
Peacekeeping, Compliance with International Norms, and Transactional Sex in Monrovia, Liberia

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Abstract United Nations policy forbids its peacekeepers and other personnel from engaging in transactional sex (the exchange of money, favors, or gifts for sex), but we find the behavior to be very common in our survey of Liberian women. Using satellite imagery and GPS locators, we randomly selected 1,381 households and randomly sampled 475 women between the ages of eighteen and thirty. Using an iPod in private to preserve the anonymity of their responses, these women answered sensitive questions about their sexual histories. More than half of them had engaged in transactional sex, a large majority of them (more than 75 percent) with UN personnel. We estimate that each additional battalion of UN peacekeepers caused a significant increase in a woman's probability of engaging in her first transactional sex. Our findings raise the concern that the private actions of UN personnel in the field may set back the UN's broader gender-equality and economic development goals, and raise broader questions about compliance with international norms.

Over the last decade several studies have suggested that United Nations (UN) peacekeeping works: peacekeeping deployments tend to achieve their core security objectives.¹ UN peacekeeping makes it more likely that post-war peace will last, a finding that largely persists across different data sets, statistical models, and attempts to address the nonrandom assignment of peacekeeping missions.² More recent studies have suggested that UN peacekeeping deployments prevent the contagion of conflict and are associated with a reduction in both battlefield fatalities and civilian casualties.³

A world without UN peacekeeping would be a more violent and insecure place. However, the role of UN peacekeepers in a series of sexual abuse scandals,⁴

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1. Fortna 2008; Howard 2008.
2. Doyle and Sambanis 2006; Gilligan and Sergenti 2008.
3. Beardsley 2011; Hultman, Kathman, and Shannon 2014a, 2014b.
4. Perhaps the best-known case is Kathryn Bolkovac's whistle-blowing account of UN peacekeepers' complicity in sex trafficking in Bosnia. Bolkovac and Lynn 2011. A more recent example involved the

peacekeepers' introduction of a deadly strain of cholera that killed over 8,000 people in Haiti,⁵ and concerns about the creation of a "peacekeeping economy" that caters to the consumption needs of expat UN and NGO workers rather than to the long-term development needs of the host country⁶ raise the question of whether the UN can fulfill its vital peacekeeping role with less damage to its other peace-building goals of social and economic development.

Transactional sex, defined as the "exchange of sex for money, favors, or gifts,"⁷ involves all three of these concerns: sexual exploitation and abuse (SEA), public health, and the host country's social and economic development.⁸ However, existing studies and journalistic accounts of the problem have relied on anecdotal evidence,⁹ and thus its prevalence remains to be established. To fill this evidentiary gap, this article presents the first systematic quantitative study of the association between a UN peacekeeping operation and transactional sex. In fact, this study is, as far as we can tell, the first to provide a rigorous population estimate of the incidence of transactional sex with foreign military personnel of any kind.¹⁰

To do so, we conducted a survey in Monrovia, Liberia in the summer of 2012.¹¹ Liberia has hosted an average of about 12,000 peacekeepers of the United Nations Mission in Liberia (UNMIL) at any given point in time since 2003, with usually

rape of a Haitian boy by Pakistani peacekeepers. "Two Pakistani UN Soldiers Jailed for Raping Haitian Boy," *BBC News*, 13 March 2012.

5. Mark Doyle, "Haiti Cholera Victims File Claim Against the United Nations," *BBC News*, 9 October 2013.

6. Carnahan, Durch, and Gilmore 2006; Jennings and Nikolić-Ristanović 2009.

7. Liberia Institute of Statistics and Geo-Information Services (LISGIS) et al. 2008, 172.

8. We recognize that sexual exploitation and abuse are not the same as transactional sex. However, the UN's zero-tolerance policy bans almost all sexual activity between UN peacekeeping personnel and local women, including transactional sex, to prevent "sexual exploitation." These rules not only prohibit any "exchange of money, employment, goods or services for sex" but also strongly discourage "sexual relationships between United Nations staff and beneficiaries of assistance, since they are based on inherently unequal power dynamics." United Nations Secretariat, Secretary-General's Bulletin 2003/13, "Special Measures for Protection from Sexual Exploitation and Sexual Abuse," 9 October 2003. See also Kanetake 2010.

