

**CHARLES UNIVERSITY**  
**FACULTY OF SOCIAL SCIENCES**

Institute of Political Studies  
Department of Security Studies

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**Sina Schneider**

**CHARLES UNIVERSITY**  
FACULTY OF SOCIAL SCIENCES  
Institute of Political Studies  
Department of Security Studies  
University of Konstanz  
Department of Politics and Public Administration

**Gendered Consequences of Internal Displacement:  
Examining Intimate Partner Violence  
in Sub-Saharan Africa**

Master's Thesis

Author of the Thesis: Sina Schneider

Study programme: International Security Studies

Supervisor: PhDr. JUDr. Tomáš Karásek, Ph.D., Prof. Dr. Anke Hoeffler

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## **Abstract**

Both internal displacement and intimate partner violence (IPV) pose a serious threat to women and are most pronounced in sub-Saharan Africa. The literature on factors influencing IPV is extensive, but few papers examine the connection with displacement. This thesis aims to examine the impact of internal displacement on the prevalence of IPV in six countries in sub-Saharan Africa. I hypothesise that internal displacement increases the likelihood of a women being the victim of IPV. Internal displacement is thought to increase women's empowerment. This leads to a patriarchal backlash from their partners, who exhibit hyper-masculinity to restore the status quo through increased violence. I also argue that living in conflict-affected areas increases the likelihood of IPV for internally displaced women compared to displaced women living in non-conflict-affected areas, due to increased vulnerability in conflict zones. Using cross-national data from the Demographic and Health Survey, the Uppsala Conflict Data Program and the WomenStats Project these arguments are tested using a multilevel logistic regression analysis. The results suggest that only one form of IPV, sexual violence, is consistently exacerbated by internal displacement. No influence of conflict exposure on IPV could be identified, which is likely due to poor data quality. This complexity deepens existing knowledge and encourages more nuanced approaches in future research, which should primarily focus on finding new ways to collect data on internal displacement.

## **Abstrakt**

Vnitřní vysídlení i partnerské násilí (IPV) představují pro ženy vážnou hrozbu a nejvýrazněji se projevují v subsaharské Africe. Literatura o faktorech ovlivňujících IPV je rozsáhlá, ale jen málo prací se zabývá souvislostí s vysídlením. Cílem této práce je prozkoumat vliv vnitřního vysídlení na výskyt IPV v šesti zemích subsaharské Afriky. Předpokládám, že vnitřní vysídlení zvyšuje pravděpodobnost, že se žena stane obětí IPV. Předpokládá se, že vnitřní vysídlení zvyšuje postavení žen. To vede k patriarchální reakci ze strany jejich partnerů, kteří projevují hypermaskulinitu, aby obnovili status quo prostřednictvím zvýšeného násilí. Tvrdím také, že život v oblastech zasažených konfliktem zvyšuje pravděpodobnost IPV u vnitřně vysídlených žen ve srovnání s vysídlenými ženami žijícími v oblastech nezasazených konfliktem, a to v důsledku zvýšené zranitelnosti v konfliktních zónách. Na základě mezinárodních údajů z Demografického a zdravotního průzkumu, Uppsala Conflict Data Program a WomenStats Project jsou tato tvrzení testována pomocí víceúrovňové logistické regresní analýzy. Výsledky naznačují, že pouze jedna forma IPV, sexuální násilí, je důsledně zhoršována vnitřním vysídlením. Vliv vystavení konfliktu na IPV se nepodařilo identifikovat, což je pravděpodobně způsobeno nízkou kvalitou dat. Tato komplexnost prohlubuje stávající znalosti a vybízí k diferencovanějším přístupům v budoucím výzkumu, který by se měl zaměřit především na hledání nových způsobů sběru dat o vnitřním vysídlení.

## **Internal Displacement, Intimate Partner Violence, Sub-Saharan Africa, Hyper-Masculinity, Patriarchal Backlash, Conflict, Ecological Framework**

**Vnitřní vysídlení, násilí mezi partnery, subsaharská Afrika, nadměrná maskulinita, patriarchální zpětná vazba, konflikt, ekologický rámeček**

**Genderové důsledky vnitřního vysídlení: Zkoumání násilí mezi partnery v subsaharské Africe**

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## **Introduction**

In 2023, the number of internally displaced people worldwide reached 75.9 million (iDMC, 2024b). This is the highest recorded since the Internal Displacement Monitoring Centre began recording in 2008. Of these, 68.3 million were displaced as a result of conflict and violence. This figure has risen by 49 per cent since 2018 and is projected to rise further as conflicts, violence and climate crises intensify and lead to new conflict escalations, that will destroy human settlements and secure environments. The region most affected by internal displacement is sub-Saharan Africa, where 46 per cent of the world's IDPs live. The number of internal displaced people there has almost tripled in the last ten years (iDMC, 2024b).

IDPs are among the most vulnerable population groups and often live under poor conditions, as they lose most of their resources when forced to flee (World Bank, 2023). Among other issues, IDPs face disruption to their employment, reduced financial resources, and negative social impacts from lack of access to public services and infrastructure like health facilities and education. All these factors impact on women to a greater extent and make them particularly vulnerable to violations of their fundamental rights and gender-based violence (GBV) (UNDP, 2022, United Nations, 2024).

The most common form of GBV worldwide is intimate partner violence (IPV, hereafter), and is often defined, when perpetrated against women, as any form of emotional, physical, or sexual violence perpetrated by a male intimate partner. 27 per cent of women aged 15 to 49 worldwide have experienced some form of violence at least once in their lives, although the actual figure could be much higher due to under-reporting (WHO, 2021). IPV is an issue that concerns societies globally, but its extent and frequency vary by country, with high-income countries having the lowest prevalence. At 33 per cent, the prevalence of IPV in sub-Saharan Africa is the third highest in the world after Oceania and South Asia (WHO, 2021). IPV can lead to serious psychological, physical, sexual, and reproductive health problems for women in the short and long term. These problems can result in high social and economic costs for women, often because they become isolated and are unable to work (WHO, 2024).

The aim of this paper is to extend previous studies of IPV to the context of internal displacement at the cross-national level. Given that both internal displacement and IPV pose a serious threat to women in particular and are so pronounced in sub-Saharan Africa, this thesis research question asks whether there is a link between these two phenomena:

*What is the effect of internal displacement on the prevalence of intimate partner violence in sub-Saharan Africa?*

The thesis is divided into four parts. First, it gives an overview of existing literature. Using theories of patriarchal backlash and hyper-masculinity, the first hypothesis posits that displacement increases the likelihood of IPV for women compared to non-displaced women. The second hypothesis posits that living in conflict-affected regions increases the likelihood of IPV for displaced women compared to displaced women living in non-conflict-affected regions and is also derived from this theory. The third part explains the research design and the statistical analysis, including the data and the methods this work will use and then also explains the results. First, logistic regression is used to examine the relationship between the dependent variable *internal displacement* and the independent variable *IPV* at the individual-level. In order to include country-specific control variables, a multilevel analysis is carried out. For the second hypothesis, a two-stage logistic regression is used to examine whether conflict exposure influences IPV and the relationship between IPV and displacement. The findings, which indicate that only sexual IPV is consistently exacerbated by displacement, underscore the complexity of IPV dynamics. No influence of conflict exposure on IPV was determined, presumably due to poor data quality. The counterintuitive results suggest that socio-cultural factors have multifaceted and sometimes unexpected impacts on IPV prevalence. This complexity adds depth to the existing knowledge and encourages more nuanced approaches in future research. The final section discusses these results and their practical and theoretical implications for future research, which should mainly focus on finding new ways to collect data on displacement.

In the following the term “gender” will be used frequently. “Gender” refers to the characteristics, roles, behaviours, and activities that society associates with being a woman or a man. Unlike sex, which refers to the biological characteristics, gender is about the social and cultural expectations placed on individuals based on their perceived sex (Sultana, 2012, Yasukawa et al., 2023). The use of “gender” in this thesis is binary (man and woman) because the DHS datasets do not include other gender identities (Croft et al., 2023).

## **1. Literature Review**

### **1.1 Factors influencing IPV on an individual, partner, and societal-level**

In the literature examining the factors influencing IPV, the consensus is that violence against women who are either married or living with a partner can take the form of emotional, physical, or sexual violence or a combination of any of these forms (Ahinkorah et al., 2018, Ellsberg et al., 2020, Falb et al., 2015, Mossie et al., 2023, Parroco, 2023, Wachter et al., 2017). Most studies seeking explanations for variations in the prevalence of IPV look at the individual or household level, and interactions between the two (see for example: Aboagye et al., 2022, Mossie et al., 2023, Seidu et al., 2021). Oluwole et al. (2020) went beyond this and concluded that IPV is caused by interacting factors on more levels, including the individual, relational, community and societal-levels.

#### **1.1.1 Individual-level**

Studies that examine women's age in relation to IPV find conflicting results. Ahinkorah et al. (2018), Mossie et al. (2023) and Stöckl et al. (2021) showed that being younger decreased the likelihood of a woman experiencing IPV, while Black et al. (2019) and Olayanju et al. (2013) found that younger women were more likely to experience IPV.

Another individual factor concerns the transmission of violence between generations. Witnessing parental violence is strongly associated with IPV in studies across sub-Saharan African (Alawode et al., 2023, Bayat et al., 2023, Østby, 2016, Parroco, 2023). By witnessing this violence, the trauma and the belief that it is normal and justified is passed on between generations. Children accept this violence as learned behaviour and subsequently regard it as normal when they grow up (Alawode et al., 2023).

#### **1.1.2 Interactions between the individual and partner level**

Many researchers point to the fact that women's empowerment has a compounding effect on IPV. For example, Ahinkorah et al. (2018) found that women's improved decision-making ability in the home increases their likelihood of experiencing IPV in 18 sub-Saharan African countries. This was exaggerated among partners with little or low levels of formal educational attainment, a poor wealth status for the couple, and if the woman is working. Cools and Kotsadam (2017) come to a similar conclusion regarding women's empowerment in a sample across 30 sub-Saharan African countries: women who are employed have a higher risk of being abused by their partner. Tessema et al. (2023) and Alawode et al. (2023)

also found a positive correlation between women's labour status and IPV in sub-Saharan Africa. As women's employment status improves, so does their risk of being the victim of IPV. The evidence is particularly high if a woman earns more than her partner, as Stöckl et al. (2021) showed in 15 sub-Saharan African countries. The gendered resource theory serves as the dominant theory to explain these findings (Stöckl et al., 2021). When a woman is relatively poorly resourced in terms of her educational attainment, employment status or level of income compared to her partner, this could lead to more abuse from her partner due to her being more dependent on him. However, more resources for the woman relative to her partner could lead to more violence because this may run counter to the partner's perceived gender ideologies, as men may feel inferior, that their existence in a patriarchal society is threatened, and want to prove their dominance (Atkinson et al., 2005, Cools and Kotsadam, 2017, Parroco, 2023).

Diverging from this theory is a study from Mossie et al. (2023), that showed, in 26 sub-Saharan African countries, that moderate participation in decision-making processes in the home and not working from home reduces the likelihood of women becoming victims of IPV. Oluwole et al. (2020) conducted a study in an urban community in south-west Nigeria, and concluded that employed women are less likely to report being victims of violence against women.

The research on IPV and economic resources and empowerment reveals differing findings which is seen abundantly in studies by Hynes et al. (2016), Stöckl et al. (2021) and Vyas and Watts (2009). They each reviewed the findings from different studies that looked at this relationship. According to their results, the literature is particularly contradictory when it comes to women working and generating their own income. One frequently used argument to counter the gendered resource theory is that more gender equality serves as a defence against IPV by giving women stronger bargaining power in their relationship (Vyas and Watts, 2009).

Taking all this information into account, it is crucial for the analysis of this thesis to control for individual-level factors that have been identified as predominant influences on IPV in previous studies.

### **1.1.3 Partner level**

The main partner characteristics associated with IPV perpetration are the partners' low educational attainment and alcohol consumptions (Mossie et al., 2023). According to Cools and Kotsadam (2017) unequal levels of educational attainment between partners lead to an increase in the risk of IPV. In all reviewed studies that take alcohol abuse into account, it is a significant factor in influencing IPV prevalence (Annan and Brier, 2010, Black et al., 2019, Mootz et al., 2018, Oluwole et al., 2020, Østby, 2016).

There are disagreements in the literature when it comes to household income. According to Stöckl et al. (2021), an increase in household wealth leads to a decrease in IPV prevalence, while Cools and Kotsadam (2017) conclude that household wealth is not strongly correlated with IPV, but that societies with a high degree of economic inequality have a higher level of IPV. This was further reviewed by Tessema et al. (2023) who found a positive correlation between community poverty and IPV but none for household wealth.

Given that other studies have included partner characteristics to provide a comprehensive picture of the influences on IPV, it is also crucial for this thesis to include factors related to the partner in the analysis.

### **1.1.4 Societal-level**

At a societal-level, exposure to conflict is a decisive factor influencing increased IPV. Evidence comes from Hossain et al. (2014), who showed that IPV was the most commonly reported form of violence in the aftermath of the first Ivorian civil war. More evidence comes from a study in the occupied Palestinian territories, where political violence drastically exacerbated the risk of IPV (Clark et al., 2010). Also, a study in Colombia provides evidence that IPV was more common in conflict-affected population groups than conflict-related sexual violence (Wirtz et al., 2014). A cross-national study in Africa conducted by Le and Nguyen (2022) concluded that women living in conflict areas were more frequently affected by IPV. Another cross-national study by Østby (2016) in sub-Saharan Africa also showed that exposure to general conflict violence and high overall conflict intensity significantly increased the risk of IPV victimisation.

