on the mainstream culture (Mills, Fox, Gholizadeh, Klonoff, & Malcarne, 2017), a bi-directional approach is often adopted in conceptualizing acculturation. The latter emphasizes the interaction and attitudes towards the home culture and the host culture (Weinreich, 2008; Berry, 2003).

Acculturation strategies. From the bi-directional approach, four acculturation strategies have been identified, these include: integration – a preference for both one’s home culture and the host culture (Berry, 2005), assimilation – a preference for the host culture and distancing from one’s home culture, separation – a preference for one’s

home culture and a distancing from the mainstream culture, and marginalization – a disconnection from both one’s home culture and the host culture (Berry, 2003). The integration mode has been associated with better adjustment, while marginalization has been linked to more negative outcomes with the moderating role of social support (Berry, 2005).

Implicit in Berry’s acculturation strategies is the assumption that both the host culture and the culture of origin are benign, which does not take into account experiences of xenophobia, racism, and other systemic oppressions that further complicate the IPV experiences of African immigrants in the U.S. (Weinreich, 2008). A multidimensional perspective acknowledges that acculturation consists of a wide range of variables that can change independently. These include acculturation conditions, orientations, and outcomes (Celenk & Van de Vijver, 2011).

Acculturation conditions. Acculturation conditions are antecedent factors such as the characteristics of the receiving society (e.g. perceived or objective discrimination), characteristics of the society of origin (e.g. political context), characteristics of the migrant group (e.g. ethnic vitality), and personal characteristics (e.g. expectations, norms and personality). These characteristics define the context that impinges on the process of acculturation (Celenk & Van de Vijver, 2011; p. 3; Schwartz et. al., 2010).

Acculturation orientations. Acculturation orientations are similar to Berry’s four acculturation strategies, and they describe the immigrant’s preferred style of relating to the host culture through cultural adoption or a preference for the culture of origin through cultural maintenance. Worth noting is the understanding that in negotiating acculturation strategies, an individual can simultaneously choose to adopt or

reject the mainstream values of the host culture while retaining or relinquishing aspects of one's own cultural values (Obasi & Leong, 2009). Further, the acculturation process might look different for voluntary immigrants, refugees, and asylum seekers depending on the circumstances surrounding the migration experience (Schwartz et. al., 2010).

Acculturation outcomes. Acculturation outcomes refer to consequences of the acculturation process. These could be psychological, internal adjustment related to mental and emotional well-being, or sociocultural and behavioral skills involving external adjustment to the mainstream culture (Celenk & van Vijver, 2011; p. 5).

Generation of Immigration

Other factors, like the generation of immigration, play a role in the acculturation strategies endorsed by the individual, ultimately impacting the overall outcome of acculturation. Studies have found generational differences in acculturation within groups as aspects of the mainstream society were acquired while certain ethnic customs were relinquished with successive generations of immigrants (Stephenson, 2000).

Definitions of Immigration Generation Cohorts

Generation of immigration is believed to be a sociological variable essential to understanding the acculturation processes of African immigrants and their descendants (Logan, 2007). The U.S. Census Bureau defines generation of immigration based on criteria such as nativity or country of birth, birthplace for parents, and the duration of residence for the foreign born (Trevelyan et. al., 2016). Accordingly, *first generation immigrants* refer to foreign born individuals who relocated to the U.S. and are the first in their family to obtain citizenship or permanent residency (Trevelyan et. al., 2016). The *second generation* cohort includes native (U.S.) born children of immigrants, who by

reason of their birth, are U.S. citizens, and typically have one or more foreign-born parents (Trevelyan et. al., 2016). *Third and fourth immigration generation* cohorts are native (U.S.) born children of native born parents, commonly referred to as *descendants of immigrants* (Rumbuat, 2004).

Half-generation designation. Theoretical and methodological questions are often raised regarding the use of nativity (place of birth) in isolation for determining immigration generation cohort (Rumbuat, 2004). Specifically, foreign-born children of immigrants who moved with their family at an early age are often given classifications of their own – *1.5 generation if relocation was before or during early teenage years*, or *1.75 if before the age of five years* (Rumbuat, 2004). Some authors further highlight issues regarding subjective measures of racial/ethnic self-identification, which tends to fade across generations of immigration, resulting in *ethnic attrition* – selective refusal by later generation descendants of immigrants to identify with their predecessors’ ethnic group (Duncan, Trejo, Alba, & Prewitt, 2018). Nonetheless, extant studies have documented fundamental differences in acculturation strategies and outcomes across generations of immigration among diverse migrant groups (Rumbuat 2004; Trevelyan et. al., 2016; Duncan et. al., 2018)

Generation of Immigration and Acculturation. Looking at the intergenerational adjustment by African immigrants to the US post migration, *classic assimilation* implies that the longer foreign born Africans live in the U.S. and are exposed to the mainstream structure, the more likely the children and descendants of these African immigrants are to adopt an American identity and lose their cultural heritage (Schwartz et. al., 2010). Based on this premise, it is expected that descendants

of immigrants will experience a different acculturation and ethnic identity trajectory than foreign-born first generation African immigrants (Rong & Brown, 2001).

Challenging the notions of a linear process of assimilation especially when comparing later generations, researchers have emphasized that migrant groups undergo different, often cyclical, paths at different rates in the acculturation process (Rong & Brown, 2001). In a study carried out by Stephenson (2000) examining acculturation strategies in four generations of immigrants, each of the first three successive generations endorsed increased immersion in the dominant society in terms of being more acculturated or assimilated. However, the effect was reversed for the fourth generation where ethnic society immersion scores were higher and dominant society immersion scores were lower than that of the third generation though not at a statistically significant level. Nonetheless, the fourth generation seemed to show a greater inclination toward learning more about and participating in their cultures of origin (Stephenson, 2000).

Consequently, a multidimensional approach to acculturation emphasizes context, the saliency of cultural heritage, and the nuanced but agentic role of the individual (Lopez-Class, Castro, & Ramirez, 2011) in incorporating cultural elements towards developing an *ethnic identity* and alleviating the stress that comes from adjusting to the dominant culture (Weinreich, 2008; Lopez-Class et. al., 2011; Schwartz et. al., 2010).

Ethnic Identity

Ethnic identity, as a construct, is used interchangeably and often conflated with acculturation due to the similarities and overlap in their cultural dimensions (Phinney, 2003). Despite their similarities, there are distinct differences between the two

constructs. *Ethnic identity* is a dynamic, multidimensional construct that refers to one's identity or sense of self as a member of an ethnic group. *Ethnic groups* are subgroups within a larger context that claim a common ancestry and share one or more of the following elements: culture, phenotype, religion, language, kinship, or place of origin (Phinney, 2003 p. 63).

Simply put, ethnic identity is concerned with how much of one's ethnic group characteristics and values have been integrated in an individual's self-concept and overall identity (Cuellar, Nyberg, Maldonado, 1997). Acculturation, on the other hand, is believed to focus on the extent to which an individual chooses to participate in the cultural traditions, values, beliefs, and practices of the dominant mainstream culture compared to own culture (Smith, 2006; Cuellar et. al., 1997). Furthermore, Phinney and Flores (2002) conceptualized acculturation as a broad construct including changes in behaviors and attitudes as a result of inter-cultural contacts, while ethnic identity, the internalization of attributes of one's ethnic group, is considered to be subsumed within acculturation (Phinney, 2003).

As an aspect of the construct of acculturation (Schwartz et. al., 2010), ethnic identity involves a sense of belonging to a specific group that is dynamic and linked to the acculturation strategies adopted by the immigrant (Phinney, 2003). Studies have found a positive correlation between ethnic identity and Berry's integration and separation acculturation strategies, while an inverse relationship is believed to exist between ethnic identity and the assimilation and marginalization strategies (Smith, 2006; Phinney & Flores, 2002) resulting in increased migrant stressors. Few studies, mostly

with qualitative methodology, have examined the role of ethnic identity in IPV among African immigrants (Akinsulure-Smith et. al., 2013; Kalunta-Crumpton, 2017).

Acculturation and IPV Risk Factors among African Immigrants

Although acculturation has been implicated in the IPV experiences of African immigrants (West, 2016), studies examining acculturation among immigration populations are frequently faced with measurement and methodological challenges (Celenk & Van de Vijver, 2011; Schwartz, Unger, Zamboanga, & Szapocznik, 2010). In a study exploring Somali refugee women's experiences of IPV, Nilsson et. al. (2008) found that there was a rise in IPV with increased acculturation. African immigrant women with greater proficiency in speaking English and having more friends from the mainstream U.S. culture were found to be at a greater risk for IPV.

However, Nilsson and colleagues acknowledged the inherent limitation in assessing the Somali women's acculturation levels by measuring participants perceived English ability, their time spent in the U.S. in year and months, and the number of their American friends (Nilsson et. al., 2008; Sullivan, Senturia, Negash, Shiu-Thornton, & Giday, 2005). More comprehensive methods are needed for examining acculturation (Phinney, 2003) in order to better understand its relationship with IPV experiences among African immigrant populations.

Nonetheless, acculturative stress - the negative impact and challenges coming from the process of acculturation - has been linked to the frequency and severity of IPV within this population (West, 2016; Sabbah et. al., 2016; Nilsson et. al., 2008). Some studies have connected religious and cultural norms to the IPV experiences of African immigrants, especially regarding help-seeking, coping, resiliency, and options for

conflict resolution (Ting & Panchanadeswaran, 2009; Sullivan et. al., 2005). Other studies have attributed this to a myriad of factors including patriarchal ideologies, adherence to traditional gender roles, and gender roles reversal post-migration due to economic stressors (Kalunta-Crumpton, 2017; Ogunsiyi & Clisdell, 2017; Kalunta-Crumpton, 2015).

In a qualitative study exploring gender differences in IPV attitudes and coping among West African immigrants, men typically attributed IPV to economic stressors, while most women named the pervasiveness of traditional cultural expectations that normalize IPV experiences (Akinsulure-Smith et. al., 2013). Although culture has been extensively documented in the literature as implicated in IPV perpetration and acceptance attitudes among African immigrants, there is an apparent need for more scholarship into the role of culture in the IPV experiences of African immigrants living in the U.S. (Kalunta-Crumpton, 2017; Kalunta-Crumpton, 2013; Akinsulure-Smith et. al., 2013; Kalunta-Crumpton & Onyeozili, 2011).

Culture and IPV

It comes as no surprise that culture has been situated at the epicenter of studies exploring IPV among ethnically diverse populations (Malley-Morrison, 2004; Oxtoby, 2012). Within these populations, culture is regarded as being both a risk and protective factor in the dialogue about IPV (Pratt & Sokoloff, 2005; Rodriguez, 2015). However, Sokoloff and Dupont (2005^a) rightly noted that when oppression and violence occur among communities of color, the saliency of culture is often overestimated, taking the focus off individual responsibility and accountability. Nonetheless, given the potentially different experiences of IPV across cultures (Ballard et. al., 2016), the goal is to

understand IPV within the context of African immigrant populations. This is particularly imperative as studies have shown that African immigrants tend to respond to IPV based on the customs and practices from their country and culture of origin regardless of the systems and resources in place in the host culture or country (West, 2016; Olayanju, Naguib, Nguyen, Bali, & Vung, 2013).

In describing the magnitude of IPV perpetration among foreign-born Africans, Mose and Gillum (2016) stated unequivocally that “African women are also at particularly high risk of IPV due to additional religious and cultural barriers. IPV perpetuation rests radically on African family structures, traditions, customs, and men’s sexism, it is important to understand them to figure out how the harmful practices can be dismantled” (p. 51). One of such customs implicated in IPV experiences among African immigrants is the notion of bridal price or dowry (Mose & Gillum, 2016; Mugoya, Witte, & Ernst, 2015), which in African collectivistic cultures was originally supposed to be an expression of appreciation from the husband’s family to the bride’s family (West, 2016; Mugoya et. al., 2015).

However, some studies have reported a recurring theme among African migrant groups involving the belief that the dowry grants the husband rights over the bride’s body, labor, chores, income and children thereby reinforcing the inequality between men and women (Bowman, 2003; Kalunta-Crumpto, 2013; Kalunta-Crumpton, 2017). Furthermore, the payment of the bride price has been credited among African immigrants for IPV tolerant attitudes and the reluctance to leave abusive spouses due to the obligation to refund the dowry upon divorce (Mose & Gillum, 2016; Mugoya et. al., 2015). Other cultural factors linked to IPV perpetration and acceptance among African

immigrants include the decriminalization of marital rape and spousal sexual assault in certain African countries (West, 2016; Mugoya et. al., 2015), polygamy, and infidelity (Sabbah et. al., 2016).

Of course, it goes without saying that there is no monolithic African culture (Capps et. al., 2011). Furthermore, it is worth noting that, despite the shared history of transatlantic slave trade, a legacy of colonial domination, (Logan, 2007) and experiences of acculturation, foreign-born African immigrants in the U.S. represent a heterogeneous culture-sharing group with considerable variation in language, ethnic and national identities, social and religious functions, as well as family structures and cultural values (Oxtoby, 2012). These experiences are also fundamentally different from the lived experiences of native (U.S.) born people of African descent (Rumbuat, 2004). Therefore, in understanding IPV among first generation African immigrant populations, it is essential to consider the role of culture in the perception and experiences of IPV (Akinsulure-Smith et. al., 2013). This is especially crucial in the development of culturally responsive interventions to address IPV perpetration and acceptance attitudes within this population (Sokoloff & Dupont, 2005^b).

In addressing IPV, some researchers have noted that foreign-born Africans tend to adopt an informal and cultural conflict resolution processes that are rooted in structures similar to those in place in their countries of origin (West, 2016; Kalunta-Crumpton & Onyeozili, 2011). Rather than seeking help outside of the migrant community, Akinsulure-Smith et. al., (2013) described a hierarchal approach that involves going first to the family, elders and the religious leaders. However, in their attempts to address IPV at the community level, women often reported a lack of

favorable response relative to men, and they acknowledged not feeling supported by the structures put in place, which tend to maintain a hegemony of male privilege and dominance (West, 2016; Kalunta-Crumpton, 2013; Ting & Panchanadeswaran, 2009).

Patriarchy and IPV

Bowman (2003), in exploring IPV experiences among foreign-born Africans, noted that it was difficult to avoid interpreting IPV in Africa in terms of gender inequality as majority of the traditional African societies are patriarchal. So pervasive was the institutionalized patriarchy that it was reflected in customary laws that forbid women from land ownership or sharing properties with their husbands (Bowman, 2003; West, 2016). Not surprisingly, some studies have found increased risk for IPV with patriarchal ideologies of male privilege and dominance. (Kalunta-Crumpton, 2017; Kalunta-Crumpton & Onyeozili, 2011; Hunnicutt (2009)

Making a distinction between patriarchal structure and ideology in a seminal work on patriarchy and its varieties, Hunnicutt described the former as a hierarchical order that organizes systems in terms of endowing masculinity with a position of power and privilege, while placing women in subservient roles (Hunnicutt, 2009). Patriarchal ideologies on the other hand legitimizes structural patriarchy based on beliefs about the hegemony of male dominance exists, which are left unchecked in a system that perpetuates and maintains it (Hunnicutt, 2008; Kalunta-Crumpton, 2015). Simply put, the patriarchal hierarchical order that benefits men over women is largely reliant on “its acceptance by the many” (Dobash & Dobash, 1979, p. 43). Hunnicutt further argued that patriarchy cannot be seen as fixed or timeless, but this system of male domination and women subjugation takes on many forms in different contexts (Hunnicutt, 2009, p. 558).

The core concepts of patriarchy have been described as male domination and female subordination (Hattery, 2009; Hunnicutt, 2009). Particularly in the context of African immigrants, abusive men often kept their female partners isolated and deprived of the right to an education and other economic opportunities (Sabbah et. al., 2015; Sullivan et. al., 2005). In instances where the females held jobs outside of the home, they were still required to assume full responsibility for traditional female gender roles such as childcare and household duties (Ting & Panchanadeswaran, 2009). Studies have shown that many of the African women perceived their IPV experiences as borne out of their social positioning as women in a cultural context that supports and emphasizes patriarchal societal norms (Akinsulture-Smith et. al., 2013; Sullivan et. al., 2005).

Although patriarchy has been criticized as a theory for understanding IPV and gender-based violence (Hunnicutt, 2009), it may be applicable to the realities of African immigrants as it takes the focus from individual men who like to dominate to systems of oppression rooted in cultural and religious norms (West, 2016). Not surprisingly, studies have connected pervasive religiosity with IPV experiences among African immigrants, howbeit with inconclusive findings (Sullivan et. al., 2005; West, 2016).

Religion and African Immigrants

Religion, a multifaceted construct, is an important aspect of the lives of many African immigrants whose cultures and social norms are often intricately woven with religious beliefs and practices (Balogun & Akinola, 2015). However, the impact of religion on mental health or social wellbeing is not unique to African immigrants. In his seminal work on religion and prejudice, Gordon Allport (1960) made a distinction between mature and immature religion as he attempted to understand the positive

correlation between religion and prejudice. Allport believed that the increase in prejudice was linked to immature religion that was not adequately internalized (Cohen, Hall, Koenig, & Meador, 2005). He described the immature religion as more utilitarian – a means to an end, while the mature religion was considered to be functionally autonomous – religion as an end in itself (Cohen et. al., 2005; Allport, 1960).

Religious Orientation. Based on this premise, Allport explored the motives behind religious acts, practices, and commitments as he differentiated between intrinsic and extrinsic religious orientations – both of which were believed to exist as polar opposites on a linear continuum (Lavric & Flere, 2011). On the one hand, extrinsically motivated individuals are believed to use their religion as a means to some outcome, for example to gain social affiliation and acceptance in the community (Trimble, 1997). On the other hand, intrinsically motivated individuals are said to embody or live out their religious beliefs and convictions (Lavric & Flere, 2011; Flere & Lavric, 2007).

Extrinsic religious orientation was portended to be negatively correlated with mental health, while intrinsic religious orientation has been heralded as psychologically healthy (Flere & Lavric, 2007; Maltby, 2005). However, studies have shown that intrinsic orientation is not always associated with positive outcomes, and neither is extrinsic orientation constantly linked to psychological distress (Lew et. al., 2017). Further, the relationship between intrinsic and extrinsic orientations is not a mutually exclusive one as studies have found that individuals, referred to by Allport as indiscriminately proreligious, endorse both intrinsic and extrinsic orientations equally (Lavric & Flere, 2011).

Expanding on Allport's work, extrinsic orientation was further divided into two types: personal extrinsic and social extrinsic orientations (Trimble, 1997; Gorsuch & McPherson, 1989). Individuals who are personally extrinsically motivated tend to use religion to meet personal needs of safety and security, while social extrinsic motivation encompasses involvement in religion for social purposes such as making friends and being a part of a group (Flere & Lavric, 2007; Trimble, 1997). Nonetheless, a prevailing criticism of the extensive research on religious orientations challenges the westernized ideals of individualism in which these constructs appear to be entrenched, and the fact that the existing studies have been carried out on mostly religiously homogenous White American Protestant populations (Sanchez & Gilbert, 2016; Flere & Lavric, 2007; Cohen et. al., 2005).

To that end, extant studies have examined differences in religious orientations in culturally and religiously diverse populations with varying results that challenge the intrinsic-extrinsic dimensionality (Lew et. al., 2017; Sanchez & Gilbert, 2016; Lavric & Flere, 2011). In a study examining inter-cultural validity of religious orientation among four different cultural and religious settings: American Protestants, Bosnian Muslims, Serbian Orthodox, and Slovenian Catholics, there were no clear differences between personal extrinsic and intrinsic motivation. Extrinsic orientation was also found to be salient and associated with positive outcomes among non-Protestant populations (Flere & Lavric, 2007).