9. Jennings and Nikolić-Ristanović 2009; Kate Holt, "DR Congo's Shameful Sex Secret," *BBC News*, 3 June 2004; and Emily Wax, "Congo's Desperate 'One-Dollar UN Girls': Shunned Teens, Many Raped by Militiamen, Sell Sex to Peacekeepers," *Washington Post*, 21 March 2005, A1.

10. There are numerous case studies of such sexual transactions involving, for example, US soldiers in Vietnam or Korea. Moon 1997, among others. There are also various estimates of the number of women that engage in transactional sex with foreign soldiers. For example, several sources say that more than one million Korean women have engaged in such transactions with US soldiers. See Moon 1997, 1; Tickner 2001, 50; and Lee 2010, 125. However, this claim appears to originate with a documentary that aired on PBS in 1996. *The Women Outside: Korean Women and the US Military*, directed by J.T. Takagi and Hye Jung Park, New York: Third World News Reel, 2000. Similarly, Baker says that "one of every six Korean women age fifteen to thirty-five years old worked in the sex industry" (2004, 156) but this figure stems from a letter to the editor, which in turn attributes it to the nongovernmental organization My Sister's Place. Rita Nakashima Brock, "Japanese Didn't Invent Military Sex Industry," *New York Times*, 23 February 1992, E14. These figures may be accurate, but we are unaware of any rigorous quantitative study of the incidence of transactional sex with foreign military personnel.

11. Survey materials, including questionnaires, are available at <<http://dx.doi.org/10.7910/DVN/BY1VXH>>.

about one-fifth of them stationed in Monrovia.¹² Our findings are stunning. We estimate that more than half of eighteen- to thirty-year-old women in greater Monrovia have engaged in transactional sex and that most of them (more than three-quarters, or about 58,000 women) have done so with UN personnel, typically in exchange for money.¹³ The data we collected show unambiguously that transactional sex with UN personnel is a ubiquitous life experience among young women in Monrovia.¹⁴

Our analysis also examines whether and to what extent the presence of UN peacekeepers has led to young women engaging in transactional sex who would not otherwise have done so.¹⁵ Did high-paying UN peacekeepers merely displace non-UN buyers from an otherwise stable transactional sex market, or did the arrival of UNMIL lead to an actual increase in the volume of sexual transactions? The latter is more likely. Most of our analysis indicates that the presence of UNMIL peacekeepers has been associated with a substantial and statistically significant increase in the rate of entry into the transactional sex market, that is, the probability that a woman engages in her first transactional sex. A conservative estimate links each additional UNMIL battalion, which consists of about 1,000 troops, to a 3 percent increase in the probability that a woman will engage in her first transactional sex in a given year, with the estimate rising to 6 percent for a battalion of African troops, which have generally made up the majority of forces in Monrovia.¹⁶ Consider, for

12. A comprehensive set of UNMIL deployment maps is available at <<http://dx.doi.org/10.7910/DVN/D7AIFN>>.

13. UN personnel include both UNMIL peacekeepers and UN staff serving in other capacities or with other agencies, although peacekeepers far outnumber other personnel. For example, UNHCR's total non-national staff in Liberia numbered thirty-five in 2012. United Nations High Commissioner for Refugees, *UNHCR Global Report 2012: Liberia*, available at <<http://www.unhcr.org/51b1d636b.pdf>>. When we estimate the impact of the UN's presence over time, we focus on variation in the number of UNMIL peacekeepers because this precise figure is available and reflects the vast majority of deployed UN personnel. Throughout the text, we ensured statements of statistical findings accurately reflect the underlying measure used in estimation. Since we generally asked respondents about transactional sex with UN personnel, we report our results in this way. Table S.3 in the supplementary material contains the exact wording of all survey items analyzed in this article. Military and civilian UN personnel may well behave differently, and these differences could be important in assessing UN missions that involve relatively larger civilian components, but our data and the fact that civilians constitute a very small share of the total UN presence in Liberia do not permit us to explore these differences.