These results were further confirmed in a study conducted in Peru (Østby et al., 2019). Accordingly, three traumatisation mechanisms were decisive in increasing the risk of IPV. The mechanisms were focused on perpetrators, victims and society at large. Being actively

involved in or witnessing violence can have a traumatising effect and desensitise men to commit further violence in the form of IPV. Similarly, individuals who have previously been exposed to violence are at greater risk of experiencing it again in a relationship due to social learning and as a means of coping with feelings of shameful experiences (Kelly et al., 2021a, Østby et al., 2019). At the societal-level, exposure to conflict violence can lead to a general acceptance and normalisation of the use of violence (Østby et al., 2019). This is also supported by the findings of Kelly et al. (2021a) in the Democratic Republic of Congo (DRC) and Murphy et al. (2019) in South Sudan, where previous exposure to sexual violence in conflicts led to an increase in IPV.

Based on the findings that conflict increases the risk of IPV, this paper examines whether similar patterns of increased IPV risk exist among internally displaced women in sub-Saharan Africa living in conflict areas.

In addition the exposure to conflict, Hudson et al. (2020) found mechanisms at the societal-level that influence women's subordination at the interpersonal level and normalises the use of violence against women. They came up with the "Patrilineal/Fraternal Syndrome" which revolves around the interconnected social and cultural practices that enforce male dominance and female subordination in societies. The syndrome is seen as a foundational structure influencing social, economic, and political stability by emphasising male dominance and fraternity. It is characterised by several interlocking components - male control of resources, preferences for sons, devaluation of daughters - which create a self-reinforcing system. Each element supports and strengthens the others, making it difficult to disrupt the cycle of female subordination and male dominance at both the household and societal-level. This syndrome has been shown to be reliable and useful in predicting national outcome measures like gross domestic product per capita, the human development index (HDI) or the global hunger index (Hudson et al., 2020).

Evidence that factors at the societal-level can have an influence on the risk of IPV for the individual women comes from Ma et al. (2023). They used the Gender Inequality Index of the UN development programme as an indicator for the empowerment of women at country-level in 53 low and middle-income countries. Their results indicate that the risk of IPV decreases with a higher level of empowerment. These findings also apply to a study by Redding et al. (2017) in Spain, in which IPV reports were most common in regions with high inequality. Similarly, Willie and Kershaw (2019) found an effect of the Gender

Inequality Index on the prevalence of IPV in the United States, with emotional IPV in particular being strongly affected.

Despite the relatively extensive literature on the relationship between IPV and various individual, interpersonal and societal factors, there is little literature on the relationship between IPV and displacement.

## **1.2 Displacement**

According to the UN Guiding Principles on Internal Displacement's, two criteria must be met for a person to be considered internally displaced (European Union and United Nations, 2018). The first is that they are forced to flee their homes due to a variety of factors such as armed conflict, human rights violations or natural or human-made disasters. This distinguishes them from people who move voluntarily, for example for economic reasons. The second criterion is that they stay within the internationally recognised borders of their own country (European Union and United Nations, 2018).

Several studies have emphasised that internal displacement is a factor that can exacerbate IPV. A policy brief by Arango et al. (2021) showed that the risk of IPV was significantly higher for displaced women compared to non-displaced women in a sample of African countries. This is further confirmed by findings from Kelly et al. (2021a and 2021b), who found a high significance among displaced women in the DRC, Colombia and Liberia. In the DRC, currently displaced women were 20 per cent more likely to have experienced IPV in the past year than women who had never been displaced (Kelly et al., 2021a). In line with this, Stark et al. (2010) found that IPV is a common problem in camps for internally displaced persons in Uganda.

Similar to IPV in non-displacement situations, women's empowerment and unequal gender dynamics are crucial factors in predicting the prevalence of IPV in displaced communities, according to Hynes et al. (2016), Kelly et al. (2021a) and Wachter et al. (2017). They result from the erosion of existing social structures and changes to traditional gender roles due to the stress of displacement. For example, Wachter et al. (2017) found that women living in IDP camps had new opportunities, such as access to formal education or skills training, which improved their empowerment. At the same time their partners felt disempowered by the threat to their traditional role as protectors and providers of resources.

Among the Colombian women surveyed by Hynes et al. (2016), a common reason for IPV

was the disruption to a man's employment, and that the woman in the household was now generating the main source of income. Similarly, Østby et al. (2019) concluded that the disruption of old living habits through displacement can lead to a reduction in a man's traditional social control over behaviour that was previously considered deviant. The disruption of old living habits is also an explanation provided by Kelly et al. (2021a) and Wachter et al. (2017), as displacement often separates women from their family and support networks, making them more vulnerable and so predicts a higher prevalence of IPV.

Both men and women living in camps for internally displaced persons in northern Uganda stated in a survey that there were strict gender roles, and that the role of a woman is to submit to the demands of their partners. In the survey, women categorised IPV as less worrying than rape by someone other than their partner, which suggests a normalisation of violence (Ager et al., 2018). Qualitative findings from Colombia also confirm this (Wirtz et al., 2014).

There appear to be similar patterns among displaced persons to other settings. A frequent risk factor is the partner's alcohol consumption (Falb et al., 2015, Kelly et al., 2021a, Kelly et al., 2021b, Wachter et al., 2017, Wirtz et al., 2014). Also, Ager et al. (2018) describe that the women surveyed described alcohol consumption by men as an aggravating factor for violence against their partners. The drunkenness of the perpetrator is explained as protection from responsibility and the violence associated with drunken perpetrators seems to be normalised.

Other key determinants for the increase in IPV in displacement contexts are the increasing levels of poverty and unemployment for both women and their partners (Falb et al., 2015, Kelly et al., 2021a, Murphy et al., 2019). Economic deprivation was also cited by respondents in the survey conducted by Ager et al. (2018) as a key factor contributing to the prevalence of IPV in their camps. In the survey by Wirtz et al. (2014), IPV increased not only when the husband was unemployed, but also when the wife was seeking employment to support the family.

In addition to all the similar findings in the aforementioned papers, Kelly et al. (2021b) emphasised that there are context-specific differences when analysing IPV among displaced people. In Colombia, respondents' education had no impact on the prevalence of IPV, but unemployment was highly significant. In Liberia, the opposite was true (Kelly et al., 2021b). In a study by Ellsberg et al. (2020) in South Sudan, any form of education among respondents and their partners was found to reduce the risk of IPV.



As well as the trauma of displacement, the experience of conflict or disaster can also cause trauma and post-traumatic stress disorder, which can exacerbate IPV (Hynes et al., 2016, Nandi et al., 2017).

By examining internal displacement both at the individual and relationship-level across different sub-Saharan African countries whilst also controlling for country-specific differences, this thesis goes beyond existing research to contribute a more comprehensive understanding of the complex relationship between displacement and IPV.

## **2. Conceptual framework and hypotheses**

There is a large body of both quantitative and qualitative literature on the factors that influence IPV prevalence. However, research on the effect of internal displacement on IPV has been mostly qualitative, relying on case studies with relatively small sample sizes, particularly in sub-Saharan Africa, while only a few focus on larger cross-country samples and quantitative analyses (see e.g. Hynes et al., 2016, Falb et al., 2015, Kelly et al., 2021b). These deep insights into specific cases are very important, but they do not lend themselves to generalisations about the link between internal displacement and IPV.

One reason why cross-national comparisons are rare in the literature on internal displacement and IPV is that data on internal displacement, i.e. specific data on an individuals' migration history, is difficult to collect. Another reason is that modelling is challenging due to the influencing factors spanning different levels of analysis, from the individual to the relationship or even societal-level (Eseosa Ekhaton-Mobayode et al., 2022, Østby, 2016). Mossie et al. (2023) conclude that there are cross-national differences between all sub-Saharan African countries in the prevalence of IPV. One reason for this is different cultural perspectives, even in different provinces of a country, which makes it difficult to take them all into account and control for them all.

### **2.1 Hyper-masculinity and patriarchal backlash**

There is ample evidence to suggest that a combination of factors, including exposure to conflict violence, employment status and educational attainment, may increase the risk of a woman becoming the victim of IPV (Black et al. 2019; Eseosa Ekhaton-Mobayode et al. 2022). According to Meger (2010), the “occurrence of sexual violence [...] can be understood as a product of the hyper-masculine climate of abuse and antipathy towards

women” (p.122). Furthermore, when men attempt to or are expected to assert their masculinity in times of community or family vulnerability, Kelly et al. (2021b) argue that “war can legitimize hyper-masculinity” (p.4). Internal displacement is often the result of living in an environment characterised by conflict, violence or other life-threatening disasters (iDMC, 2024b). Thus, the prevalence of IPV in internal displacement settings should follow patterns of IPV prevalence in conflict settings and be connected to an exacerbated hyper-masculine climate amongst men.

My main theoretical argument is based on this and a feminist perspective of patriarchy and hyper-masculinity. Patriarchy refers to a deeply-embedded institutionalised system of social relationships, values, norms and behavioural patterns of male supremacy in both the public and private spheres, and one that has its origins in male violence (Walby, 1990, Hudson et al., 2020). Sultana (2012) defines patriarchy “as a set of social relations between men and women” that create “independence and solidarity among men”, which in turn allows them to dominate women (p.3). Patriarchy thus starts from the given biological differences between the sexes and exaggerates them by creating gender-specific characteristics that assign the dominating, "masculine" roles to men and the subordinate, "feminine", roles to women. This oppression and control is evident in many areas of women's public and private lives and ranges from a lack of access to education or resources to a dearth of decision-making opportunities in the household and beyond (Ma et al., 2023, Sultana, 2012, Walby, 1990).

Hyper-masculinity refers to an exaggerated form of traditional male behaviours and traits. It encompasses characteristics that go beyond conventional masculinity, often emphasising aggressive, dominant, and violent behaviours (Hickey, 2016). Men displaying hyper-masculinity often exhibit extreme assertiveness and a need for control in their interactions with others. They place a high value on physical strength and toughness and regard violence as manly. Additionally, hyper-masculinity is marked by a propensity for rebellion and risk-taking, which are frequently employed as methods to assert and validate one's masculinity (Spencer et al., 2004).

This paper argues that violence against women is characterised by deeply embedded societal gender and power dynamics and is a result of male control and patriarchal

dominance. This violence is therefore not just an individual matter but also a societal issue. Women in violent relationships are often disadvantaged beyond the violence itself, because the overall power and social values of patriarchal society favour their male partners (Yllö, 2005). The oppression of women is inherently based on violence and violence against women may be used by the perpetrator to keep women in an oppressed position where she has less economic, political and/or social power than him (Hynes et al., 2016, Mshweshwe, 2020, Hudson et al., 2020). When embedded traditional social structures and old living habits collapse due to displacement, traditional gender roles are subverted, and gender inequality erodes. In the new communities where the internally displaced live, social norms and structures may be broader than in their old communities, and women may have access to new opportunities and services (Klugman, 2022). All this challenges the role of patriarchal masculinity and can lead to male insecurity which, in turn, can reinforce hyper-masculinity as a male attempt to restore the status quo once families have settled again.

Women in internal displacement situations are less dependent on their partners due to structural changes in social norms and the financial necessity for them to work, which gives them more self-empowerment in the long term (Yasukawa et al., 2023). Men, on the other hand, perceive this as a threat to their traditional male identity and their role as providers of resources, and, therefore feel disempowered (Falb et al., 2015, Kelly et al., 2021a, Østby, 2016).

Following on, backlash theory predicts that the victimisation of women will increase with their increasing empowerment. Men who are dissatisfied and feel disgraced by their partner's empowerment find their concept of masculinity and the traditional patriarchal society to be threatened. Another aspect of this perceived threat is that men's resources, such as work, income or education, may no longer be secure due to their displacement. As a result of these perceived new imbalances and threats, men try to maintain their dominance over their partner as head of the household by using violence as an expression of their perceived frustration (Heirigs and Moore, 2018). In accordance with backlash theory, women becoming more independent from their dominating husband and gaining more bargaining power might exacerbate IPV in displacement settings.

The disruption of old habits through internal displacement could also have a different,

negative, impact on women, as they are separated from their familiar support network and families, making them more vulnerable in the short term. Families and other trusted people can not only defuse conflicts, but also monitor the behaviour of men and shelter women to protect them from their partner's aggression (Kelly et al., 2021a, Wachter et al., 2017).

Against this background, I seek to test whether internal displacement leads to a higher IPV prevalence due to the challenge to traditional gender roles, which in turn exacerbates a hyper-masculine, abusive climate (Falb et al., 2015). This leads to the following first hypothesis:

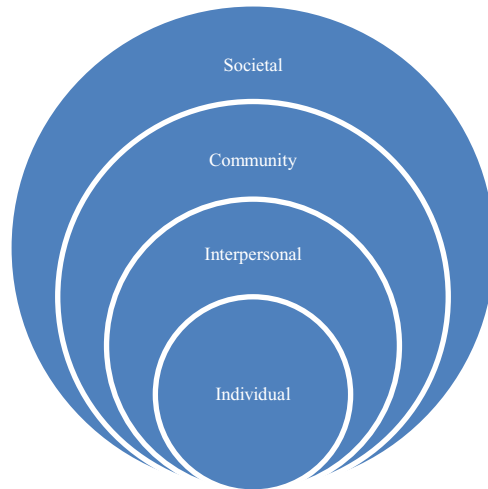
***Hypothesis 1:*** Internal displacement increases the likelihood of a woman being the victim of IPV.

The presented theory on hyper-masculinity and patriarchal backlash is extended by the ecological framework theory to consider the drivers of IPV beyond the individual and relationship level, first introduced by Heise (1998). Male domination is the basis for violence, but cannot serve as the sole explanation, as an adequate theory must explain both why men become violent and why women as a whole are often the subject of their violence (Heise, 1998). From this I deduce that societal factors also influence the impact that internal displacement is likely to have on IPV prevalence at the individual and partner level since socio-political structures and gender inequality can normalise IPV (Kelly et al., 2021b, Olayanju et al., 2013).