Allport's religious orientation framework has been found to be relevant among people of African descent, howbeit with some adaptations (Sanchez & Gilbert, 2016). In non-western cultures that value collective and communal religious rituals or practices,

both intrinsic and extrinsic religious orientations are endorsed as authentic motivation and genuine expression of religious faith (Sanchez & Gilbert, 2016; Lavric & Flere, 2011; Cohen et. al., 2005). Not surprisingly, religion is considered an integral part of many African communities and has been found to act as a buffer against stress (Gillum, Sullivan, & Bybee, 2006). However, religion could also be a source of psychological distress due to the need for strict conformity to ideals and beliefs (Laher, 2007; Maltby, 2005) that may be deleterious to mental health and social well-being, including attitudes that condone or overlook IPV and other gender-based violence (Attoh, 2017).

Religion and IPV. There have been conflicting results from the research on the relationship between religiosity and IPV (Berkel, Vandiver, & Bahner, 2004). Some studies have found a link between IPV and religiosity with fundamental Judeo-Christian beliefs and Islamic Sharia Law believed to directly, or indirectly through traditional gender roles and patriarchal ideologies, influence an increase in IPV perpetration and acceptance attitudes among African immigrants (Attoh, 2017). Others noted a decrease in IPV prevalence rates with regular attendance at religious services (Ellison, Trinitapoli, Anderson, & Johnson, 2007). Yet, some studies found no relationship between intrinsic or extrinsic religious motivation and IPV attitudes (Berkel et. al. 2004^a).

It is worth mentioning that in most of the literature, religion and spirituality are often used interchangeably, but some researchers have attempted to explicate the differences between these two terms (Berkel, Armstrong, & Cokley, 2004). In their study on IPV among mostly White, African American, and Hispanic women, Fowler and Rountree (2010) associated religion more with dogmas, shared norms, values, and beliefs involving a higher power. Spirituality, on the other hand, was described as “a

way of being, awareness of the transcendent, beliefs and practices around meaning and purpose in life, and interaction with a higher power” (Fowler & Rountree, 2010; p. 2).

Regarding the experiences of African immigrants, extricating religion from spirituality is a more complex process. African communities and cultures are steeped in religious norms and practices (Balogun & Akinola, 2015; Olayanju et. al., 2013). Many African migrant women come from countries where religion is central (Sullivan et. al., 2005), and they report utilizing faith, religion, and spirituality to cope with the burden of IPV (Ting & Panchanadeswaran, 2016). In exploring the complex interplay between religion and IPV, religion is often regarded as a double-edged sword as it can serve as a protective factor buffering against the adverse effects of IPV (Choi et. al., 2016).

However, religion has also been reported as a mechanism used by the perpetrators to keep the women subjugated in abusive situations, and to reinforce patriarchy (West, 2016). According to Choi et. al., (2016), religious beliefs are often used by abusers, families, friends, and the community to justify IPV, blame the women who experienced IPV, and encourage such women to forgive their abusers and remain in the abusive situations. In addition, fundamental religious beliefs have been associated with strict adherence to traditional gender roles, and both have been implicated in the pervasiveness of IPV (Kalunta-Crumpton, 2017; Klingorova & Havlicek, 2015).

Gender Roles Attitudes and IPV

Gender roles attitudes, as defined by the beliefs about appropriate roles for men and women, have been found to be one of the most consistent predictors of IPV acceptance attitudes (Berkel et. al. 2004). Gender roles attitudes can be conceptualized as existing on a continuum with traditional gender roles at one extreme, and more

egalitarian gender roles at the other end. Traditional gender roles refer to the stereotypical beliefs about an individual based on the assigned binary genders of male or female (McDermott & Lopez, 2013). Studies have found a direct linear relationship between traditional gender role attitudes and negative attitudes towards women or the acceptance of rape myths (McDermott et. al., 2017; McDermott & Lopez, 2013; Yick, 2007). A recurring theme in the literature is that individuals who had more stereotypical gender role attitudes were more likely to blame the victim, as well as endorse rape myths and the use of physical or sexual violence (Berkel et. al. 2004).

According to McDermott et. al. (2017), adherence to traditional masculine gender roles involves the rigid internalization of traditional masculine norms with dysfunctional outcomes, such as IPV perpetration and acceptance attitudes. Among African immigrants, this process is further complicated by the gender roles reversal, which sometimes occur with immigration when African immigrant women are placed at an economic advantage over their male partners (Kalunta-Crumpton, 2015). Studies have noted that women who experienced economic freedom with their immigration status were often at a greater risk for IPV (Akinsulure-Smith et. al., 2013). With access to the labor market and more earning power than their husbands, IPV is triggered and maintained by the loss of the male partners' culturally-sanctioned privileges and power (Kalunta-Crumpton, 2015). Not surprisingly, many of the victims of the intimate partner homicides among African immigrants were nurses by profession, who were also more financially solvent than their partners (Kalunta-Crumpton & Onyeozili, 2011).

Purpose of the Study

Based on the findings from previous research, an exploration of some factors that have been implicated in IPV perpetration and acceptance attitudes may add substantially to what is known about the experiences of IPV within African migrant populations in the U.S. The population of interest in the present study are first generation African immigrants, relative to second, third, or fourth generations that theoretically may be considered as descendants of the African immigrants (Stephenson, 2000). To that end, this present study examined the complex inter-relationships existing among factors presumably associated with the IPV attitudes held by African immigrants. Specifically, factors such as acculturation, ethnic identity, religious orientation, and patriarchal beliefs were explored in this study, as well as other demographic variables like gender, relationship status, education, income, religion, and length of stay in the U.S.

Research Questions

Due to the exploratory nature of this study, the following research questions were postulated in lieu of hypotheses.

Research Question 1. Among first generation African immigrants, what relationships exist, if any, among demographic variables (age, relationship status, gender, ethnicity, religion, education, income, length of stay in the U.S.), and overall IPV Attitudes?

Research Question 2. After controlling for relevant demographic variables, do acculturation strategies (cultural adoption and cultural maintenance), ethnic identity (exploration and commitment), religious orientation (intrinsic, personal extrinsic, and social extrinsic), and dimensions of patriarchal beliefs (institutional power of men,

inferiority of women, and gendered domestic roles) cumulatively and successively predict overall IPV Attitudes?

Research Question 3a. Given its salience in African cultural and religious norms, do patriarchal beliefs explain or mediate any existing relationship between acculturation strategies and overall IPV attitudes, after controlling for ethnic identity, religious orientation, and relevant demographic variables?

Research Question 3b. Given its salience in African cultural and religious norms, do patriarchal beliefs explain or mediate any existing relationship between ethnic identity and overall IPV attitudes, after controlling for acculturation strategies, religious orientation, and relevant demographic variables?

Research Question 4a. After controlling for relevant demographic variables and acculturation strategies, to what degree, if any, do religious orientation (intrinsic, personal extrinsic, and social extrinsic), and dimensions of patriarchal beliefs (institutional power of men, inferiority of women, and gendered domestic roles) moderate any relationship between ethnic identity (exploration and commitment) and overall IPV Attitudes?

Research Question 4b. After controlling for relevant demographic variables and for ethnic identity, to what degree, if any, do religious orientation (intrinsic, personal extrinsic, and social extrinsic), and dimensions of patriarchal beliefs (institutional power of men, inferiority of women, and gendered domestic roles) moderate any relationship between acculturation strategies (cultural adoption and cultural maintenance) and overall IPV Attitudes?

Research Question 5. What group differences, if any, exist among first generation African immigrants, in the three dimensions of IPV attitudes (emotional or psychological abuse, controlling behaviors, and physical violence) based on gender (male and female) and religious affiliation (Christianity, Islam, Spiritual/Traditionalist, and No Religion) after controlling for acculturation strategies, ethnic identity, religious orientation, and patriarchal beliefs?

Method

The target population for the study were individuals who self-identify as first generation immigrants from African countries that have lived in the U.S. for at least a year, who have some familiarity with the English language, and are above 18 years of age. There were no exclusion criteria or restrictions to participation based on gender identification or immigration status. Fitting with the goals and purpose of the study, participants were recruited using non-probability sampling method. Specifically, a combination of snowball and criterion purposeful sampling were utilized as such methods have been found to be useful when working with racial/ethnic minoritized populations (Salganik & Heckathorn, 2004).

Procedure

Upon receiving IRB approval, invitation to participate in the research was sent out to African associations, cultural and religious groups, as well as other immigrant organizations via e-mails, listservs, phone calls, and in-person visits. Web-based recruitment was carried out using online postings made in African and religious forums, on Facebook, Redditt, and other social networking groups. Interested participants were required to access the study using a link to an online survey platform (Qualtrics.com),

which hosted the informed consent, demographics questionnaire, and the measures for the study. The surveys were anonymous, except for the voluntary provision of email addresses by participants who chose to enter a drawing for one of ten twenty-five dollars amazon gift cards. All responses were saved on a secure and encrypted university server, supported by the research security guidelines of the University of Oklahoma.

Non-Mturk Group. Initially, 96 participants were recruited using the web-based recruitment method. However, based on a series of a priori power analyses conducted to estimate sample size, 144 to 224 participants would be needed to optimally examine the study's research questions using five predictors with statistical power levels ranging from .70 to .90, a significance level of .05, and a moderate effect size of .15 (Faul, Erdfelder, Buchner, & Lang, 2009). Consequently, a second group of participants were recruited using Amazon Mechanical Turk (MTurk), a crowdsourcing platform. To allow a comparison between groups for equivalence testing, web-based recruitment continued alongside MTurk recruitment. 204 participants were part of the first (NonMTurk) group, of which 24 responses were deleted due to missing data on one or more of the study's measures. A total of 180 participants were included in the NonMTurk group.

Mturk Group. Although still an emerging field, extant studies have supported the use of MTurk as a crowdsourcing mechanism for garnering participation in online research (Briones & Benham, 2017; Hauser & Schwarz, 2015). After registering as an MTurk requester (researcher), a series of custom tasks, known as *human intelligence tasks (HITs)*, were designed for potential participants who are also referred to as MTurk workers. Amazon MTurk allows for predetermined qualifications to be made such as

geographical location, which was set to allow only MTurk workers within the United States to participate (Briones & Benham, 2017).

A two-minute demographic survey was designed as a HIT with questions that allowed for screening MTurk workers for eligibility based on the study's criteria. Participants who qualified were given a second HIT containing the informed consent and a link to the study's survey on Qualtrics.com, as well as a random number generated code to be entered upon submission confirming MTurk worker statuses and HIT completion. Mean completion time for the study was 15 minutes. Based on the contractual agreement and average compensation for MTurk workers per minute (Briones & Benham, 2017), everyone who took the two-minute initial screener was paid .25 dollars, while those who participated in the study were compensated with additional 4 dollars.

A total of 346 MTurk workers took the initial demographic screener, but 111 responses were excluded for not meeting the study's criteria regarding identification as an African immigrant. Of the 235 MTurk workers that took part in the study, 55 responses were deleted due to missing data on one or more of the study's measures. Overall, 180 MTurk workers provided usable data that were included in the study. These participants made up the MTurk group (see Table 1 for demographics by recruitment group).

Participants

A total of 360 participants took part in the study (see Table 2). However, only 37.5% ($n = 135$) of the participants identified as first generation immigrants stating that they were born outside of the U.S. About 24% ($n = 86$) identified as second generation immigrants with either or both parents born outside of the U.S., 21.4% ($n = 77$) were third generation immigrants who had either or both grandparents born outside of the

U.S., while 16.7% (n = 60) identified as fourth generation immigrants with great-grandparents and beyond born outside of the U.S., and 0.6% (n = 2) participants declined to indicate what generation of immigration was most applicable.

First Generation Immigrants. Given the study's focus on first generation African immigrants, participants who identified as second, third, or fourth generation descendants of African immigrants were excluded from the study's primary analyses. Here is the breakdown of demographics for first generation immigrants (refer to Table 3). 51.9% (n = 70) of the participants identified as female, 45.2% (n = 61) as male, and 3% (n = 4) did not report gender. As for age, 43% (n = 58) participants reported their ages to be between 18 to 34 years, 47% (n = 64) were within the age bracket of 35 to 54 years, 8.9% (n = 12) were 55 years old and above, and .7% (n = 1) of the participants declined to provide their age.

When asked about relationship status, majority of the participants identified as married or partnered in committed relationships (60.7%; n = 82), 33.3% (n = 45) identified as single, and 5.9% (n = 8) participants identified as widowed, separated, or divorced. The majority of participants (67.4%; n = 91), identified their religion as Christianity, 13.3% (n = 18) reported religion as Islam, 9.6% (n = 13) endorsed African traditional religion or described themselves as spiritual, 8.9% (n = 12) reported being non-religious, while .7% (n = 1) did not provide any information about religion.

In terms of education, many of the participants reported having a post-graduate masters or doctorate degree (50.4%; n = 68). About 45% (61) had a bachelor's degree, 3% (n = 4) had a high school diploma or its equivalence, and 1.5% (n = 2) individuals did not report their education status. Regarding income, 7.4% (n = 10) participants reported their gross annual income to be below \$25000, about 21% (n = 28) reported income

within the range of \$26000 and \$49000, 36.3% (n = 49) of the participants reported income to be between \$50000 and \$99000, 34.1% (n = 46) reported their income to be 100000 dollars and above, while 1.5% (n = 2) participants declined to provide information about their annual income.

With regard to ethnicity, the majority of participants (87.4%; n = 118) identified as Black, Afro-Latinx or African American, 9.6% (n = 13) identified as mixed or multiracial, .7% (n = 1) identified as White African, and 2.2% (n = 3) did not provide any ethnicity beyond identifying as African immigrants. Regarding duration or length of stay in the U.S., 35.6% (n = 48) of the participants have lived in the U.S. for less than 10 years, another 35.6% (n = 48) have lived in the U.S. between 11 to 20 years, 19.3% (n = 26) have lived in the U.S. between 21 and 30 years, 5.9% (n = 8) participants have lived in the U.S. for more than 30 years, while 3.7% (n = 5) individuals did not report the number of years lived in the U.S.

Measures

Demographic questionnaire. Participants were asked to provide demographic information for the study such as self-identified gender, age, relationship status, religion, education level, household income, languages spoken, years lived in the U.S., generation of immigration, country of birth, and parents' country of birth.

Acculturation Questionnaire. Acculturation is a multidimensional construct consisting of a wide range of variables that can change independently (Celenk & Van de Vijver, 2011). As such, acculturation can be better understood by examining distinct aspects rather than combining the separate components into a single variable (Phinney & Flores, 2002). To that end, the acculturation questionnaire was developed based on

Phinney and Flores' (2002; pp. 321-327) method of "unpacking acculturation" by focusing on aspects of the acculturation process such as language proficiency and social networks. There were six questions in the acculturation questionnaire: the first two address to what extent the participant utilizes and is fluent in the English language, the second two questions asked about fluency and use of native language in everyday life, and the last two asked participants to endorse how true the following statements are: "*Most of my friends have mainstream Euro-American or non-African ethnic backgrounds*" or "*Most of my friends and I have similar African ethnic backgrounds.*" Participants were asked to rate their responses on a 5-point Likert-type scale ranging from 1 – (not at all or never/strongly disagree) to 5 (very well or always/strongly agree).

In scoring participants' responses, questions about English language and mainstream culture were reverse scored making up the *cultural adoption* subscale, while questions about native language and African ethnic culture made up the *cultural maintenance* subscale. Based on these scores, higher total scores on the acculturation questionnaire would indicate a preference for *cultural maintenance* (Native language proficiency/usage and similar African ethnic social networks) relative to *cultural adoption* (English language proficiency/usage and mainstream Euro-American or non-African social networks).

Multigroup Ethnic Identity Measure - Revised (MEIM - R; Phinney & Ong, 2007). The Multigroup Ethnic Identity Measure - Revised is a 6-item measure which assesses ethnic identity on two major dimensions or subscales: Exploration and Commitment (Phinney & Ong, 2007). The items are rated on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree), with two additional open-ended

items provided at the end inquiring about the participants' and their parents' self-identified ethnicities. Scores were calculated by the mean of the subscales and/or the mean of the whole scale, such that scores range from 1 to 5 for the overall scale and for the two subscales (Phinney & Ong, 2007). Higher scores on the subscales indicate higher levels of ethnic identity-exploration and/or ethnic identity-commitment, whereas higher scores on the overall scale represent a more positive ethnic identity.

The MEIM-R is an improvement on the original Multigroup Ethnic Identity Measure (MEIM), a 14-item measure developed to assess ethnic identity across ethnic groups (Phinney, 1992). Inconsistencies in the factor loading of items in the original MEIM necessitated a revision. In the MEIM-R, two items were added to increase the number of items on one subscale and an exploratory factor analysis was conducted that led to discarding items with factor loadings less than .40 (Phinney & Ong, 2007). MEIM-R retained the two-factor structure of the Exploration and Commitment scales with the internal consistencies of .76, .78 respectively and .81 for the combined 6-item scale. However, the authors cautioned for an assessment of measurement equivalency across ethnic groups (Phinney & Ong, 2007).

Since its development, several studies have been carried out using the MEIM-R (Yoon, 2011; Brown et. al., 2014; Chakawa, Butler, & Shapiro, 2015; Yap et. al., 2016). These studies have found measurement invariance across ethnically diverse populations suggesting that the MEIM-R could be used to measure and compare ethnic identity across multiple racial and ethnic groups (Brown et. al., 2014; Yoon, 2011). Furthermore, the MEIM-R has been used in a number of studies with the population of interest to this study – African immigrants and people of African descent with internal consistency

(Cronbach's α) ranging from .76 to .91 for the two scales and .81 to .89 for the overall scale (Yoon, 2011; Chakawa et. al., 2015; Yap et. al., 2016).

The Intimate Partner Violence Attitude Scale – Revised (IPVAS-R) is a revised version of the Intimate Partner Violence Attitude Scale (IPVAS). The IPVAS was originally developed and validated on a small, primarily Hispanic college student population (Fincham, Cui, Braithwaite, & Palsey, 2008). Consequently, the IPVAS-R was created using a more diverse sample of men and women. The IPVAS–R consists of 17 items assessing the degree to which respondents endorse the use of physical and psychological abuse in intimate relationships. The IPVAS–R measures acceptance of IPV in three domains: emotional or psychological abuse (*Abuse* - consisting of eight items e.g., “*During a heated argument, it is okay for me to bring up something from my partner’s past to hurt him or her;*” controlling behaviors (*Control* - five items e.g., “*It is okay for me to tell my partner not to talk to someone of the opposite sex.*”) and physical violence (*Violence* - four items e.g., “*It would never be appropriate to hit or try to hit one’s partner with an object.*” [reverse scored]). These items are rated on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*) and summed with scores ranging from 17 to 85. Higher scores indicate a greater endorsement of attitudes condoning IPV. The internal consistency coefficients for IPVAS–R and its subscales have been found to range from .68 to .91 (Fincham et al., 2008).

The Intrinsic-Extrinsic Religious Orientation Scale (I/E-ROS) is one of the most commonly used measures of religiosity, which captures different aspects of religious orientation, motivation and commitment (Berkel et. al., 2004). Originally developed by Allport and Ross, the Religious Orientation Scale (ROS) was created to

measure both intrinsic and extrinsic religious motivation (Allport & Ross, 1967). The original scale was made up of 20 items, 11 of which referred to intrinsic motivation and the remaining nine were related to extrinsic religious motivation (Trimble, 1997; Berkel et. al., 2004^b). The ROS has been criticized for poor psychometric properties and undertook several revisions over the course of time for these reasons (Flere & Lavric, 2007; Cohen et. al., 2005; Genia, 1993). A major revision involved the breakdown of the extrinsic scale into two subscales – personal extrinsic in which religion is utilized for personal gains, and social extrinsic involving the use of religion for social affiliation and to meet interpersonal needs (Trimble, 1997; Maltby & Lewis, 1996; Gorsuch & McPherson, 1989).

This present study makes use of the revised ROS (also known as the Intrinsic-Extrinsic Religious Orientation Scale – Revised (I/E-ROS; Gorsuch & McPherson, 1989). Some of the items were reworded to increase its applicability to diverse religions. The I/E-ROS consists of three subscales with 14 items. The first scale measures intrinsic motivation (I) for religion and is made up of eight items, such as *“I try hard to live all my life according to my religious beliefs.”* Three of eight items on the intrinsic motivation scale are reverse scored. The second scale measures personal extrinsic motivation (Ep) toward religion and is made up of three items for example, *“I pray mainly to gain relief and protection.”* The last scale measures social extrinsic motivation (Es) for religion and is also made up of three items, such as *“I go to my place of worship because it helps me to make friends”* (Gorsuch & McPherson, 1989).