14. We did not conduct a survey of UN personnel in Monrovia and so are unable to provide an estimate of how many peacekeepers or other UN staff members engage in transactional sex. It seems reasonable to suspect that this number is large, given the large share of women reporting transactional sex with UN personnel and the fact that any particular peacekeeper's deployment is almost always limited to twelve months or less.

15. Women are not the only individuals at risk of engaging in transactional sex and anecdotal evidence indicates that local men also trade sex for money. However, we interviewed only women about their histories of transactional sex because qualitative accounts suggest that most transactions involve local women. Jennings and Nikolić-Ristanović 2009. This means we may be underestimating the total incidence of transactional sex, since we cannot estimate from our data the number of local men selling sex. A study of transactional sex between peacekeepers and host-country males remains an important avenue for future research.

16. The African contingents in Monrovia have been mostly from Nigeria and Ghana, with Nigeria contributing the largest number of UNMIL troops in the city. We do not know the countries of origin for the UN's civilian staff, whether deployed with UNMIL or with another UN agency, but the size of the civilian contingent is in any case small relative to the number of UNMIL peacekeepers.

example, UNMIL as it stood in 2008—an average year in terms of the number of deployed peacekeepers. In this context, the estimated 3 percent annual per-battalion increase in a woman's probability of engaging in her first transactional sex implies that the median Monrovia woman's chance of reaching age twenty-five without engaging in transactional sex would be nearly 50 percent greater if there were no UNMIL troops. In total, this estimate suggests that more than 12,000 women in Monrovia entered the transactional sex market who would not have done so in the absence of UNMIL. This corresponds to about one of every five women aged eighteen to thirty in 2012 that have engaged in transactional sex with UN personnel. However, we cannot entirely dismiss the possibility that the association between UNMIL's presence and the growth of the transactional sex market is coincidence, even though the large-scale participation of well-paying UN personnel in this market is in our view beyond doubt.

The commonality of transactional sex in itself may be cause for concern. Some women can gain significant income and status by engaging in transactional sex,¹⁷ and we acknowledge that women in a postconflict environment such as Monrovia “are not only victims but also survivors who have agency to make consensual decisions.”¹⁸ But in terms of public health, transactional sex is generally associated with a heightened risk of contracting sexually transmitted diseases,¹⁹ and studies in both the developing and developed world have indicated that women engage in risky sexual practices when they engage in transactional sex.²⁰ Transactional sex has also been linked to gender-based violence.²¹ While some women choose and are able to improve their livelihoods through transactional sex, Dupas found that young women are less likely to report sex with “sugar daddies” when they receive information about health risks, and Baird and colleagues observed that cash transfers lead to declines in marriage and pregnancy among school drop-outs, consistent with the notion that improved economic circumstances make it possible for young women to opt out of remunerative sexual relationships.²²

Our findings are particularly troubling because they suggest that the actions of UN peacekeepers are undermining the UN's broader peace-building goals in Liberia, especially its gender equality and economic development goals. When UNMIL withdraws it will leave behind a distorted economy in which more than half of Monrovia's young women will have been making, or at least augmenting, their livelihoods by selling sex.²³

17. Atwood et al. 2011; Jennings 2008, 64.

18. Simic 2009, 294.

19. LISGIS et al. 2008, although the report notes that condom usage is relatively common, and UNAIDS 2013 shows low prevalence of HIV in Liberia compared to other sub-Saharan African countries. See also Luke and Kurz 2002.