The framework that is illustrated in *Figure 1* suggests that IPV is influenced by an interplay of factors at four different levels, from the individual, interpersonal, community and societal-levels (Swaine et al., 2019, Olayanju et al., 2013). The factors at the individual-level include age, level of education and employment and correspond to the factors already considered in the theory above. The interpersonal level refers to all interactions in which the woman directly engages with her partner, her family and the partner's family. Factors at this level are the partner's alcohol consumption and an unequal division of labour or educational attainment. At the community level, an acceptance of violence and weak community sanctions are factors that influence violence against women.

Social and cultural norms are examples of risk factors at the societal-level (Swaine et al., 2019). Cultural norms can be multifaceted and manifest themselves, for example, in the form of wife beating being justified by the population. Patriarchal structures are also deeply rooted in a country's culture and are linked to cultural and social norms (Falb et al., 2015). Other

examples are government policies that discriminate against women, a lack of impunity for perpetrators of violence against women, poverty and the lack of societal legislation on IPV (Heise, 1998, Olayanju et al., 2013).



*Figure 1: Ecological framework from Heise (1998) and Swaine et al. (2019)*

In societies with high gender inequality, women are likely to experience higher levels of IPV, as the patriarchal structures that are anchored at the individual or community level are reproduced at the state level, for example in the form of laws that affect their rights (Hudson et al., 2020, Ma et al., 2023). Similarly, where there is greater economic inequality or general poverty, a higher level of violence against women can be expected, as poverty makes women more dependent on their partners and reduces their bargaining power (Cools and Kotsadam, 2017, Olayanju et al., 2013). While women with less bargaining power at the societal-level are more likely to be victims of violence against women, the greater bargaining power associated with displacement at the individual-level is not always accompanied by a reduction in the violence to which they are subjected.

Building on the economic framework theory of the patrilineal/fraternal syndrome, Hudson et al. (2020) suggests that the patrilineal system of society ensures that lineage and inheritance are traced through the male line, reinforcing the concentration of power and resources among men, maintaining patriarchy. This system is perpetuated through various social norms and practices, such as patrilocal marriage or the control of women's labour. The persistence of this system has a profound impact on social stability, resilience and security, ultimately limiting the potential for gender equality and social progress and justifying and reinforcing violence against women at the individual-level (Hudson et al., 2020).

All those assumptions make it important to control for country-specific differences at the societal-level.

## **2.2 Conflict as an additional stressor**

Living in a conflict zone creates a sense of threat and insecurity in individuals, which is likely intensified by internal displacement (Østby, 2016). According to Falb et al. (2015), the risk factors for IPV are exacerbated not only by internal displacement, but also by war. In line with the hyper-masculinity and patriarchal backlash arguments, I argue that exposure to conflict has a similar impact on IPV as internal displacement has on IPV. Firstly, since general living conditions are deteriorating, social structures and old habits are breaking down due to the consequences and uncertainties of conflict, and this poses a threat to masculinity and legitimises hyper-masculinity (Kelly et al., 2021b, Østby et al., 2019). Secondly, living in a conflict-ridden environment and experiencing violence regularly can change people's mindsets and create a "culture of violence" (Østby, 2016, p.6). In this new culture, violence is normalised and performing this hyper-masculinity through violence becomes accepted. This violence is used by men to maintain their dominance (Le and Nguyen, 2022, Østby et al., 2019).

This thesis also assumes that internal displacement further increases the existing stress, trauma and other psychological problems that come with living in conflict affected areas. These mental issues can in turn be channelled through the use of violence against a partner in order to pass on the pressure (Østby, 2016). On this basis, I hypothesise that living in a conflict-affected environment exacerbates the already persistent negative effects of displacement on IPV. Consequently, this leads to the following second hypothesis:

***Hypothesis 2:*** Living in conflict-affected regions increases the likelihood of being the victim IPV for internally displaced women compared to internally displaced women living in non-conflict-affected regions.

## **3. Research Design**

### **3.1 Hypothesis 1**

#### **3.1.1 Data and methodology**

For the first hypothesis, the empirical analysis uses data from the Demographic and Health

Surveys (DHS). The aim of the DHS programme is to conduct nationally representative household surveys in over 90 low- and middle-income countries to collect data on various demographic and health indicators. The data from the surveys relate to the individual woman and include a module on domestic violence (ICF, accessed in 2024 ). A logistic regression is carried out with this data, as the dependent variable is binary.

The units of analysis are individual women. The sample included in this analysis consists of 7977 women aged 15 to 49 from six surveys carried out in six countries between 2021 and 2022 as part of the latest round of the DHS (VIII). The six countries were Burkina Faso, Cote d'Ivoire, Ghana, Kenya, Mozambique, and Tanzania. They were selected because they were the only ones for which survey data from this round of the DHS was already available. In all other sub-Saharan African countries, data collection is still ongoing. Only the most recent DHS round could be used, as round VIII is the first to collect data on internal displacement and also includes the module on domestic violence.

In a second step, a more advanced multilevel logistic regression model is implemented, to control for country-specific social and cultural norms. For this purpose, the dependent, independent, and control variables remain the same at the individual-level. A country-level is introduced to take into account the security of women in the country, income equality and inequality in family law. Data for the security of women and inequality in family law comes from the WomanStats project which collects data on the situation and status of women worldwide (WomanStats Project, 2024). Further data for income equality comes from the Gini index, which measures income inequality in nearly all countries worldwide. It measures how far the distribution of income between households within a country deviates from perfect equality by using data from household surveys that collect information on income or consumption levels (World Bank, 2024).

### **Dependent variable**

The dependent variable consists of different questions regarding IPV. Only women who were selected for the module about domestic violence are included. The field staff who carried out the surveys for the domestic violence module all received special training to ensure that the questions were handled sensitively. This is crucial since talking about IPV can be highly distressing and potentially retraumatising for survivors. Moreover, due to the stigma and fear of retribution associated with IPV, respondents might be reluctant to disclose their experiences. Special training equips field staff with the skills to create a supportive and

non-judgmental environment, encouraging more open and truthful communication that enhances the quality and reliability of the data collected (ICF, accessed in 2024).

Among the questions women were asked about *emotional IPV* were whether their partner had ever humiliated her, threatened her with harm, insulted them or made her feel guilty. Questions regarding *physical IPV* included if their partner ever pushed, shook, slapped, punched her with his fist or something harmful, twisted her arm, pulled her hair, threw something at her, kicked, dragged, tried to strangle or burn her, threatened her with a knife/gun or other weapon. *Sexual IPV* includes all acts in which the partner has physically forced her to perform sexual acts or has forced the woman to have sex or engage in other sexual acts when it was not wanted by her. The questions on *emotional IPV*, *physical IPV* and *sexual IPV* were combined into one variable *IPV*.

The final dependent variable *IPV* equals one if the respondent answered “yes” to at least one of the above-mentioned questions. Descriptive statistics for the dependent variable are shown in *Table 1*. To improve accuracy and examine differences between the three forms of IPV, there are three additional dependent variables: *emotional IPV*, *physical IPV* and *sexual IPV*. They are equal to one if the respondent answered "yes" to any of the questions concerning any of the types of IPV.

Descriptive statistics: dependent variable			
	IPV		
	Mean	SD	Frequency
<i>Respondent has experienced</i>			
- emotional IPV	0.31	0.46	2320 (30.87%)
- physical IPV	0.22	0.41	1662 (22.12%)
- sexual IPV	0.08	0.27	585 (7.78%)
Any of the above (variable IPV)	0.40	0.50	2823 (37.56%)
Observations	7515		

*Table 1: Descriptive statistics for IPV*

### **Independent variable**

The independent variable relates to internal displacement. If respondents stated that they had



not lived in their current place of residence since birth, a follow-up question was asked about the reason for the move. If the respondents stated "forced displacement" as the reason, the variable *displacement* was set to one, otherwise to zero.

### **Control variables**

The control variables for the first model are individual and partner characteristics that might influence both the dependent and the independent variable. *Education* indicates the woman's highest education level, ranging from "no education", "primary", "secondary" to "higher than secondary level". *Age* is the age of the respondent at the time of the survey. *Father\_beat\_mother* indicates whether the respondent's father has ever hit her mother. The variable *working* defines whether the woman is currently employed or has been employed in the last 12 months. All the other variables also concern the partner of the respondent. The *wealth* variable is a composite measure of cumulative living standards, including ownership of selected assets such as bicycles, types of water access and sanitation. *Earns\_more* indicates whether the respondent's income is greater than, less than, or the same as their partner's income. As with the woman, *partner\_working* indicates whether the partner has worked in the last 12 months or is currently working, *partner\_education* is their highest educational attainment and *partner\_drinks* indicates whether he drinks alcohol sometimes or often.

Two new control variables are introduced for the second model. The first is *MULTI3*, a measure for inequity in family laws with regard to gender. The scale from 0 to 4 assigns lower values to countries where laws and practices promote gender equity, such as setting legal marriage ages at 18 or older, prohibiting polygyny, and ensuring women's rights to consent, divorce, and inheritance. Conversely, higher scores indicate inequitable conditions, including child marriage, legal polygyny, restricted abortion access, and laws favouring men in divorce and custody matters (WomanStats Project, 2024). The second variable *GINI* is the Gini index, which indicates the distribution of wealth for the respective country and ranges from 0: perfect equality to 100: perfect inequality (World Bank, 2024). Descriptive statistics for the independent variable and the control variables are shown in *Table 2*.

<b>Descriptive statistics: independent and control variables</b>				
	Mean	SD	Min	Max
Displacement	0.03	0.16	0	1
Age	32.93	7.50	15	49
Education	1.40	1.01	0	3
Father_beath_mother	0.21	0.41	0	1
Working	1.97	0.36	1	3
Wealth	3.40	1.41	1	5
Earns_more	2.06	0.51	1	4
Partner_working	0.97	0.17	0	1
Partner_education	1.61	1.03	0	3
Partner_drinks	0.30	0.45	0	1
MULTI3	3.75	0.43	3	4
GINI	39.52	3.12	35.3	50.5
Observations	7515			

Table 2: Descriptive statistics for internal displacement and the control variables

### 3.1.2 Model specifications

$Y$  in Equation 1 indicates the dependent binary variable IPV (0 = no, 1 = yes) against woman  $i$  in the logistic regression. This is regressed on the intercept  $\beta_0$  and the binary variable  $\beta_1$ , which can take on the value 0 if the woman was not internally displaced and 1 if the woman was displaced.  $\beta_2 X_i$  is a vector of covariates with the individual-level controls outlined above that may affect both the assigned treatment and the outcome variable.

$$\text{Logit}(Y_i = 1) = \beta_0 + \beta_1 \text{displaced} + \beta_2 X_i + \varepsilon_i$$

Equation 1: Model specification for Model 1

Equation 2 depicts the multilevel model with the added control variables for the country-level.  $Y$  is the binary outcome for the dependent variable IPV for woman  $i$  in country  $c$ .  $\beta_0$  denotes the overall intercept. The displacement status of woman  $i$  is denoted by  $\beta_1$ .  $\beta_2$  is a vector of fixed effects for the control variables  $X_{ij}$  at the individual-level.  $\gamma_1$  and  $\gamma_2$  denote the fixed effect of the country-level control variables (MULTI3 and GINI, respectively).  $u_c$  is the random effect at the country-level, accounting for unobserved heterogeneity and variability across countries. Including random intercepts for countries allows for the model to account for nested data structures, where individuals are nested within countries.

$$\text{Logit}(Y_{ijc} = 1) = \beta_0 + \beta_1 \text{displaced} + \beta_2 X_{ij} + \gamma_1 \text{MULTI3}_c + \gamma_2 \text{GINI}_c + u_c$$

Equation 2: Model specification for Model 2

### 3.1.3 Sample weights

The module on domestic violence was only used in a sub-sample of all selected DHS households, and only one woman per household was randomly selected. There were also cases in which the module was skipped by the interviewer, e.g. if full privacy was not given for the duration of the module. In order to take account of unequal selection probabilities, the *domestic violence* weight is used in the analysis, which takes all of the above factors into account. The sample weights were assigned to each survey respondent to adjust for the variations in selection probabilities and then rescaled by dividing by 1,000,000 to approximate the number of cases (Croft et al., 2023).

## 3.2 Hypothesis 2

### 3.2.1 Data and methodology

For hypothesis 2, a multilevel model with three levels is implemented in order to take into account the conflict exposure as a control variable. The model is run at the individual-, cluster- and country-level and includes cluster and country-level random effects to account for unobserved heterogeneity across countries that might influence IPV.

The dependent and independent variables from the first hypothesis as well as the sample weights are used and extended with an interaction term between internal displacement and conflict exposure, as well as a variable controlling for conflict exposure. The geographical data of the DHS was used for this in combination with data on conflict exposure from the UCDP Battle-Related Deaths Dataset. It contains data on the number of combat-related deaths and their location in conflicts that are included in the UCDP/PRIO Armed Conflict Dataset, from 1989 to 2023 (Shwan et al., 2023).

The primary sampling units for this hypothesis are selected by ICF (2013) from the DHS data collection and are referred to as clusters. Each cluster is a geographic area that can vary in size and the GPS coordinates are the estimated centre of a cluster. In each cluster a random sample of 25 to 30 households is chosen for the survey. To ensure the privacy of survey respondents, the DHS program anonymises the GPS coordinates of the clusters. The GPS points of the clusters are randomly displaced within a radius of up to two kilometres for urban clusters and up to five kilometres for rural clusters (ICF, 2013). There are 1458 clusters

in the final dataset.

Cluster size can vary but contains a number of households within a geographic area who participated in the survey.

#### **Added control variable: conflict exposure**

In order to be able to include the variable *conflict*, the clusters of the DHS data were spatially matched with the UCDP dataset (Shwan et al., 2023). To create the final dummy variable, the number of conflicts within a radius of five kilometres in the five years prior to the survey was calculated for each woman. For each cluster, the geographical distance to each conflict event was determined.

The conflict variable has a mean value of 0.22 and a standard deviation of 1.32. 516 individuals were exposed to conflict, which is roughly 7.37 per cent out of all of the surveyed women in the dataset.