Participants respond to the I/E-ROS items on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Total scores for the overall scale range

from 14 to 70 with higher score indicating a greater motivation for religiosity (Flere & Lavric, 2007; Trimble, 1997). On the intrinsic scale, scores can range from 8 to 40, with higher scores indicating more intrinsic attitudes (e.g. religion as a way of life). On the personal extrinsic motivation scale, scores can range from 3 to 15 with higher scores indicating that an individual is more likely to use religion for their personal benefit (e.g., comfort, peace). Similarly, the social extrinsic motivation scale has scores ranging from 3 to 15, with higher scores noting that a person is motivated by the social rewards of religion (Gorsuch & McPherson, 1989; Maltby, 2005). The I/E-ROS has been used in studies with people of African descent (Berkel et. al., 2004^b; Colbert, Jefferson, Gallo, & Davis, 2009), and the reliability coefficients for the three scales (I, Ep, Es) have been reported as .87, .66, and .70 respectively (Berkel et. al., 2004^a; Colbert et. al., 2009).

The Patriarchal Beliefs Scale (PBS) is a measure of patriarchal beliefs assessing patriarchal ideologies as well as systems of male domination and women subjugation at the micro, meso, and macro levels (Yoon et. al., 2015). The PBS is made up of 35 items, and a 5-point Likert scale was used to anchor responses from 1 (strongly disagree) to 5 (strongly agree) with scores ranging from 35 to 175. Higher scores on the PBS reflect greater endorsement of patriarchal beliefs (Yoon et. al., 2015).

In a study carried out to develop and validate the PBS, three correlated factors of the PBS were found. These three factors make up the subscales of the PBS, which include the institutional power of men, inferiority of women, and gendered domestic roles. (Yoon et. al., 2015). The first scale assessing the institutional power of men is made up of 12 items, for example *“I would feel more comfortable if a man was running the country’s finances.”* The second subscale related to the inferiority of women also

consists of 12 items, such as “*Women’s careers should be limited to traditional female jobs.*” The last scale is the gendered domestic roles, and it is made up of 11 items like “*A man should be the breadwinner*” (Yoon et. al., 2015).

Though relatively new, the development of the PBS consisted of several studies, which supported the 3-factor model (Yoon et. al., 2015). The PBS was also supported in relation to other measures assessing gender-related attitudes that are rooted in patriarchy. For example, the PBS was correlated in expected directions with modern sexism, antifeminist attitudes, and egalitarian attitudes toward women (Yoon et. al., 2015). The internal consistency estimates reported for the PBS total and three factor scores were Cronbach’s alphas of .97, .97, .95, and .96 respectively (Yoon et. al., 2015).

Operationalized Definition of Variables

The outcome variable in this study is Attitudes toward IPV – as measured by the Intimate Partner Violence Attitude Scale – Revised (IPVAS-R). Predictor variables are acculturation, ethnic identity, religious orientation, and patriarchal beliefs (see figure 3). Acculturation, with a focus on acculturation strategies as measured by the acculturation questionnaire, consists of the two dimensions of acculturation strategies - *cultural adoption* (English language proficiency/usage and mainstream Euro-American or non-African social networks) and *cultural maintenance* (Native language proficiency/usage and similar African ethnic social networks).

Ethnic identity, as measured by the Multigroup Ethnic Identity Measure - Revised (MEIM-R), consists of two subscales – exploration and commitment. Religious orientation, as measured by the Intrinsic-Extrinsic Religious Orientation Scale – Revised (I/E-ROS), consists of three subscales – intrinsic religious motivation, personal extrinsic

religious motivation, and social extrinsic religious motivation. Patriarchal beliefs, as measured by the Patriarchal Beliefs Scale (PBS), consists of three subscales - institutional power of men, inferiority of women, and gendered domestic roles. Lastly, gender, a demographic variable was also included as a predictor. Other relevant demographic variables such as age, education, income, religious affiliation, relationship status, length of stay in the U.S., and racial/ethnic group were included in the analyses and controlled for as covariates (generation of immigration was included in supplemental analysis).

Results

Preliminary Data Analysis

Two statistical software packages were utilized in this study – the Minitab Statistical Software (Minitab 19) was used for some of the preliminary data analysis, while the Statistical Package for the Social Sciences (SPSS) was used for both the preliminary and primary data analysis. After deleting responses with missing data on one or more of the study’s measures, an outlier analysis was carried out using multiple constructs, such as studentized residuals, Mahalanobis distance, Leverage values, and Cook’s distance statistics (Aguinis, Gottfredson, & Joo, 2013; Liao, Yanju Li, & Brooks, 2017). Altogether, Mahalanobis, Leverage, and Cook’s distance statistics identified 18 outliers, however, the studentized residuals scores were ≤ 2.96 , the recommended cut-off point for studentized residuals is $\geq \pm 3.0$ (Aguinis et. al., 2013). After examining them for errors in data input, the decision was made to include the identified outliers in the data set based on the recommended best practices for managing outliers as potentially valid data points (Aguinis et. al., 2013; Liao et. al., 2017).

Descriptive Statistics

Preliminary data analysis also consisted of using SPSS to calculate the percentages and frequencies of all relevant demographic data (gender, age, education, income, relationship status, religion, generation of immigration and length of stay in U.S., refer to Tables 1-3), as well as the mean, standard deviation, and range of scores for the key study variables (Acculturation, MEIM-R, ROS, PBS, IPVAS-R; see Table 4). The assumptions of normality, homogeneity of variance, and the linearity of distribution for all study variables, were assessed using histogram of the normal p-plot and scatterplot of standardized residuals, with no significant violation of these assumptions observed (refer to Figures 4 to 6).

Zero-Order Correlations

A matrix of zero-order correlations was generated to examine the relationships existing among the key variables in the study, and to test for multicollinearity. The results (see Table 5) showed there were small to moderate correlations between the outcome variable (IPVAS-R) and all predictor variables ($r \leq .59$), but small to no correlation among the predictor variables ($r \leq .323$). Furthermore, assumption of multicollinearity was not violated as the collinearity statistics were within acceptable limits (Tolerance $\geq .839$; VIF ≤ 1.19).

Reliability Estimates.

Internal reliability estimates, Cronbach's alpha values, were obtained for all the measures used in the study (see Table 6). The IPVAS-R measuring the outcome variable, attitudes toward IPV, had an internal consistency coefficient (Cronbach's α) of .95 for the overall scale and .95, .87, and .91 for the Abuse, Control, and Violence subscales

respectively. The acculturation questionnaire assessing acculturation strategies had marginal internal consistency coefficients: .45 and .54 for the cultural adoption and cultural maintenance subscales respectively, and .59 for the overall acculturation scale. This may be attributable to insufficient questions or poor interrelatedness among the items on the questionnaire due to the presence of two conceptually different bidimensional domains – cultural adoption and cultural maintenance (Tavakol & Dennick, 2011).

Further examination of the Cronbach's alpha values for the acculturation questionnaire showed that if the question "*Most of my friends have mainstream Euro-American or non-African ethnic backgrounds*" was removed from the cultural adoption subscale, the internal reliability estimate increases from .45 to .74. Also, if the question "*Most of my friends and I have African ethnic backgrounds*" was removed from the cultural maintenance subscale, the internal reliability estimate increases from .55 to .91 (see Table 6), bringing to question the utility of using preference for mainstream US or African friends as a means of assessing acculturation strategies.

The Cronbach's alpha values for MEIM-R, measuring ethnic identity, were .80 for the exploration subscale, .86 for the commitment subscale, and .87 for the overall scale. The Cronbach's alpha values obtained for the PBS, measuring patriarchal beliefs, were .98 for the institutional power of men subscale, .98 for the inferiority of women subscale, .96 for the gendered domestic roles subscale, and .98 for the overall PBS scale. The I/E-ROS assessing religious orientation had an internal consistency of .85 for the overall scale, .81 for the intrinsic orientation scale, while both the personal and the social extrinsic subscales had a Cronbach alpha value of .79.

Comparing the NonMTurk and MTurk groups

A total of 360 participants took part in the study from two different recruitment platforms – 180 from the NonMturk group and 180 from the Mturk group (refer to Procedure in Method section). Prior to examining the study's research questions, it was important to ascertain the homogeneity of the samples and the comparability of data obtained from web recruitment and the more non-traditional crowdsourcing recruitment using Amazon MTurk. This was carried out through equivalence testing. Table 7 provides the mean differences on study measures for the two groups.

Equivalence Testing

Null Hypothesis Statistical Testing (NHST) makes statistical inferences about how groups differ to a significant extent within set parameters and degrees of *no difference* confidence (Silva-Ayçaguer, Suárez-Gil, & Fernández-Somoano, A., 2010). The assumption here is that the groups are actually the same. The question underlying the premise of NHST focuses on the likelihood or chance of having a large difference of a predetermined amount if the two groups are the same (Briones & Benham, 2017). However, failure to reject the null hypothesis of *no difference* does not necessarily mean the groups are the same or *equivalent* (Tyron, 2001; Weigold, Weigold, & Russell, 2013; Briones & Benham, 2017).

On the other hand, equivalence testing starts with the assumption that the groups do differ. Borrowed from biomedical research, equivalence testing examines the likelihood of having a small difference of a predetermined amount if the two groups are actually different (Briones & Benham, 2017). Not to be assumed as merely the opposite of NHST, equivalence testing examines whether the differences between group are small

enough to be considered insignificant (Weigold et. al., 2013). Taken further, social science researchers describe different types of equivalence in self-report measures: qualitative, quantitative, and auxiliary equivalence (Van de Vijver & Harsveld, 1994; Weigold et. al., 2013). Quantitative equivalence refers to “similar mean scores and variances,” qualitative equivalence refers to “similar internal consistencies, intercorrelations, and/or factor structures,” while auxiliary equivalence focuses on supplemental areas such as “response rates and times, missing items, and comfort completing studies using various modalities” (Weigold et al., 2013 p. 56).

Quantitative Equivalence. Different statistical methods have been developed to test for quantitative mean equivalence such as the use of confidence intervals (Tyron, 2001), and the two one-sided independent samples t-test (Briones & Benham, 2017). More conservative approaches recommend combining a mean equivalence test with a NHST, and comparing the results with four potential outcomes: the mean equivalence test is significant and the NHST is not, which means the groups are equivalent; the mean equivalence is not significant and the NHST is, meaning the groups are not equivalent; both the mean equivalence test and the NHST are significant, which means the groups are similar with small differences, or both the mean equivalence test and the NHST are insignificant which, in this case, indicates that equivalence is inconclusive and cannot be determined (Weigold et. al., 2013). Following the guidelines above, NHST and mean equivalence tests were carried out on the two groups constituting the study’s sample.

Null Hypothesis Statistical Test (NHST). Independent samples t-tests were conducted using SPSS to compare the means of the NonMturk and Mturk groups (see Table 7) on the outcome variable (IPVAS-R) and the four predictor variables

(acculturation, MEIM-R, I/E-ROS, PBS). Mean equivalence tests were also carried out on Minitab 19 for all the study variables using the two one-sided independent samples t-test, also known as TOST procedure (Schuirmann, 1987; Lakens, 2017).

Two One-sided Independence Samples T-test (TOST). The initial step in equivalence testing involved the establishment of Delta (Δ) or equivalence interval, which is an a priori value of how far apart the two groups can be and still be considered equivalent (Briones & Benham, 2017; Weigold et. al., 2013). Given the absence of prior research on which Δ is usually based, it was determined to follow the numerical conventions in psychology by setting the Δ value to +/- 20% around the reference group (Briones & Benham, 2017; Weigold et. al., 2013), which in this case was the NonMTurk group. The results of the TOST (see Table 8) and NHST were compared to determine quantitative equivalence.

The results showed that statistical equivalence was found on the outcome variable, IPVAS-R, as the difference between the two group means was within the equivalence interval (*lower limit* -6.96 < **.95** < 6.96 *upper limit*, $p < .001$). Further, NHST had no significant effect, $t(358) = -.761$, $p = .447$, $d = .08$, despite the MTurk group having a slightly higher mean than the NonMturk group (see Table 7). As a result, equivalence can be assumed between the two groups on the outcome variable, IPVAS-R. Regarding the predictor variables, both groups had comparable means (see Table 7) with no significant effect on acculturation strategies, $t(358) = -.348$, $p = .728$, $d = .04$. Not surprisingly, the difference between the two means was also within the equivalence interval (*lower limit* -3.14 < **.12** < 3.14 *upper limit*, $p < .001$), meaning statistical equivalence could be claimed on acculturation strategies.

On the NHST for the I/E-ROS assessing religious orientation, Levene's test indicated unequal variances ($F = 14.67, p < .001$), so the degrees of freedom were adjusted from 358 to 330. The NonMturk group had a higher mean than the Mturk group (see Table 7) on the I/E-ROS, but there was no significant effect $t(330) = 1.802, p = .072, d = .19$. Further, assessing for statistical equivalence using TOST with equal variance not assumed revealed statistical equivalence between the two groups as the mean difference was within the equivalence interval (CI *lower limit* $-9.34 < -1.89 < 9.34$ *CI upper limit*, $p < .001$). The PBS, measuring patriarchal beliefs, showed no NHST significant difference in group means, $t(358) = -1.553, p = .121, d = .16$, even though the mean of the Mturk group was higher than the NonMturk group (see Table 7). Also, difference between the two means on the PBS was within the equivalence interval (*lower limit* $-14.52 < 5.2 < 14.52$ *upper limit*, $p < .001$), which indicated that statistical equivalence can be assumed between the two groups on the PBS.

On MEIM-R assessing ethnic identity, statistical equivalence was found for the two groups as the difference between the group means was within the equivalence interval (*lower limit* $-.768 < -.21 < .768$ *upper limit*, $p < .001$). However, NHST also showed a significant difference between the two groups, $t(358) = 2.486, p = .013, d = .27$, with the NonMTurk group having a higher mean than the Mturk group (see Table 7). Further examination of the NHST significant difference revealed a small effect size (Cohen's $d = .27$), indicating that while statistically significant, the difference between the two groups was small enough to be considered trivial (Maher, Markey, & Ebert-May, 2013; Cohen, 1994). Given these findings, the two groups were determined to be quantitatively equivalence on all major study variables (see Table 7).

Qualitative Equivalence. Qualitative equivalence was further examined using internal consistency (Cronbach's α) values per group for all the main study variables (refer to Table 9). Most of the variables had Cronbach's α values $\geq .80$. The exception was the acculturation questionnaire whose internal consistency values for the overall scale were marginal at .51 and .53 for the NonMTurk and the MTurk group respectively. As per guidelines from previous studies, internal consistency equivalence interval was defined as a difference of $< +/- .10$ (Weigold et. al., 2013; Meyerson & Tryon, 2003). The results showed equivalent internal consistency values for both groups on all of the study's main variables (see Table 9), indicating that qualitative equivalence can be assumed for the two groups across the study's key variables.

Auxiliary Equivalence. Lastly, the two group's distributions of demographic variables were examined for auxiliary equivalence using the Chi square test of homogeneity on the Minitab 19. The two group's distributions were found to be equivalent on some of the demographic variables but not on others. The exceptions were education, income, generation of immigration, and length of stay in the U.S., where statistically significant differences were found among the two groups with moderate to strong effect sizes ($.12 \geq \phi_c \leq .43$; see Table 1). Specifically, most of the participants in the NonMTurk group reported having a postgraduate degree and an annual income above \$100000. Further, majority of the participants in the NonMTurk group were first generation immigrants, while most of the participants in the MTurk group had lived in the U.S. for over 30 years.

The differences in demographics could be attributed to the MTurk group being more diverse than traditional college student populations (Briones & Benham, 2017;

Hauser & Schwarz, 2015). However, the web recruitment for the NonMTurk group may have provided a more representative sample of the recent wave of African immigrants in the U.S. who were more likely to have a bachelor's degree or higher (Anderson & Lopez, 2018). Nonetheless, the comprehensive equivalence testing revealed quantitative, qualitative, and mostly auxiliary equivalence. Therefore, it was determined that there was sufficient homogeneity between the NonMTurk and the MTurk groups. As a result, the two groups were combined as one sample group for the study's primary analyses.

Primary Data Analyses

As previously mentioned, given the study's focus on first generation immigrants, only a subset of the overall data from participants who identify as first generation immigrants was included in the study's primary analysis. The data was first examined to ensure that the assumptions of multivariate normality, homogeneity of variance, as well as linearity and multicollinearity were not violated. A correlational research design with moderation and mediation analyses was adopted in this study. The hierarchical multiple regression is the preferred statistical method for examining moderator effects when either the predictor or the moderator variable (or both) is measured on a continuous scale (Frazier, Tix, & Barron, 2004) as was the case with the Likert scales used in this study's instruments (IPVAS-R, acculturation questionnaire, MEIM-R, ROS, and PBS).

Hierarchical Multiple Regression

As shown in Table 10, a four-step hierarchical multiple regression analysis was used to examine how much of the variance in IPV attitudes was predicted by the demographic variables and other key variables of the study (acculturation, MEIM-R, I/E-ROS, and PBS). In step 1, after dummy coding the categorical variables, all pertinent

demographic variables (gender, age, relationship status, education, income, religion, ethnicity, and length of stay in the U.S.) were entered into the regression analysis. This was done to examine the relationship between these variables and IPV attitudes, as well as to control for relevant demographic variables in subsequent regression analysis. The key predictors were then entered in the order described below.

In step 2, scores from the acculturation questionnaire (acculturation strategies: *cultural adoption* and *cultural maintenance*) were added. Ethnic identity (*exploration* and *commitment*) was also added on to this step based on the literature identifying ethnic identity as an integral part of the multidimensional acculturation process (Phinney & Flores, 2002; Scwhartz et. al., 2010). Step 3 consisted of the addition of the subscales of religious orientation (*intrinsic*, *personal extrinsic*, and *social extrinsic* orientations), while in the final step, the dimensions of patriarchal beliefs (*institutional power of men*, *inferiority of women*, and *gendered domestic roles*) were added on. All variables were examined to see how much of the variance was predicted in overall IPV Attitudes.

Research 1. Block one of the four models in the hierarchical multiple regression was used in addressing the first research question, which examined the relationships between relevant demographic variables (age, relationship status, gender, religion, education, income, length of stay), and IPV Attitudes. The results indicated that the demographic variables contributed significantly to the regression model, $F(18, 116) = 5.02, p < .001$, and accounted for about 44% ($R^2 = .44$) of the variation in attitudes toward IPV among first generation African immigrants.

There was a response pattern of decreased IPV tolerant attitudes among first generation African immigrants who were younger in age (relative to those 55 years old

and above), single, divorced, or widowed individuals (relative to those in committed relationships), immigrants with a postgraduate degree and greater income (relative to those with a high school diploma and an annual income less than \$25000), who have lived in the U.S. for longer than 10 years, as well as immigrants who identified as White Africans of European ancestry (relative to Black Africans). However, upon further examination, there were no statistically significant effects among these demographic variables. This suggests that age, relationship status, education, income, ethnicity, and length of the stay in the U.S. did not significantly predict IPV attitudes. Instead, gender and religion were the only significant demographic predictors in the model.

Gender predicted about 17% of the variance in IPV attitudes, with females reporting less IPV condoning attitudes than males [$\beta = -.450$, $t(116) = -5.898$, $p < .001$, $pr^2 = .169$]. Religious affiliation accounted for additional 6% of the variance in IPV attitudes, with individuals who identified as Christians [$\beta = .277$, $t(116) = 2.304$, $p = .023$, $pr^2 = .002$], and Moslems [$\beta = .340$, $t(116) = 3.084$, $p = .003$, $pr^2 = .004$] reporting significantly more IPV tolerant attitudes than respondents who described themselves as having no religious affiliation.