20. Dunkle et al. 2010; Gertler, Shah, and Bertozzi 2005; Robinson and Yeh 2011.

21. Dunkle et al. 2004; Dunkle et al. 2007.

22. Dupas 2011, 29; Baird, McIntosh, and Özler 2011.

23. The high incidence of transactional sex with UN personnel is clearly contrary to the UN's stated development goals. However, discontent with UNMIL is uncommon among women in Monrovia and in

This research has implications for at least two broad literatures in international relations: on peacekeeping effectiveness and on international norm diffusion. Our paper matches recent literature on the effectiveness of peacekeeping missions in using temporally and spatially disaggregated data to study the impact of peacekeepers not only on battlefield statistics but also on civilians. However, we take issue with how this literature focuses on the benefits of UN peacekeeping without examining its negative externalities and broader societal costs. Peacekeeping's evident impact in prolonging post-war periods of peace would make it inappropriate to argue that these costs outweigh peacekeeping's benefits. Our analysis cannot make such a determination. However, host countries should fully understand the implications of a peacekeeping presence and our analysis provides clarification on this point.

Our results also carry implications for the literature on compliance with international norms. Recent empirical studies indicate that states operating in the same circles of international organizations begin to behave similarly in a variety of ways, most prominently through a process of "socialization," which can include persuasion, social pressure to conform, and acculturation.²⁴ For example, Greenhill argues that human rights norms spread by way of intergovernmental organizations that provided a forum for "high-level government representatives" to convince one another of the benefits of adopting these norms and to pressure holdouts by calling into question "acceptance from their peers" and "their status within that community."²⁵

Such a process of socialization has led to widespread acceptance of the norm against transactional sex involving peacekeepers among high-level officials and decision makers at the UN, but efforts to extend this process to peacekeepers themselves have not been as successful. The UN has sponsored robust education campaigns and the Security Council has issued explicit norm-based directives about how UN peacekeepers should interact with host-country women and penalties for failing to comply have been put in place. Yet we have strong evidence that front-line personnel flout the norm against transactional sex. Norm diffusion among decision makers, expressed in norm-consistent policies and rules, has in this case not been enough to affect desired behaviors among front-line personnel.

In principle, front-line compliance could be accomplished in at least two ways. First, the UN could instill the relevant norms in on-the-ground personnel. UNMIL

particular among women who have engaged in transactional sex with UN personnel. Among the latter, 79 percent say that UNMIL has made a positive nonsecurity contribution to Liberia and 88 percent say that UNMIL should stay in the country, compared to 49 percent and 74 percent for women who have never engaged in transactional sex. These figures indicate popular support for UNMIL's continued presence, but probably also reflect respondents' concerns that UN-driven economic growth may subside if UNMIL withdraws.

24. Classic works include Haas 1992; Florini 1996; Finnemore and Sikkink 1998; and Goodman and Jinks 2004. For recent empirical studies see, for example, Greenhill 2010; and Bearce and Bondanella 2007. Graham, Shipan, and Volden 2013 provide an overview of the literature on policy diffusion in American and comparative politics as well as international relations, which the norm diffusion literature is part of.

25. Greenhill 2010, 133.

has tried as much by emphasizing the inherent wrongness of transactional sex in its information campaigns targeted at UN personnel (i.e., the demand side) as well as the local population (i.e., the supply side), but transactional sex remains common.²⁶

Second, a system of incentives, monitoring, and punishment could perhaps succeed where appeals to appropriateness and social sanctions have not. In fact, the UN has put in place significant penalties for transactional sex, such as dismissal, repatriation, and loss of future employment opportunities but the application of available enforcement procedures has been lacking.²⁷ The severity of punishments may even have backfired because a troop-contributing country can be asked to reduce its personnel contribution as a result of SEA violations, negatively affecting the very individuals who are asked to initiate investigations. While an extensive campaign to exert social pressure failed, it remains an open question whether a fine-tuned system of monitoring and calibrated material incentives that did not exist in this case could have induced compliance.

