# Exposure to Global Cultural Scripts Through Media and Attitudes Toward Violence Against Women 

Jeffrey Swindle<br>September 15, 2018

## Introduction

Interest in the influence of global cultural scripts on ordinary people expanded in recent years. Scholarship on this topic stems from the expansive literature on global cultural diffusion processes, which conceptualizes global cultural scripts as scripts about the good life, modernity, and development (Boyle 2005; Meyer 2010; Thornton 2005). These scripts are theorized as generally emanating from prominent elites and international organizations (Boli and Thomas 1999; Meyer et al. 1997). The bulk of prior research on global cultural diffusion examines the spread of global cultural scripts across nation-states and their influence on nations' policies and practices. One common critique of this literature is that it ignores what happens "on the ground" among individual people (see Schofer et al. 2012:66). Several new studies demonstrate that the diffusion of global cultural scripts extends beyond that of nation-states and down to many ordinary people in even the most remote parts of the world (Meyer 2010; Thornton 2001; 2005; Thornton et al. 2012; see also Frerich and Münch 2010; Jepperson 2002:246-251; Pope and Meyer 2016:296-298; Qadir 2016:146; Schofer et al. 2012:66). Most importantly, these new studies show that the diffusion of global cultural scripts has substantial effects on individuals’ knowledge, attitudes, and behavior (Allendorf and Thornton 2015; Boyle et al. 2002; Cloward 2016; Givens and Jorgenson 2013; Hadler 2012; Hadler 2012; 2016; Hadler and Haller 2011; 2013; Hadler and Meyer 2009; Hadler and Symons 2018; Marquart-Pyatt 2012; Pandian 2018; Roberts 2017; Velitchkova 2015; Wang and Schofer 2018; Zhou 2013).

The theorization and empirical measurement of individuals' exposure to global cultural scripts, however, remains somewhat indirect and loose (Boyle et al. 2002:26; Pierotti 2013:261; Thornton et al. 2015:290-292). Existing scholarship posits some mechanisms through which global cultural scripts are diffused down to ordinary persons, including education, media, and international nongovernmental organizations (INGOs). However, the actual content flowing through these mechanisms usually is not analyzed. Implicitly, the content is presumed to be homogeneous and containing myriad types of global cultural scripts and nothing else. This assumption is misguided. Global cultural scripts are not the only information dispersed to individuals through these mechanisms, and when global cultural scripts are diffused through these mechanisms they are not necessarily all delivered as a single "package" (Allendorf and Thornton 2015). Precision about the exact cultural content disseminated through particular mechanisms, and its subsequent influence on people's attitudes and behavior, is needed to improve understanding of global cultural diffusion at the level of individual people.

I argue that the cultural content permeating through a central mechanism of global cultural diffusion may be less homogenous than assumed by prior literature. It follows that individuals' consumption of information through such a mechanism results in differential effects on individuals. Specifically, I examine the spread and consequences of global cultural scripts that decry violence against women as an immoral practice, a growing topic of concern in world culture (Merry 2006; Pierotti 2013). I focus on the diffusion of such scripts through the particular mechanism of media in the context of twenty-first century Malawi. Research on media effects emphasizes how it is not media consumption alone, but the actual content in media that exerts
influence on individuals (Ferrara 2016; Ward 2003). Variations in media content can contribute to heterogeneous effects. I review a variety of sources to outline how cultural scripts both denouncing and supportive of violence against women are disseminated in Malawi through radio, television, and newspaper media. This leads me to hypothesize how each of these three types of media influence Malawians' rejection of violence against women in heterogeneous ways. To be clear, my interest is not the comparative effects of unique media types (i.e. whether media you watch is more influential than media you read), but about the relative presence of global cultural scripts criticizing violence against women and other contradictory cultural scripts across media types.

The relationship between media and attitudes toward violence against women in Malawi is analyzed with five cross-sectional waves of either the Demographic and Health Surveys or the UNICEF Multiple Cluster Indicator Surveys, which were conducted in Malawi between 2000 and 2016. I use multilevel logistic regression models to estimate the effects of people's radio, television, and newspaper consumption on their level of attitudinal rejection of violence against women. Additionally, some of the surveys I use ask people whether they listen to a series of radio programs that explicitly criticize violence against women, from which I assess the association between individuals' consumption of these radio programs and their attitudes.

I also draw upon unique data derived from my collection of all newspaper articles that condemn violence against women which were published in the two most popular daily Malawian newspapers during the same time period as the surveys I use. I exploit variation in the publication dates of these articles and the interview dates of survey respondents to perform a quasi-natural experiment of the exogenous treatment effects of the publication of these newspaper articles on individuals' attitudes. I also test the exogenous effects of the publication of the only tabloid newspaper in Malawi by leveraging the timing of the tabloid's unexpected, immediate dissolution during the middle of the data collection period for the 2013-14 survey wave.

The major theoretical contribution from this study is that the content contained across media, and by implication across other mechanisms of global cultural diffusion, should not be assumed to be homogeneous. Some global cultural scripts may flow alongside contradictory, competing cultural scripts within the same general mechanism. Detailed analysis of the actual content diffused through mechanisms and their subsequent effects on individuals' attitudes and behavior is essential to improve understanding the global flow of culture and its influence on ordinary people. Empirically, my analyses show how measures of the content flowing through mechanisms can be combined with survey data to assess individual-level effects. This approach could benefit several scholarly fields, including research on global cultural diffusion, social movements, and media framing.

## Theoretical Motivation

Global cultural scripts about societal development, progress, and human well-being are widely promoted as good and applicable for all peoples in all settings, regardless of history or background (Boli and Thomas 1999; Drori and Krücken 2009; Meyer 2010; Meyer et al. 1997; Schofer et al. 2012; Thornton 2001; 2005; Thornton et al. 2015). They posit what constitutes a "developed" society, how a "modern" individual lives and what they believe, and a general vision of "the good life." Much existing research on global cultural scripts shows their origins in northwestern European social thought and spread across international organizations, national governments, and various local contexts. More recently, though, scholars' interest has begun to
shift to whether, and especially through what mechanisms, global cultural scripts are disseminated to individual people and what effect they might have (Givens and Jorgenson 2013:421; Hadler 2016:343-349; Pierotti 2013:241-242).

With respect to mechanisms, Boyle et al. (2002) and Pierotti (2013) contend that global cultural scripts are deeply embedded in education and media, among other sources. In a crossnational study of 26 African, Asian, Latin American, and Persian Gulf countries, Pierotti shows that an individuals' educational achievement and media consumption predict their likelihood of rejecting violence against women. Boyle et al. (2002), in a similar analysis of East African nations, find that education and radio consumption (the only media variable they examine) are positively associated with individuals' rejection of female genital mutilation. Others posit that the presence of international nongovernmental organizations (INGOs) in a society provides the organizational structure for global cultural scripts to circulate down to individuals. They find that the number of INGOs in a country predicts citizens' likelihood of expressing support for human rights, gender equality, sexual minorities, social tolerance, and environmental sustainability, and similarly aligned personal behaviors like recycling and divorce (Givens and Jorgenson 2013; Hadler 2012; Hadler and Haller 2011; 2013; Hadler and Meyer 2009; Hadler and Symons 2018; Marquart-Pyatt 2012; Pandian 2018; Roberts 2017; Wang and Schofer 2018; Zhou 2013).

Still, this scholarship generally does not outline the actual processes by which particular global cultural scripts impact people's attitudes. For example, Boyle et al. (2002) and Pierotti (2013) do account for variation across individuals within nations in their level of education and media use, but do not identify the presence of specific global cultural scripts within the content shared through either of these theorized mechanisms. Mechanisms of global cultural diffusion, be they education, media, or INGOs, do not themselves spread global cultural scripts; such diffusion is contingent on the messages flowing through these mechanisms. Pierotti (2013:261) recognizes this limitation, but laments the lack of available measures of the content contained within each of these mechanisms in existing data generally used by scholars.

In addition, the existing literature theorizes global cultural scripts as a singular package, when in reality scripts are diffused separately or in small batches. This is evident from scholarship about people's knowledge of different global cultural scripts; some are correlated, others less so, and they do not load to a single factor (Allendorf and Thornton 2015:258-261; Lai and Thornton 2015; Thornton et al. 2012b). The implicit assumption that global cultural scripts come in a complete package further contributes to the under-theorization of the exact information that is spread through different diffusion mechanisms.

I aim to contribute to this gap in the current literature by investigating in greater depth how media content influences individuals' attitudes toward violence against women (VAW) in contemporary Malawi. I refer to cultural scripts that denounce violence against women as antiviolence against women scripts, or anti-VAW scripts for short.