Research Question 2. After controlling for relevant demographic variables, the second research question examined how much of the variance in IPV Attitudes was explained by acculturation strategies (*cultural adoption* and *cultural maintenance*), ethnic identity (*exploration* and *commitment*), religious orientation (*intrinsic*, *personal extrinsic*, and *social extrinsic*), and dimensions of patriarchal beliefs (*institutional power of men*, *inferiority of women*, and *gendered domestic roles*). The subsequent three blocks of the hierarchical regression analyses were used to address this question.

With the addition of acculturation strategies (*cultural adoption* and *cultural maintenance*) as well as ethnic identity (*exploration* and *commitment*) in block 2, the model significantly explained an additional 5% of the variation in IPV attitudes among first generation African immigrants after controlling for all relevant demographic variables, $\Delta F(4, 112) = 2.41, p = .054, \Delta R^2 = .05$. However, the acculturation strategies (*cultural adoption* – relative preference for U.S. host culture, and *cultural maintenance* – relative preference for African culture of origin) did not predict significant variance in IPV attitudes. Further, the exploration dimension of ethnic identity also did not predict significant variance in IPV attitudes (see Table 10). The commitment dimension of ethnic identity accounted for most of the variance (3.2%), and significantly predicted a decrease in IPV tolerant attitudes ($\beta = -.266, t(112) = -2.648, p = .009, pr^2 = .032$).

With the addition of the three aspects of religious orientation (*intrinsic, personal extrinsic, and social extrinsic*) in block 3, the model as a whole contributed significantly and explained another 5% of the variance in IPV attitudes, $\Delta F(3, 109) = 3.48, p = .018, \Delta R^2 = .05$. Within this model, personal and social extrinsic religious orientations did not significantly predict IPV attitudes. Instead, intrinsic religious orientation accounted for most of the variance in IPV attitudes (2.2%), and significantly predicted an increase in IPV tolerant attitudes ($\beta = .174, t(109) = 2.237, p = .027, pr^2 = .022$).

In the final step, the three dimensions of patriarchal beliefs (*institutional power of men, inferiority of women, and gendered domestic roles*) were added on to examine how much of the variance in IPV attitudes is accounted for by patriarchal beliefs, after controlling for all other variables including acculturation, ethnic identity, and religious orientation. Results showed that, as a whole, the model cumulatively and successively

predicted an increase in IPV tolerant attitudes, accounting for an additional 11% of the variance in IPV attitudes, $\Delta F(3, 106) = 10.99, p < .001, \Delta R^2 = .11$. Within this model, both the inferiority of women and the gendered domestic roles subscales were not significant predictors of IPV attitudes. However, the institutional power of men subscale predicted a significant increase in attitudes condoning IPV, and accounted for about 5.2% of the variance in IPV attitudes ($\beta = .526, t(106) = 3.919, p < .001, pr^2 = .052$).

Mediation and Moderation Analyses

Research Questions 3a and 3b. The study theorized that patriarchal beliefs would significantly mediate the relationship with IPV tolerant attitudes for both acculturation strategies and ethnic identity. However, the regression analyses did not reveal any significant relationship between acculturation strategies and IPV attitudes. Instead, there was a significant relationship between the commitment subscale of ethnic identity and IPV attitudes. As a result, a single mediation analysis was conducted with the commitment subscale of ethnic identity using the Model 4 of the Process macro v3.4 software developed for SPSS by Andrew Hayes (2017).

The premise of a mediation analysis is that the independent variable (X) predicts the mediator variable (M) and the dependent variable (Y). The mediator (M) also predicts the dependent variable (Y). However, when both the independent variable (X) and the mediator (M) are predicting (Y), there would be a decrease in the direct effect of X on Y due to the effect of the mediator (Hayes, 2017). Based on this premise, the *commitment* subscale of ethnic identity was entered into the mediation analysis as the independent variable, *patriarchal beliefs* (PBS) as the mediator variable, and *IPV*

tolerant attitudes (IPVAS-R) as the outcome variable (Hayes Process model 4, see figure 7), while all other key study variables were controlled for.

The results (Table 11) showed that the commitment subscale of ethnic identity significantly predicted a decrease in patriarchal beliefs, $b = -14.837$, $t(129) = -4.908$, $p < .0001$, as well as IPV tolerant attitudes, $b = -6.389$, $t(129) = -5.528$, $p < .0001$. Also, patriarchal beliefs significantly predicted an increase in IPV attitudes, $b = .2088$, $t(128) = 8.637$, $p < .0001$. However, when both ethnic identity and patriarchal beliefs were entered into the analysis, the commitment subscale of ethnic identity had an attenuated predictive effect on IPV attitudes, $b = -3.291$, $t(128) = -3.115$, $p = .0023$. Further, the test of the indirect effect of ethnic identity on IPV attitudes with the addition of patriarchal beliefs was significant, *Indirect* = -3.099, *SE* = .766, 95% CI [-4.756, -1.746]. Therefore, patriarchal beliefs partially mediated the relationship between the commitment subscale of ethnic identity and IPV tolerant attitudes.

Research Questions 4a and 4b. The study also sought to examine if religious orientation and patriarchal beliefs would together impact the direction or magnitude of the relationship with IPV attitudes for both ethnic identity and acculturation strategies. Seeing as there was no significant relationship between acculturation strategies and IPV attitudes, a single moderation analysis was conducted using the commitment subscale of ethnic identity as the predictor variable, and both religious orientation and patriarchal beliefs as moderator variables. This analysis was carried out using Model 3 of the Process macro v3.4 software developed for SPSS by Andrew Hayes (2017) to probe for three way interaction effects of ethnic identity, religious orientation, and patriarchal beliefs on IPV attitudes after controlling for all other relevant variables.

Subsequent to entering the four-step hierarchical regression model, the Process macro automatically mean centers the variables Commitment (ethnic identity), I/E-ROS (religious orientation) and PBS (patriarchal beliefs), and creates interaction terms by multiplying the predictor variable (Commitment) with the moderator variables (I/E-ROS and PBS) for the Process model 3 moderated moderation analysis (see figure 8).

The results of the moderation analysis (Table 12) revealed a non-significant highest order unconditional interaction, that is the three-way interaction of ethnic identity, religious orientation, and patriarchal beliefs ($p = .263$). The two way interaction effect of ethnic identity and patriarchal beliefs ($p = .188$) was also not significant. However, the two-way interaction effect of ethnic identity and religious orientation on IPV attitudes, $b = -.3263$, $t(124) = -2.8412$, $p = .005$ was statistically significant. There was also a significant two way interaction effect between religious orientation and patriarchal beliefs on IPV attitudes, $b = -.0076$, $t(124) = -2.2787$, $p = .024$.

The Johnson-Neyman technique was used to probe and provide clarity on the significant interaction. The results showed that IPV tolerant attitudes were highest when ethnic identity was low and both religious orientation and patriarchal beliefs were high. When patriarchal beliefs were low, an increase in ethnic identity at low, average, or high levels of religious orientation led to a decrease in IPV tolerant attitudes (see figures 6 and 7). However, when patriarchal beliefs were high, low religious orientation resulted in a reversal of the relationship between ethnic identity and IPV attitudes such that an increase in ethnic identity resulted in an accompanying increase in IPV tolerant attitudes. Interestingly, high religious orientation maintained the inverse relationship between ethnic identity and IPV attitudes even when patriarchal beliefs were high (see figure 8).

Therefore, it can be said that religious orientation moderated the relationship between ethnic identity and IPV attitudes by influencing the strength and direction of that relationship when patriarchal beliefs were high.

Multivariate Analysis of Covariance

Research Question 5. The study sought to further examine if the three dimensions of IPV attitudes (psychological/emotional abuse, physical violence, controlling behavior – hereafter referred to as Abuse, Control, and Violence) were differentially predicted by gender and religious affiliation when all other predictor variables have been controlled for.

A two-way multivariate analysis of covariance (MANCOVA) was conducted to investigate the combined influence of gender (i.e. male and female) and religious affiliation (Christianity, Islam, Spiritual/African Traditional Religion, and No Religion) on the three dimensions of IPV attitudes (Abuse, Control, and Violence) among African immigrants. A meaningful pattern of correlation was observed among the three dimensions of IPV – Abuse, Control, and Violence ($r \geq .483$), meeting the MANCOVA assumption of moderate correlations among dependent variables (Meyers, Gamst, & Guarino, 2006). However, the Box M's value assessing homogeneity of covariance was significant, indicating that equal covariance matrices between the group cannot be assumed, hence the use of Pillai's test, which is believed to be more robust (Adeleke, Yahya, & Usman, 2015).

The results of the multivariate analysis are presented in Table 13. There was a significant predictive relationship between the covariate patriarchal beliefs and scores on the IPV attitudes, *Pillai's Trace* = .264, $F(3, 116) = 13.849$, $p < .001$, $\eta^2 p = .264$.

However, acculturation, ethnic identity, and religious orientation had no significant effect on the three dimensions of IPV attitudes (Abuse, Control, and Violence).

The interaction effect of gender and religious affiliation on the three dimensions of IPV attitudes (Abuse, Control, and Violence) was nearing significance with a relatively large effect size, *Pillai's Trace* = .136, $F(9, 354) = 1.908$, $p = .055$, $\eta^2 p = .045$. There were also significant main effects for gender and religious affiliation. The results suggest that when the three dimensions of IPV attitudes (Abuse, Control, Violence) were examined, there were differences in the IPV attitudes endorsed by males and females across the religious affiliations ascribed to by the first generation African immigrants in this study, while controlling for the influence of acculturation strategies, ethnic identity, religious orientation, and patriarchal beliefs (refer to Table 13).

To elucidate the significant effects from the multivariate analysis, a series of univariate analysis of covariance (ANCOVA) were conducted on each of the three dimensions of IPV attitudes using Bonferroni adjusted alpha levels (.05/3). Homogeneity of variance assumption was considered met as the Levene's test of equality of variances was not significant for two of the three dimensions of IPV attitudes - Abuse and Control, with Violence as the exception. However, the ANCOVA was considered robust given the sample size ($N = 135$). The results of the univariate analyses (Table 14) showed that there were statistically significant differences in the three dimensions of IPV attitudes as a result of the covariates. Specifically, patriarchal beliefs had significant effects on all the three dimensions of IPV attitudes, while religious orientation only had a significant effect on the Control dimension of IPV.

When the covariates were controlled for, there was a significant interaction effect of gender and religious affiliation on the *Violence* dimension of IPV attitudes, $F(3, 118) = 2.98, p = .034, \eta^2 p = .070$, with males reporting more IPV acceptance attitudes than females, and significantly more so in the Islam group than the other three religious groups (refer to Table 15 for the adjusted means and standard deviations disaggregated by gender and religious affiliation). A closer look at the profile plots of estimated means (see Figure 9) showed that across all four religious affiliation groups, females reported less tolerant attitudes than males on each of the three dimensions of IPV attitudes, with the exception of the Spiritual/Traditional group where females seemed to endorse more tolerant attitudes on the Abuse dimension of IPV.

On its own, the main effect of gender was such that females significantly endorsed less IPV tolerant attitudes on the Control and Violence dimensions of IPV, but this difference was not significant for the Abuse dimension. Religious affiliation, on the other hand, only had a statistically significant effects on the Violence dimension of IPV attitudes (refer to Table 14). These findings indicate that the male and female participants in this study had the tendency to endorse each of the three dimensions of IPV attitudes differently across the four religious affiliation groups.

To better understand what these significant differences mean when each of the different dimensions of IPV attitudes were considered separately, simple contrast pairwise comparisons between gender and across religious affiliation were carried out with Bonferroni adjustment for multiple comparisons. Using males as the reference category, the results of the pairwise comparison of gender consisting of only two groups was similar to the univariate analysis of covariates. Females consistently reported less

IPV tolerant attitudes than males, especially on the Control and Violence dimensions of IPV attitudes.

Pairwise comparison of the significant main effects for religion showed that across the four religious affiliation groups, the Spiritual/Traditional group reported less IPV tolerant attitudes on each of the three dimensions of IPV relative to the other religious affiliation groups. However, there were no significant differences on two of the three dimensions of IPV across the four religious affiliation groups. The exception was the Violence dimension, where the Islam group endorsed significantly more IPV condoning attitudes than both the Spiritual/Traditional and the No Religion groups (see Table 15).

Discussion

Purpose of the Study and Theoretical Framework

The aim of the present study was to examine the complex relationships existing among factors previously associated with IPV tolerant attitudes held by first-generation African immigrants. Although extensive studies have explored the lived IPV experiences of African immigrants in the U.S., these studies have relied exclusively on qualitative methodologies (Sullivan et. al., 2005; Akinsulure-Smith et. al., 2013, Kalunta-Crumpton, 2013; West, 2016). Taking an exploratory stance, the present study uniquely contributes to the literature via quantitatively informed methodology. Specifically, the present study is designed to validate concepts initially generated through previous qualitative study, thus contributing to both depth and breadth of understanding.

Using the social ecological model of IPV as a framework (Heise, 1998; Smith et. al., 2014; Sabbah et. al., 2016), the study examined multiple eco-systemic factors. This

included personal factors such as demographic variables and individual attitudes toward IPV, interactions with community level variables like acculturation strategies, ethnic identity, and religious orientation, as well as overarching views and ideologies present in the society at large, such as traditional gender roles and patriarchal beliefs. A discussion of the study's findings is presented below.

Demographic variables and IPV attitudes

Qualitative studies, using focused groups and interviews, often cite economic stressors, low income, and low education levels as risk factors for prolonged IPV experiences among African immigrants (Kalunta-Crumpton & Onyeozili, 2011; Akinsulure-Smith et. al., 2013). The present study noted a similar response pattern of decreased IPV tolerant attitudes endorsed by first-generation African immigrants who were single, divorced or widowed, of younger age, with higher education and greater income, and who have resided in the U.S. for a longer duration (more than 10 years). However, upon further examination, this response pattern was not statistically significant. Thus, age, relationship status, education, income, and length of the stay in the U.S. were not considered significant predictors of IPV attitudes in this study. Of all the demographic variables examined, gender and religion were the only significant predictors of IPV tolerant attitudes.

Gender. Females were found to report significantly less IPV tolerant attitudes than males among the first generation African immigrants who participated in this study. This finding was consistent with studies in Western settings where men were found to consistently report more favorable attitudes toward IPV and rape myth acceptance than women (McCarthy, Mehta, & Haberland, 2018). No study till date has specifically

examined the role of gender in the IPV experiences of African immigrants. However, studies exploring the IPV experiences among lower income, developing African countries, found that females were more likely than males to justify or endorse more IPV condoning attitudes (Uthman, 2011; Ogunsiyi & Clisdell, 2017). In a multi-country study carried out by the World Health Organization, majority of the women seemed more likely to justify IPV and believed that women were supposed to adhere to traditional gender roles or abide by their partner's desires. Furthermore, acceptance of wife beating was found among women who had experienced IPV themselves (WHO, 2005).

The present study took a more nuanced look at IPV attitudes and its gendered dynamics. Females consistently reported less IPV tolerant attitudes on all the three dimensions of IPV; this was particularly true for controlling behaviors and physical violence. Further, when the combined effects of gender and religious affiliation were considered, males reported more IPV tolerant attitudes than females, and more so in the Islam group than the Spiritual/Traditional or No Religion groups.

Religion. Religion is an integral part of the lives of Africans all over the world, and the three main religious groups in the African continent are Christianity, Islam, and African Traditional religions (Aderibigbe, 2015). IPV attitudes across these three religious groups were compared in the present study. Using a No Religion group as a reference point, individuals who endorsed Christianity and Islam as their religious groups reported significantly more IPV tolerant attitudes. Further, when each dimension of IPV attitudes (emotional or psychological abuse, controlling behaviors, and physical violence) were examined individually, the religious groups differentially endorsed these attitudes. Interestingly, individuals who identified as spiritual or practitioners of African

traditional religion endorsed significantly less overall IPV tolerant attitudes than the other religious affiliation groups. Nonetheless, religion appears to increase the risk for IPV tolerant attitudes among first generation African immigrants.

Similar to the findings of the present study, previous studies have alluded to religion as a double-edged sword, promoting IPV-tolerant attitudes among African immigrants via Islamic Sharia Law and fundamental Judeo-Christian beliefs (Kalunta-Crumpton, 2017; Attoh, 2017; West, 2016). However, no study till date has compared IPV attitudes across religious groups for African immigrants. This may be due to the difficulties inherent in extricating religion from other aspects of African cultures (Aderibigbe, 2015; Balogun & Akinola, 2015; Olayanju et. al., 2013). Nonetheless, it is worth noting that in this study, individuals who identified as having no religion, or those who described themselves as spiritual and/or practitioners of the indigenous African religions endorsed lower overall IPV acceptance. It is probable that inherent in some of the more fundamental religions are dogmas, values, and shared beliefs that may present African immigrants as more susceptible to condoning IPV experiences (Fowler & Rountree (2010).

Sociocultural characteristics and IPV attitudes

Combining individual sociocultural characteristics with the interlocking systems at play, the present study examined the role of acculturation and ethnic identity in IPV attitudes. Acculturation was conceptualized similar to previous studies in terms of acculturation strategies - the immigrant's preferred style of relating to the host culture through cultural adoption or a relative preference for the culture of origin through cultural maintenance (Berry, 2005; Obasi & Leong, 2009; Schwartz et. al., 2010). Ethnic

identity, self-identification and level of commitment to one's ethnic groups, was also assessed in the study as part of the multidimensional construct of acculturation.

Acculturation. The findings of the present study showed that acculturation strategies were not significant predictors of IPV attitudes among first generation African immigrants. Using IPV attitudes as proxy for IPV experiences, this finding was contrary to a previous study, which found that more acculturated African immigrant women with a preference for U.S. mainstream cultural adoption were at greater risk for experiencing IPV (Nilsson et. al., 2008). In that particular study, African migrant women with greater proficiency in speaking English, greater independence, and self-sufficiency, were believed to threaten the status quo, challenging their male partner's control, and putting the women at greater risks for both psychological abuse and physical aggression (Nilsson et. al., 2008). This view has been documented in qualitative studies naming gender roles reversal among African immigrants as a risk factor for IPV (Akinsulure-Smith et. al., 2013; Kalunta-Crumpton, 2017). It is worth noting that this present study focused on IPV attitudes rather than the lived IPV experiences explored in the Nilsson et. al. (2008) study. Regarding acculturation as a multidimensional construct, ethnic identity was also examined, which provided some insights into the factors impacting the IPV attitudes endorsed by first generation African immigrants.

Ethnic Identity. Although subsumed in acculturation, the present study found a different pathway for the influence of ethnic identity on IPV attitudes. Two aspects of ethnic identity were examined in this study – exploration and commitment. Phinney (1996) conceptualized ethnic identity as a complex construct including positive evaluation of one's ethnic group, interest and participation in activities associated with

the group, as well as a sense of belonging and commitment to one's ethnic group.

Exploration and commitment are believed to be the two underlying processes in ethnic identity development (Phinney, 1996; Phinney, 2003).

Ethnic Identity: Exploration and Commitment. Exploration involves an interest and curiosity about one's ethnic group, while commitment has to do with a sense of belonging, identification, and an affective connection to one's ethnic group (Syed et. al., 2013). Studies have found differences in exploration and commitment in determining psychological well-being, with exploration sometimes seen as a negative predictor of self-esteem (Romero & Roberts, 2003), or having minimal association with well-being relative to commitment (Lee & Yoo, 2004).

Taken further, Syed et. al. (2013) identified two types of exploration – *search* involving a less concrete questioning or investigation into one's ethnic group, and *participation* consisting of direct engagement in the cultural traditions of one's ethnic group. These authors believed that *search*, as a form of exploration, had the tendency to be linked to negative outcomes because of the lack of guarantee that the search would translate into action in terms of ethnic identity development (Syed et. al., 2013). The authors further explained the difference between exploration and commitment in terms of *identity coherence*, clarity about and integration of one's sense of self, which is said to mediate the relationships between exploration or commitment and self-esteem (Syed et. al., 2013). It is believed that when exploration involves an ambivalent search, it often results in more questions and identity confusion, which is associated with poorer health outcomes (Syed et. al., 2013).