Background

UN Policy on Sexual Exploitation and Abuse

UN policy defines transactional sex as a form of sexual exploitation and abuse.²⁸ The UN Secretariat is sensitive to the fact that peacekeeping operations face challenges in this regard, although it may have been unaware of the problem's magnitude given the lack of reliable data.²⁹ In 2003, the UN adopted a strict "zero-tolerance" policy that forbids its peacekeepers from exchanging money, food, help, or anything of value for sex. In 2005, the Department of Peacekeeping Operations (UNDPKO) established a Conduct and Discipline Team to train peacekeepers about the new policy and process allegations of misconduct.³⁰ In 2007, the policy was extended to all UN personnel and the Conduct and Discipline Team within UNDPKO became the Conduct and Discipline Unit within the UN's Department of Field Support.

26. See Figures S.4 and S.5 in the supplementary materials for campaign documents mentioning the "shame" and reputational "ruin" that can result from transactional sex. While these campaigns have not achieved their stated objectives, it is of course possible that transactional sex with UN personnel would be even more rampant in their absence. We do not aim and are not able to assess the causal effects of campaigns against sexual exploitation and abuse.

27. See, for example, Neil MacFarquhar, "Peacekeepers' Sex Scandals Linger, On Screen and Off," *New York Times*, 8 September 2011, A10. UNMIL has logged very few SEA allegations (eighteen in 2009, fifteen in 2008 and 2010, twelve in 2007 and 2011, and nine in 2012), which suggests enforcement mechanisms are activated in a minuscule share of the total estimated violations of the UN's zero-tolerance policy. United Nations Conduct and Discipline Unit 2015.

28. Whether transactional sex with UN personnel should be considered exploitation is a matter of some debate. Simic argues that existing policy is in fact "overprotective" (2012, 7).

29. UN Office of Internal Oversight Services (UN OIOS) 2013. See also United Nations 2005. A more recent report, UN OIOS 2015a, draws on the findings of this article and acknowledges the severity of the problem.

30. United Nations 2005.

Transactional Sex in Sub-Saharan Africa

Anthropological and sociological accounts indicate that transactional sex is common in sub-Saharan Africa and that affected women do not typically self-identify as sex workers. It is particularly common, according to these accounts, for young women and adolescent girls to exchange sexual favors with older men for money and gifts.³¹ However, quantitative evidence has been mixed. Rates of young women engaging in transactional sex were above 5 percent in only three of the twelve African countries that Chatterji and colleagues studied.³² In contrast to these relatively low rates, Dunkle and her colleagues found that about 18 percent of men reported giving gifts for casual sex in rural South Africa and that 21 percent of women receiving care at an antenatal clinic in Soweto reported engaging in transactional sex.³³ There is some evidence suggesting that the sex trade may be particularly pervasive in post-war societies.³⁴

In Liberia, the 2007 Demographic and Health Survey (LDHS) asked women if they had received money, gifts, or favors in return for sex within the last twelve months.³⁵ This was the case for an estimated 4 percent of all fifteen- to forty-nine-year-old women across the entire country. If we restrict the analysis to eighteen- to thirty-year-old never-married women in Monrovia, the estimate is about 10 percent. (The LDHS did not ask about sex with UN personnel.) Since the LDHS survey inquired about only the last twelve months, this estimate is not on its face inconsistent with our estimate of the share of women who have ever engaged in transactional sex.

It is also possible that the LDHS figure is an underestimate because interviews were conducted face to face, with interviewers recording subjects' responses. Transactional sex is a sensitive issue for some subjects, although perhaps less so in Monrovia than elsewhere, and this might depress the reported rate of transactional sex.³⁶ For this reason we took extensive measures to ensure that respondents could answer sensitive questions about their sexual histories in private, without enumerators knowing their responses.³⁷

31. Hunter 2002; Luke and Kurz 2002; Leclerc-Madlala 2003.

32. Chatterji et al. 2005.

33. Dunkle et al. 2007; Dunkle et al. 2004. See also Moore, Biddlecom, and Zulu 2007.

34. Nikolić-Ristanović 2003; Pankhurst 2007.

35. LISGIS et al. 2008. LDHS survey item 639A reads: "In the last 12 months, did you ever give or receive money, gifts or favors in return for doing men business (engaging in sexual intercourse) with him?" We do not believe that women commonly give something in exchange for sex, and the LDHS data file's item label omits this possibility, so we assume here that interviewed women were recipients.