Anti-VAW scripts are deeply institutionalized in international forums, policymaking, and rhetoric (Merry 2006; 2016; Pierotti 2013). In a formal sense, anti-VAW scripts became integrated into global cultural models promoting gender equality during the UN's 1993 Declaration on the Elimination of Violence Against Women and the 1995 Fourth World Conference on Women in Beijing (UN 1993; 1995). Since then, these messages have been championed by many international organizations, national governments, social movements organizations, academic and policy experts, and political activists (e.g. CARE 2012; UN Human Rights Council 2009; UN 2017; UN Women 2017; World Bank 2017).

Much of the research on attitudes toward VAW has focused primarily on socioeconomic and demographic predictors (for recent reviews, see Flood and Pease 2009; Waltermaurer 2012; World Bank and WHO 2017). Several factors are consistently identified as important predictors of attitudinal rejection of VAW, including education, wealth, older age, ever having been married, and urbanicity (Alesina et al. 2016; Cools and Kotsadam 2017; Hayes and Boyd 2016; Hindin 2003; 2014; Mann and Takyi 2009; Oyediran 2003; Rani and Banu 2008; Uthman et al. 2009; Yount and Carrera 2006; Yount and Li 2009). Other additional predictors are influential in some settings but not in others, such as employment and NGO interventions (Alesina et al. 2016; Arias 2018; Cloward 2016; Goldman and Little 2015; Green et al. 2018; Rani et al. 2004).

Other scholars, however, theorize predictors of attitudes toward VAW from the perspective of "social learning" (Hindin 2014; Krause et al. 2015; Speizer 2010; Yount and Carrera 2006; Yount and Li 2009; Yount et al. 2014). They explain that individuals learn certain gender and family norms from others with whom they closely interact and from their society at large (e.g. Bandura 1977). Local norms and personal experiences are key to this approach. Pierotti (2013) forges a different path that bears similar to social learning approaches but instead examines individuals' social learning of global rather than local norms through their exposure to global cultural scripts. The tenets of social learning theory still apply, but the novelty is the notion that in today's increasingly globalized world, all people are in a sense becoming integrated into a single world society with its own global cultural logic.

Pierotti (2013) is among the few scholars within the literature on the influence of global cultural scripts to explicitly examine the relationship between media use and attitudes toward VAW (see also Wang 2018). Some scholarship, however, have taken advantage of the unique measures for different forms of media consumption often asked about in surveys, including radio, television, and newspaper use, though they provide little to no theoretical explanation for disaggregating media use. Results vary widely by type of media and society. For example, television use predicts rejection of VAW in Bangladesh and India (Jesmin and Amin 2017; Ting et al. 2017), whereas in Zambia it is insignificant (Lawoko 2006), and in Nigeria it is negative, contrary to researchers' expectations (Okenwa-Emegwa et al. 2016). Radio use is often found to predict rejection of VAW, but sometimes is insignificant (Cardoso and Sorenson 2017; Oyediran 2003; Uthman et al. 2009). Newspaper use has received less attention, but found inconsistent relationships with rejection of VAW across contexts. Commenting on the differential effects of unique types of media on attitudes toward VAW, Krause et al. (2017) summarize, "researchers should examine separately the influence of each form of media exposure" (p. 125).

These findings demonstrate considerable variance in the effects of different types of media on individuals attitudes toward VAW. I argue that differences in content across and within media types can account for this variance. For various reasons, anti-VAW scripts may be more or less prevalent across certain media types. Moreover, even within a given type of media, conflicting messages are often simultaneously expressed. The presence of anti-VAW and other competing scripts can vary widely across societal contexts, depending on media production and law. I next outline the recent history of media regulations and circulation in Malawi. This sets up my examination of the content about VAW across radio, television, and newspaper media in Malawi and leads to my empirical hypotheses regarding the influence of these various types of media on individuals' rejection of VAW.

## Study Background: Media in Malawi Since Independence

The post-colonial history of media in Malawi begins with former President Dr. Hastings Kamuzu Banda. He was in power from when Malawi gained political independence in 1964 until 1994. The Malawi Censorship Act of 1972 pushed by Banda outlawed virtually all media besides government-sponsored outlets to promote nationalism and Banda's personal political ideology. This policy matched Banda's general ruling style: He strongly resisted foreign influence, accepting very little international aid or trade, and prohibited most INGOs (Chimbwete et al. 2005; Forster 1994; Short 1974; Thornton et al. 2014). ${ }^{1}$ Rather than submitting to international norms of gender equality, Banda idealized what he called "our African way of life" (Young and Banda 2008/1946).

With time, Banda's grip on the country loosened and the government began to sign off on international treaties related to women's rights. In 1987, Malawi ratified the Convention on Discrimination Against Women (UN 1991), ${ }^{2}$ and in 1997, just three years after Banda's departure from power, Malawi adopted its first legislation to protect women from discrimination and violence (Barkvoll 2009). This paved the way for the more expansive Protection Against (Prevention of) Domestic Violence Act, which passed on April 26, 2006 after substantial efforts by national activists (Kamyongolo and White 2017).

Banda's fall from power also brought about greater, but of course not complete, media freedom. The Malawi Censorship Act that Banda enacted in 1972 was lifted in 1993. Many new media outlets were created immediately thereafter, but nearly all were financially unsustainable and ceased publication within a few months or years (Lwanda 2006). In 1998, the Malawi Broadcasting Corporation (MBC) switched from being an official branch of the federal government to a formally independent, but tax-funded, public service media outlet (Englund 2011:27). Several other media outlets emerged during the twenty-first century, but none overtook the MBC as the most widely consumed or liked media outlet (NSO 2015). Despite these shifts toward media freedom, the government continues even today to censure certain media outlets from time to time, usually those which criticize the incumbent president (The Nation, August 6 2014).

With respect to radio, 18 radio stations were in operation by 2006, including two managed by the MBC (Englund 2011). By 2014, there were 34 (NSO 2015:56-60). All of these radio stations were produced in Malawi and contained primarily content related to Malawi, with some international news. MBC radio stations historically have had the most listeners (Englund 2011). They also have by far the broadest geographic coverage, with the signals of many other stations only accessible in small portions of the country.

The radio is the most commonly consumed source of media in Malawi, easily outpacing television or newspapers (Englund 2011; NSO and ICF 2017). ${ }^{3} 61$ percent of Malawians listened to the radio at least weekly in 2000 . This percentage jumped to 76 in 2004, but then steadily declined to 40 in 2016 despite the rise in the number of radio stations. Though the exact reason

[^0]for this decline is unknown, Malawi's stalling economy and the rising frequency of electricity blackouts share some of the blame.

Television media is far less common and especially limited in local content production. There are three kinds of television service in Malawi: public broadcasting by MBC, a handful of private television stations, and subscription satellite services (NSO 2015:70-73). MBC channels are the longest running, beginning in the late 1990s, and the most accessible and viewed of these three options. Private, nationally-operated television stations were virtually nonexistent or inaccessible until very recently (Englund 2011). Eight private channels were in official existence in 2014, but among television subscribers the highest accessibility of these eight channels, which was operated by MBC, was only $32 \%$ (NSO 2015:76). Satellite services began to be available in the 2000s, but at least in 2015 remained limited to three pan-African services (NSO 2015). Pirated foreign movies are also often colloquially classified as "television" and can be purchased through pirated DVDs in any market center or viewed at small makeshift public viewing rooms in urban or semi-urban areas for a small price (Gray 2011; 2014; see also Parks 2016). ${ }^{4}$

At least weekly television use among Malawians is much lower than radio use, beginning at 6 percent in 2000, expanding to 25 percent by 2010, and decreasing to 15 percent in 2016. In a survey from 2014, 46 percent of households in urban areas had a working television (though frequent blackouts made them unusable), while only 6 percent did in rural areas (NSO 2015:71).

Two newspapers are by far the most successful: The Daily Times and The Nation. Both are formally independent from the government and published in English. They have Monday through Friday weekday editions and usually one weekend edition. The Nation maintains a small circulation of a supplement to its weekend edition called Tamvani that is printed in chiChewa (the language of the Chewa ethnic group, which Banda made the other official language alongside English). Since late 2009, The Nation also has printed a biweekly newspaper, Fuko, in both chiChewa and chiTumbuka (the most common local language in the northern region) (The Nation, December 4 2013). Despite being in different languages, the content of these newspapers are extremely similar to the English newspapers (Angotti et al. 2014). Finally, in 2009 the same parent company of The Daily Times started publishing a weekly tabloid newspaper on Fridays in English entitled Weekend Times. The paper rapidly became more popular than The Daily Times, but was shut down in 2014 after mounting law suits. Other newspapers have emerged in recent years, such as Nyasa Times, Malawi24, and Malawi Voice, but these are limited to online publication only and are less popular, especially during the time period of 2000 to 2016 I analyze.