### **3.2.2 Model specification**

$$\text{Logit}(Y_{ij} = 1) = \beta_0 + \beta_1 \text{displacement}_i + \beta_2 X_{ij} + \gamma_1 \text{conflict}_j + \gamma_2 Z_c + \gamma_3 (\text{displacement}_i \times \text{conflict}_j) + v_j + u_c$$

*Equation 3: Model specification for Hypothesis 2*

$Y$  in *Equation 3* indicates the binary outcome for the dependent variable IPV for woman  $i$  in cluster  $j$  within country  $c$ .  $\beta_0$  denotes the overall intercept. Coefficient  $\beta_1$  denotes the displacement status of woman  $i$  and  $\beta_2$  is a vector of fixed effects for the control variables  $X_i$  at the individual-level.  $\gamma_1$  is the fixed effect of the control variable conflict exposure in cluster  $j$ .  $\gamma_2$  is a vector of fixed effects for the combined country-level control variables  $Z_c$  (MULTI3 and GINI).  $\gamma_3$  denotes the interaction between displacement status and conflict exposure.  $v_j$  is the random effect at the cluster-level, accounting for unobserved heterogeneity and variability across the clusters within the same country.  $u_c$  represents the random effect at the country-level, accounting for systematic differences in the log-odds of IPV between different countries. Including both random intercepts for clusters and countries allows for the model to account for nested data structures, where individuals are nested within clusters, and clusters are nested within countries. This approach properly models the hierarchical nature of the data and the dependencies within clusters and countries.

## 4. Results

### 4.1 Frequencies

Figure 2 shows the frequencies for the dependent variable *IPV* and independent variable *displacement* on the y-axis. Only 2.66 per cent of all women in the sample were internally displaced. From the 2823 women who experienced IPV, only 71 (2.5 per cent) were internally displaced. The number of women who stated they were internally displaced after being asked why they moved is very low compared to the frequency of reported IPV (36.62 per cent), which leads to an unequal distribution of observations for the dependent and independent variable.

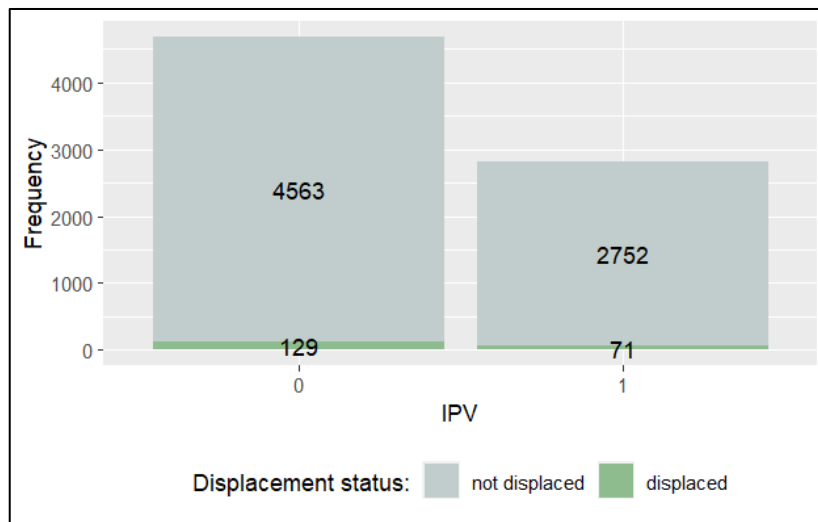


Figure 2: Frequencies of internal displacement and IPV

Table 4 shows this disparity in more detail for each individual country. As can be seen, there are differences between countries. Kenya has the largest disproportion between the two variables and Tanzania has the smallest.

Counts by Country			
Country	IPV	Displacement	Conflict
Burkina Faso	388	40	141
Côte d'Ivoire	297	21	7
Ghana	661	67	0
Kenya	1251	43	327
Mozambique	67	6	23
Tanzania	159	23	18

Table 3: Internal displacement and IPV counts by country

The variable for exposure to conflict shows similar trends, as illustrated in Figure 3. Of the

501 women exposed to conflict, only 15 were internally displaced (2.99 per cent) and the ratio between conflict exposure and no conflict exposure in the entire sample is very uneven. The conflict exposure variable is also unevenly distributed between countries. There was not a single conflict event in Ghana, while Kenya had the most conflict events with 327, followed by Burkina Faso with 141.

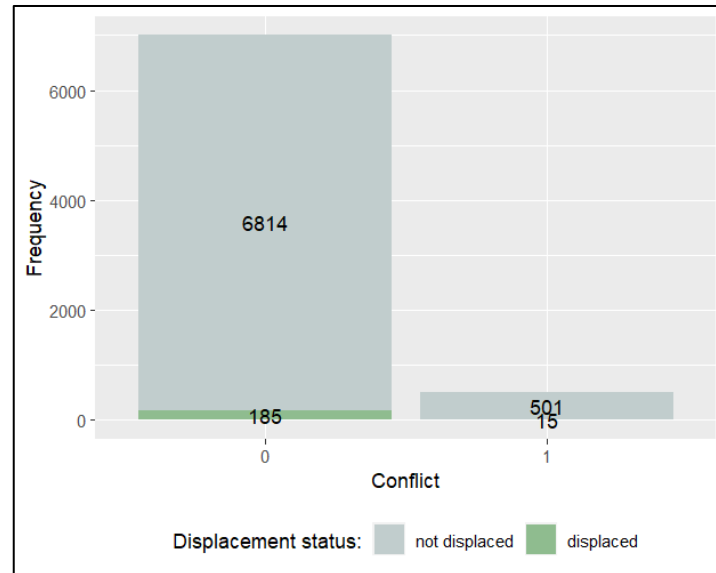


Figure 3: Frequencies of internal displacement and conflict exposure

## 4.2 Hypothesis 1

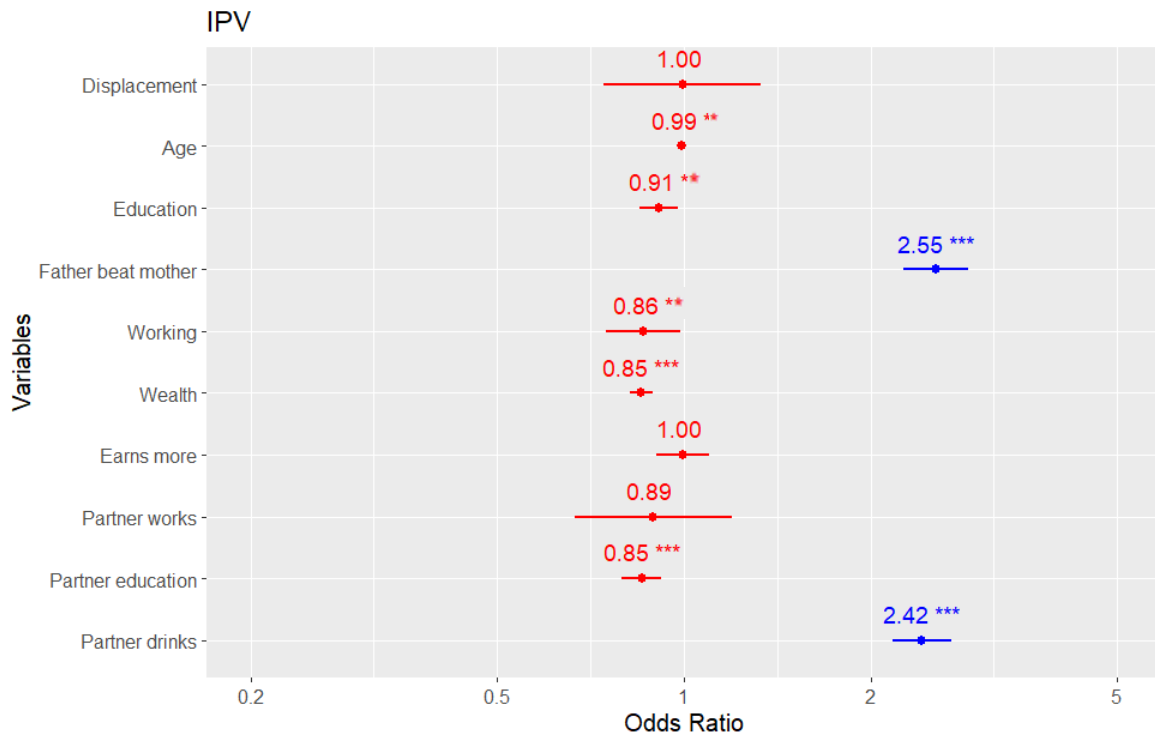
### 4.2.1 Logistic regression result

Table 5 provides an overview of the logistic regression results for the first model with IPV as the dependent variable and the control variables for the individual women and their partner. The standard errors of the regression coefficient  $b$  are shown in brackets.

<b>Logistic regression model results</b>	
<i>Dependent variable:</i>	
Model 1: IPV	
	<i>B</i>
Displacement	-0.002 (0.149)
Age	-0.008** (0.003)
Education	-0.092** (0.037)
Father_beat_mother	0.936*** (0.061)
Working	-0.150** (0.070)
Wealth	-0.159*** (0.021)
Earns_more	-0.003 (0.050)
Partner_work	-0.115 (0.148)
Partner_education	-0.158*** (0.037)
Partner_drinks	0.884*** (0.056)
Observations	7,515
AIC	8,821.941
$R^2$	0.13
<i>Note:</i>	* $p < 0.05$ ; ** $p < 0.01$ ; *** $p < 0.001$

Table 4: Logistic regression model results for IPV

For better visualisation, the adjusted odds ratios (aORs) are shown in *Figure 4*.



*Figure 4: Odds ratio for model 1*

The plot visualises the aORs for the independent variable *displacement* and the control variables, along with their 95 per cent confidence intervals. The aORs represent the adjusted odds of experiencing IPV for a one-unit increase in the predictor variable. aORs greater than one indicate an increased likelihood of experiencing IPV and aORs smaller than one indicate a decreased likelihood of experiencing IPV. The horizontal lines extending from each point estimate (dot) represent the 95% confidence intervals. If the intervals cross the vertical line at one, the effect is not statistically significant at the 0.05 per cent level.

The results show that hypothesis 1, which states that internal displacement increases the likelihood of IPV in total, cannot be confirmed. The coefficient for *displacement* was not significant and therefore has no effect on IPV. The adjusted odds ratio further indicate that there is no significant association between the two variables since the 95% confidence interval includes one. The standard error of the *displacement* variable and its size relative to the coefficient itself was relatively high:  $relative\ Size = \frac{0.149}{-0.002} = -74.5$ . This indicates that the standard error was 74.5 times the magnitude of the coefficient, suggesting a high level of uncertainty. Given that the number of IDPs in the dataset is small, there is not enough data to provide a reliable estimate for the effect of displacement.



Some of the control variables had a significant association with IPV. The age of the respondents was significantly associated with a slight decrease in the adjusted odds of experiencing IPV at the five per cent level ( $p < 0.05$ ). Higher education levels were highly significantly associated with lower aOR of experiencing IPV at the one per cent level ( $p < 0.001$ ). Similarly, being employed was significantly associated with lower aOR of experiencing IPV. A higher wealth status was also associated with lower aOR of experiencing IPV at the one per cent level ( $p < 0.001$ ). Another highly significant variable that was associated with lower aOR of IPV was the partners higher level of education ( $p < 0.001$ ). Having a father who beat a woman's mother and having a partner who drinks alcohol were significantly associated with higher aOR of experiencing IPV at the one per cent level ( $p < 0.001$ ). Earning more than the partner and the partner's employment status were not significantly related to IPV.

Three new logistic regression models are introduced. In the models 2 to 4 that can be seen in *Table 6*, the dependent variable consisted of only one form of IPV, emotional, physical or sexual, to determine whether there are differences in the significance of the three forms. The respective form of IPV was regressed on displacement exposure and the control variables at the individual and relationship level.

Logistic regression model results: different forms of IPV						
	<i>Dependent variable:</i>					
	Model 2: emotional		Model 3: physical		Model 4: sexual	
	<i>b</i>	<i>aOR</i>	<i>b</i>	<i>aOR</i>	<i>b</i>	<i>aOR</i>
Displacement	0.075 (0.153)	1.078 (0.799- 1.454)	0.056 (0.178)	0.946 (0.667- 1.341)	0.675** (0.215)	1.965 (1.290- 2.992)
Age	0.002 (0.004)	1.002 (0.995- 1.009)	-0.006 (0.004)	0.994 (0.986- 1.002)	-0.014** (0.006)	0.986 (0.975- 0.998)
Education	-0.064* (0.038)	0.938 (0.870- 1.011)	-0.162*** (0.043)	0.850 (0.781- 0.925)	-0.034 (0.067)	0.966 (0.848- 1.102)
Father_beat_mother	0.736*** (0.062)	2.087 (1.849- 2.356)	0.825*** (0.067)	2.282 (2.002- 2.602)	1.084*** (0.093)	2.955 (2.461- 3.549)
Working	-0.026 (0.073)	0.975 (0.845- 1.124)	-0.232** (0.082)	0.793 (0.676- 0.932)	0.188 (0.125)	1.207 (0.945- 1.543)
Wealth	-0.148*** (0.022)	0.862 (0.826- 0.900)	-0.152*** (0.024)	0.859 (0.819- 0.901)	-0.113** (0.038)	0.893 (0.830- 0.961)
Earns_more	-0.015 (0.051)	0.985 (0.890- 1.089)	0.063 (0.057)	1.065 (0.951- 1.191)	-0.042 (0.089)	0.959 (0.805- 1.142)
Partner_work	-0.169 (0.151)	0.844 (0.628- 1.136)	-0.159 (0.167)	0.853 (0.615- 1.182)	0.499** (0.336)	1.648 (0.853- 3.181)
Partner_education	-0.162*** (0.038)	0.850 (0.789- 0.917)	-0.144*** (0.043)	0.866 (0.796- 0.942)	-0.122** (0.066)	0.885 (0.777- 1.008)
Partner_drinks	0.825*** (0.057)	2.283 (2.041- 2.554)	0.935*** (0.063)	2.548 (2.253- 2.882)	0.923*** (0.093)	2.517 (2.100- 3.018)
Observations	7,515		7,515		7,515	
AIC	8,342.242		6,975.265		3,660.490	
Pseudo- $R^2$	0.10		0.12		0.10	

Note: \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Table 5: Logistic regression model results for emotional, physical and sexual IPV

Similar to the first model, the variable for internal displacement showed no significance in the second and third models. However, in the fourth model, where sexual IPV by the partner was the dependent variable, being displaced was statistically significant at the five per cent level of significance. This indicates a significant association between the variable and the

aOR of experiencing sexual IPV. The aOR were increased by 96.5 per cent if the woman is displaced, holding all other variables constant, which partly confirms the first hypothesis, since sexual IPV is one form of IPV. The four variables *father\_beat\_mother*, *wealth*, *partner\_education* and *partner\_drinks* were significant in all models at either the five or one per cent level, the variable *earns\_more* was not significant in any of the models. Some further differences in the control variables were that, firstly, the respondents' level of education had a significant influence on the dependent variable in all models except model 4. Secondly, the employment status of the respondent's partner was only significant in model 4.