36. See Cohen and Green 2012 on how survey methodology affects the collection of sensitive material.

37. It is of course also possible that our figures overestimate the true incidence of transactional sex in Monrovia. However, we do not see any compelling reason for this to be the case. Since responses were hidden from enumerators, subjects had no reason to lie to appeal to their interviewer, and in any case, we would expect any social desirability bias to lower the number of women reporting transactional sex. There were also no skip patterns on the sensitive questionnaire that could have incentivized subjects to give particular responses to save time, nor did we make any other incentives conditional on responses to sensitive questions. During implementation of the survey, at least one co-author was on site at all times to train and supervise enumerators. Enumeration activities were tracked by way of GPS devices

The Liberian Civil War and UNMIL

Liberia suffered two brutal civil wars between 1989 and 2003 that caused some 250,000 deaths in a country with a population of between two and three million people during that period.³⁸ In September 2003 the UN Security Council established the UN Mission in Liberia (UNMIL) to monitor a peace agreement and provide security. The Economic Community of West African States (ECOWAS), or more specifically the Economic Community of West African States Monitoring Group (ECOMOG), provided the first contingent and UNMIL has had a large presence of African peacekeepers ever since. Initially the force was mandated to consist of 15,000 personnel, mostly soldiers, but also including police and civilians. The largest concentration of soldiers has been stationed in the nation's capital, Monrovia, which hosts mission headquarters and one of the largest bases in the country, and virtually all of our respondents were aware of UNMIL's presence in the city. Numerous civilian support workers and UN staff (from UNDP, UNHRC, UNICEF, and other agencies) are also concentrated in Monrovia.

Survey and Results

We surveyed 1,381 randomly selected households throughout greater Monrovia. Our sample-selection procedures described here and in greater detail in the supplementary materials give us high confidence that we have obtained a representative sample of households in greater Monrovia.

We first geolocated all dwellings (about 110,000) in greater Monrovia using current satellite imagery. Next, we subdivided greater Monrovia into eighty-one similarly sized enumeration areas and randomly selected thirty-nine of these areas as primary sampling units, with selection probabilities proportional to the number of dwellings in each enumeration area. We then randomly sampled target residences within each sampled enumeration area, and GPS-equipped enumerators visited these sites to conduct interviews. If the selected residence contained more than one household, enumerators would record the number of households and randomly select one of them for an interview. Each selected household was visited up to four times if necessary to speak to an adult member of the household.

The vast majority (88.7 percent) of targeted households participated in the survey. Only four households (0.3 percent) refused.³⁹ In 8.1 percent of the cases, enumerators were unable to locate or approach the building at the geocoded location, in 2 percent

that each team was required to carry and time stamps that were automatically recorded for every survey response.

38. Ellis 2006.

39. High response rates are not unusual in Liberia. The 2007 Liberia Demographic and Health Survey completed interviews with 91 percent of its selected households, or 97 percent of the households with which contact was made. LISGIS et al. 2008, 5.

of the cases the building was not a residence, and in 0.9 percent of the cases the sampled household could not be reached despite multiple visits.