Newspaper use in general is low in Malawi, hovering between 15 to 19 percent at least weekly use throughout the twenty-first century. Illiteracy limits the size of a potential newspaper audience. On top of this, daily circulation for The Daily Times and The Nation is very low for a population of sixteen million, hitting only ten to sixteen thousand daily copies in 2004 with only a slight increase by 2012 (Englund 2011:31; Gondwe 2012). The Weekend Times reached twenty-seven thousand weekly copies. Though larger, this amount is still quite small for the total population size (Mchakulu 2018).

Internet use is on the rise in Malawi, but only three percent of the population used the internet at least weekly in 2016, the last year of my analysis (NSO and ICF 2017:42-43). Among those who accessed the internet in 2015, nearly 80 percent did so via mobile phones (NSO 2015). Struggles of cost and accessibility limited internet use.

[^1]Given these differences across these unique types of media in Malawi, I subsequently examine how anti-VAW scripts circulate through each of these media sources. I hypothesize how variance in the prevalence of such scripts across media types might lead to differential effects on Malawians' rejection of VAW. I focus here on the circulation of anti-VAW scripts via radio, television, and newspapers and set aside the internet because of limited relevance given its low use.

## Hypotheses about Media and Attitudes about Violence Against Women in Malawi

As outlined by Englund (2011:25-31), the basic theme in Malawian media over the years is the pervasive theme of "developmentalism" (Englund 2011:40; see also Harris 2017:133-137), which he describes as spreading messages about a range of topics believed to contribute to national development, such as VAW, education, human rights, HIV/AIDS prevention, and contraception. International and local NGOs, along with foreign aid agencies, work closely with media outlets, especially the MBC, to promote their messages (Swidler and Watkins 2017). In the words of one local journalist: "The NGO gives money so the reporter will write. So they indirectly co-determine what is published and what is aired" (quoted in Harris 2017:136; see also Harris 2018; Myers 2018). Often the content aired and published is direct, straightforward statements about what brings about development and what is in accordance with human rights and what is not. On other occasions, global cultural scripts are embedded into fictional dramas to spread the message to unsuspecting audiences. This style of content is referred to as "edutainment" (Ferrara 2016).

With respect to anti-VAW scripts in particular, organizations hold "trainings" for journalists about the importance of not only covering VAW, but the importance of explicitly condemning the practice (e.g. The Daily Times November 29, 2004; The Nation November 27, 2016). Representatives from Malawi's offices of UN Women, UNFPA and local NGOs often lead these trainings. These efforts have led to a strong anti-VAW sentiment prevalent in Malawian media, which likely affects the attitudes of individual Malawians. Accordingly, my first hypothesis is:

Hypothesis 1: Generalized media use, irrespective of type, increases rejection of VAW in Malawi.

The content available across radio, television, and newspaper media varies widely, though, and Malawians' consumption of these different forms of media is likely to have diverse effects. This may be the case even if the generalized effect of media use holds as hypothesized above. I describe the content available across distinct types of media to develop specific hypotheses regarding their unique influences on people's attitudes toward VAW.

## Radio

Several radio programs in Malawi regularly share anti-VAW scripts alongside many other global cultural scripts about a range of issues. These radio programs were initially developed by MBC as a way to provide information about family planning, contraception, and HIV/AIDS, and they were successful at increasing condom use and couple discussion of family planning (Meekers et al. 2007). These same programs also are used to promote anti-VAW messaging. Popular dramas like Tichitenji (What Do We Do?) and more information-sharing programs like Uchembere Wabwino (Safe Motherhood) focus on the harms of VAW and
promote gender equality and anti-VAW scripts explicitly. Consuming each of these programs is likely to lead people toward rejection of VAW. Other radio programs on other stations also contain dramas and informational programming that similarly advance anti-VAW scripts, such as the programs Pakachere (The Meeting Tree) or Kanthu ndi Khama (Action and Effort) (Pakachere 2007; The Nation, June 4 2012).

Of course, much radio content is focused exclusively on local news, religion, or music and entertainment that does not discuss VAW, and thus would not directly influence attitudes toward VAW (Englund 2011:30). And portrayals of women as being subservient to men are quite common, especially in popular music and commercials on the radio (Gilman and Fenn 2006; see also Englund 2011:117-118). Such portrayals could stoke beliefs in male superiority and motivate attitudinal acceptance of VAW.

This information about radio content in Malawi leads me to two hypotheses. Anti-VAW scripts in radio content appear to be more pervasive and salient than some limited messaging that justifies VAW. So I expect that radio use, on average, leads people toward greater rejection of VAW. I also hypothesize that listening to MBC programs containing anti-VAW scripts especially increases rejection of VAW.

Hypothesis 2: Radio use increases rejection of VAW.
Hypothesis 3: Experience listening to MBC radio programs that disseminate anti-VAW scripts has a positive influence on rejection of VAW.

## Television

While some television content in Malawi shares similarities with radio content, much is actually supportive of interpersonal violence and male control, and thus overall may negatively influence attitudinal rejection of VAW. To begin, local television stations produce much content that may guide people toward rejection of VAW. The stations operated by the MBC produce popular television dramas and informational shows that, much like its radio programs, feature anti-VAW and other global cultural scripts. One example is the popular drama Tikuferanji (Why Are We Dying). Importantly, though, local stations are not the only way Malawians consume "television." Satellite television and movies are also fairly common and considered "television" by ordinary people in Malawi.

The content on satellite television is primarily South African, Nigerian, Zambian, Malawian, and American music videos, and international news, celebrity gossip, and sports (Gray 2011; 2014). The content is diverse, but often portrays women as being subservient to more dominant men. Violent behavior, including toward women, is regularly shown and normalized (Englund 2011:117-118; Gray 2014). In many music videos as well as televised news about celebrity gossip, women are consistently portrayed as sexual objects. Collectively, content on satellite television likely encourages justification of VAW more than promoting its rejection, as similar content has in other societal contexts (Vandenbosch and Eggermont 2014; Ward 2016; Wright and Centeno 2018).

Movies, a final form of media consumption that Malawians include in their definition of "television" use, are available for DVD purchase or in makeshift public viewing places. The most popular are Chinese martial arts and American action movies with famous lead male actors like Tom Cruise and female actresses that serve primarily as objects of sexual interest (Gray 2011; 2014). Implicitly, these movies normalize violence and female objectification, and lead
viewers to assume that America and China must be very violent societies (Gray 2014:990). These videos likely foster attitudes supportive of VAW and female subservience to men to men.

In summary, MBC television programs and other local television content may discourage VAW, but they do not compromise the bulk of the "television" content Malawians consume, the rest of which often normalizes violence and may have a negative influence on rejection of VAW. Consequently, I hypothesize that Malawians' television use, on average, increases the justification of VAW. Without additional data on Malawians' particular consumption of either MBC television programs, satellite television, or movies, I make no additional hypotheses regarding the relationship between television and attitudes about VAW.

Hypothesis 4: Television use has a negative effect on rejection of VAW.

## Newspapers

The government and NGOs exert substantial influence over mainstream newspapers, including the most widely read and circulated The Daily Times and The Nation. They provide journalists with regular content by telling them about their development interventions. As a result, coverage of efforts to combat gender discrimination and VAW as well as empower women are especially common, likely making individuals' newspaper consumption a positive force on their rejection of VAW.

Many articles that discuss VAW document specific violent incidents. They report these incidents in a purely informative, straightforward manner (e.g. The Daily Times, November 4 2004). Some articles go beyond this and also make direct moral claims about the injustice of VAW, calling it a "harmful cultural practice" (Swidler and Watkins 2017) and positing that it impinges on women's human rights (see also Boyle and Hoeschen 2001). Other articles do not discuss any specific incident of VAW but still make moral claims about VAW. They may cover the efforts of foreign aid agencies, NGOs, activists, and the government to discourage VAW (e.g. The Daily Times, December 4 2000). Others report on public speeches by domestic or international leaders condemning VAW or social movements against VAW (e.g. The Nation, November 27 2003). Opinion editorials about the injustice of VAW also appear regularly (e.g. The Nation, December 10 2012). Articles that make anti-VAW moral claims are especially likely to influence Malawians' attitudes.

The direct influence of such articles is limited by the fact that most of the population does not read the newspaper, either due to inaccessibility, illiteracy, or a lack of English language ability. Still, their influence can extend to people who do not personally read them. According to theories of "media framing," powerful media sources set the cultural frames in a society through which specific issues and events are discussed and interpreted (Dardis et al. 2008; Entman 1989; Gamson 1988; Gamson and Modigliani 1989; McCombs and Shaw 1972). From this point of view, we would expect that the prominent newspapers in a society exert influence over essentially all members of a society, even those who do not personally consume them (see Druckman et al. 2017). Accordingly, I argue that the publication of articles containing anti-VAW scripts shape the attitudes of all people in Malawi, regardless of whether they read these articles themselves.