The statistical measures Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) are helpful to compare and evaluate the fit of the different regression models. The AIC estimates the quality of each model, relative to other models. It aims to select a model that best explains the data with a minimal number of parameters (Hemmerich, 2021a). Similar to AIC, the BIC is used to select among competing models, but it includes a penalty term that increases with the number of parameters and the size of the dataset, making it more stringent than the AIC in penalizing model complexity (Hemmerich, 2021b). When comparing all four models according to their AIC and BIC, the fourth model has the best trade-off between model complexity and goodness of fit. With 3,660.490, it had by far the lowest AIC, indicating that it fits the data for predicting sexual IPV better than the other models fit their respective dependent variable.

An omnibus test was carried out for all models to check whether the models make a significant explanatory contribution compared to the respective null model that does not include any predictor variables. The test uses metrics such as the log-likelihood, deviance, AIC and BIC to evaluate model fit. The core of the omnibus test is a Chi-square test, which compares the deviance of the two models (Backhaus et al., 2006). The results can be seen in *Table 1A* in the appendix. All four models had very small p-values and significant Chi-square statistics, indicating a significantly improved fit compared to the intercept-only model for predicting the respective dependent variable. This implies that the independent variable and the control variables add explanatory power to the models. The use of both AIC and BIC helps ensure that the improvement in fit is not just due to overfitting with more parameters, but rather, these models genuinely capture more of the underlying patterns in the data (Backhaus et al., 2006). The consistent finding across different types of IPV underscores the

robustness of the predictors in explaining variations in IPV experiences.

The goodness of fit of the models was limited despite a very high significance. Nagelkerke's pseudo- $R^2$  provides a very low value of 0.13 for the first model, 0.10 for the second, 0.12 for the third and 0.10 for the fourth model (Nagelkerke, 1991). The values are thus far below what is considered a good model fit according to Backhaus et al. (2006) (0.2 - 0.4). The models therefore do not appear to be suitable for describing the effect of hypothesis 1, as only a very small proportion of the variance of the dependent variable *displacement* can be explained by the independent variable *IPV*.

#### **4.2.2 Results for each country**

The *regression table 2A* for the logistic regressions for each country can be found in the appendix. What these tables reveal is that there were significant country-specific differences in the effect of internal displacement but also in the control variables. In Ghana, internal displacement was associated with significantly higher aOR of experiencing IPV. This suggests that internal displaced women in Ghana were more vulnerable to IPV. In Tanzania, however, internal displacement was associated with significantly lower aOR of experiencing IPV, where internally displaced women had about 89 per cent lower odds of experiencing IPV compared to non-displaced women, holding other factors constant. In Burkina Faso, Côte d'Ivoire, Mozambique, and Kenya, displacement did not have a statistically significant effect on IPV, indicating no clear relationship between internal displacement and IPV in these countries based on the given data.

#### **4.2.3 Results with country-level controls**

The logistic regression Model 1 was expanded by adding a second level for country control variables. *Table 6* shows the results for the multilevel regression model with variables on the individual-level and control variables on the country-level. Figure xy displays the aOR for this model.

<b>Multilevel regression model results</b>	
<i>Dependent variable:</i>	
Model 5: IPV	
<i>b</i>	
<i>Individual-level</i>	
Displacement	0.026 (0.151)
Age	-0.082** (0.026)
Education	-0.227*** (0.040)
Father_beat_mother	0.804*** (0.064)
Working	-0.144** (0.071)
Wealth	-0.128*** (0.023)
Earns_more	-0.042 (0.051)
Partner_work	-0.114 (0.150)
Partner_education	-0.214*** (0.039)
Partner_drinks	0.912*** (0.057)
<i>Country-level</i>	
MULTI3	0.067 (0.239)
GINI	0.148* (0.081)
Observations	7,515
Variance (country)	0.067
Std. Dev. (country)	0.259
AIC	8,729.708
BIC	8,826.577
Conditional $R^2$	0.163
<i>Note:</i>	* $p < 0.1$ ; ** $p < 0.05$ ; *** $p < 0.001$

Table 6: Multilevel regression model results for IPV

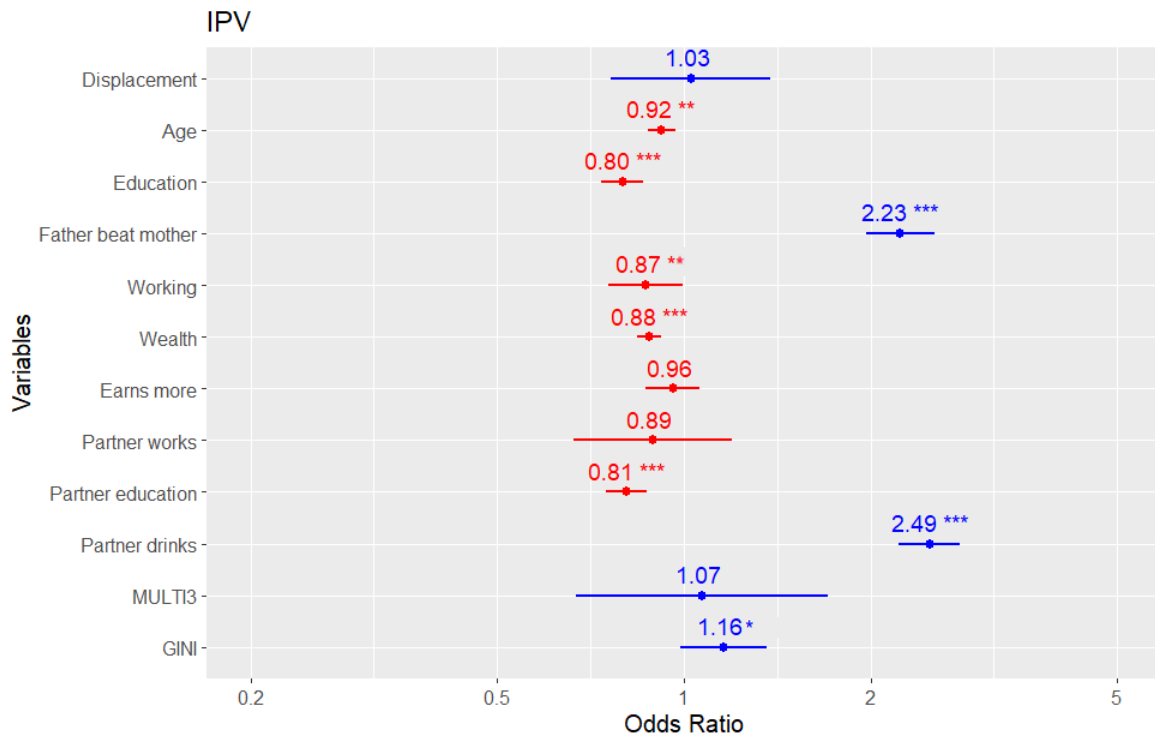


Figure 5: Odds ratio multilevel regression model 5

Table 6 and Figure 5 show that both the regression coefficient for the displacement variable changed its direction but remained statistically non-significant when adding country-level control variables in the multilevel model. This indicates that the observed change in the direction is not statistically robust, and I cannot confidently conclude that there is a true effect of displacement on IPV, even after controlling for country-level variables.

The coefficient for the MULTI3 variable is not significant. This implies that higher equitable family laws are not associated with a change in the likelihood of IPV. The second added country-control variable *GINI* is statistically significant, but only on the 10 per cent level. This indicates that women who are living in a country with higher economic inequality are having a higher likelihood of experiencing IPV, which is consistent with the ecological framework.

The variance in IPV attributable to clustering had a value of 0.067 which suggests low variability between clusters. The standard deviation of the random effect at cluster-level was 0.259, indicating that the dispersion of IPV probability between clusters was marginal. The conditional  $R^2$  of 0.163 indicates that 16.3 per cent of the variability in IPV is explained by both the fixed and random effects in the model. This suggests a low level of explanatory power for the model as a whole.

Table 7 shows the regression results of the three models with the individual forms of IPV as the respective dependent variable, while also including the country-level control variables.

Logistic regression model results: different forms of IPV						
	Dependent variable:					
	Model 6: emotional		Model 7: physical		Model 8: sexual	
	<i>b</i>	<i>aOR</i>	<i>b</i>	<i>aOR</i>	<i>b</i>	<i>aOR</i>
<i>Individual-level</i>						
Displacement	0.067 (0.155)	1.067 (0.788- 1.444)	0.127 (0.181)	1.132 (0.794- 1.614)	0.705** (0.218)	2.013 (1.314- 3.084)
Age	-0.010 (0.027)	0.989 (0.938- 1.044)	-0.073** (0.031)	0.930 (0.875- 0.988)	-0.139** (0.047)	0.870 (0.794- 0.954)
Education	-0.160*** (0.041)	0.846 (0.781- 0.917)	-0.394*** (0.048)	0.674 (0.613- 0.741)	-0.176** (0.073)	0.839 (0.727- 0.967)
Father_beat_mother	0.662*** (0.065)	1.910 (1.688- 2.161)	0.545*** (0.070)	1.724 (1.502- 1.980)	0.930*** (0.098)	2.534 (2.090- 3.074)
Working	-0.021 (0.074)	0.973 (0.843- 1.124)	-0.172** (0.083)	0.842 (0.716- 0.990)	0.176 (0.124)	1.193 (0.935- 1.521)
Wealth	-0.134*** (0.024)	0.875 (0.835- 0.916)	-0.085** (0.026)	0.918 (0.872- 0.967)	-0.066* (0.040)	0.937 (0.866- 1.013)
Earns_more	-0.035 (0.052)	0.965 (0.872- 1.068)	0.018 (0.058)	0.982 (0.877- 1.101)	-0.076 (0.088)	0.927 (0.780- 1.102)
Partner_work	-0.147 (0.153)	0.857 (0.635- 1.157)	-0.184 (0.171)	0.832 (0.595- 1.162)	0.441 (0.338)	1.554 (0.802- 3.011)
Partner_education	-0.185*** (0.040)	0.827 (0.764- 0.895)	-0.258*** (0.046)	0.772 (0.705- 0.846)	-0.202** (0.070)	0.817 (0.712- 0.938)
Partner_drinks	0.846*** (0.058)	2.348 (2.096- 2.631)	0.986*** (0.064)	2.681 (2.363- 3.042)	0.935*** (0.093)	2.548 (2.123- 3.059)
<i>Country-level</i>						
MULTI3	-0.009 (0.272)	0.464 (0.374- 0.574)	-0.384 (0.475)	0.681 (0.268- 1.728)	-0.464 (0.384)	0.629 (0.296- 1.336)
GINI	0.068 (0.092)	0.967 (0.904- 1.034)	0.113 (0.115)	1.120 (0.893- 1.404)	0.070 (0.104)	1.073 (0.875- 1.316)
Observations	7,515		7,515		7,515	
AIC	8,267.133		6,787.256		3,635.152	
BIC	8,364.003		6,884.126		3,732.002	

Variance (country)	0.086	0.186	0.132
Std. Dev. (country)	0.293	0.431	0.3638
Conditional-R <sup>2</sup>	0.14	0.21	0.17
<i>Note:</i>			*p<0.1; **p<0.05; ***p<0.001

Table 7: Multilevel regression model results for emotional, physical and sexual IPV

The analysis delivered similar results to the models without the country-level variables. Being internally displaced was not significantly associated with emotional and physical IPV. It was only significantly related with sexual violence more than doubling the odds of experiencing sexual IPV. Neither *MULTI3* nor *GINI* was significantly associated with the odds of experiencing any form of IPV.

The conditional R<sup>2</sup> describes the proportion of the variance that is explained by both the fixed effects and the random effects in the model. Higher values indicate greater model explanatory power (Johnson, 2013). The value is highest for model 7, followed by model 8, which indicates that model 7 has the best explanatory power.

Model 1 has an AIC of 8,821.941 and Model 5 has an AIC of 8,729.708. The lower AIC of Model 5 indicates that it fits the data slightly better than Model 1 does. Among the different forms of IPV, Model 8 (sexual IPV) has the best fit (lowest AIC and BIC). Higher values of variance and standard deviation in models 7 and 8 indicate greater variability in IPV outcomes between clusters for physical and sexual IPV compared to emotional IPV and all types of IPV. Model 7 has the highest conditional R<sup>2</sup>, explaining 21 per cent of the variability in the dependent variable.

An omnibus test was carried out which can be found in *Table 3A* in the appendix. The results strongly suggest that the predictors included in the full models significantly enhance the explanation of the variation in all four types of violence outcomes compared to the null models. The significant reduction in AIC, BIC, and deviance, along with the high Chi-square values and extremely low p-values, indicate that the additional predictors are meaningful and contribute to a better understanding of the factors associated with these forms of violence.