We completed two types of questionnaires with participating households.⁴⁰ First, we completed a household roster containing basic demographic and socioeconomic data for all individuals living in the household. Second, we collected detailed information from one randomly sampled individual household member.⁴¹

If this household member was a woman between the ages of eighteen and thirty, enumerators asked a series of questions about her experiences with transactional sex in general and with UN personnel specifically. Because of the sensitive nature of these questions we used an all-female team of Monrovia enumerators to administer them, and we ensured that subjects could answer the questions privately, without enumerators seeing the responses. Enumerators asked questions verbally, and each respondent then recorded her answer herself on an iPod. Since some women were illiterate, possible responses were depicted iconographically, and enumerators carried cards to show respondents what each icon meant. An iPod screenshot of a typical question is shown in the supplementary materials.⁴²

Tables 1 through 7 provide an overall description of the transactional sex market in Monrovia. When asked directly whether they have engaged in transactional sex (either with UN personnel or some other man), about 41 percent of the women in our sample reported having done so, as Table 1 shows. A number of women who did not acknowledge transactional sex in this direct question (either by not responding or by answering “no”) did respond to related subsequent questions as if they had in fact engaged in transactional sex, even though they could have refused to answer those questions or could have answered “not applicable.” Tables 3 to 7 show that for each of these questions roughly half of the women in our sample gave a response that indicates that they have engaged in transactional sex.

We incorporate this information in our estimate of the total incidence of transactional sex (both with UN personnel and in general) reported in Table 2. For this estimate we identified a subject as having had transactional sex if she directly reported having

40. Questionnaires were conducted in English, Liberia’s official language. English is the language most commonly reported as being spoken at home in our sample (24 percent, compared to 18 percent speaking Bassa, and 10 percent each speaking Kpelle and Lorma, with 36 percent distributed over twelve other local languages). In Monrovia English is widely spoken even among those who primarily speak another language at home, and our enumerators did not report language-related implementation problems. Monrovia’s linguistic diversity, in particular with respect to tests measuring subjects’ cognitive ability, could induce measurement error, but if anything such noise should weaken our regression results.

41. Survey items analyzed for this article are available in Table S.3 in the supplementary materials.

42. Beber, Roesler, and Scacco 2014 used similar procedures for sensitive political questions in Sudan, and Scacco 2010 provides experimental evidence that these measures elicit substantially different responses than enumerator-administered questions about subjects’ riot participation. We decided against using alternative approaches, for example, list experiments or randomized response techniques, because they deliberately introduce noise in the data and hence produce relatively inefficient estimates. Our enumerators reported that subjects found our provisions for their anonymity credible and understood why they were asked to self-administer sensitive items. Several subjects indicated they did not think these measures were necessary given the ubiquity of transactional sex in Monrovia.

TABLE 1. *Distribution of answers to the question: “Have you ever received money, food, shelter, help or anything of value from a man for doing men business (engaging in sexual intercourse) with him?”*

	<i>Frequency</i>	<i>Percent</i>	<i>Survey-weighted percentage</i>	<i>Percent of Yes/No responses</i>
No	247	52.0	51.6	55.9
Yes	195	41.1	41.0	44.1
Don't know	30	6.3	6.4	
Refuse	3	0.6	1.1	
Total	475	100	100	100

TABLE 2. *Total incidence of transactional sex with UN personnel and in general*

<i>Ever engaged in transactional sex?</i>	<i>Frequency</i>	<i>Percent</i>	<i>Survey-weighted percentage</i>	<i>Percent of those who have engaged in transactional sex</i>
No	206	43.4	38.7	
Yes, and with UN personnel	208	43.8	46.2	77.9
Yes, but not with UN personnel	45	9.5	10.1	16.9
Yes, unclear if with UN personnel	14	3.0	4.3	5.2
Don't know / Refuse	2	0.4	0.7	
Total	475	100	100	100
Total engaged in transactional sex	267	56.2	60.6	

Notes: Subjects are coded as having had transactional sex with UN personnel if at least one of the following is true: (1) the subject indirectly acknowledges transactional sex with a UN peacekeeper (i.e., knows someone who has been asked for transactional sex by a peacekeeper, that person actually received something of value in exchange for sex, and then the subject reports that this person was herself); (2) the subject reports transactional sex with UN personnel with any frequency; (3) the subject reports that her last transactional sex was with UN personnel. Subjects are coded as having had any kind of transactional sex if at least one of the following is true: (1) the subject directly reports having engaged in transactional sex; (2) the subject reports an age of first transactional sex; (3) the subject reports transactional sex with any frequency; (4) the subject is coded as having had transactional sex with UN personnel.