Ethnic Identity: Commitment as a Protective Factor. In the present study, the exploration aspect of ethnic identity was not a significant predictor of IPV attitudes. However, the commitment subscale was associated with significant decrease in IPV tolerant attitudes. Interpreting these findings in light of previous studies, ethnic identity commitment may serve a protective function for first generation African immigrants, making them less susceptible to the deleterious effects of patriarchal ideologies that normalize IPV within the culture and the society at large (West, 2016).

Ethnic Identity and Patriarchal beliefs. Patriarchy as a system of oppression has been theorized in previous studies as an explanatory mechanism for the increase in IPV tolerant attitudes among African immigrants (Akinsulure-Smith et. al., 2013; Kalunta-Crumpton, 2015). In this study, patriarchal beliefs partially mediated the relationship between ethnic identity and IPV attitudes. This finding was not surprising given the salience of patriarchal ideologies in African cultures (Bowman, 2003; West, 2016). Further, it quantitatively corroborated what has often been cited in qualitative studies, that African cultures are steeped in patriarchal systems of male domination and women subjugation. So ingrained are these ideologies that they are inadvertently transmitted through the established institutions in African societies, such as schools and religious establishments (Akinsulure-Smith et. al., 2013; Kalunta-Crumpton, 2017). Additionally, ethnic identity is often intricately linked to religiosity or motivation for engaging in religion among African immigrants (Ting & Panchanadeswaran, 2016).

Religious Orientation. The present study found that religious orientation could serve as both a risk and a protective factor against IPV condoning attitudes. On its own, religious orientation predicted an increase in IPV tolerant attitudes. Of the three aspects

of religious orientation examined in the present study, intrinsic religious orientation, involving embodying one's religion and integrating it into one's sense of self, was significantly linked to more endorsement of attitudes condoning IPV. These findings were contrary to studies identifying religiosity as a protective factor against IPV particularly for people of African descent (Ellison et. al., 2007).

Religious orientation and ethnic identity. Curiously, the present study found that religious orientation moderates the relationship between ethnic identity and IPV tolerant attitudes when the influence of patriarchal beliefs was accounted for. Higher levels of ethnic identity were associated with a decrease in IPV tolerant attitudes, especially when both religious orientation and patriarchal beliefs were low. However, when patriarchal beliefs were high and religious orientation was low, the protective quality of ethnic identity becomes attenuated. This results in an increase in IPV tolerant attitudes as ethnic identity increases. Nonetheless, ethnic identity remained a protective factor for those who endorsed high religious orientation in the presence of deeply rooted patriarchal beliefs. These findings indicate that both ethnic identity and religious orientation together may be protective factors, minimizing the tendency for African immigrants to justify or condone IPV attitudes and experiences.

Patriarchal Beliefs. A recurring theme in the literature documenting the IPV experiences of African immigrants is the influence of patriarchal ideologies. Similarly, the present study found that patriarchal beliefs underlined the interrelationships among ethnic identity, religious orientation, and IPV tolerant attitudes. It was not surprising to note the direct relationship between patriarchal beliefs and IPV attitudes, with increase in patriarchal ideologies resulting in an accompanying increase in IPV tolerant attitudes.

Interestingly, out of the three dimensions of patriarchal beliefs examined (institutional power of men, inferiority of women, and gendered domestic roles), gendered domestic roles and inferiority of women did not predict IPV attitudes. This was unexpected as previous studies have emphasized the impact of adherence to traditional gender roles (West, 2016) and gender roles reversal in the IPV experiences of African immigrants (Akinsulure-Smith et. al., 2013; Kalunta-Crumpton, 2017). It may be that the very premise of patriarchy as a system of oppression based on male domination and the institutional power of men is sufficient to account for its harmful impact on IPV attitudes and experiences.

Based on the findings of the present study, a second look at patriarchy as a theoretical base for understanding the IPV experiences of African immigrants may be warranted. While patriarchal beliefs can be reflected on a micro-level in the family systems and traditional gender roles (Sabbah et. al., 2015), studies have argued that patriarchal ideologies are prevalent in what is being transmitted via societal institutions such as the schools and religious institutions (Bowman, 2003; West, 2016). This may play a role in the close association between religious orientation and patriarchal beliefs observed in the present study.

A Colonial Legacy of Patriarchy. It is worth mentioning that some authors question the premise that precolonial African cultures were traditionally patriarchal in structure (Amadiume, 1987). Describing Africa as the matriarchal south, Amadiume (1997) insisted that most of Africa operated from a matriarchal kinship before colonialism forced patriarchy on the continent. Others posit that there was a form of patriarchy pre-existing in indigenous Africa that was “structured in a way that allowed

men and women to hold complimentary economic, social, and political positions” for the common good of all (Kalunta-Crumpton, 2015, p. 5).

This more egalitarian system was believed to have given way to European patriarchal ideologies of male domination and female subjugation as a result of colonialism. For many African countries during the European Imperial rule, more traditional gender roles were enforced with men tasked with working outside the home and females relegated to the role of the homemaker (Amadiume, 1997; Kalunta-Crumpton, 2015). The authors further noted that, beyond colonialism when the western world gravitated progressively toward a less patriarchal society, Africa retained the patriarchal roots bequeathed from the colonial era (Kalunta-Crumpton, 2015). Nonetheless, Africans today are socialized into a pervasive system of patriarchy.

Not surprisingly, immigrants coming from patriarchal African cultures are more likely to adhere to the patriarchal ideologies characterizing the social institutions in their home countries, which reinforce their understanding of gendered roles and IPV acceptance attitudes (Sullivan et. al., 2005; Akinsulure-Smith et. al., 2013; Kalunta-Crumpton, 2015; Kalunta-Crumpton, 2017). Consequently, even when they find themselves in a more egalitarian society, it is not uncommon for African immigrants, especially those utilizing cultural maintenance as an acculturation strategy, to operate by the patriarchal ideologies existing in their countries of origin (Kalunta-Crumpton, 2015).

Implications for Theory and Practice

Research Implications. The goals of the present study were exploratory in nature. Given the paucity of research on African immigrants and IPV, this study quantitatively adds to the existing literature documenting the lived IPV experiences of

this unique migrant group. The study's findings shed some light into the factors impacting the IPV attitudes endorsed by African immigrants living in the U.S. One of the challenges in studying IPV experiences among immigrants is understanding the role, if any, of acculturation. Extensive studies have documented the difficulties inherent in measuring the multidimensional construct of acculturation (Celenk & Van de Vijver, 2011; Schwartz et. al., 2010; Phinney & Flores, 2002; Phinney, 1996).

The present study addressed this challenge by including ethnic identity in understanding the acculturation experiences of African immigrants. An implication for research is the importance of having comprehensive and psychometrically sound measures for assessing acculturation and ethnic identity among diverse ethnic groups. Further, there are few measures currently assessing acculturation normed for use with people of African descent (Obasi & Leong, 2009). Future research is encouraged in test construction and development of items capturing the acculturation and ethnic identity experiences of African immigrants. The present study also emphasizes the need for more culturally diverse scholarship of IPV experiences among minoritized groups.

Furthermore, by focusing on attitudes, this study highlights an important approach to understanding and addressing the IPV experiences of African immigrants. Not only important at the individual level, attitudes play a vital role in the IPV responses of the community and society at large (Flood & Pease, 2009). However, more research is needed in exploring the connection between IPV attitudes and the actual lived IPV experiences of African immigrants. These implications go a long way in informing and guiding clinical practices and interventions.

Clinical Implications. There are some clinically relevant applications of the findings of this study. When working with African immigrants who have experienced intimate partner violence, a better understanding of their unique IPV experiences is essential for the provision of culturally competent and congruent services (Nasraddin, 2017; Kalunta-Crumpton, 2017; Ting & Panchanadeswaran, 2016). From challenging assumptions about the definitions and IPV experiences of African immigrants to identifying resources specific to this migrant group, multicultural competencies are important given the commitment of counseling psychology to social justice and advocacy (Crenshaw, 1991; Collins & Bilge, 2016).

Fostering resilience. It is important to avoid presenting the IPV experiences of African immigrants from a culturally-deficit model that tends to pathologize their experiences and place inherent deficiencies within the immigrants themselves and their culture (Gillum et. al., 2006; Kalunta-Crumpton, 2015). In this study, ethnic identity and religious orientation were both identified as potential protective factors against IPV tolerant attitudes. The resiliency that African immigrants bring to their host country can be fostered by focusing interventions at developing an integrative ethnic identity. Additionally, it may be important to integrate into clinical practice spirituality and/or some form of religious coping when working with African immigrants.

Socio-ecological approaches to prevention. The study also emphasizes the importance of taking an ecological approach to working with the IPV experiences of African immigrants. Gender specific and culturally responsive interventions may be appropriate at the individual level, specifically targeting males who may be more at risk for endorsing attitudes justifying and condoning IPV. At the multi-systemic level, there

is a need for soliciting support from communities and religious organizations that impact this migrant group (Alexander-Scott et. al., 2016). Community support and mentoring can be focused on promoting intimate partnerships based on mutual respect and trust.

Social norms and attitudinal change. Given the salience of religion among African immigrants, religious leaders and faith communities are vital to changing the IPV tolerant attitudes endorsed by African immigrants. Mental health professionals, in collaboration with communities and religious groups, can provide psychoeducation on healthy relationships within the family. Preventative services and program development can also be aimed toward social norms and attitudinal change. This may include addressing potential risk factors for IPV such as patriarchal ideologies. Further, religious, and cultural groups can be instrumental in creating healthier shared beliefs about what the typical and appropriate behaviors in relationships are (Alexander-Scott et. al., 2016). Ultimately, these approaches may be helpful in minimizing IPV tolerant attitudes and decreasing the IPV experiences among African immigrants in the U.S.

Limitations and Future Directions

There were some important limitations in this study that should be considered in interpreting its findings. The study's participants were first generation African immigrants from different African countries of origin with potentially dissimilar histories and languages, as well as diverse cultural traditions and norms. Although African immigrants have enough commonalities and shared experiences, grouping them together as if there was a monolithic African culture may obscure the nuances or within group differences. Future research may choose to explore the impact of country of origin

or the diverse languages and ethnic groups subsumed under the large umbrella of African immigrants.

Another limitation lies in the use of snowball sampling method, especially in getting participants for the NonMturk group, as well as the use of Amazon MTurk crowdsourcing platform. Although the two groups were found to be sufficiently equivalent to be combined as one group, there could be nuanced differences existing between groups, which could limit the generalizability of the study. There is also the potential for sample bias due to self-selection of participants to the study, which may not be fully representative of the population of interest further limiting the study's generalizability. It is worth noting that even though precautions were taken to minimize error arising from intentional or unintended ethnic misidentification as African immigrants, the veracity of participants' ethnicity could not be guaranteed especially among the MTurk group. Social desirability and the use of self-report inventories further present unique limitations in the study. The validity of the study's data depends on the participants honest responding to the items on the measures, which has the tendency to be skewed by social desirability responding.

One methodological limitation of the study that bears mention is the fact that the acculturation questionnaire used to assess acculturation strategies had low internal reliability estimates. Future studies are encouraged to use more psychometrically sound measures to better study acculturation in its multidimensionality. Another limitation lies in the study's use of a correlational research design, which precludes conclusions about causality. Specifically, in examining the relationships among the predictors of IPV attitudes in this study, including the role of patriarchal beliefs and religious orientation in

the mediation and moderation analyses, caution must be taken to avoid interpreting the results as indicative of causality. For example, high religious orientation was identified as a protective factor when combined with high ethnic identity. However, more research may be needed to identify which of the three aspects of religious orientation (*intrinsic*, *personal extrinsic*, and *social extrinsic*) uniquely contributes to the protective factor. Also, future studies should include additional variables in predicting more of the variance in IPV attitudes. One of such variables is social support, which has been reported to play a salient role in the IPV experiences of African immigrants living in the U.S. (Ting & Panchanadeswaran, 2009; West, 2016).

Lastly, the use of IPV attitudes as proxy for IPV experiences may present another limitation given that some studies have noted that attitudes do not consistently predict actual behavior (Ajzen & Fisbein, 2005). Despite the attitudes-behavior inconsistency, extant studies have found IPV attitudes to be good predictors of IPV experiences (McDermott & Lopez, 2013; Trott, Harman, & Kaufman, 2017). However, future research is needed in exploring the attitudes-behaviors connection of IPV among African immigrants.

Conclusion

In summary, the present study examined the interrelationships existing among acculturation strategies, ethnic identity, religious orientation, and patriarchal beliefs as significant predictors of attitudes toward intimate partner violence among first generation African immigrants living in the U.S. Ethnic identity, religious orientation, and patriarchal beliefs were found to be significant predictors of IPV attitudes. The study further explored the role of gender and religious affiliation in the IPV attitudes endorsed.

Females reported significantly less IPV tolerant attitudes across the four religious affiliation groups examined in the study. Also, compared to the Islam and Christianity religious groups, individuals who reported not having any religious group and those who described themselves as spiritual or practitioners of African Traditional religion reported significantly less IPV tolerant attitudes.

Further, there were differences based on gender and religious affiliation in the type of IPV attitudes endorsed by African immigrants – emotional or psychological abuse, controlling behaviors, or physical violence. The study did not find a significant connection between the preferred acculturation strategies and IPV attitudes endorsed by first generation African immigrants. Patriarchal beliefs explained some of the connection between ethnic identity and IPV attitudes.

By and large, ethnic identity was a protective factor against IPV tolerant attitudes. This was especially true when combined with high religious orientation in the presence of equally high and deeply rooted patriarchal beliefs. However, low ethnic identity seemed to expose the first generation African immigrants to the risk of increased IPV tolerant attitudes, especially when religious orientation was also low and patriarchal beliefs were high. Although exploratory, the findings of this study have the potential to inform future research and practice in unique ways by increasing understanding of what is known about the IPV experiences of African immigrants living in the U.S.

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Appendix A: Tables and Figures

Table 1
Demographic Variables and Chi Square Statistics for the Two Groups (N = 180)

Variables		NonMTurk	MTurk	Chi Square
		n (%)	n (%)	
Gender	Female	102 (56.7)	80 (44.4)	$\chi (2, N = 180) = 2.74, p = .25,$ $\phi_c = .12$
	Male	73 (40.6)	90 (50)	
	Missing	5 (2.8)	10 (5.6)	not significantly different
Age	18-34 yrs	93(51.7)	98 (54.4)	$\chi (2, N = 180) = 3.09, p =$.213, $\phi_c = .13$
	35-54 yrs	78 (43.3)	67 (37.2)	
	Above 55	8 (4.4)	15 (8.3)	not significantly different
	Missing	1 (.6)	0	
Relationship Status	Single	65 (36.1)	60 (33.3)	$\chi (2, N = 180) = 0.65, p = .72,$ $\phi_c = .06$
	Partnered	105 (58.3)	112 (62.2)	
	Divorced	10 (5.6)	8 (4.4)	not significantly different
Religion	Christianity	114 (63.3)	103 (57.2)	$\chi (3, N = 180) = 2.40, p = .60,$ $\phi_c = .12$
	Islam	19 (10.6)	17 (9.4)	
	Spiritual	19 (10.6)	22 (12.2)	not significantly different
	None	21 (11.7)	27 (15)	
	Missing	7 (3.9)	11 (6.1)	
Education	High School	12 (6.7)	21 (11.7)	$\chi (2, N = 180) = 33.40,$ $p < .001, \phi_c = .43$
	Bachelors	88 (48.9)	130 (72.2)	
	Postgraduate	77 (42.8)	28 (15.6)	significantly different
	Missing	3 (1.7)	1 (.6)	Moderate to Large effect size
Income	< \$25000	20 (11.1)	27 (15)	$\chi (3, N = 180) = 16.09, p$ $= .001, \phi_c = .30$
	\$26-49000	36 (20)	62 (34.4)	
	\$50-99000	66 (36.7)	62 (34.4)	significantly different
	> \$100000	55 (30.6)	29 (16.1)	Moderate to Large effect size
	Missing	3 (1.7)	0	
Generation of immigration	First	102 (56.7)	33 (18.3)	$\chi (3, N = 180) = 61.57, p$ $< .001, \phi_c = .58$
	Second	36 (20)	50 (27.8)	
	Third	19 (10.6)	58 (32.2)	significantly different
	Fourth	22 (12.2)	38 (21.1)	Moderate to Large effect size
	Missing	1 (.6)	1 (.6)	
Length of Stay in the U.S.	Below 10	42 (23.3)	19 (10.6)	$\chi (4, N = 180) = 51.95, p$ $< .001, \phi_c = .54$
	11-20 yrs	46 (25.6)	16 (8.9)	
	21-30 yrs	53 (29.4)	45 (25)	significantly different
	Above 30	32 (17.8)	90 (50)	Moderate to Large effect size
	Missing	7 (3.9)	10 (5.6)	

Table 2
Demographic Variables for All Study Participants (N = 360)

Demographic variables		N	%
Gender	Female	182	50.6
	Male	163	45.3
	Missing	15	4.2
Age	Btw 18 and 34 years	191	53.1
	Btw 35 and 54 years	145	40.3
	55 years and Above	23	6.4
	Missing	1	.3
Relationship Status	Single	125	34.7
	Partnered	217	60.3
	Other: Divorced/Widowed	18	5.0
Religion	Christianity	217	60.3
	Islam	36	10.0
	African Traditional/Spiritual	41	11.4
	None/Not Religious	48	13.3
	Missing	18	5.0
Education	High School/GED	33	9.2
	Bachelors	218	60.6
	Postgraduate	105	29.2
	Missing	4	1.1
Income	\$25000 and below	47	13.1
	\$26000 to \$49000	98	27.2
	\$50000 to \$99000	128	35.6
	\$100000 and above	84	23.3
	Missing	3	.8
Ethnicity	Black African	246	68.3
	Mixed	62	17.2
	White African	15	4.2
	Missing	37	10.3
Generation of Immigration ^a	First Generation	135	37.5
	Second Generation	86	23.9
	Third Generation	77	21.4
	Fourth Generation	60	16.7
	Missing	2	.6

Length of stay in the U.S.	Below 10 years	61	16.9
	Btw 11 to 20 years	62	17.2
	Btw 21 to 30 years	98	27.2
	Above 30 years	122	33.9
	Missing	17	4.7

^aFirst Generation – born outside of U.S., Second Generation – one of more parents born outside the U.S., Third Generation – one or more grandparents born outside the U.S., Fourth Generation – one or more great-grandparents and beyond born outside the U.S.

Table 3
Demographic Variables for First Generation Immigrants (N = 135)

Demographic variables		N	%
Gender	Female	70	51.9
	Male	61	45.2
	Missing	4	3.0
Age	Btw 18 and 34 years	58	43.0
	Btw 35 and 54 years	64	47.4
	55 years and Above	12	8.9
	Missing	1	.7
Relationship Status	Single	45	33.3
	Partnered	82	60.7
	Other: Divorced/Widowed	8	5.9
Religion	Christianity	91	67.4
	Islam	18	13.3
	African Traditional/Spiritual	13	9.6
	None/Not Religious	12	8.9
	Missing	1	.7
Education	High School/GED	4	3.0
	Bachelors	61	45
	Postgraduate	68	50.4
	Missing	2	1.5
Income	\$25000 and below	10	7.4
	\$26000 to \$49000	28	20.7
	\$50000 to \$99000	49	36.3
	\$100000 and above	46	34.1
	Missing	2	1.5
Ethnicity	Black African	118	87.4
	Mixed	13	9.6
	White African	1	.7
	Missing	3	2.2
Length of stay in the U.S.	10 years and below	48	35.6
	Btw 11 to 20 years	48	35.6
	Btw 21 to 30 years	26	19.3
	Above 30 years	8	5.9
	Missing	5	3.7

Table 4

Key Variables' Means, Standard Deviations, Range of Scores, Minimum and Maximum Values

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	<i>Min</i>	<i>Max</i>
Acculturation Questionnaire	360	24.24	3.57	6-30	13	30
MEIM-R (Ethnic Identity)	360	3.73	.790	1-5	1	5
I/E-ROS (Religious Orientation)	360	45.78	9.94	14-70	17	63
PBS (Patriarchal Beliefs)	360	74.91	35.24	35-175	35	171
IPVAS-R (IPV Attitudes)	360	35.28	12.10	17-85	17	61

Note - acculturation questionnaire consists of the two dimensions of acculturation strategies - *cultural adoption* (English language proficiency/usage and mainstream Euro-American or non-African social networks) and *cultural maintenance* (Native language proficiency/usage and similar African ethnic social networks).