To summarise, the analysis partially confirms the first hypothesis. Internal displacement increases the likelihood that a woman will experience sexual violence, a form of IPV. The addition of control variables at the country-level slightly improved the model fit. In the discussion, the results are explained in more detail and placed in context.



### 4.3 Hypothesis 2

The multilevel logistic regression results for the ninth model with IPV as the dependent variable are presented in *Table 9*. To include conflict exposure, a third level on the cluster-level was introduced, comprising 1458 clusters. An interaction effect was added to this model to capture the interaction between conflict exposure and displacement. Again, for better visualisation, the adjusted odds for Model 9 are shown in *Figure 5*.

<b>Multilevel regression model results</b>	
	<i>Dependent variable:</i>
	Model 9: IPV
	<i>b</i>
<i>Individual-level</i>	
Displacement	-0.122 (0.176)
Age	-0.063** (0.031)
Education	-0.279*** (0.046)
Father_beat_mother	0.877*** (0.076)
Working	-0.151** (0.082)
Wealth	-0.121*** (0.029)
Earns_more	-0.087 (0.059)
Partner_work	-0.186 (0.170)
Partner_education	-0.195*** (0.045)
Partner_drinks	1.077*** (0.068)
<i>Cluster-level</i>	
Conflict_exposure	-0.006 (0.021)
<i>Country-level</i>	
MULTI3	0.101 (0.242)
GINI	0.190** (0.084)
<i>Interaction effect</i>	
Displacement*Conflict_exposure	0.659 (0.796)
Observations	7,515

Cluster variance	0.912
Cluster std. dev.	0.954
Country variance	0.066
Country std. dev.	0.256
AIC	8,391.165
BIC	8,508.884
Conditional $R^2$	0.339
<i>Note:</i> * $p < 0.1$ ; ** $p < 0.05$ ; *** $p < 0.001$	

Table 8: Multilevel regression results for IPV

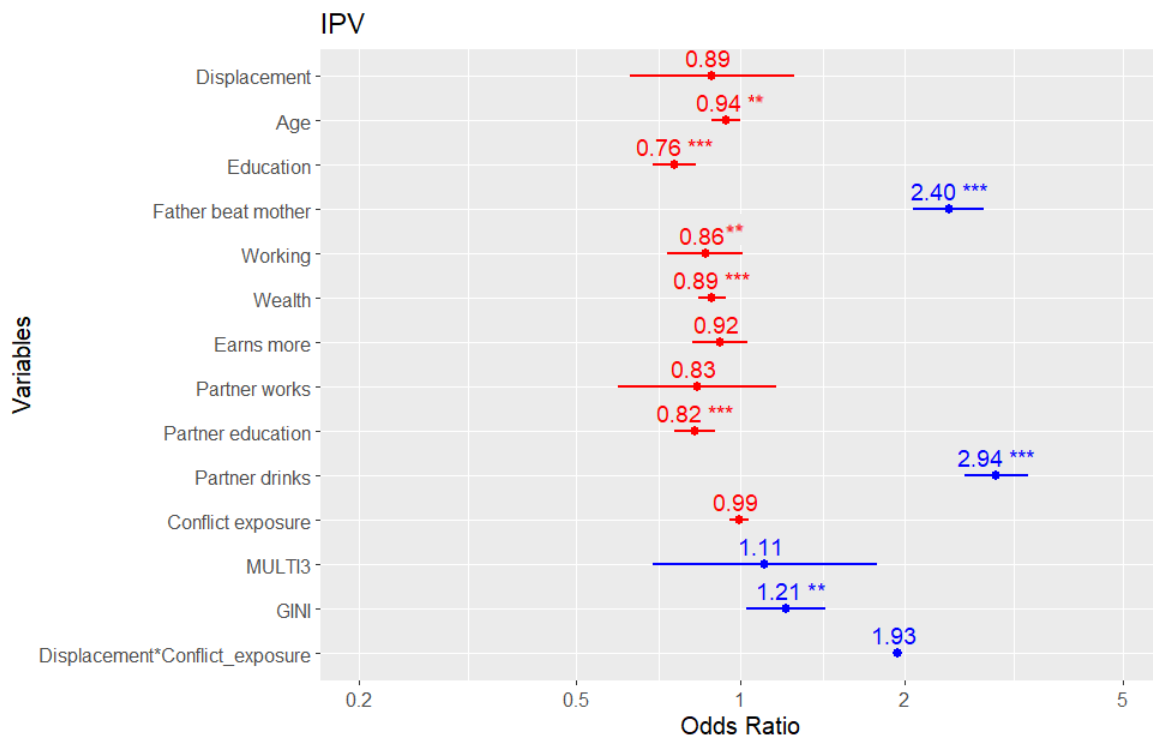


Figure 6: Odds ratio for model 9

The results show that the second hypothesis, which asserts that living in conflict-affected regions increases the likelihood of IPV for displaced women as a whole, cannot be confirmed. The main effects of the variables *displacement* and *conflict* were not statistically significant, indicating that neither internal displacement nor living in a conflict-affected region alone significantly influenced the likelihood of IPV. The coefficient for the interaction effect *displacement\*conflict* was also not statistically significant and had a large standard error. At 0.796, the standard error was greater than the coefficient itself, which makes the estimate unreliable. As Figure 3 shows, not only is the number of conflict cases very low, but the number of internally displaced women experiencing conflict within a five-kilometre radius is also very low compared to the total number of women. The non-

significant interaction term means that the combination of being internally displaced and experiencing high conflict intensity does not significantly increase the likelihood of IPV compared to other women.

The control variables in the model exhibit results consistent with those observed in the first hypothesis. Specifically, the age of the woman had a significant negative effect on the likelihood of experiencing IPV, at the 5 per cent level ( $p < 0.05$ ). Both the woman's and her partner's levels of education were significantly negatively associated with IPV, each at the one per cent level ( $p < 0.01$ ). Additionally, wealth status showed a highly significant negative correlation with IPV, with an aOR of 0.89 ( $p < 0.01$ ). Conversely, a significant positive association with IPV was found if the partner drinks alcohol and if the woman's father beat her mother, also at the one per cent level ( $p < 0.01$ ). *GINI* was significant at the five per cent level, indicating that higher income inequality of a country had a negative effect on IPV prevalence. The variables *earns\_more* and *partner\_work* were not significant.

The variance and standard deviation for cluster random effects (0.912, 0.954) show that there is significant variability in IPV outcomes across households within the same country. This suggests that there is significant heterogeneity and variability in IPV across different clusters beyond what is explained by the fixed effects in the model. The variance and standard deviation for country effects (0.066, 0.256) indicate that there are only marginal differences in IPV prevalence between different countries, beyond what is explained by both the fixed effects and the clustering at the household level.

As with the first hypothesis, *Table 9* shows the results of the three models with the individual forms of IPV as the respective dependent variable. It was not feasible to include the interaction term between conflict and displacement in Models 6, 7, and 8. The primary reason for the exclusion was the small sample sizes for women who experienced both displacement and conflict. This limited sample size resulted in large standard errors and non-significant, non-definable estimates for the interaction term, which strongly compromised the reliability and interpretability of the results. To ensure the robustness of the findings, the variables conflict and displacement were included separately in the models. This approach allowed for a more stable and meaningful analysis of each variable's individual effect on the different types of IPV, without the confounding influence of an unreliable interaction term.

**Multilevel regression model results: emotional, physical and sexual IPV**

	<i>Dependent variable:</i>					
	Model 10: emotional		Model 11: physical		Model 12: sexual	
	<i>b</i>	<i>aOR</i>	<i>b</i>	<i>aOR</i>	<i>b</i>	<i>aOR</i>
<i>Individual-level</i>						
Displacement	-0.069 (0.180)	0.918 (0.648- 1.301)	0.007 (0.213)	0.885 (0.584- 1.342)	0.751** (0.275)	2.119 (1.236- 3.633)
Age	0.014 (0.032)	1.027 (0.965- 1.092)	-0.066* (0.031)	0.955 (0.888- 1.026)	-0.159** (0.058)	0.853 (0.761- 0.955)
Education	-0.240*** (0.048)	0.841 (0.769- 0.919)	-0.459*** (0.056)	0.730 (0.657- 0.811)	-0.143** (0.084)	0.867 (0.735- 1.021)
Father_beat_mother	0.712*** (0.077)	2.008 (1.741- 2.316)	0.648*** (0.085)	2.381 (2.021- 2.806)	1.230*** (0.121)	3.420 (2.695- 4.338)
Working	-0.013 (0.086)	0.967 (0.819- 1.142)	-0.144** (0.097)	0.831 (0.686- 1.008)	0.273** (0.154)	1.314 (0.972- 1.778)
Wealth	-0.128*** (0.030)	0.866 (0.817- 0.917)	-0.074** (0.034)	0.896 (0.838- 0.959)	-0.127** (0.054)	0.881 (0.792- 0.980)
Earns_more	-0.065 (0.060)	0.944 (0.841- 1.061)	-0.102 (0.068)	0.949 (0.829- 1.087)	-0.085 (0.110)	0.918 (0.740- 1.140)
Partner_work	-0.226 (0.175)	0.777 (0.556- 1.086)	-0.270 (0.198)	0.734 (0.498- 1.081)	0.370 (0.384)	1.448 (0.683- 3.071)
Partner_education	-0.153*** (0.046)	0.878 (0.803- 0.959)	-0.248*** (0.079)	0.825 (0.743- 0.916)	-0.249** (0.085)	0.780 (0.660- 0.921)
Partner_drinks	0.984*** (0.069)	2.417 (2.121- 2.755)	1.182*** (0.079)	3.192 (2.733- 3.727)	1.225*** (0.093)	3.404 (2.688- 4.311)
<i>Cluster-level</i>						
Conflict_exposure	-0.026 (0.024)	0.990 (0.944- 1.038)	-0.019 (0.026)	1.006 (0.955- 1.060)	0.032 (0.037)	1.033 (0.960- 1.111)
<i>Country-level</i>						
MULTI3	0.054 (0.276)	0.974 (0.818- 1.160)	0.149 (0.411)	1.283 (1.040- 1.582)	0.244 (0.168)	1.276 (0.918- 1.774)
GINI	0.128 (0.095)	1.205 (1.125- 1.291)	0.182 (0.136)	1.110 (1.023- 1.205)	0.254*** (0.067)	1.289 (1.131- 1.468)

Observations	7,515	7,515	7,515
Variance (cluster)	1.006	1.126	3.147
Std. Dev. (cluster)	1.003	1.061	1.774
Variance (country)	0.087	0.205	0.122
Std. Dev. (country)	0.296	0.453	0.321
AIC	7,938.404	6,502.718	3,374.371
BIC	8,049.199	6,613.512	3,478.241
Conditional R <sup>2</sup>	0.333	0.401	0.552

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.001

Table 9: Multilevel regression model results for emotional, physical and sexual IPV

Similar to the first hypothesis, conflict exposure was not significantly associated with any form of IPV. Being internally displaced was also not significantly associated with emotional or physical IPV. However, there was a significant correlation with an increased likelihood of sexual IPV, with women who are internally displaced being more than twice as likely to experience sexual IPV, as the aOR of 2.020 indicate. Another common feature of these models compared to the second, third and fourth model was that the variables *father\_beath\_mother*, *wealth*, *partner\_education* and *partner\_drinks* were all significantly associated with the respective form of IPV, which is in line with previous research. Earning more than the partner and the partner's education also had no significant influence on the probability of experiencing any form of violence in these models. In contrast to the models for the first hypothesis, age was significantly negatively associated with the probability of experiencing physical and sexual IPV.

The value for the conditional R<sup>2</sup> increases with each of the four models, in line with the AIC and BIC values, which get smaller. Comparing the AIC and BIC values for all four models for the second hypothesis, model 12 (sexual IPV) has the lowest AIC and BIC. This indicates the best fit among the three models examining different forms of IPV without the interaction term. Model 11 (physical IPV) and Model 10 (emotional IPV) follow, with higher AIC and BIC values, suggesting slightly less optimal fits. In contrast, Model 9, which includes the interaction term between conflict and displacement, had a significantly higher AIC (8,391.250) and BIC (8,495.120). This higher AIC and BIC values indicates that the model with the interaction term does not fit the data as well as the other models. This could be due to the instability and non-significance of the interaction term, likely resulting from the small sample sizes of women experiencing both displacement and conflict. Therefore, excluding

the interaction term and analysing the variables separately not only provided more reliable estimates but also resulted in models with better fit, as indicated by the lower AIC values for Models 10, 11 and 12.

The variance and standard deviation of the random effects varied across the models, indicating different levels of clustering effects within and across the groupings. Across the models, the variance of random intercepts for the clusters ranged from 0.912 to 3.147, with corresponding standard deviations ranging from 0.954 to 1.774. This variability suggests that individuals within the same cluster tend to have similar outcomes related to IPV and its different forms. Sexual IPV demonstrates significantly greater variability in outcomes across clusters. This indicates that factors influencing sexual IPV may vary widely between different households compared to physical and emotional IPV.

An omnibus test was carried out for all four models and can be found in the appendix in *Table 4A*. Across all models, the full models significantly improve upon the null models, as indicated by the highly significant Chi-Square test results ( $p < 2.2e-16$ ). The reduction in AIC and BIC values from the null models to the full models suggests that the full models provide a better fit to the data. This is further supported by the increase in the log-likelihood and the reduction in deviance for the full models. Overall, the full multilevel models that include the specified predictors offer a substantially better explanation for the variance in the respective types of violence compared to the null models.

## **5. Discussion**

The above analysis shows that internal displacement seems to be a driving force for sexual IPV, which partially confirms the first hypothesis. The second hypothesis on conflict exposure could not be confirmed but the regression analysis that included conflict exposure as a control variable also showed a negative relationship between displacement and sexual IPV. In the following discussion, the results will be discussed and put into context.