Unlike mainstream newspapers, the popular tabloid newspaper the Weekend Times was largely devoid of anti-VAW scripts or any global cultural scripts during its period of publication between 2009 and 2014. Known colloquially as the "weekly scandal sheet," the paper consisted of rumors and gossip (Mchakulu 2018). Articles usually included tales of government corruption,
cheating and divorce among various elites, witchcraft, or sexual abuse. The general irreverence of the tabloid's content may have encouraged readers to challenge professionalized and elitefocused presentations of news and social life in Malawi present in more mainstream newspapers. Indirectly, this could lead readers to be skeptical of global cultural scripts championed by the national government, including anti-VAW and gender equality scripts (Wasserman 2010; Wasserman and Mbatha 2016).

Beyond reporting rumors and gossip, the tabloid also featured what was interpreted by Malawians as extremely salacious erotic sexual content. Most notable were the photographs of a new "Action Girl" model in each edition, always posed in a sexual suggestive position while wearing only underwear or a bathing suit (Nyasa Times, February 21, 2012). Given Malawi’s history of a strict dress code for women during Banda's presidency and a legacy of conservative dress thereafter (Gilman 2011), this type of content was unprecedented and garnered much attention, including repeated efforts by the federal government to find a legal reason to shut the tabloid down (News24, October 10, 2010; Nyasa Times, February 21, 2012). In interviews with readers and nonreaders of the Weekend Times, Mchakulu (2018) found that both expressed concern about how the tabloid reduced respect for women. They worried about the consequences the paper would have for women's position in society. Given strong links in other contexts between the sexual objectification of women in print media and individuals' gender attitudes (Ward et al. 2015), consumption of such content may lead Malawians' to espouse more permissive attitudes toward VAW.

The divergent messaging with respect to VAW and women's status between mainstream Malawian newspapers and the Weekend Times tabloid lead me to several hypotheses about their unique effects. I anticipate that people's exposure to anti-VAW scripts through newspapers outweighs any exposure through newspapers to contradictory cultural scripts that portray women as subservient to men and as sexual objects. I therefore expect an overall positive effect of newspaper use on rejection of VAW. I also hypothesize that the publication of articles that make moral claims decrying VAW leads to an increase in rejection of VAW. This effect should extend to both readers and nonreaders.

With respect to the tabloid newspaper, estimating its effects are more complex: It is not the presence of anti-VAW scripts that matters, but the general tone, direction, and content of the entire tabloid that could foster attitudes supportive of VAW among readers and nonreaders. The unexpected closing of the paper on January 31, 2014 offers a way forward. Exactly what caused the tabloid to close remains a mystery (Mchakulu 2018), with ownership citing decisions to change directions, rumors of the tabloid being plagued by numerous lawsuits, and political pressure all being possible explanations (Nyasa Times, January 31 2014). Its abrupt cessation of publication, though, was an exogenous shock in which the removal of the tabloid from the social environment in Malawi served as a "treatment" that may have shaped Malawians' rejection of VAW. Since it could no longer be consumed, the influence of the Weekend Times on people's attitudes toward VAW must have largely ceased. I hypothesize that, net of other factors, rejection of VAW increased for readers and nonreaders alike after the Weekend Times was abruptly shut down.

Hypothesis 5: Newspaper use increases rejection of VAW.
Hypothesis 6: The publication of newspaper articles containing anti-VAW scripts has a positive effect on rejection of VAW for both newspaper readers and nonreaders.

Hypothesis 7: Rejection of VAW increases for both newspaper readers and nonreaders after the Weekend Times' ceased publication.

## Data and Methods

To test my hypotheses, I rely primarily on five cross-sectional surveys from Malawi: the 2000, 2004, 2010, and 2015-16 Demographic and Health Surveys (DHS) and the 2013-14 UNICEF Multiple Indicator Cluster Survey (MICS) (NSO 2015; NSO and ICF 2017; NSO and ICF Macro 2011; NSO and OCR Macro 2001; 2005). These surveys conducted in Malawi each feature a two-stage cluster design in which households were selected from enumeration areas that were selected from districts. In each survey, all women from selected households between the ages of 15-49 were invited to participate. In one third of the selected households, all eligible men ages 15-54 in the DHS and ages 15-49 in the MICS were asked to be interviewed. Combined, the five surveys yielded a total sample size of 124,578 , including 96,730 women and 27,848 men. Survey interviews were conducted over several months: July-November 2000, October 2004-February 2005, June-October 2010, November 2013-April 2014, and October 2015-February 2016.

The consistency across surveys in terms of sampling design and questionnaires allow for this pooled analysis. All descriptive statistics, which are listed in Table 1, use the sampling weights provided in the DHS and MICS survey waves in order to account for variability in selection probability. A correlation matrix of all variables is reported in the Appendix.

## Measures

Rejection of VAW. My dependent variable, rejection of VAW, measures individuals' rejection of the notion that a husband is justified in beating his wife. Respondents were asked, "Sometimes a husband is annoyed or angered by things that his wife does. In your opinion, is a husband justified in hitting or beating his wife in the following situations: (1) If she goes out without telling him? (2) If she neglects the children? (3) If she argues with him? (4) If she refuses to have sex with him? (5) If the food is not properly cooked? " Respondents were not asked whether their husband was justified in beating them or whether they were justified in beating their wife. The questions instead referred to $a$ husband and $a$ wife.

79 percent of respondents said that a husband was not justified in beating his wife in any of the five proposed situations, as reported in Table 1. The coefficient alpha obtained from these five questions was 0.84 and loadings from a one-factor analysis range from .66 to .74 , indicating that the five questions tapped into a single latent construct. Following others (e.g. Pierotti 2013; Yount and Li 2009), I therefore constructed a binary variable in which respondents who rejected all five scenarios were coded as ' 1 ' and respondents who did not reject one or more scenarios were coded as ' 0 .'

Media Use. Several independent variables for media consumption are used. Respondents were asked, "Do you listen to the radio almost every day, at least once a week, less often than that or not at all?" They were also asked two additional questions with equivalent language but about whether they watched television and read a newspaper or magazine. Unfortunately, the option of "almost every day" is not included for these questions in the 2015-16 DHS.

There are multiple ways to construct variables from these questions. I use a binary variable in which respondents who report at least weekly radio use are coded as ' 1 ' and two similar binary variables for at least weekly television and newspaper/magazine use, respectively. I also use a binary variable for at least weekly general media use if respondents report consuming
any one of these three types of media at least weekly. 53, 12, and 11 percent of respondents used radio, television, or newspaper media at least weekly, respectively, and 57 percent used at least one of these forms of media weekly (Table 1).

As supplementary measures, I also use three count measures of radio, television, and newspaper/magazine use. In these measures, respondents who say "almost every day" are assigned a ' 3 ,' those who say "at least once a week" are given a ' 2 ,' those who select "less often than that" get a ' 1 ,' and those who report "not at all" are marked as ' 0 .' I then add the values respondents receive for each of these three count measures for a summary count measure of overall media use that ranges in value from ' 0 ' to ' 9 .' As previously stated, the 2015-16 survey wave did not have this level of detail about respondents' media use, so estimates for these variables are based only on the 2000, 2004, 2010, and 2013-14 survey waves. The mean value for the radio use count variable was $1.89(\mathrm{SD}=1.21)$, while the mean values for television and newspaper use count variables were 0.44 ( $\mathrm{SD}=0.87$ ) and 0.52 ( $\mathrm{SD}=0.83$ ) (Table 1).

MBC Radio Programs Use. To more directly assess respondents' exposure to anti-VAW scripts when listening to the radio, I leverage a series of survey questions asked in the 2000, 2004, and 2010 survey waves in which respondents were asked, "In the last few months, have you listened to any of the following program series about family planning or health on the radio? " Respondents were asked about the following five programs, all of which are on the MBC radio stations: Uchembere Wabwino (Safe Motherhood), Phukusi Lamoyo (Bag of Life), Umoyo M'Malawi (Health in Malawi), Dokotala Wapawailesi (Radio Doctor), and Chitukuko M'Malawi (Development in Malawi). Though the survey question refers to these radio programs as being about family planning and health, they regularly discuss VAW and share anti-VAW scripts. I use five binary variables for whether respondents have listened to these radio programs in the last few months. The percent of respondents who have is $62,58,54,51$, and 57 , respectively (Table 1).

Anti-VAW Newspaper Articles. To further assess the influence of anti-VAW scripts contained within newspapers, myself and two research assistants in Malawi collected data reflecting newspaper articles about interpersonal violence. Specifically, we identified all newspaper articles that were published in the Monday through Friday editions of The Daily Times and The Nation between October 12, 1999 (nine months prior to the interview date of the first respondent in the first survey wave) and February 14, 2016 (the interview date of the final respondent in the last survey wave) in which the author either personally took an explicit moral position regarding interpersonal violence or reported on others who took such a position, such as local activists or government administrators. We kept our inquiry broad so that we could capture articles that discussed violence against women, children, and men to capture the full landscape of possibilities.