Table 5

Zero Order Correlation Matrix for Key Variables

	2	3	4	5
1. IPVAS-R (IPV Attitudes)	.185**	-.121**	.339**	.592**
2. Acculturation	-	.190**	.166**	.169**
3. MEIM-R (Ethnic Identity)		-	.201**	-.075
4. I/E-ROS (Religious Orientation)			-	-.323**
5. PBS (Patriarchal Beliefs)				-

Multicollinearity: Tolerance \geq .839; VIF \leq 1.19

Note. *p < .05 (two tail). ** p < .001 (two tail).

Table 6.

Internal Reliability Estimates (Cronbach's alpha values) for Key Variables

		Cronbach's α
Acculturation Questionnaire	Cultural Adoption	.45
	Cultural Maintenance	.54
	Overall Scale	.59
	<i>Cultural Adoption (if Question about preference for friends from U.S. mainstream culture was deleted)</i>	.74
	<i>Cultural Maintenance (if Question about preference for African friends was deleted)</i>	.91
MEIM-R (Ethnic Identity)	Exploration	.80
	Commitment	.86
	Overall Scale	.87
I/E-ROS (Religious Orientation)	Intrinsic	.81
	Personal Extrinsic; Ep	.79
	Social Extrinsic; Es	.79
	<i>Extrinsic (Ep and Es)</i>	.83
	Overall Scale	.85
PBS (Patriarchal Beliefs)	Male Power	.98
	Women Inferiority	.98
	Gendered Roles	.96
	Overall Scale	.98
IPVAS-R (IPV Attitudes)	Abuse	.95
	Control	.87
	Violence	.91
	Overall Scale	.95

Table 7.

NHST Differences Between NonMTurk and MTurk Groups on Key Variables - Independent Samples T-test

	Non-MTurk		MTurk		<i>t</i> (358)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Acculturation	15.72	3.19	15.84	3.47	-.348	.728	.04
MEIM-R (Ethnic Identity)	3.84	.779	3.63	.790	2.486	.013**	.27
I/E-ROS (Religious Orientation)	46.72	8.36	44.83	11.25	1.802*	.072	.19
PBS (Patriarchal Beliefs)	72.03	34.48	77.79	35.84	-1.553	.121	.16
IPVASR (IPV Attitudes)	34.81	12.63	35.86	11.56	-.744	.457	.08

Note NHST – Null Hypothesis Significance Testing using Independent Samples T-test; *n* = 180 for each group; * I/E ROS Equal Variance not assumed *t*(330); **significant two-tailed

Table 8.

Equivalence Testing Between NonMTurk and MTurk Groups on Key Variables

	Difference	Equivalence Interval	$t(358)$	P	Decision
Acculturation	.12	$\leq -3.14,$ ≥ 3.14	9.29, -8.61	<.001	Equivalence Assumed
MEIM-R	-.21	$\leq -.77, \geq .77$	6.75, -11.83	<.001	Equivalence Assumed
I/E-ROS	-1.89	$\leq -9.34,$ ≥ 9.34	7.14, -10.75	<.001	Equivalence Assumed
PBS	5.76	$\leq -14.41,$ ≥ 14.41	5.44, -2.33	.01	Equivalence Assumed
IPVASR	.95	$\leq -6.96,$ ≥ 6.96	6.20, -4.71	<.001	Equivalence Assumed

Note. Equivalence Testing Using Two One-sided T-test; Reference Group is NonMTurk; Difference = Test Group – Reference Group; $n = 180$ * I/E ROS Equal Variance not assumed $t(330)$; **significant two-tailed

Table 9.

Internal Consistency for the Two Groups on Key Variables for Qualitative Equivalence

	<i>Cronbach's α</i>			<i>Decision</i>
	<u>NonMTurk</u> (N = 180)	<u>MTurk</u> N = 180)	<u>Difference</u> (<i>Equivalence</i> <i>Interval +/-1.0</i>)	
Acculturation	.51	.53	.02	Equivalence Assumed
MEIM-R	.88	.86	-.02	Equivalence Assumed
I/E-ROS	.80	.89	.09	Equivalence Assumed
PBS	.99	.98	-.01	Equivalence Assumed
IPVASR	.95	.95	0	Equivalence Assumed

Table 10.

Hierarchical Regression Analysis Model for First Generation Immigrants

Predictors	Unstandardized		Standardized		<i>p</i>	<i>pr</i> ²	Model Stats
	<i>b</i>	<i>SE</i>	β	<i>T</i>			
Gender: Female	-10.731	1.820	-.450	-5.898	<.000*	.169	Model 1 Fit Demographics F (18,116) = 5.02, <i>p</i><.001, R² = .44
Relationship: Single	-1.574	2.218	-.062	-.710	.479	.002	
Relationship: Other	-2.564	4.383	-.044	-.585	.560	.002	
Education: Bachelor's	.612	4.379	.026	.140	.889	<.001	
Education: Graduate	-2.500	4.595	-.105	-.544	.587	.001	
Income: Btw25and49	-3.839	3.468	-.131	-1.107	.271	.006	
Income: Btw50and99	-4.597	3.368	-.186	-1.365	.175	.009	
Income: Above100	-6.421	3.517	-.256	-1.825	.070	.016	
Age: Btw18and34	-3.076	3.527	-.128	-.872	.385	.004	
Age: Btw35and54	-1.903	3.255	-.080	-.585	.560	.002	
Ethnicity: Mixed	5.567	3.022	.138	1.842	.068	.016	
Ethnicity: White African	-5.571	10.155	-.040	-.549	.584	.001	
Duration11and20yrs	-1.467	2.297	-.059	-.639	.524	.026	
Duration21and30yrs	-2.187	2.400	-.072	-.911	.364	.046	
DurationAbove30yrs	-2.256	4.093	-.045	-.551	.583	.001	
Christianity	7.042	3.057	.277	2.304	.023*	.002	
Islam	11.890	3.855	.340	3.084	.003*	.004	
Spiritual/Traditional	1.911	3.983	.047	.480	.632	.001	
Acculturation							Model 2 Fit Acculturation $\Delta F (4,112) =$ 2.41, <i>p</i> = .054, $\Delta R^2 = .05$
Cultural Adoption	-.093	.628	-.011	-.148	.883	<.001	
Cultural Maintenance	.526	.339	.122	1.549	.124	.001	
Ethnic Identity							Model 3 Fit Religious Orientation $\Delta F (3,109) =$ 3.48, <i>p</i> = .018, $\Delta R^2 = .05$
Exploration	2.079	1.242	.167	1.675	.097	.013	
Commitment	-3.532	1.334	-.266	-2.648	.009*	.032	
Religious Orientation							Model 4 Fit Patriarchal Beliefs $\Delta F (3,106) =$ 10.99, <i>p</i> < .001, $\Delta R^2 = .11$
Intrinsic	.367	.164	.174	2.237	.027*	.022	
Personal Extrinsic	.494	.369	.115	1.337	.184	.008	
Social Extrinsic	.326	.386	.068	.845	.400	.003	
Patriarchal Beliefs							Model 4 Fit Patriarchal Beliefs $\Delta F (3,106) =$ 10.99, <i>p</i> < .001, $\Delta R^2 = .11$
Male Superiority	.457	.117	.526	3.919	.000*	.052	
Women Inferiority	-.080	.132	-.076	-.604	.547	.001	
Gendered Roles	.076	.121	.081	.630	.530	.001	

Note. Other – divorced, separated, or widowed; *SE* = Standard error of *b*; significant at $p \leq .05$; the pr^2 given is the squared partial correlation

Table 11.

Hayes Process Model 4 Mediation Analysis - Commitment Subscale of Ethnic Identity

	Model	<i>t</i>	<i>P</i>	<i>b</i>	SE	LLCI	ULCI
X predicting M							
Commit and PBS	<i>F</i> (5,129) = 9.25, <i>p</i> <.0001, <i>R</i> ² = .21	-4.908	<.0001*	-14.837	3.023	-20.818	-8.856
M predicting Y							
PBS and IPV	<i>F</i> (6,128) = 36.77, <i>p</i> <.0001, <i>R</i> ² = .54	8.637	<.0001*	.2088	.024	.1610	.2567
X predicting Y							
(Total Effect) Commit and IPV	<i>F</i> (5,129) = 15.69, <i>p</i> <.0001, <i>R</i> ² = .25	-5.528	<.0001*	-6.389	1.156	-8.676	-4.103
(Direct Effect) Commit and IPV	<i>F</i> (6,128) = 36.77, <i>p</i> <.0001, <i>R</i> ² = .54	-3.115	.0023*	-3.291	1.056	-5.381	-1.201
Indirect effect of X on Y indicating mediation							
Commit and IPV via PBS				-3.099*	.766	-4.756	-1.746

Note. Predictor variable: commitment subscale of ethnic identity, Mediator variable: PBS, Outcome variable: IPVASR; *b* = unstandardized coefficients, SE = Standard error of *b*, LLCI = Lower Limit Confidence Interval, ULCI = Upper Limit Confidence Interval, * significant *p* <.05

Table 12.

Hayes Process Model 3 Moderation Analyses

Predictors	<i>b</i>	<i>SE</i>	<i>t</i>	<i>P</i>	LLCI	ULCI
Ethnic Identity Commit (MEIM-R)	-3.023	1.0777	-2.8050	.0058*	-5.1559	-.8898
Religious Orientation (I/E-ROS)	.0810	.1212	.6687	.5049	-.1588	.3208
Interaction 1 (MEIM-R * I/E-ROS)	-.3263	.1149	-2.8412	.0053*	-.5537	-.0990
Patriarchal Beliefs (PBS)	.2351	.0275	8.5447	<.0001*	.1807	.2896
Interaction 2 (MEIM-R * PBS)	.0366	.0277	1.3228	.1883	-.0182	.0913
Interaction 3 (I/E-ROS * PBS)	-.0076	.0033	-2.2787	.0244	-.0142	-.0010
Interaction 4 Three-way (MEIM-R * I/E-ROS * PBS)	-.0035	.0031	-1.1246	.2629	-.0096	.0026
Model Summary			$F(10,124) = 44.31, p < .0001, R^2 = .564$			
Test of 3-way Interaction			$\Delta F(1,124) = 1.265, p = .2629, \Delta R^2 = .003$			

Note. N = 360; Predictor variables: acculturation strategies (Acculttotal) and ethnic identity (MEIM-R), Outcome variable: IPV attitudes (IPVASR); Moderator variables religious orientation (I/E-ROS) and patriarchal beliefs (PBS); *b* = unstandardized coefficients, SE = Standard error of *b*, LLCI = Lower Limit Confidence Interval, ULCI = Upper Limit Confidence Interval, * significant $p < .05$

Table 13.

Results of Two-Way Mancova Gender and Religious Affiliation

	<i>Pillai's Trace</i>	<i>F</i>	<i>Df1</i>	<i>Df2</i>	<i>p</i>	η^2p
Gender*Religion	.136	1.872	9	354	.055	.045
Gender	.089	3.758	3	116	.013	.089
Religion	.187	2.613	9	354	.006	.062
Acculturation	.018	.727	3	116	.538	.018
Ethnic Identity	.042	1.705	3	116	.170	.042
Religious Orientation	.037	1.487	3	116	.222	.037
Patriarchal Beliefs	.264	13.849	3	116	<.001	.264

Note. Pillai's Trace value – multivariate test; Df1 – hypothesis degrees of freedom; Df2 – degrees of freedom error; η^2p – partial Eta squared

Table 14.

Results of Univariate Analysis of Covariance

	Abuse			Control			Violence		
	<i>F</i>	<i>P</i>	<i>np</i> ²	<i>F</i>	<i>p</i>	<i>np</i> ²	<i>F</i>	<i>p</i>	<i>np</i> ²
Gender*	1.84	.144	.045	.361	.782	.009	2.98	.034**	.070
Religion									
Gender	1.42	.236	.012	5.59	.020*	.045	8.58	.004*	.068
Religion	.90	.443	.022	.23	.878	.006	6.87	<.001*	.149
Accult.	1.33	.252	.011	.06	.803	.001	.47	.492	.004
Ethnic Identity	2.27	.134	.019	.04	.847	<.001	2.69	.104	.022
I/E-ROS	.89	.347	.035	4.40	.038*	.039	.66	.418	.014
PBS	40.50	<.001*	.256	13.64	<.001*	.104	5.89	.017*	.048

Note. η^2p – partial Eta squared; **interaction effect significant $p < .05$; *main effects significant $p < .05$
 Accult, = Acculturation, I/E-ROS = Religious Orientation; PBS = Patriarchal Beliefs

Table 15.

Descriptive Statistics for Key Variables by Gender and Religion

Estimated Marginal Means by Gender and Religion								
	Male M (SD)				Female M (SD)			
	Christian N = 46	Islam N = 8	Tradition N = 3	None N = 4	Christian N = 42	Islam N = 10	Tradition N = 9	None N = 8
Abuse	19.78 (.87)	20.29 (1.96)	13.25 (3.03)	19.73 (2.60)	17.38 (.87)	15.99 (1.70)	18.06 (1.82)	14.83 (1.94)
Control	12.33 (.59)	11.63 (1.32)	11.52 (2.04)	13.18 (1.75)	10.55 (.59)	10.23 (1.14)	9.70 (1.22)	9.12 (1.30)
Violence	5.91 (.33)	9.78** (.74)	5.76 (1.14)	6.82 (.98)	5.63 (.33)	6.65 (.64)	5.03 (.69)	4.67 (.73)

	Estimated Means by Gender		Estimated Means by Religion			
	Gender M (SD)		Religion M (SD)			
	Male N = 61	Female N = 69	Christian N = 88	Islam N = 18	Tradition N = 12	None N = 12
Abuse	18.26 (1.12)	16.57 (.84)	18.58 (.56)	18.14 (1.33)	15.66 (1.80)	17.28 (1.62)
Control	12.16 (.75)	9.90 (.57)*	11.44 (.38)	10.93 (.90)	10.61 (1.21)	11.15 (1.09)
Violence	7.07 (.42)	5.49 (.32)*	5.78 (.21)	8.22 (.50)*	5.40 (.68)*	5.74 (.61)

Note. **interaction effect significant $p < .05$; *main effects significant $p < .05$

Social-Ecological Model for IPV

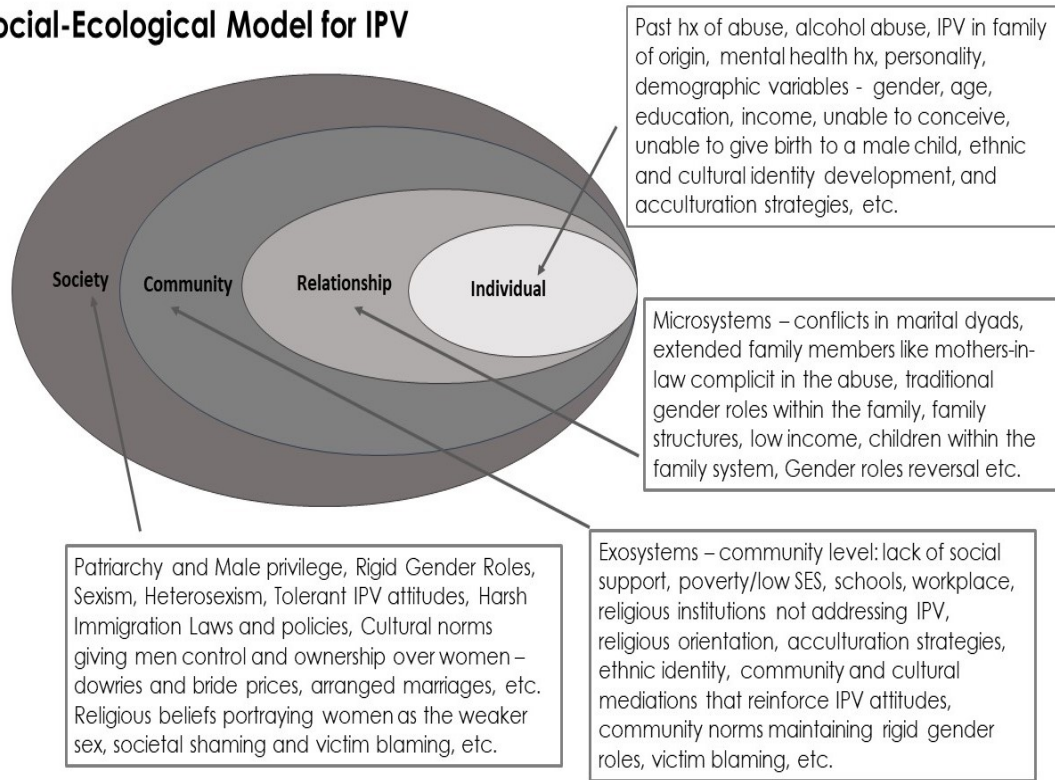


Figure 1. Social Ecological Model of IPV adapted from Laure Heise (1998)