### **5.1 Hyper-masculinity and patriarchal backlash**

Due to limitations in the scope and difficulties in operationalization, I could not directly test whether the mechanism behind the theory of patriarchal backlash holds true. To empirically validate this theory, I would have needed more detailed information about the new living situations in the communities following internal displacement to ascertain

whether women experienced increased empowerment. Additionally, crucial would have been comprehensive data on the male partners, as the theory posits that men might feel threatened by their partners' gained empowerment through internal displacement. Specifically, I would have needed data that captures the perspectives and experiences of both women and their male partners in the new living environments. This would include understanding changes in household dynamics, shifts in economic roles, and variations in social status post-displacement. By examining how women perceive their empowerment and how men react to these changes, I could have more accurately assessed the interplay between displacement, female empowerment, and male responses.

In addition, insights into community attitudes and norms regarding gender roles post-displacement would have provided a more comprehensive picture of the socio-cultural landscape influencing these dynamics. Such detailed, multi-faceted data would allow for a rigorous analysis of whether displacement indeed leads to patriarchal backlash characterized by increased male aggression or other hyper-masculine behaviors.

However, some of the control variables included in the analysis (*earns\_more*, *education*, and *working*) do offer some insights into the potential dynamics at play. Each of the models shows that most of the standard individual and relational control variables generally accepted in the literature and their relationship to IPV are confirmed by this analysis. They are consistent with the results of other studies and help to analyse the mechanisms of the theory presented.

Being employed increased the risk of IPV for women across all analyses. Employment can be seen as a form of empowerment for women, leading to greater financial independence and self-sufficiency. However, this empowerment can threaten traditional gender roles, provoking insecurity and aggressive behaviour in men who feel their provider role is being undermined (Gelles and Loseke, 1993). This finding is subject to caveats, as the analysis cannot prove that this is the reason why IPV is higher. The increased IPV risk among working women suggests that employment can trigger backlash from men attempting to reassert control (Villarreal, 2007). These findings reflect a nuanced reality where different forms of empowerment have varying impacts on IPV.

To the contrary, higher levels of education were associated with a lower risk of experiencing IPV, indicating that education can be a protective factor against IPV. This supports the idea

that empowerment through education can reduce vulnerability and is contrary to what the theory on patriarchal backlash predicted. Educated women might be more likely to be aware of their rights, have better access to resources that can reduce their economic dependency on their partner and possess greater social capital to seek help (Amegbor and Pascoe, 2021, Conroy, 2014). This aligns with the ameliorative hypothesis, which posits that as women's empowerment grows in a country, their victimization decreases, but that this relationship may be complex and context dependent. It indicates that other factors, such as social norms and support systems, play crucial roles in mitigating IPV beyond just economic independence (Parroco, 2023).

Earning more than the partner had no significant effect on the risk of IPV in any of the models. This finding does not support the empowerment theory directly. The lack of significant impact from earning more than the partner suggests that economic power alone may not be sufficient to alter power dynamics in relationships significantly (Amegbor and Pascoe, 2021).

Being younger significantly increased the risk of IPV across all models where IPV was the dependent variable. This finding aligns with existing literature, which often highlights that younger women are at a higher risk of IPV (see for example: Black et al., 2019, Olayanju et al., 2013). Younger women may be perceived as easier targets by abusive partners seeking to assert control and dominance, particularly in displacement settings where social structures are disrupted (Decker et al., 2015).

Having a partner who was employed only increased the risk of sexual IPV, which contradicts the findings of Amegbor and Pascoe (2021). In their study, the employment of the partner had a significant influence on only emotional and physical IPV, which might be due to different contextual and cultural factors. This suggests that the impact of the partners employment on different forms of IPV can vary depending on the socio-economic and cultural context like societal norms and values related to gender roles and employment.

Alcohol abuse by the partner was a significant determinant of all forms of violence against women in all models and is consistent with findings from other studies (see for example: Amegbor and Pascoe, 2021, Black et al., 2019). These findings prove that alcohol reduces self-control, making individuals more likely to engage in aggressive behaviour, including IPV. Another argument is that alcohol abuse and IPV are both products of socio-cultural norms that promote aggressive behaviour as an expression of masculinity (Amegbor and



Pascoe, 2021).

Although the main independent variable displacement is not significant, the significant and partly contradictory results of the control variables highlight the complexity of IPV dynamics in general. The findings suggest that various individual-level factors and partner characteristics significantly impact IPV risks, necessitating a nuanced understanding of these interactions. The study reaffirms the importance of considering multiple dimensions of empowerment and societal norms in addressing IPV in displacement settings but also shows that more research focusing on IDPs needs to be done.

## **5.2 Country-level controls**

The results revealed that higher income inequality in a country (*GINI*) was associated with increased risk of IPV, whereas gender equity in family laws (*MULTI3*) was not associated with IPV. The additional control variables for the country-level did not change the results for the first hypothesis. However, the multilevel analysis underscores the need to account for the hierarchical structure of the relationship between internal displacement and IPV. While the independent variable *displacement* kept a consistent effect, controlling for country-level factors was essential to ensure a comprehensive understanding of how contextual influences shape this relationship. This approach allowed for a more nuanced analysis and highlights the importance of considering both individual and contextual factors in IPV research.

Further implications for the results of the first hypothesis are related to the quality of the data used for the analysis and are explored next.

### **Internal displacement**

A key criticism that ran through the analysis was the quality of the data, particularly striking being the imbalance between women who were selected for the DHS domestic violence module and affected by internal displacement compared to those who were not affected by displacement. Data on internal displacement is difficult to collect, leading to selection biases. Collecting more vulnerable and private information on IPV in this context seems to be an even greater challenge. This paper contributes to the study of internal displacement and IPV, and is the first to use the newest wave of DHS data which for the first time includes a question on internal displacement. The inclusion of this question in the DHS is a good step towards a better understanding of the gendered consequences of internal displacement, but it lacks a

representative sample of IDPs as the DHS does not focus on internal displacement.

Official figures from the Internal Displacement Monitoring Centre reports on internal displacement show, that the numbers of internally displaced are a lot higher than what the figures in the DHS surveys indicate. One example is Burkina Faso, which in 2020, just six months before the DHS survey, had the fifth highest number of internally displaced persons in the world. In 2020 alone, 515,000 people were internally displaced (iDMC, 2021). In the 2021 DHS, out of a total of 17,659 people, only 313 were internally displaced, and of these only 40 were selected for the domestic violence module (INSD and ICF, 2023).

One problem with collecting data on IDPs is that in most cases there is no registration system for them, as there is for displaced persons who have to flee beyond the borders of their home country (Baal and Ronkainen, 2017, European Union and United Nations, 2018). Using sampling techniques to obtain data that can later be generalised is the most common approach to obtain reliable data on IDPs, but it also presents difficulties (Baal and Ronkainen, 2017, Claussen et al., 2020). In theory, a properly designed sampling technique ensures that every IDP has an equal chance of being selected. This is crucial for the data to be representative and generalizable to the entire IDP population but can fail in practice and lead to potential biases due for various reasons.

IDPs often reside in remote or inaccessible areas where infrastructure is poor. Reaching these locations can be challenging and expensive, making it difficult to include IDPs from these areas in the sample. Continuous conflict and instability in regions with high IDP populations pose significant security risks for data collectors, which can limit access. Other unforeseen factors such as disease outbreaks can further hinder access to areas and make data collection too dangerous for staff. IDP populations are often in a state of flux due to ongoing displacement driven by security threats and many IDPs are unable to find permanent or even semi-permanent places to settle due to persistent insecurity. These continuous movements and the transient nature complicate efforts to locate and sample these individuals accurately (Baal and Ronkainen, 2017).

### **Conflict exposure**

Evidence that the DHS struggled with collecting data can be seen in the analysis of the second hypothesis. The results for both the control variable of conflict exposure and the interaction effect were not significant, which is counterintuitive and not supported by previous studies (see for example: Clark et al., 2010, Østby, 2016). In the combined dataset

there were not many overlaps between interviewed women and conflict exposure and even fewer between displaced women and conflict exposure. This indicates that DHS staff were not exposed to the risk of travelling to conflict-prone areas to collect data. An explanation for this lack of overlaps and the small numbers is also that the study was conducted across six different countries, of which not all were equally affected by conflicts in the time the study was conducted. For example, there were no internally displaced persons due to conflict in Tanzania in 2022, when the DHS data was collected, nor in the five years prior to that (iDMC, 2024a).

A further limitation of the data for the second hypothesis' analysis results from the dependence of the analysis on the GPS data of the DHS. In order to protect the privacy of the respondents, the geographical coordinates of the DHS clusters were randomly displaced (Eseosa Ekhatior-Mobayode et al., 2022). This reduces the spatial precision of the data, which can obscure the true locations of the survey individuals and their proximity to conflict zones. The random displacement of GPS coordinates may result in some respondents being incorrectly classified as closer or farther from the conflict zones. This misclassification could potentially lead to an "attenuation bias", which means a systematic underestimation of the strength of the relationship between two variables, in this case displacement and IPV (van Kippersluis et al., 2023).

### **5.3 Country specific differences: the case of Tanzania**

The results of the first hypothesis differ widely between the chosen countries. The analysis could not confirm the theory of patriarchal backlash in Tanzania, with counterintuitive regression results indicating that internal displacement is associated with a significantly decreased likelihood of IPV. One explanation for this comes from the countertheory, amelioration theory. According to the amelioration theory, as women's empowerment increases, their victimisation decreases because they are better able to defend and protect themselves against violent male behaviour (Parroco, 2023, Heirigs and Moore, 2018). In this context, this would mean that as women's empowerment and equality through internal displacement increases, their risk of IPV decreases.

One shortcoming of the analysis, which is also due to data quality, is that the question on internal displacement in the DHS is not very precise. The survey asked whether the individuals were internally displaced, but the reason for their internal displacement remains uncertain. This lack of specificity could lead to biases emerging since the analysis cannot

differentiate between the different causes of internal displacement, such as conflict, violence or natural disasters. The results in *Table 2A* in the Appendix show that internal displacement in Tanzania reduces the risk of IPV. One potential explanation for this finding is related to the nature of internal displacement in Tanzania. Internal displacement in Tanzania is primarily due to natural disasters such as earthquakes or floods (Blocher et al., 2021a, Blocher et al., 2021b). This distinction is crucial because the underlying causes of internal displacement could have varying social and psychological impacts on individuals and communities and may affect the risk of IPV in different ways. These considerations highlight a significant gap in the literature. The existing research does not adequately explore whether the different causes of internal displacement have varying impacts on IPV. This gap presents an opportunity for future research to investigate the nuances of how different types of internal displacement influence IPV. Understanding these distinctions could contribute to a more comprehensive understanding of the dynamics at play.

Findings by Bohnet et al. (2021) support the claims made here for Tanzania. They found that the risk of social conflict is higher in areas where conflict-induced IDPs live than in areas where flood-induced IDPs live. They note that the consequences of the conflict lead to more severe negative living conditions in the new host communities. In line with the theory of patriarchal backlash and hyper-masculinity, it can be argued that rates of IPV are higher among IDPs fleeing conflict than those fleeing disaster. Disaster-induced internal displacement may not destroy local support systems to the same extent as conflict-induced internal displacement and might even create enhanced community cohesion (Bohnet et al., 2021). These social support networks are crucial for IDPs to mitigate the negative effects of fleeing their homes and can create a protective environment that reduces the risk of IPV (Kelly et al., 2021b).

Another factor is that disaster-induced internal displacement is often short-lived. Internally displaced people can often return more quickly than those fleeing conflict (Bohnet et al., 2021). In addition, people displaced by disasters often receive more state or international aid than people displaced by conflict, who are often neglected or not officially recognised as vulnerable (Cantor and Sánchez-Mojica, 2023, Field, 2018). Such disaster relief efforts may include temporary shelters and aid services that offer protection and resources to displaced women, thereby reducing their vulnerability to IPV. The different impacts of internal displacement for conflict-induced IDPs can serve as an explanation for why internal

displacement in Tanzania leads to a decline in IPV.

#### **5.4 Sexual IPV vs. other forms of IPV**

Studies by Garcia-Moreno et al. (2006), and Amegbor and Pascoe (2021) underline the importance of analysing the different forms of IPV separately, as was done in this paper. Amegbor and Pascoe (2021) conclude that most factors in their study predict specific types of IPV differently, which is consistent with the findings in this thesis.

Why displacement increases only the risk of sexual IPV in this study relates to the theory on patriarchal backlash and hyper-masculinity. Sexual IPV, more than the other forms of IPV, might be used more often as a tool of domination and to demonstrate antipathy towards women. Unlike emotional or physical IPV, men may resort to sexual IPV more frequently as a stronger means to regain control over their partner, making it a more pronounced response to displacement-induced insecurities. Sexual IPV can affect intimate and personal boundaries of the victim to a greater extent, leading to more widespread traumatic effects. By violating these boundaries, the perpetrator asserts control not just physically, but also psychologically and emotionally over the woman, that affect her long term well-being (Kalra and Bhugra, 2013). Therefore, sexual IPV can be used as a strategic tool to assert dominance and re-establish control that was perceived to have been lost through displacement. The use of this form of violence could also be less to do with the immediate physical or emotional control and more about a deeper, longer lasting symbolic reclamation of power within the disrupted social and patriarchal order (Armstrong et al., 2018).

Under-reporting of IPV may be another explanation for the different results for the different forms of IPV. Seidu et al. (2021), based on a multilevel analysis of the prevalence of IPV in sub-Saharan Africa, report that women in the region tend not to report any form of violence against them because of a strongly entrenched acceptance of violence, conditioned by socio-cultural beliefs and practices. Underreporting can also be due to trauma, and feelings of shame and fear (World Bank, 2023). A study by Cullen (2022) in Nigeria sheds light on the extent of underreporting and differential reporting across IPV types. She conducted face-to-face surveys, as used in the DHS, with half of a study group in Nigeria. For the other half she used a list experiment, in which respondents were given anonymity, to ask about their experiences of IPV. The respondents were randomly assigned to one of the two groups. Using the list method, the number of reported experiences of emotional and physical IPV was more than 30 per cent higher than in the face-to-face survey. The rate of physical IPV

was even 180 per cent higher with the list method than in the DHS survey for Nigeria. Interestingly, the prevalence of sexual IPV was the same with the face-to-face interview and the list experiment, indicates that sexual IPV may be reported more consistently regardless of the survey method (Cullen, 2022).