Since articles for these newspapers only recently began to be available online and are not easily searchable, we located hard copies of these two newspapers at several libraries and archives in Malawi. ${ }^{5}$ To identify relevant articles, we looked over all pages of these newspapers and read the titles on each page. Then we fully read the articles with titles related to violence, gender discrimination, or gender equality. We took pictures of all articles that contained messages explicitly against interpersonal violence and then stored them in a database. I then

[^2]supervised a team of undergraduate students who re-read and coded all articles for content, as well as provided a second check that these articles were related to our interest in moral positions surrounding interpersonal violence.

We found 723 newspaper articles that contained explicit moral messages about interpersonal violence. Some articles discussed violence against children or men specifically, but they always discussed Virtually all of these condemned violence against women or girls, though a very small minority very focused exclusively on violence against albinos, homosexuals, or children generally. 33 of these 723 articles contained some mixed messaging at least somewhat or implicitly supportive of some forms of interpersonal violence. We also found six articles that contained messages supporting a form of interpersonal violence and included no condemnation of violence. In other words, an article with anti-interpersonal violence scripts appeared on average every 8.26 days during this time period. The highest number of such articles published in a single day was five. Figure 2 displays temporal variation in the monthly totals of the number of these articles published. The thin, light blue line captures the raw monthly article count and the thicker, blue line displays the monthly article count smoothed over a 13 month period (six months prior to the observed month, the month of observation, and six months after the observed month). As shown, articles condemning interpersonal violence were published in most months but with temporal variation.

I exploit this variation as well as variation in the dates when individuals' were interviewed for the surveys I use to create individual-level measures respecting the number of recent published articles that contain anti-VAW messages. The independent variable I construct measures the number of newspaper articles featuring anti-VAW scripts that were published within three months prior to the exact date when respondents were individually interviewed. For example, if a person was interviewed on April 1, 2014, then their value would be the total number of such articles published between January 1 and March 31, 2014. Another respondent interviewed on April 20, 2014 likely would receive a different value, since their value would include the total number of such articles between January 20 and April 19, 2014. On average, $11.50(\mathrm{SD}=2.68)$ newspaper articles featuring anti-VAW scripts were published in the three months prior to respondents' dates of interview.

A three month period is used captures recent trends in the publication of articles about VAW without demanding that articles published far in the past continue to exert influence. Since my selection of this time period is subjective, I substitute this measure with two alternative measures in robustness analyses, capturing the number of articles published one month and six months prior to one's interview date.

Tabloid Closed. I treat the termination of the weekly Friday tabloid newspaper Weekend Times on January 31, 2014 as an exogenous shock. The content in the tabloid was based on antiestablishment cultural frames and objectified women. The tabloid's unexpected and sudden cessation serves as a "treatment." I therefore construct a binary treatment variable and assign all respondents in the 2013-14 survey wave a value of ' 1 ' if they were interviewed after the tabloid was shut down on January 31, 2014, of which about half were. I assigned others in the 2013-14 survey wave a value of ' 0 .' I do not assign values to respondents in other survey waves because there would be no variation across respondents within each of the other survey waves.

Control Variables. I also include a number of control variables, as listed in Table 1. I first include several controls for individual-level mechanisms of global cultural diffusion previously identified by other scholars. Education is associated with rejection of VAW (Hayes and Boyd 2016; Pierotti 2013; Rani et al. 2004; Uthman et al. 2009a), and I use a continuous measure of
individuals' years of schooling completed. A binary measure for urban living is included because urbanicity is consistently associated with rejection of VAW (Pierotti 2013) and support for gender equality (Evans 2015; 2017; Evans and Swiss 2017). Consistent with prior literature, I also include a binary variable for Christian religious identity (Pierotti 2013).

Several additional demographic controls are included: categorical measures for household wealth and marital history, binary measures for gender and matrilineal lineage, and a continuous measure of age. Household wealth is consistently a strong predictor of rejection of VAW (Rani et al. 2004; Uthman et al. 2009b; Yount and Li 2009). I use the household wealth variable available in these surveys, which is based on an index of asset ownership and coded as a categorical variable with respondents divided into quintiles. Studies find diverse effects for marital history (Hayes and Boyd 2016; Krause et al. 2014; Pierotti 2013), but in African countries marriage is positively associated with rejection (Hindin 2003; 2014). I include a measure of marital history with categories of never married, formerly but not currently married, and currently married. I use a dummy variable for male because men are consistently more likely than women to reject VAW (Cools and Kotsadam 2017; Krause et al. 2015; Uthman et al. 2010). Matrilineal ethnicities in Malawi pass land and family ties through the mother's line, giving women in such contexts more power and voice (Peters 1997), which could promote rejection of VAW. I rely on others' ethnographic research to code ethnicities in Malawi as either matrilineal or patrilineal and construct a dummy variable for matrilineal lineage (Berge et al. 2014; Ibek 1970). Age is included in my models because it is positively associated with rejection of VAW in Malawi and many other places, contrary to cohort theories of social change (Hayes and Boyd 2016; Pierotti 2013; but see Yount et al. 2013; Yount and Li 2009).

## Analytical Strategy

I estimate multilevel logistic regression models to test my hypotheses about media influences on Malawians' level of rejection of VAW. Unique media variables are included in different models to test each hypothesis, as outlined below. All previously listed control variables are included in all models. ${ }^{6}$ I employ fixed effects for survey waves and include a random effect for geographic district. Employing random effects for districts is helpful to account for district level variance in rejection of VAW, which may occur given many deeprooted differences across districts in Malawi. Such differences include the temporal introduction of the foreign religions of Christianity and Islam (Kudo 2017; Sicard 2000; Van Kol 2008). They also include district level historical differences in specific local economic activities that scholars show limit women's independence in Malawi (Kerr 2005; 2009; McCracken 1987). I do not employ probability weights in multilevel models. The reason for this is that neither the DHS nor the MICS report higher-order selection probabilities. ${ }^{7}$ When including random effects, using individual level weights while ignoring the lack of weights at higher-order levels inflates standard errors and produces a less efficient model (West et al. 2015).

I begin by testing the effect of an individual using either radio, television, or newspaper media at least weekly on their rejection of VAW. This approach follows the way several other scholars have tested for media use effects on rejection of VAW. In the next model, I exchange

[^3]this general media use variable for three binary variables that separately measure individuals' at least weekly use of radio, television, and newspaper forms of media.

Given that these two models form the basis of subsequent analyses, I perform a series of robustness checks on them. First, I estimate them using the probability survey weights provided, scaled to the sum of the sample sizes in each district (Carle 2009; Rabe-Hesketh and Skrondal 2006). Second, I use fixed effects for geographic districts instead of random effects. In the fixed effect models I again use the probability weights, unscaled, since there is no higher-order modeling component. ${ }^{8}$ Third, I turn back to the multilevel modeling approach and substitute the count variables for level of media, radio, television, and newspaper use in for their at least weekly versions. I am forced to exclude respondents from the 2015-16 survey wave in this third robustness check because that survey did not distinguish between daily and weekly use. Having done this, I disaggregate my pooled sample of respondents into women and men and estimate these models and robustness checks separately by sex. This is important to (1) understand possible gender differences, and (2) to test if female respondents are driving the main effects of the models since they constitute $77.65 \%$ of respondents.

Next, I shift to evaluating the effects of listening to specific MBC radio programs that feature anti-VAW messages. Building on the prior model, I add five more binary variables for having listened in the past few weeks to the five previously listed MBC radio programs that regularly feature anti-VAW scripts. Drawing upon these results, I combine those of these five binary variables that have positive point estimates into a new count measure of MBC radio programs an individual has heard. In a new model, I replace the five binary variables with this new count variable and test its effect on rejection.

I subsequently direct my attention to newspapers. I estimate a model that features my variable capturing the number of anti-VAW articles published in the three months prior to a respondent's interview date, as well as binary variables for at least weekly radio, television, and newspaper use. As a robustness check, I investigate if there is variation in the observed estimates for the number of anti-VAW articles published in the last month or in the last six months.

I then focus on evaluating the treatment effect of the cessation of the Weekend Times tabloid. To do so, I use data from the 2013-14 survey wave only and divide respondents into two groups of nearly equivalent size: those interviewed before the tabloid closed (control) and those interviewed after (treatment). I first compare the before and after percentages of rejection of VAW. Additionally, I check the balance between the two groups by comparing the before and after percentages (or means) for all independent variables (except year) that are considered in my primary regression models.