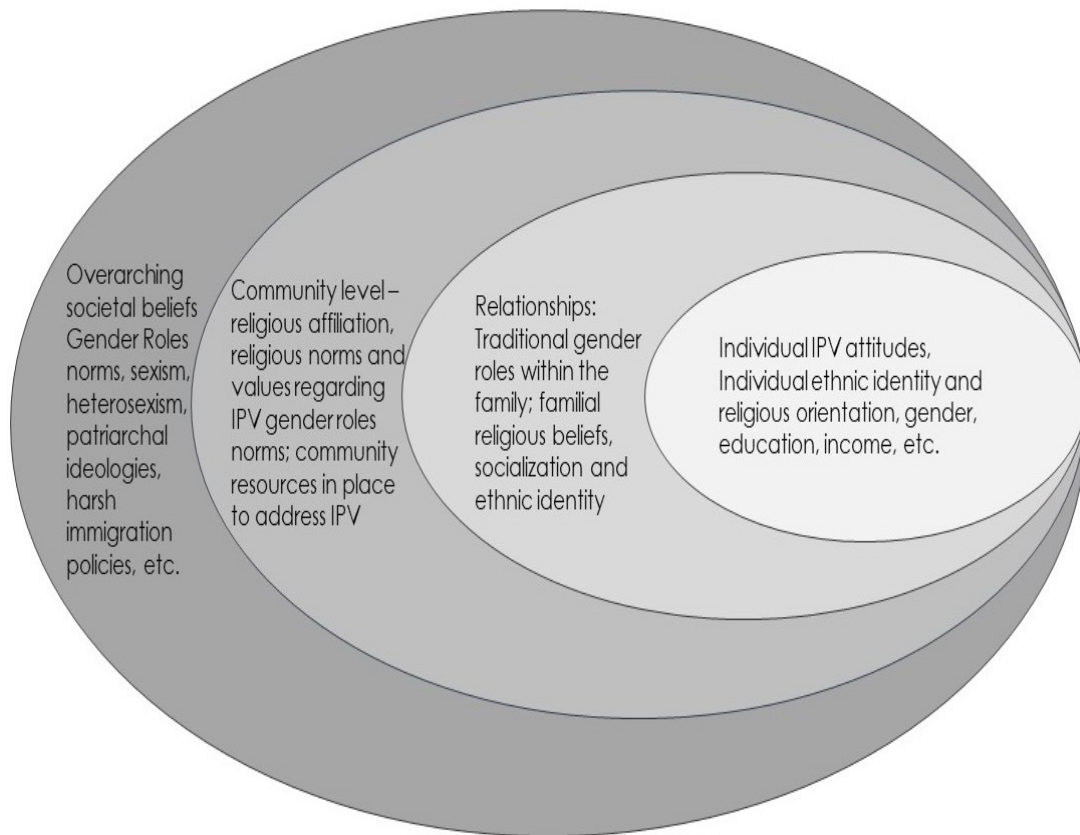


Figure 2. Key Study Variables in the Social Ecological Model of IPV

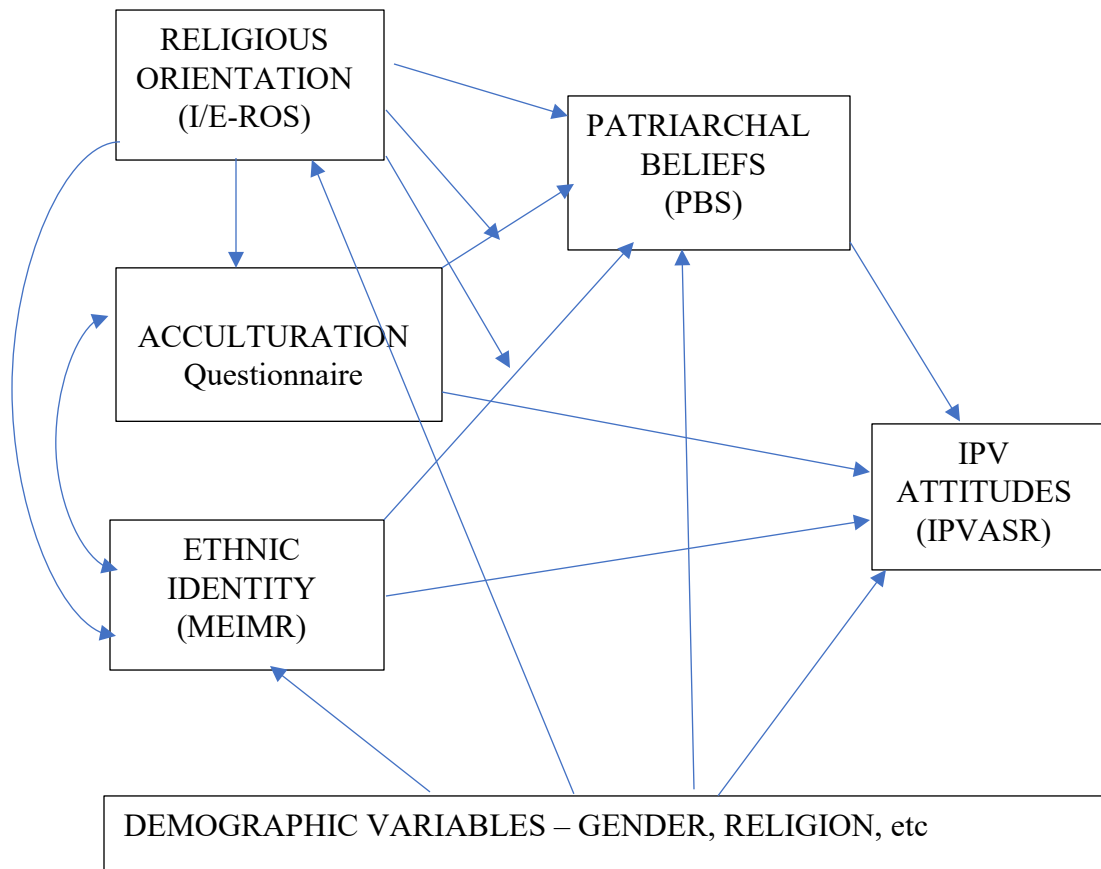


Figure 3. Operationalized Key Study Variables and Conceptual Model

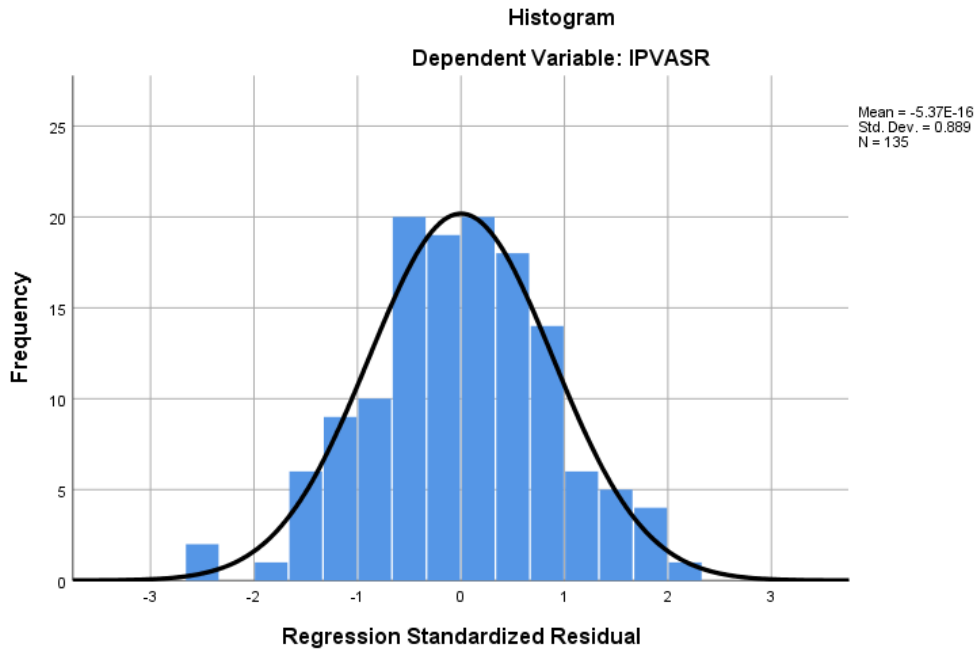


Figure 4. Histogram of Regression Standardized Residual

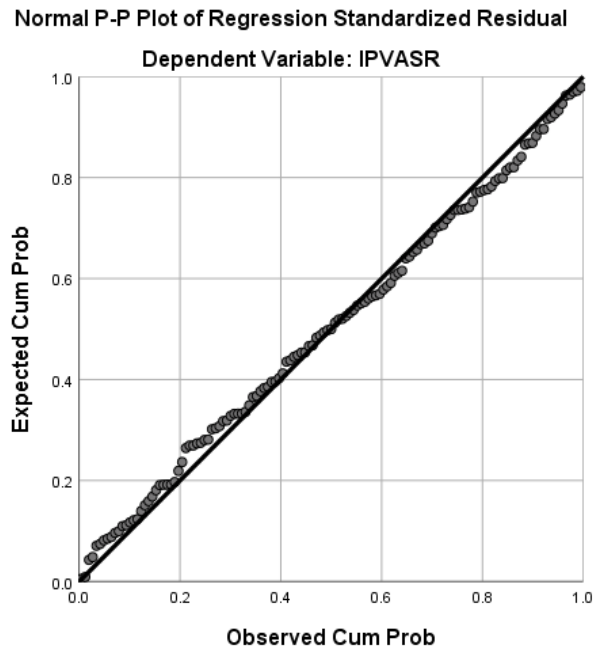


Figure 5. Normal P-Plot of Regression Standardized Residual

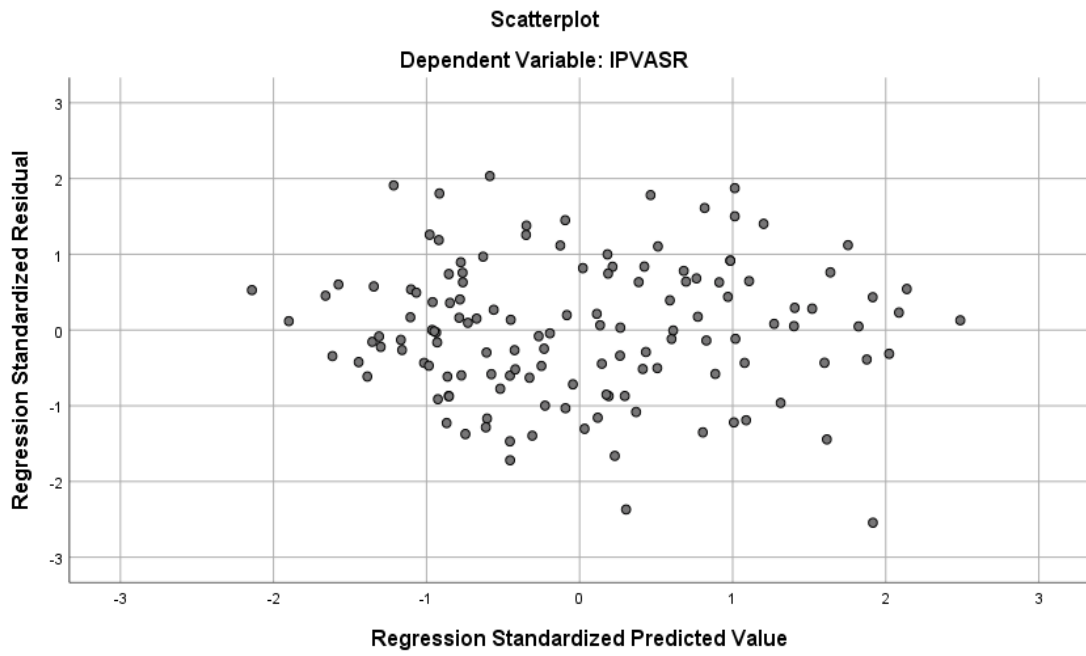


Figure 6. Scatterplot Regression Standardized Residual

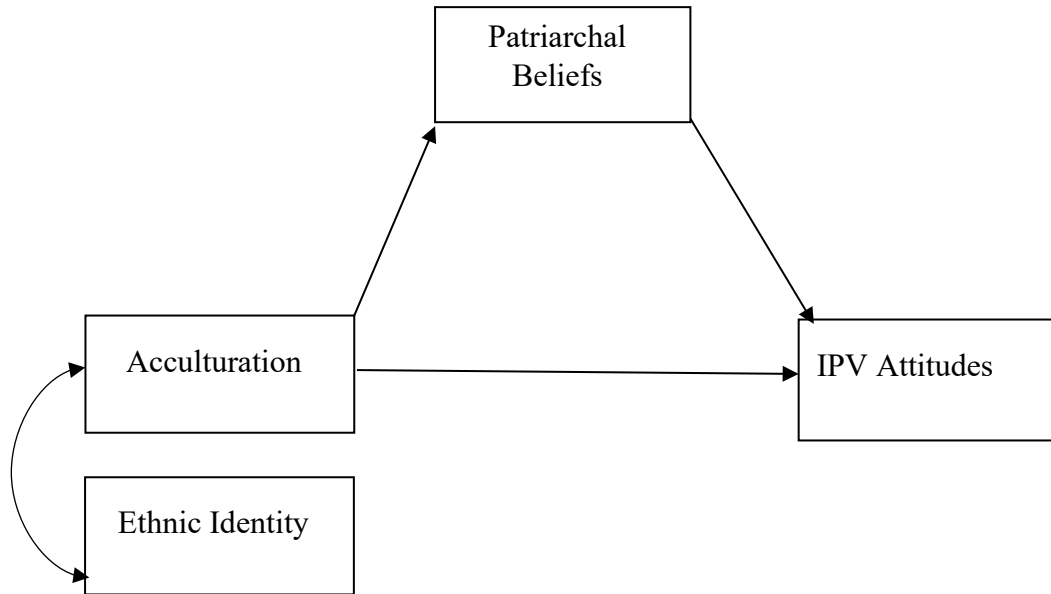


Figure 7. Hayes Process Model 4 Mediation Analysis Conceptual Diagram

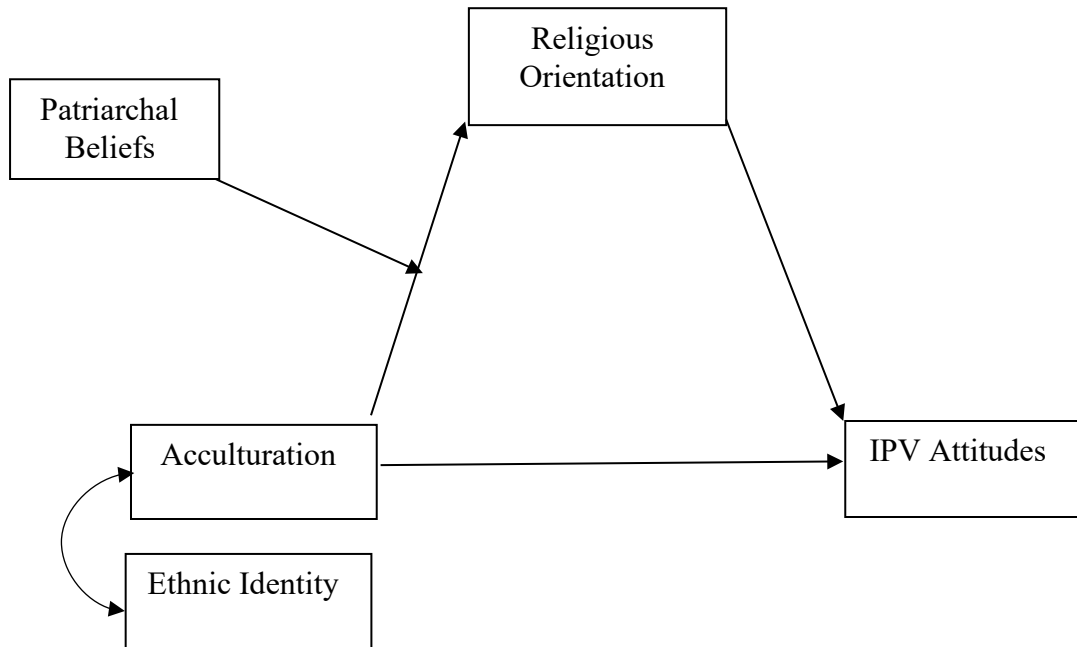


Figure 8. Hayes Process Model 3 Moderated Moderation Analysis Conceptual Diagram

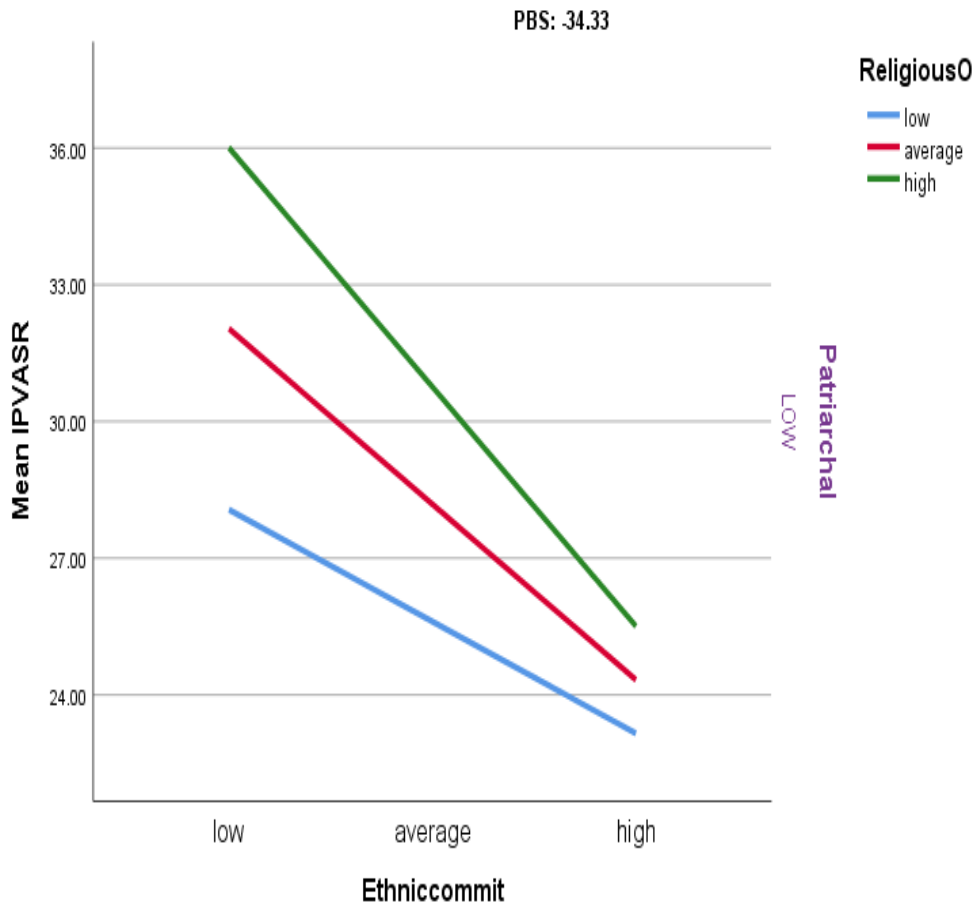


Figure 9. Graph of Moderated Moderation at Low Patriarchal Beliefs

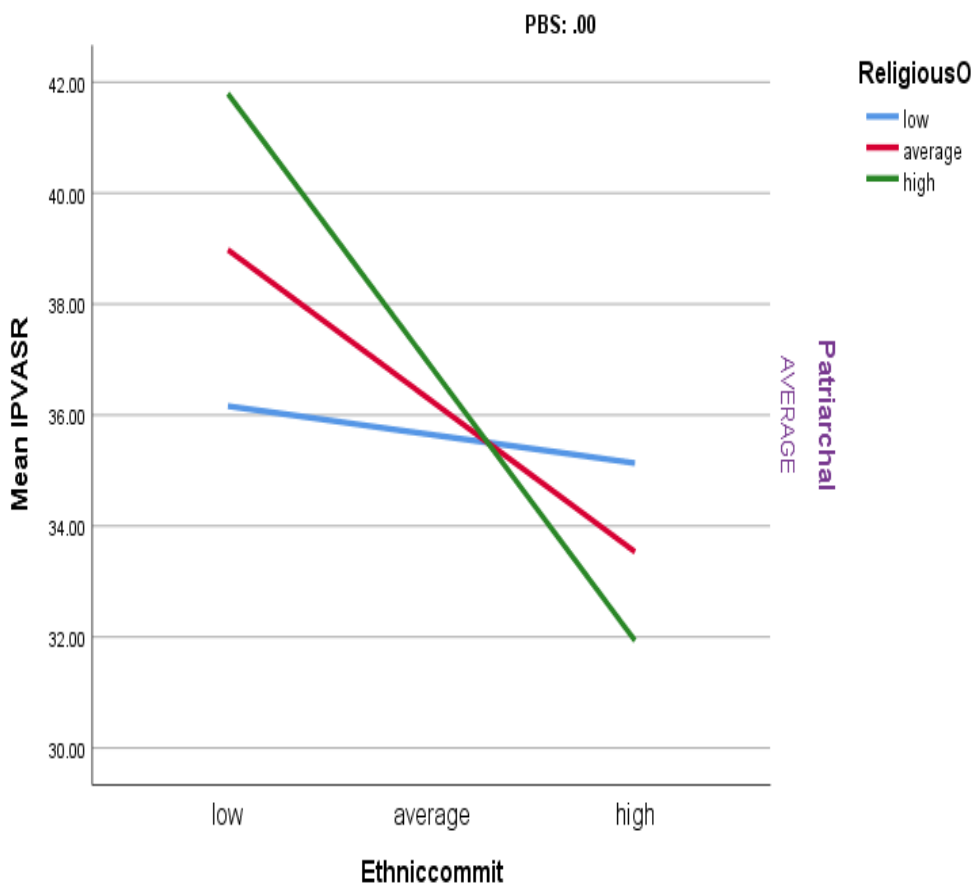


Figure 10. Graph of Moderated Moderation at Average Patriarchal Beliefs

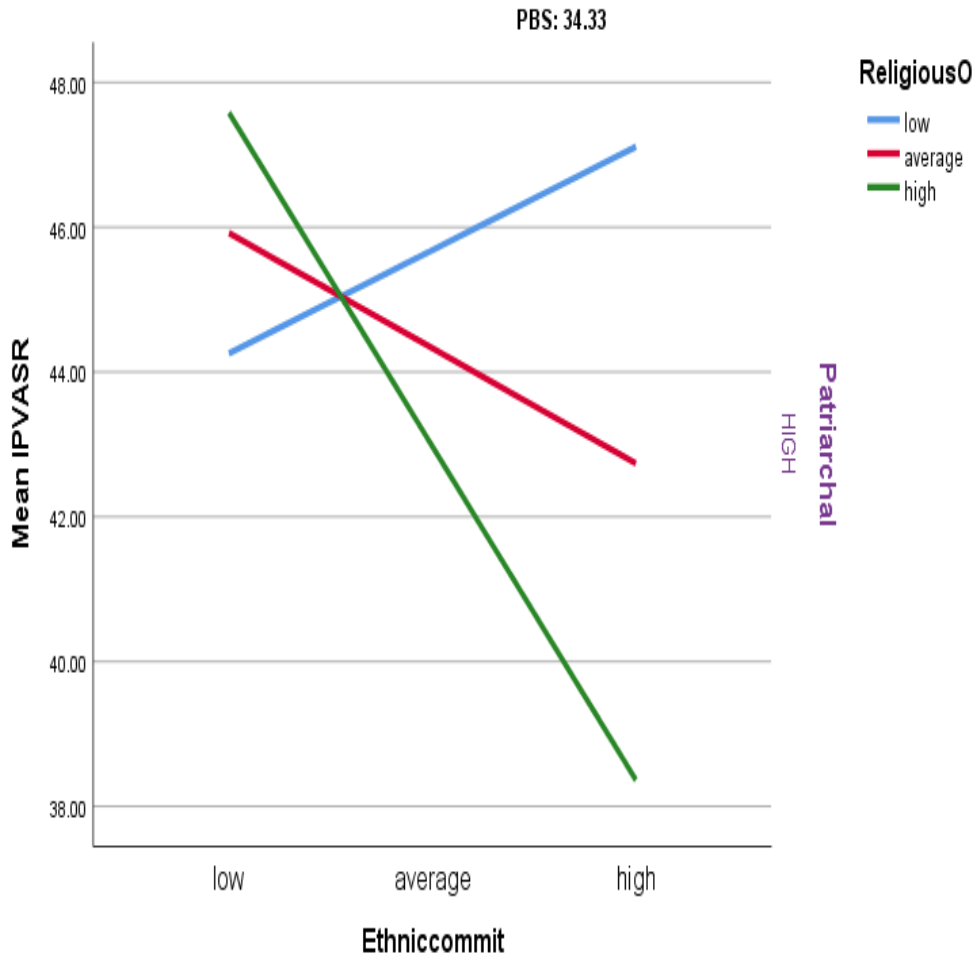
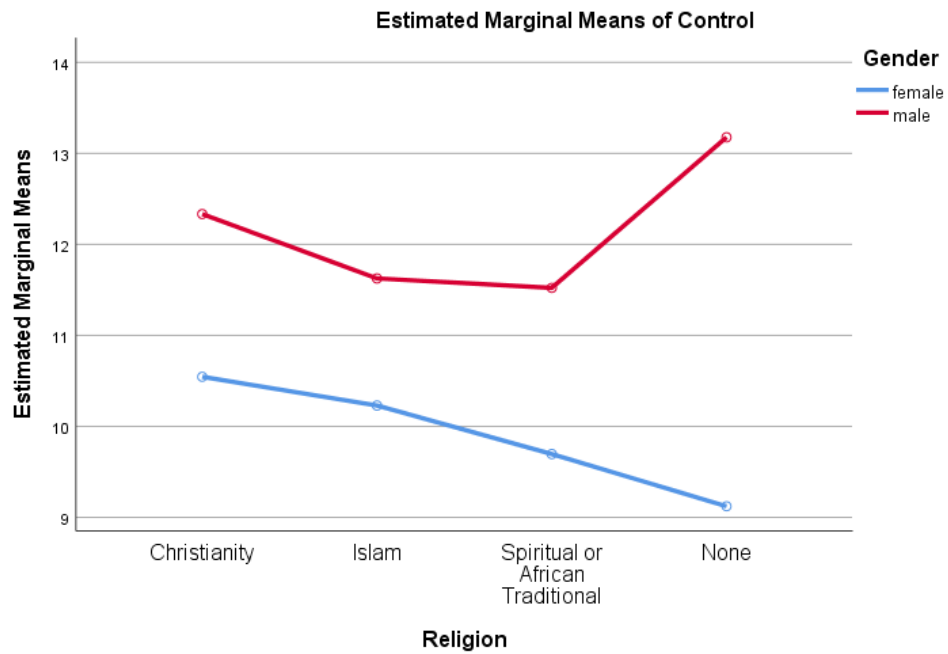
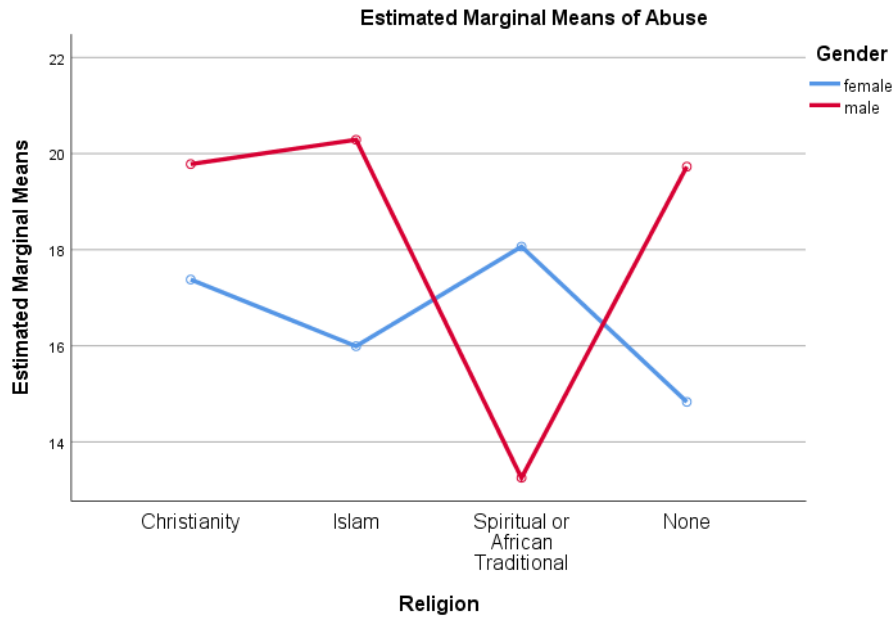


Figure 11. Graph of Moderated Moderation at High Patriarchal Beliefs



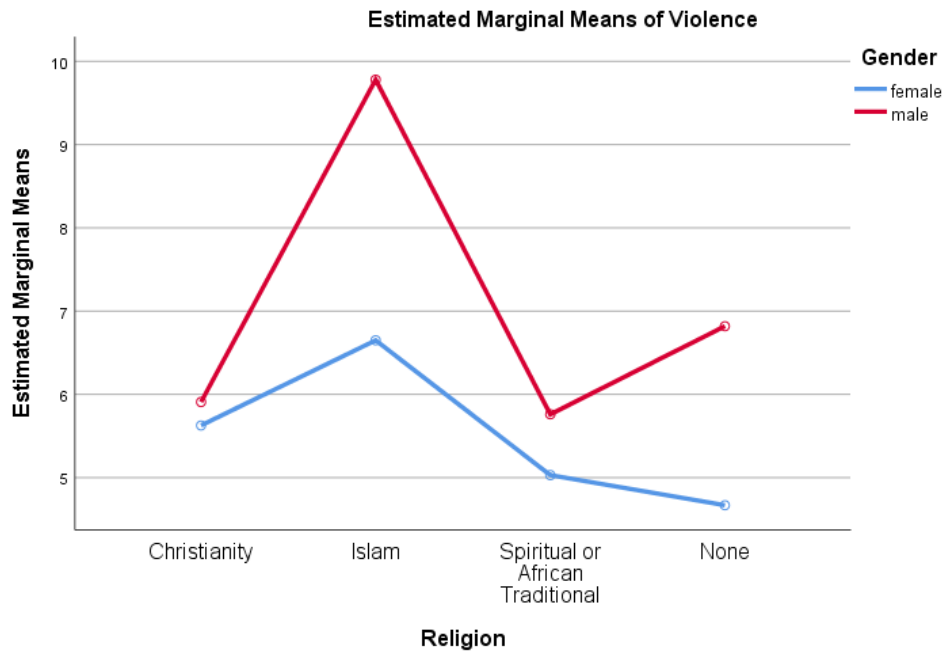


Figure 12. Estimated Marginal Means for each of the three IPV dimensions by Gender and Religion

Appendix B: Demographic Questionnaire

Thank you for your participation. Please answer the following questions according to what best describes you

1. What Age Bracket do you fall into? (Refer to list below) _____
 - 18 to 24 years
 - 25 to 34 years
 - 35 to 44 years
 - 45 to 54 years
 - 55 to 64 years
 - Age 65 or older
2. How do you self-identify your gender? _____
3. Relationship Status _____ 4. Religion _____
5. What **generation** best applies to you? (Refer to list below) _____
 - i. I was born outside of the United States (U.S.)
 - ii. I was born in the U. S.; my mother or father was born outside the U.S.
 - iii. My parents and I were born in the U.S. all grandparents born outside the U.S
 - iv. My parents and I were born in the U.S. at least one of my grandmothers or grandfathers was born outside the U.S.
 - v. All my grandparents were, both my parents and I were born in the U.S.
 - vi. I do not know what generation best fits since I lack some information
(Adapted from MASPAD Question 46)
6. Nationality/Country of citizenship _____
7. Duration of stay (length in years) in the United States _____
8. Languages spoken fluently _____
 - a. Is English your first language? _____
 - b. Native language (if applicable) _____
9. Highest level of education completed (U.S. or abroad): _____
(Some high school; high school/GED; some college; Associate degree; Bachelor's degree; Master's degree; Graduate or professional degree – MD, JD; Doctoral Degree - PhD)
10. Please estimate your family's total income after taxes (Refer to list below) _____
 - i. Approximately less than \$25,000 per year
 - ii. Approximately \$25,000 to \$34,000 per year
 - iii. Approximately \$35,000 to \$49,000 per year
 - iv. Approximately \$50,000 to \$74,000 per year
 - v. Approximately \$75,000 to \$99,000 per year
 - vi. Approximately \$100,000 to \$149,000 per year
 - vii. Approximately \$150,000 or more per year

Appendix C: Acculturation Questionnaire

Thank you for your participation. Please answer the following questions according to what best describes you and your experiences. Refer to the numbers below for rating scale

1. **English Language**
 - A. I can speak the English language:
 - 1 (Not at all)
 - 2 (A little/Somewhat)
 - 3 (Okay/Neutral)
 - 4 (Good/Well)
 - 5 (Very well)
 - B. I use the English language in my daily life:
 - 1 (Never)
 - 2 (Rarely)
 - 3 (Sometimes/Neutral)
 - 4 (Often)
 - 5 (Always)
2. **Native Language**
 - A. I can speak my native language:
 - 1 (Not at all)
 - 2 (A little/Somewhat)
 - 3 (Okay/Neutral)
 - 4 (Good/Well)
 - 5 (Very well)
 - B. I use my native language in my daily life:
 - 1 (Never)
 - 2 (Rarely)
 - 3 (Sometimes/Neutral)
 - 4 (Often)
 - 5 (Always)
3. **Social Network**
 - A. Most of my friends and I have similar African ethnic backgrounds:
 - 1 (Strongly Disagree)
 - 2 (Disagree)
 - 3 (Neutral)
 - 4 (Agree)
 - 5 (Strongly Agree)
 - B. Most of my friends have mainstream Euro-American or non-African ethnic backgrounds:
 - 1 (Strongly Disagree)
 - 2 (Disagree)
 - 3 (Neutral)
 - 4 (Agree)
 - 5 (Strongly Agree)
4. I self-identify my Ethnicity as _____
5. My Parents self-identify their Ethnicities as _____

Appendix D: MEIM-R

Test Format: 5-point scale, from strongly disagree (1) to strongly agree (5), with 3 as a neutral position.
Source: Phinney, Jean S., & Ong, Anthony D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, Vol 54(3)*, 271-281. doi: 10.1037/0022-0167.54.3.271

Multigroup Ethnic Identity Measure—Revised (MEIM-R)

Items

- 1 I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.**
- 2 I have a strong sense of belonging to my own ethnic group.**
- 3 I understand pretty well what my ethnic group membership means to me.**
- 4 I have often done things that will help me understand my ethnic background better.**
- 5 I have often talked to other people in order to learn more about my ethnic group.**
- 6 I feel a strong attachment towards my own ethnic group.**

Note. In administering the measure, these items should be preceded by an open-ended question that elicits the respondent's spontaneous ethnic self-label. It should conclude with a list of appropriate ethnic groups that the respondent can check to indicate both their own and their parents' ethnic backgrounds (see Phinney, 1992). Items 1, 4, and 5 assess exploration; Items 2, 3, and 6 assess commitment. The usual response options are on a 5-point scale, from strongly disagree (1) to strongly agree (5), with 3 as a neutral position. The score is calculated as the mean of items in each subscale (Exploration and Commitment) or of the scale as a whole. Cluster analysis may be used with the two subscales to derive ethnic identity statuses. Items were adapted from "The Multigroup Ethnic Identity Measure: A New Scale for Use with Diverse Groups," by J. Phinney, 1992, *Journal of Adolescent Research*, 7, p. 172–173. Copyright 1992 by Sage.

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Appendix E: IPVAS-R

Intimate Partner Violence Attitude Scale (Revised)

Fincham, F.D., Cui, M., Braithwaite, S.R., & Pasley, K. (2008). Attitudes towards intimate partner violence in dating relationships. *Psychological Assessment, 20*, 260-269.

Instructions: Please use the scale to select the first answer that comes to your mind when considering each question.

1 – Strongly Disagree 2 – Disagree 3 – Neither Agree nor Disagree 4 – Agree 5 – Strongly Agree

1. I would be flattered if my partner told me not to talk to someone of the other sex.
2. I would not like for my partner to ask me what I did every minute of the day.
3. It is okay for me to blame my partner when I do bad things.