Since the results of this study were only significant for sexual violence, it is possible that the DHS data underreport the incidence of emotional and physical violence. This underreporting likely attenuates the observed effects in the analysis. The discrepancies in reporting imply that the true prevalence and risk factors for emotional and physical IPV are not fully captured. This leads to non-significant or at least biased results for these forms of IPV and for the model in which all forms are combined into one. The consistent reporting of sexual IPV in both face-to-face and anonymous methods suggests that the DHS data for sexual IPV are more reliable than the data for the other forms. This reliability lends credence to the finding that displacement significantly impacts sexual IPV.

## **5.5 Suggestions for further research**

### **Collection of internal displacement data**

Future researchers should focus on the collection of data on internal displacement. This thesis has shown that internal displacement and its consequences have not been sufficiently researched due to the lack of appropriate data. In the DHS internal displacement is just one of many questions about background characteristics. This leaves room for further research, which should primarily address the question of how to collect data on IDPs to better reflect the population of IDPs as a whole. Large-scale, representative field studies focusing specifically on this topic would provide researchers with data and lead to more reliable analyses of outcomes in the future. Data should be collected on the individual-level by interviewing randomly selected, representative, large scale study populations of IDPs about their living conditions and the consequences of their displacement (European Union and United Nations, 2018). With higher quantities and higher quality of data on internal displacement, there would be far more possibilities to conduct insightful studies into gender specific issues that IDP's face.

In the process of collecting data on internal displacement, researchers should also gather more detailed information about the changes in living situations experienced by both women and their partners. This includes data on housing conditions, community integration, access to resources, and shifts in social dynamics within the household and the broader community.

While this thesis offers a foundational exploration of the theory, it is limited by the available data, which does not fully capture the complexity of the post-displacement experience. Future research, equipped with more comprehensive and nuanced data, could more definitively test the mechanisms at play and provide stronger empirical evidence for the proposed relationship between internal displacement, female empowerment, and patriarchal backlash.

Additionally, future studies should consider longitudinal data collection to track changes over time. This approach would help to capture the dynamic nature of internal displacement and its long-term impacts on gender relations. Longitudinal data could reveal whether initial empowerment effects persist or if they diminish as internally displaced families adapt to their new environments.

### **Forms of internal displacement**

A closer look at the case of Tanzania has shown that future research should analyse the various causes of displacement, such as conflicts, natural disasters and other socio-economic factors. This nuanced exploration is crucial, as the limited existing body of research, including the findings from Tanzania, indicates that different types of displacement may have varying impacts on IPV risk. Specifically, research should examine whether the social and psychological effects associated with conflict-induced displacement differ significantly from those linked to disaster-induced displacement. Investigating these variations can provide a more comprehensive picture of the protective and risk factors associated with each type of displacement, thereby enriching the understanding of the broader social dynamics affecting displaced populations.

### **Forms of IPV**

Many researchers do not distinguish between the different forms of IPV and conduct their studies using IPV as the only dependent variable (Kelly et al., 2021b, Tessema et al., 2023). This work has shown that the effects of independent variables used here can differ greatly depending on which form of IPV is chosen as the dependent variable. Based on the results of this study, it is strongly recommended that the differences between the three forms of IPV be taken into account in further studies.

### **Internal displacement and factors at the country-level**

For future studies it would be highly relevant to analyse the interplay between internal displacement, and laws and social norms at the country-level in greater detail. Including

internally displaced women, who are amongst the most vulnerable in a state, in this process would be hugely important to the effectiveness of laws affecting women's safety at the state level (Yasukawa et al., 2023). Whether internally displaced women are affected differently by societal factors than the general population would also be of great importance.

Further research should examine whether internal displacement exacerbates women's isolation from state-level laws or, alternatively, whether it integrates them more into this legal framework and fosters their participation in decision-making. This analysis is essential, as the way in which internal displaced women and their partners interact with existing laws can reveal gaps in legal protection and enforcement. It can also highlight the strengths and weaknesses of current legal frameworks in addressing the unique challenges faced by internally displaced populations.

Internal displacement could also influence women's political engagement and empowerment. This possible engagement could influence policy and law-making for women's rights that might influence the risk of IPV. African Union Commission et al. (2020) found a positive correlation between the involvement of internally displaced women in decision-making processes and the effectiveness of policies and laws affecting them.

Studying whether displaced women become more politically active or whether their voices are marginalized can provide insights into the broader implications of displacement for women's rights and participation in society. One positive example of internally displaced women engaging in political activism and advocacy comes from the watchdog organisation Plataforma EICOS Meta, which was founded by internally displaced Colombian women (Yasukawa et al., 2023). It monitors the implementation of policies related to durable solutions for displaced women and has been instrumental in supporting the development and execution of public policy on gender equality (Yasukawa et al., 2023). The African Union Commission et al. (2020) and Cazabat et al. (2020) come to contradictory conclusions, stating that the participation of internally displaced women in decision-making processes concerning their rights is very limited.



## **Conclusion**

The primary aim of this thesis was to investigate the impact of internal displacement on the prevalence of intimate partner violence in sub-Saharan Africa. By examining internal displacement both at the individual and relationship-level across different sub-Saharan African countries whilst also including conflict exposure and controlling for country-specific differences, this thesis went beyond existing research. The analysis provided valuable insights by showing that internal displacement has a negative impact on the prevalence of sexual IPV but was constrained by limitations in the precision of the data on IPV and internal displacement.

The results of the multilevel model highlight the importance of individual and contextual factors in understanding and managing the impact of displacement on IPV in accordance with the ecological framework. It was not possible to directly test whether displacement leads to increased empowerment among women; this remains an assumption in the absence of comprehensive data. The control variables related to women's empowerment provided mixed results, complicating any interpretation in line with the theory of patriarchal backlash and hyper-masculinity.

The absence of detailed data hindered a thorough testing of the theoretical mechanisms behind the hypothesis. This thesis lays the groundwork for exploring the relationship between displacement, female empowerment, and patriarchal backlash. Future research with more comprehensive data is needed to validate these mechanisms and provide stronger empirical evidence. This study underscores the significant challenge associated with accurately measuring internal displacement and IPV. If future research can address these measurement challenges and the limitations of this paper, it would likely yield more reliable results, offering more definitive insights into the complex dynamics of IPV among IDPs.

## Summary

Hlavním cílem této práce bylo prozkoumat dopad vnitřního vysídlení na výskyt partnerského násilí v subsaharské Africe. Tím, že tato práce zkoumala vnitřní vysídlení jak na úrovni jednotlivce, tak na úrovni vztahů v různých zemích subsaharské Afriky a zároveň zahrnovala vystavení konfliktu a kontrolovala rozdíly specifické pro jednotlivé země, šla nad rámec dosavadního výzkumu. Analýza přinesla cenné poznatky tím, že ukázala, že vnitřní vysídlení má negativní dopad na výskyt sexuálního IPV, ale byla omezena omezeními v přesnosti údajů o IPV a vnitřním vysídlení.

Výsledky víceúrovňového modelu zdůrazňují význam individuálních a kontextových faktorů pro pochopení a zvládnutí dopadu vysídlení na IPV v souladu s ekologickým rámcem. Nebylo možné přímo ověřit, zda vysídlení vede ke zvýšení postavení žen; to zůstává předpokladem při absenci komplexních údajů. Kontrolní proměnné související s posílením postavení žen poskytly smíšené výsledky, což komplikuje jakoukoli interpretaci v souladu s teorií patriarchální zpětné vazby a hypermaskulinity.

Absence podrobných údajů bránila důkladnému testování teoretických mechanismů stojících za hypotézou. Tato práce pokládá základy pro zkoumání vztahu mezi vysídlením, posílením postavení žen a patriarchální zpětnou vazbou. K ověření těchto mechanismů a poskytnutí silnějších empirických důkazů je zapotřebí budoucí výzkum s komplexnějšími daty. Tato studie zdůrazňuje značnou náročnost spojenou s přesným měřením vnitřního vysídlení a IPV. Pokud se budoucí výzkum dokáže vypořádat s těmito problémy měření a omezeními této práce, pravděpodobně by přinesl spolehlivější výsledky a nabídl by definitivnější vhled do složité dynamiky IPV mezi vnitřně vysídlenými osobami.

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## List of Appendices

Appendix no. 1: Omnibus test results hypothesis 1 (table)

<b>Omnibus Test Results H1</b>				
	IPV	Emotional	Physical	Sexual
Null Model Parameters	2	2	2	2
Full Model Parameters	15	15	15	15
Null Model AIC	9564	8893.3	7565.2	3935
Full Model AIC	8723.9	8322.2	6955.3	3640.5
Null Model BIC	9577.8	8907.1	7579	3948.8
Full Model BIC	8827.8	8426.1	7059.1	3744.8
Null Model LogLik	-4780	-4446.6	-3781.6	-1966.5
Full Model LogLik	-4399.9	-4159.1	-3477.7	-1820.3
Null Model Deviance	9562	8891.3	7563.2	3933
Full Model Deviance	8799.9	8320.2	6953.3	3638.5
Chisq	762.07	571.09	609.89	294.46
Df	10	10	10	10
Pr(> Chisq)	< 2.2e-16	< 2.2e-16	< 2.2e-16	< 2.2e-16

Table 1A: Omnibus Test Results for Hypothesis 1

Appendix no. 2: Logistic regression model results for each country for Hypothesis 1 (table)

<b>Logistic Regression Model Results</b>						
<i>Dependent variable:</i>						
	IPV					
	Burkina Faso	Côte d'Ivoire	Ghana	Kenya	Mozambique	Tanzania
Displacement	-0.147 (0.368)	-15.698 (520.017)	0.466** (0.219)	0.139 (0.346)	0.557 (1.029)	-2.138** (1.063)
Age	0.004 (0.009)	-0.038*** (0.010)	-0.013* (0.008)	-0.010* (0.005)	-0.032 (0.028)	0.016 (0.015)
Education	-0.268** (0.100)	-0.241** (0.120)	-0.168** (0.078)	-0.206** (0.065)	-0.332 (0.300)	-0.377* (0.213)
Father_beat_mother	0.188 (0.248)	1.138*** (0.261)	0.979*** (0.157)	0.789*** (0.084)	0.488 (0.438)	1.031*** (0.252)
Working	-0.330* (0.190)	-0.183 (0.262)	0.061 (0.176)	-0.234** (0.097)	-1.677* (0.869)	0.417 (0.304)
Wealth	-0.246*** (0.057)	-0.138** (0.064)	-0.145** (0.050)	-0.109** (0.036)	0.454 (0.361)	0.115 (0.106)
Earns_more	0.122 (0.171)	-0.188 (0.232)	-0.196* (0.115)	0.011 (0.069)	-0.141 (0.296)	-0.217 (0.242)
Partner_work	0.237 (0.302)	0.174 (0.513)	-0.639* (0.370)	-0.062 (0.241)	-0.260 (0.856)	-1.901 (1.264)
Partner_education	-0.137 (0.097)	-0.119 (0.098)	-0.155** (0.077)	-0.378*** (0.067)	-0.106 (0.352)	-0.145 (0.209)
Partner_drinks	0.540*** (0.164)	1.248*** (0.176)	0.921*** (0.118)	0.999*** (0.087)	0.792* (0.411)	0.096 (0.267)
Observations	1,202	994	1,729	2,956	168	466
Akaike Inf. Crit.	1,337.159	999.656	1,975.599	3,763.956	181.990	433.398

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.001

Table 2A: Logistic regression model results for each country for hypothesis 1

Appendix no. 3: Omnibus test results for hypothesis 1 with country-level controls (table)

<b>Omnibus Test Results H1 with country-level controls</b>
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	IPV	Emotional	Physical	Sexual
Null Model Parameters	2	2	2	2
Full Model Parameters	14	14	14	14
Null Model AIC	9525.4	8858.4	7461.6	3899
Full Model AIC	8729.5	8267.5	6787.4	3635.1
Null Model BIC	9539.3	8872.2	7475.4	3912.8
Full Model BIC	8826.5	8364.4	6884.3	3732
Null Model LogLik	-4760.7	-4427.2	-3728.8	-1947.5
Full Model LogLik	-4350.8	-4119.7	-3379.7	-1803.5
Null Model Deviance	9521.4	8854.4	7457.6	3895
Full Model Deviance	8701.5	8239.5	6759.4	3607.1
Chisq	819.89	614.92	698.21	287.91
Df	12	12	12	12
Pr(> Chisq)	< 2.2e-16	< 2.2e-16	< 2.2e-16	< 2.2e-16

Table 3A: Omnibus test results for hypothesis 1 with country-level controls

Appendix no. 4: Omnibus test results for hypothesis 2 (table)

<b>Omnibus Test Results for H2</b>				
	IPV	Emotional	Physical	Sexual
Null Model Parameters	3	3	3	3
Full Model Parameters	17	15	15	15

Null Model AIC	9049.9	8858.4	7461.6	3899
Full Model AIC	8391.2	8267.5	6787.4	3635.1
Null Model BIC	9070.7	8872.2	7475.4	3912.8
Full Model BIC	8508.9	8364.4	6884.3	3732
Null Model LogLik	-4522	-4427.2	-3728.8	-1947.5
Full Model LogLik	-4178.6	-4119.7	-3379.7	-1803.5
Null Model Deviance	9043.9	8854.4	7457.6	3895
Full Model Deviance	8357.2	8239.5	6759.4	3607.1
Chisq	686.74	614.92	698.21	287.91
Df	14	12	12	12
Pr(> Chisq)	< 2.2e-16	< 2.2e-16	< 2.2e-16	< 2.2e-16

Table 4A: Omnibus test results for hypothesis 2