[^4]To obtain t-tests for these comparisons, I follow the procedures outlined by Bassi and Rasul (2017) and use a series of logistic regression models to predict the effect of the tabloid's closing on rejection and each independent variable separately. I cluster the standard errors on three-day interview time periods because of my hypothesis of a time treatment effect (Bassi and Rasul 2017:259-260). ${ }^{9}$ I do not include a random effect for districts in these models to obtain ttests because the sampling time did not span both before and after the Weekend Times closed for many districts. ${ }^{10}$ Finally, I use an additional, more conservative test of equality recently outlined by Ibragminov and Müller (2016) to further probe my comparison of the percentage of respondents before and after the tabloid closed who reject VAW (Bassi and Rasul 2017:264). This procedure performs a t-test on the three-day cluster rejection percentages before and after the closure. In this strict test, there are 18 clusters before the closure and 20 after.

I conclude by assessing the effects of the closing of the tabloid on rejection of VAW net of other factors. I use the same multilevel modeling approach employed previously, but I only use data from the 2013-14 survey wave and I add a binary variable for tabloid closure. In a subsequent model, I include a variable for respondent's interview date to ensure that the observed effects for tabloid closure are not conflated with a gradual over-time trend.

## Results

Results are found in the following figures and tables found at the end of this document. They follow the order outlined in the paper, especially the analytical strategy section above. I have not written up the results or summarized the conclusions yet. In general, the hypotheses are confirmed, with some important caveats and exceptions, and they point to many directions for future research.

[^5]Table 1. Descriptive Statistics

|  | Mean or <br> \% Dist. | Std. Dev. | Min | Max |
| :--- | :--- | :--- | :--- | :--- |
| Veperiable <br> Rejection of Variable | 81.56 |  |  |  |
|  |  |  | 1 |  |
| Media Predictor Variables |  |  |  |  |
| Any Media Weekly | 56.76 |  | 0 | 1 |
| Radio Weekly | 52.06 |  | 0 | 1 |
| TV Weekly | 14.11 |  | 0 | 1 |
| Newspaper Weekly | 12.20 |  | 0 | 1 |
| Radio Programs |  |  |  |  |
| Safe Motherhood |  |  |  |  |
| Bag of Life |  |  |  |  |


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Supplementary Variables | 2.29 | 2.21 | 0 | 9 |
| Any Media Count $^{\mathrm{c}}$ | 1.77 | 1.24 | 0 | 3 |
| Radio Count $^{\mathrm{c}}$ | 0.50 | 0.94 | 0 | 3 |
| TV Count $^{\mathrm{c}}$ | 0.51 | 0.83 | 0 | 3 |
| Newspaper Count $^{\mathrm{c}}$ |  |  |  |  |
| Anti-VAW Newspaper Articles | 3.65 | 2.08 | 0 | 10 |
| in Past Month | 20.69 | 3.07 | 13 | 27 |
| in Past 6 Months | 0.43 | 1.09 | 0 | 5 |
| Justification of VAW Count |  |  |  |  |

Note: Statistics are drawn from the full pooled sample of the 2000, 2004, 2010, 2013-14, and 2015-16 survey waves unless noted otherwise.
${ }^{a}=$ Includes data from 2000, 2004, and 2010 survey waves only.
${ }^{\mathrm{b}}=$ Includes data from 2013-14 survey wave only.
${ }^{c}=$ Includes data from 2000, 2004, 2010, and 2013-14 survey waves only.

Table 2. Multilevel Logistic Regression Models on Rejection of VAW

|  | Model 1 | Model 2 |
| :---: | :---: | :---: |
| Any Media Weekly | $\begin{gathered} \hline 0.058^{* * *} \\ (0.017) \\ \mathrm{OR}=1.059^{* * *} \end{gathered}$ |  |
| Radio Weekly |  | $\begin{gathered} 0.084^{* * *} \\ (0.017) \\ \mathrm{OR}=1.088^{* * *} \end{gathered}$ |
| TV Weekly |  | $\begin{gathered} -0.076^{* *} \\ (0.028) \\ \text { OR }=0.927^{* *} \end{gathered}$ |
| Newspaper Weekly |  | $\begin{gathered} 0.013 \\ (0.027) \\ \mathrm{OR}=1.013 \end{gathered}$ |
| Education | $\begin{gathered} 0.058^{* * *} \\ (0.003) \\ \mathrm{OR}=1.060^{* * *} \end{gathered}$ | $\begin{gathered} 0.058^{* * *} \\ (0.003) \\ \mathrm{OR}=1.060^{* * *} \end{gathered}$ |
| Wealth (Ref=Poorest) |  |  |
| Poor | $\begin{gathered} 0.034 \\ (0.024) \\ \mathrm{OR}=1.034 \end{gathered}$ | $\begin{gathered} 0.029 \\ (0.024) \\ \mathrm{OR}=1.029 \end{gathered}$ |
| Middle | $\begin{gathered} 0.047 \\ (0.025) \\ \mathrm{OR}=1.048 \end{gathered}$ | $\begin{gathered} 0.040 \\ (0.025) \\ \mathrm{OR}=1.041 \end{gathered}$ |
| Rich | $\begin{gathered} 0.071^{* *} \\ (0.026) \\ \mathrm{OR}=1.074^{* *} \end{gathered}$ | $\begin{gathered} 0.063^{*} \\ (0.026) \\ \mathrm{OR}=1.065^{*} \end{gathered}$ |
| Richest | $\begin{gathered} 0.215^{* * *} \\ (0.031) \\ \mathrm{OR}=1.240^{* * *} \end{gathered}$ | $\begin{gathered} 0.221^{* * *} \\ (0.031) \\ \mathrm{OR}=1.247^{* *} \end{gathered}$ |
| Urban | $\begin{gathered} 0.214^{* * *} \\ (0.027) \\ \text { OR }=1.238^{* * *} \end{gathered}$ | $\begin{gathered} 0.223^{* * *} \\ (0.027) \\ \mathrm{OR}=1.249^{* * *} \end{gathered}$ |
| Christian | $\begin{gathered} 0.022 \\ (0.027) \\ \mathrm{OR}=1.022 \end{gathered}$ | $\begin{gathered} 0.021 \\ (0.027) \\ \mathrm{OR}=1.021 \end{gathered}$ |
| Matrilineal | $\begin{gathered} 0.114^{* * *} \\ (0.026) \\ \text { OR }=1.121^{* * *} \end{gathered}$ | $\begin{gathered} 0.113^{* * *} \\ (0.026) \\ \mathrm{OR}=1.120^{* * *} \end{gathered}$ |
| Marital History (Ref=Never Married) |  |  |


| Formerly Married | $\begin{gathered} 0.284^{* * *} \\ (0.033) \\ \text { OR }=1.329^{* * *} \end{gathered}$ | $\begin{gathered} 0.283^{* * *} \\ (0.033) \\ \mathrm{OR}=1.326^{* * *} \end{gathered}$ |
| :---: | :---: | :---: |
| Currently Married - Monogamy | $\begin{aligned} & 0.328^{* * *} \\ & (0.022) \end{aligned}$ | $\begin{aligned} & 0.322^{* * *} \\ & (0.022) \end{aligned}$ |
| Currently Married - Polygamy | $\begin{gathered} \text { OR }=1.388^{* * *} \\ 0.187^{* * *} \\ (0.033) \end{gathered}$ | $\begin{gathered} \mathrm{OR}=1.380^{* * *} \\ 0.182^{* * *} \\ (0.033) \end{gathered}$ |
| Age (Adjusted) | $\begin{gathered} \mathrm{OR}=1.206^{* * *} \\ 0.024^{* *} \\ (0.01) \end{gathered}$ | $\begin{gathered} \mathrm{OR}=1.200^{* * *} \\ 0.024^{* * *} \\ (0.001) \end{gathered}$ |
|  | $\begin{gathered} (0.001) \\ \mathrm{OR}=1.025^{* * *} \end{gathered}$ | $\begin{gathered} (0.001) \\ \mathrm{OR}=1.025^{* *} \end{gathered}$ |
| Male | $\begin{gathered} 0.381^{* * *} \\ (0.021) \\ \text { OR }=1.464^{* * *} \end{gathered}$ | $\begin{gathered} 0.382^{* * *} \\ (0.021) \\ \text { OR }=1.466^{* * *} \end{gathered}$ |
| Survey Wave (Ref=2000) |  |  |
| 2004 | $\begin{gathered} 0.352^{* * *} \\ (0.025) \\ \mathrm{OR}=1.422^{* * *} \end{gathered}$ | $\begin{gathered} 0.352^{* * *} \\ (0.025) \\ \mathrm{OR}=1.422^{* * *} \end{gathered}$ |
| 2010 | $\begin{gathered} 1.319^{* * *} \\ (0.025) \\ \mathrm{OR}=3.741^{* * *} \end{gathered}$ | $\begin{gathered} 1.328^{* * *} \\ (0.025) \\ \mathrm{OR}=3.774^{* * *} \end{gathered}$ |
| 2013-14 | $\begin{gathered} 1.418^{* * *} \\ (0.025) \\ \mathrm{OR}=4.129^{* * *} \end{gathered}$ | $\begin{gathered} 1.428^{* * *} \\ (0.025) \\ \mathrm{OR}=4.171^{* * *} \end{gathered}$ |
| 2015-16 | $\begin{aligned} & 1.039^{* * *} \\ & (0.024) \end{aligned}$ | $\begin{aligned} & 1.052^{* * *} \\ & (0.024) \end{aligned}$ |
| Intercept | $\begin{aligned} & \text { OR }=2.826^{* * *} \\ & -0.552^{* * *} \\ & (0.081) \end{aligned}$ | $\begin{gathered} \mathrm{OR}=2.865^{* * *} \\ -0.559^{* * *} \\ (0.081) \end{gathered}$ |
| Between-district variance | $0.130^{* * *}$ | $0.131^{* * *}$ |
|  | (0.036) | $(0.036)$ |
|  | $\mathrm{OR}=1.139^{* * *}$ | $\mathrm{OR}=1.140^{* * *}$ |
| N | 124047 | 124047 |
| AIC | 109788.0 | 109774.0 |
| BIC | 191917.8 | 109988.0 |