4. I don't mind my partner doing something just to make me jealous.
5. I would not stay with a partner who tried to keep me from doing things with other people.
6. As long as my partner doesn't hurt me, "threats" are excused.
7. During a heated argument, it is okay for me to bring up something from my partner's past to hurt him or her.
8. I would never try to keep my partner from doing things with other people.
9. I think it helps our relationship for me to make my partner jealous.
10. It is no big deal if my partner insults me in front of others.
11. It is okay for me to tell my partner not to talk to someone of the opposite sex.
12. Threatening a partner with a knife or a gun is never appropriate.
13. I think it is wrong to ever damage anything that belongs to my partner.
14. It would not be appropriate to ever kick, bite, or hit a partner with one's fist.
15. It is okay for me to accept blame for my partner doing bad things.
16. During a heated argument, it is okay for me to say something to hurt my partner on purpose.
17. It would never be appropriate to hit or try to hit one's partner with an object.

Appendix F: I/E-ROS

Intrinsic/Extrinsic Religious Orientation Scale

Gorsuch, Richard L., & McPherson, Susan E. (1989). Intrinsic/extrinsic measurement: I/E-Revised and single-item scales. (intrinsic and extrinsic religion). *Journal for the Scientific Study of Religion*, 28(3), 348-354. <http://dx.doi.org/10.2307/1386745>

Please indicate the response that best describes how you feel about each of the following statements using the rating scale below:

1 – Strongly Disagree 2 – Disagree 3 – Neither Agree nor Disagree 4 – Agree 5 – Strongly Agree

1. I enjoy reading about my religion.
2. I go to my place of worship because it helps me to make friends.
3. It doesn't much matter what I believe so long as I am good.
4. It is important to me to spend time in private thought and prayer.
5. I have often had a strong sense of the divine or God's presence.
6. I pray mainly to gain relief and protection.
7. I try hard to live all my life according to my religious beliefs.
8. What religion offers me most is comfort in times of trouble and sorrow.
9. Prayer is for peace and happiness.
10. Although I am religious, I don't let it affect my daily life.
11. I go to my place of worship mostly to spend time with my friends.
12. My whole approach to life is based on my religion.
13. I go to my place of worship mainly because I enjoy seeing people I know there.
14. Although I believe in my religion, many other things are more important in life.

Appendix G: PBS

Patriarchal Beliefs Scale.

Yoon, E., Adams, K., Hogge, I., Bruner, J., Surya, S., Bryant, F., & Tracey, Terence J. G. (2015). Development and Validation of the Patriarchal Beliefs Scale. *Journal of Counseling Psychology, 62*(2), 264-279.

Please indicate your agreement with the following items using the 1–7 scale below. There are no right or wrong answers. Please be open and honest in your responding.

1 – Strongly Disagree 2 – Disagree 3 – Slightly Disagree 4 – Neither Agree nor Disagree

5 – Agree

6 – Slightly Agree

7 – Strongly Agree

1. At work, I would have more confidence in a male boss than a female boss.
2. I am more comfortable with men running big corporations than women.
3. I would feel more comfortable if a man was running the country's finances.
4. I would feel more secure with a male president running the country than a female one.
5. Men should lead national politics.
6. It is important that men make the big decisions that will affect my country.
7. Men rather than women should lead religious services.
8. Matters of local government are best left up to men.
9. A man should be the head of a company.
10. Men would make for more competent CEOs of financial institutions.
11. I prefer to have men lead town hall meetings.
12. The powerful roles that men play on TV/movies reflect how society should run.
13. Women should be paid less than a man for doing the same job.
14. Banks should not give credit to women.
15. Women do not belong in the workforce.
16. It is acceptable for a man to physically reprimand his wife.
17. A woman's place in the community should be mostly through volunteer work.
18. Women are less able than men to manage money.
19. Male work colleagues should have more of a say in the work place.
20. Girls have less use for formal education than boys.
21. Women's careers should be limited to traditional female jobs.
22. Police should not intervene in domestic disputes between a husband and his wife.

23. Men are inherently smarter than women.
24. A man has the right to have sex with his wife even if she may not want to.
25. A man should be the breadwinner.
26. Cleaning is mostly a woman's job.
27. Cooking is mostly a woman's job.
28. A man should be the one to discipline the children.
29. A woman should be the one who does most of the child rearing.
30. A man should control the household finances.
31. A woman should be the one to do the housework.
32. A man is the head of the household.
33. A man should make the rules of the house.
34. Women should be more responsible for domestic chores than men.
35. A woman should be the primary caretaker for children.

Note. Items 1–12 are for F1-*Institutional Power of Men*; items 13–24 are for F2-*Inherent Inferiority of Women*; and items 25–35 are for F3-*Gendered Domestic Roles*.

Appendix H: IRB Approval Letter



Institutional Review Board for the Protection of Human Subjects
Approval of Initial Submission – Exempt from IRB Review – AP01

Date: April 25, 2019

IRB#: 10481

Principal Investigator: Mary T McKinley, MA

Approval Date: 04/25/2019

Exempt Category: 2

Study Title: Predictors of Attitudes Toward Intimate Partner Violence Among African Immigrants: The Moderating Effects of Religiosity and Patriarchal Beliefs

On behalf of the Institutional Review Board (IRB), I have reviewed the above-referenced research study and determined that it meets the criteria for exemption from IRB review. To view the documents approved for this submission, open this study from the *My Studies* option, go to *Submission History*, go to *Completed Submissions* tab and then click the *Details* icon.

As principal investigator of this research study, you are responsible to:

- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations 45 CFR 46.
- Request approval from the IRB prior to implementing any/all modifications as changes could affect the exempt status determination.
- Maintain accurate and complete study records for evaluation by the HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor. □ Notify the IRB at the completion of the project.

If you have questions about this notification or using iRIS, contact the IRB @ 405-325-8110 or irb@ou.edu.

Cordially,

A handwritten signature in black ink, appearing to read 'Ioana A. Cionea'.

Ioana Cionea, Ph.D.
Vice Chair, Institutional Review Board