Note: Models 1 and 2 use the full pooled sample of the 2000, 2004, 2010, 2013-14, and 2015-16 survey waves.
*p $<.05 ; * *$ p $<.01 ; * * * p<.001$

Table 3. Radio Programs' Effects in Multilevel Logistic Regression Models on Rejection of VAW, 2000-2010

|  | Model 3 | Model 4 | Model 5 |
| :---: | :---: | :---: | :---: |
| Radio Weekly | $\begin{gathered} 0.092^{* * *} \\ (0.025) \\ \mathrm{OR}=1.096^{* * *} \end{gathered}$ | $\begin{gathered} 0.087^{* * *} \\ (0.025) \\ \mathrm{OR}=1.091^{* * *} \end{gathered}$ | $0.108^{* * *}$ $(0.025)$ $\mathrm{OR}=1.113^{* * *}$ |
| Radio Programs Safe Motherhood | $\begin{gathered} 0.032 \\ (0.034) \\ \mathrm{OR}=1.033 \end{gathered}$ |  |  |
| Bag of Life | $\begin{gathered} 0.119^{* * *} \\ (0.035) \\ \mathrm{OR}=1.126^{* *} \end{gathered}$ |  |  |
| Health in Malawi | $\begin{gathered} 0.038 \\ (0.032) \\ \mathrm{OR}=1.039 \end{gathered}$ |  |  |
| Radio Doctor | $\begin{gathered} 0.082^{* *} \\ (0.029) \\ \mathrm{OR}=1.085^{* *} \end{gathered}$ |  |  |
| Development in Malawi | $\begin{gathered} -0.196^{* * *} \\ (0.033) \\ \mathrm{OR}=0.822^{* * *} \end{gathered}$ |  |  |
| Radio Programs Count |  | $\begin{gathered} 0.024^{* * *} \\ (0.007) \\ \mathrm{OR}=1.025^{* * *} \end{gathered}$ | $\begin{gathered} -0.014 \\ (0.010) \\ \text { OR }=0.986 \end{gathered}$ |
| Radio Weekly * Radio Programs Count |  |  | $\begin{gathered} 0.068^{* * *} \\ (0.014) \\ \mathrm{OR}=1.070^{* * *} \end{gathered}$ |

Note: Models 3-5 use the full pooled sample of the 2000, 2004, 2010, 2013-14, and 2015-16 survey waves.
*p $<.05 ; * * \mathrm{p}<.01 ; * * * \mathrm{p}<.001$

Table 4. Anti-VAW Newspaper Articles' Effects in Multilevel Logistic Regression Models on Rejection of VAW

|  | Model 6 | Model 7 |
| :--- | :---: | :---: |
| Newspaper Weekly | 0.015 | 0.018 |
|  | $(0.027)$ | $(0.027)$ |
|  | OR $=1.015$ | OR $=1.019$ |
| Anti-VAW Newspaper Articles | $0.020^{* * *}$ | $0.018^{* * *}$ |
|  | $(0.003)$ | $(0.003)$ |
|  | OR $=1.021^{* * *}$ | OR $=1.018^{* * *}$ |
| Newspaper Weekly* |  | $0.021^{*}$ |
| Anti-VAW Newspaper Articles |  | $(0.010)$ |
| In Past 3 Months |  | OR $=1.021^{*}$ |

Note: Models 6-7 use the full pooled sample of the 2000, 2004, 2010, 2013-14, and 2015-16 survey waves.
${ }^{*} \mathrm{p}<.05 ; * * \mathrm{p}<.01 ;{ }^{* * *} \mathrm{p}<.001$

Table 5. Comparison of Respondents Interviewed Before and After the Closing of the Weekend Times Tabloid on January 31, 2014.

|  | Mean or Percent Distribution |  | Test of Equality (p-value) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Interviewed Before Closure <br> (1) | Interviewed After Closure <br> (2) | $\begin{gathered} \text { t-test } \\ (\text { col. } 1=\text { col. } \\ 2) \\ (3) \end{gathered}$ | Ibragimov and Müller (2016) (4) |
| Outcome Rejection of VAW | 87.30 | 89.06 | 0.009 | 0.001 |
| Balance |  |  |  |  |
| Radio Weekly | 48.71 | 50.83 | 0.067 |  |
| TV Weekly | 16.24 | 15.65 | 0.710 |  |
| Newspaper Weekly | 13.33 | 11.60 | 0.058 |  |
| Education | 5.67 | 6.07 | 0.000 |  |
| Household Wealth |  |  |  |  |
| Poorest | 18.96 | 17.36 | 0.255 |  |
| Poor | 18.50 | 19.68 | 0.353 |  |
| Middle | 20.18 | 17.80 | 0.010 |  |
| Rich | 20.31 | 18.93 | 0.221 |  |
| Richest | 22.04 | 26.24 | 0.134 |  |
| Urban | 17.09 | 17.22 | 0.967 |  |
| Christian | 77.49 | 85.42 | 0.000 |  |
| Matrilineal | 79.50 | 75.48 | 0.393 |  |
| Marital History |  |  |  |  |
| Never Married | 23.22 | 24.96 | 0.020 |  |
| Formerly Married | 13.20 | 9.26 | 0.000 |  |
| Currently Married - | 56.83 | 56.45 | 0.718 |  |
| Monogamy <br> Currently Married - |  |  |  |  |
| Polygamy | 6.75 | 9.33 | 0.000 |  |
| Age | 28.14 | 28.33 | 0.885 |  |
| Male | 21.66 | 22.37 | 0.276 |  |

Note: Statistics are drawn from the 2013-14 MICS.

Table 6. Effects of Closing the Weekend Times Tabloid from Multilevel Logistic Regression on Rejection of VAW

|  | Model 11 | Model 12 | Model 13 |
| :--- | :---: | :---: | :---: |
| Newspaper Weekly | 0.007 | 0.008 | -0.038 |
|  | $(0.065)$ | $(0.065)$ | $(0.083)$ |
|  | OR = 1.007 | OR $=1.008$ | OR $=0.963$ |
| Tabloid Closure | $0.226^{* *}$ | $0.184^{*}$ | 0.172 |
|  | $(0.073)$ | $(0.091)$ | $(0.092)$ |
|  | OR = 1.253** | OR = 1.202* | OR $=1.188$ |
| Interview Date |  | 0.001 | 0.001 |
|  |  | $(0.002)$ | $(0.002)$ |
|  |  | OR $=1.001$ | OR $=1.001$ |
| Newspaper Weekly * |  |  | 0.107 |
| Tabloid Closure |  |  | $(0.122)$ |
|  |  |  | OR $=1.032^{* * *}$ |

Note: Models 15-18 use the sample from the 2013-14 survey wave.
*p $<.05 ; * *$ p $<.01 ; * * * p<.001$

Appendix Table 1. Descriptive Statistics by Sex

| Variable | Women |  |  |  | Men |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or \% Dist. | Std. <br> Dev. | Min | Max | Mean or \% Dist. | Std. <br> Dev. | Min | Max |
| Dependent Variable |  |  |  |  |  |  |  |  |
| Rejection of VAW | 80.27 |  | 0 | 1 | 85.97 |  | 0 | 1 |
| Media Predictor Variables |  |  |  |  |  |  |  |  |
| Any Media Weekly | 52.18 |  | 0 | 1 | 72.68 |  | 0 | 1 |
| Radio Weekly | 47.67 |  | 0 | 1 | 67.31 |  | 0 | 1 |
| TV Weekly | 11.61 |  | 0 | 1 | 22.80 |  | 0 | 1 |
| Newspaper Weekly | 9.95 |  | 0 | 1 | 20.01 |  | 0 | 1 |
| Radio Programs |  |  |  |  |  |  |  |  |
| Safe Motherhood ${ }^{\text {a }}$ | 57.64 |  | 0 | 1 | 74.64 |  | 0 | 1 |
| Bag of Life ${ }^{\text {a }}$ | 53.45 |  | 0 | 1 | 75.17 |  | 0 | 1 |
| Health in Malawi ${ }^{\text {a }}$ | 48.94 |  | 0 | 1 | 69.64 |  | 0 | 1 |
| Radio Doctor ${ }^{\text {a }}$ | 46.63 |  | 0 | 1 | 69.64 |  | 0 | 1 |
| Development in Malawi ${ }^{\text {a }}$ | 52.14 |  | 0 | 1 | 71.43 |  | 0 | 1 |
| Radio Programs Count ${ }^{\text {a }}$ | 2.07 | 1.72 | 0 | 4 | 2.89 | 1.44 | 0 | 4 |
| Anti-VAW Newspaper Articles in Past 3 Months | 11.49 | 2.68 | 6 | 18 | 11.54 | 2.71 | 6 | 18 |
| Tabloid Closure ${ }^{\text {b }}$ | 50.66 |  | 0 | 1 | 51.70 |  | 0 | 1 |
| Control Variables |  |  |  |  |  |  |  |  |
| Education | 5.30 | 3.70 | 0 | 13 | 6.62 | 3.67 | 0 | 13 |
| Household Wealth |  |  |  |  |  |  |  |  |
| Poorest | 19.11 |  | 0 | 1 | 15.52 |  | 0 | 1 |
| Poor | 19.28 |  | 0 | 1 | 19.20 |  | 0 | 1 |
| Middle | 19.37 |  | 0 | 1 | 19.26 |  | 0 | 1 |
| Rich | 19.23 |  | 0 | 1 | 20.42 |  | 0 | 1 |
| Richest | 23.01 |  | 0 | 1 | 25.60 |  | 0 | 1 |
| Urban | 17.55 |  | 0 | 1 | 19.56 |  | 0 | 1 |
| Christian | 85.03 |  | 0 | 1 | 83.98 |  | 0 | 1 |
| Matrilineal | 77.28 |  | 0 | 1 | 77.70 |  | 0 | 1 |
| Marital History |  |  |  |  |  |  |  |  |
| Never Married | 19.38 |  | 0 | 1 | 37.28 |  | 0 | 1 |
| Formerly Married | 12.81 |  | 0 | 1 | 3.55 |  | 0 | 1 |
| Currently Married - Monogamy | 57.86 |  | 0 | 1 | 54.26 |  | 0 | 1 |
| Currently Married - Polygamy | 9.92 |  | 0 | 1 | 4.88 |  | 0 | 1 |
| Age | 28.03 | 9.22 | 15 | 49 | 28.82 | $\begin{aligned} & 10.3 \\ & 3 \end{aligned}$ | 15 | 54 |
| Survey Wave |  |  |  |  |  |  |  |  |
| 2000 | 13.67 |  | 0 | 1 | 11.10 |  | 0 | 1 |
| 2004 | 12.09 |  | 0 | 1 | 11.71 |  | 0 | 1 |
| 2010 | 23.80 |  | 0 | 1 | 25.76 |  | 0 | 1 |


| 2013-14 | 25.05 |  | 0 | 1 | 24.57 |  | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2015-16$ | 25.39 |  | 0 | 1 | 26.85 |  | 0 | 1 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Supplementary Variables |  |  |  |  |  |  |  |  |
| Any Media Count |  |  |  |  |  |  |  |  |

Note: Statistics are drawn from the full pooled sample of the 2000, 2004, 2010, 2013-14, and 2015-16 survey waves unless noted otherwise.
${ }^{a}=$ Includes data from 2000, 2004, and 2010 survey waves only.
${ }^{\mathrm{b}}=$ Includes data from 2013-14 survey wave only.
${ }^{c}=$ Includes data from 2000, 2004, 2010, and 2013-14 survey waves only.

## Newspaper Articles Against Interpersonal Violence



Note: Monthly totals from Malawi's two most popular newspapers: The Nation and The Daily Times.

## Predicted Probabilities of Rejection of VAW

.85


## Predicted Probability of Rejection of VAW by Newspaper Use



Newspaper Articles Against Interpersonal Violence in Past 3 Months (Centered)

- No Weekly Newspaper Use - Weekly Newspaper Use



## Mean Rejection of Violence Against Women, by Interview Date, Malawi 2013-14 MICS

Tabloid Closure: Jan31


Note: Data comes from the Multiple Indicator Cluster Survey conducted in Malawi in 2013-14. Scatter dots represent the percent a given day that rejected VAW. Dot size indicates the relative daily number of respondents interviewed on respondents, which ranged from 34-528. Data are omitted for all days with less than 30 respondents.

Appendix Table 2. Correlation Matrix of All Variables.



Note: Statistics are drawn from the full pooled sample of the 2000, 2004, 2010, 2013-14, and 2015-16 survey waves unless noted otherwise.
${ }^{a}=$ Includes data from 2000, 2004, and 2010 survey waves only.
${ }^{\mathrm{b}}=$ Includes data from 2013-14 survey wave only.
${ }^{c}=$ Includes data from 2000, 2004, 2010, and 2013-14 survey waves only.


[^0]:    ${ }^{1}$ To tacitly comply with growing international pressure for the recognition and rights of women, Banda created the Women's League of Malawi and sent its members abroad to England and elsewhere to demonstrate Malawi's respect for women. In practice, however, he limited the primary purpose of the League to coordinating women's dance performances for himself and his entourage in communities they visited (Gilman 2011; Khaila 1995; Mkaganga 2000).
    ${ }^{2}$ However, in their first report to the convention Malawi stated that it did not "consider itself bound by such provisions ... [which] require immediate eradication of such traditional customs and practices" (UN 1991). ${ }^{3}$ Percentages of Malawian's media consumption come from the DHS and MICS reports (NSO and OCR Macro 2001:24-27; NSO and OCR Macro 2005:31-34; NSO and ICF Macro 2011:30-31; NSO 2015: XV, 239-241; NSO and ICF 2017:33-34, 40-43).

[^1]:    ${ }^{4}$ There are no cinemas anywhere in the country and, with a few somewhat successful exceptions, there is no local movie production (Gray 2011:109).

[^2]:    ${ }^{5}$ We gathered articles from the official archives of these two newspapers in Blantyre, two libraries in Lilongwe located at the Malawi Human Rights Resource Centre and the Malawi Government's Human Rights Commission, and one library in Zomba at the Center for Social Research at the University of Malawi. We traveled to these several locations because each was missing some years or months of newspaper records due to water damage, fire, etcetera.

[^3]:    ${ }^{6}$ I also calculated the variance inflation factor scores for the variables in all models described. No variable received a score of two or higher, indicating that reported estimates or standard errors are not distorted by multicollinearity. ${ }^{7}$ DHS program administrators explain that providing higher-order weights would violate their anonymity agreements with national governments (The DHS Program User Forum, August 18, 2015).

[^4]:    ${ }^{8}$ Fixed effects offer a useful robustness check for two reasons. First, there are only 28 districts in Malawi, which is small enough that random effect estimates could begin to bias estimates (Bryan and Jenkins 2016; McNeish and Stapleton 2016a; 2016b; Stegmueller 2013). Moreover, for the first two survey waves I use (2000 and 2004), the two-stage sampling strategy combined most smaller districts into a single cluster that represents 17 and 18 districts in the two surveys, respectively. While each respondents' district is still known, the sampling size for some smaller districts was much lower during these two survey waves. Second, the inclusion of a district level random effect without examining district level predictors comes at the risk of violating random effect models' "invariant coefficients assumption" (Heisig et al. 2017). Some propose additional methods for addressing the invariant coefficients assumption, such as examining "within-between" random effects separately (Bell et al. 2018; Bell and Jones 2015; McNeish and Kelley 2018) or testing the importance of including random slopes of all independent controls one at a time (Heisig et al. 2017). I examined these approaches but they did not substantively change the direction, magnitude, or significance of my coefficient estimates.

[^5]:    ${ }^{9}$ There are 60 three-day clusters, but several have a very low sample size. I omit respondents who are interviewed during a cluster that features less than 50 respondents. This drops only 63 respondents, but reduces the number of clusters to 38 .
    ${ }^{10}$ Since I do not include random effects, I do include the probability weights provided with the survey.