engaged in transactional sex, provided an age of first transactional sex, gave a frequency with which she engages in transactional sex, or had transactional sex with UN personnel. We coded a subject as having had transactional sex with UN personnel if she reported a frequency with which she engages in transactional sex with UN personnel, indicated that her last transactional sex was with UN personnel, or indirectly acknowledged transactional sex with a UN peacekeeper (i.e., knew someone who has been asked for transactional sex by a peacekeeper, that person actually received something of value in exchange for sex, and then the subject reported that this person was herself).⁴³

43. We report differences between those who never engaged in transactional sex, those who did but not with UN personnel, and those who transacted with UN personnel for a large number of variables in Table S.1 in the supplementary materials. Unsurprisingly, women who have engaged in transactional

TABLE 3. *Distribution of answers to the question: “When was the first time you had men business in exchange for something of value (money, food, medicines, help)?”*

	Frequency	Percent	Survey-weighted percentage	Percent if age reported
Less than 14	14	3.0	4.1	5.7
14	35	7.4	9.4	14.2
15	19	4.0	5.2	7.7
16	40	8.4	8.5	16.3
17	35	7.4	6.5	14.2
18	34	7.2	6.9	13.8
19	14	3.0	3.5	5.7
20	19	4.0	3.6	7.7
21	8	1.7	2.1	3.3
22	8	1.7	2.1	3.3
23	6	1.3	0.9	2.4
24	4	0.8	1.0	1.6
25	6	1.3	0.8	2.4
More than 25	4	0.8	0.7	1.6
Don't know	29	6.1	7.7	
Refuse	13	2.7	2.7	
Not applicable	187	39.4	34.5	
Total	475	100	100	100
Total if age reported	246	51.8	55.1	

The coding yields an estimate of 56 percent for the share of women in our sample who engaged in transactional sex, with 61 percent as the survey-weighted population estimate for all women aged eighteen to thirty in Monrovia. We identify 44 percent of our subjects as having engaged in transactional sex with UN personnel, which corresponds to 78 percent of those who have engaged in transactional sex in general.⁴⁴ This does not necessarily imply that most UN personnel in Monrovia have breached the UN's SEA rules, since we did not conduct a survey of UN staff and peacekeepers and therefore cannot rule out the possibility that only a small number of them account for a disproportionate share of all sexual transactions. But it does mean that transactional sex with UN personnel is a prevalent feature of young women's life histories in Monrovia.

sex with UN personnel are significantly more likely than other women to have interacted with peacekeepers. They are also significantly more likely to have a positive outlook toward UNMIL. There is little consistent evidence that women who engaged in transactional sex with UN personnel had suffered more adverse household shocks (deaths, disability or severe illness, or confiscation or destruction of domicile). They perform worse on several socioeconomic correlates (including cognitive scores, having worked as an employee in the last year, monthly job earnings, having any savings, and total assets) compared to those who never engage in transactional sex, but some of these differences are attributable to age. Women at the upper end of our age distribution perform better economically, but were already relatively old when UNMIL first deployed and therefore less likely to engage in transactional sex with UN personnel.

44. We obtain a similar percentage if we take the number of women who report a frequency with which they engage in transactional sex with UN personnel as a share of the number of women who report a frequency with which they engage in any kind of transactional sex, as shown in Table 4. In that case, 82 percent of those engaging in transactional sex do so with UN personnel.

TABLE 4. *Frequency of transactional sex*

	<i>Transactional sex in general^a</i>				<i>With UN personnel^b</i>			
	<i>Frequency</i>	<i>Percent</i>	<i>Survey-weighted percentage</i>	<i>Percent if reported</i>	<i>Frequency</i>	<i>Percent</i>	<i>Survey-weighted percentage</i>	<i>Percent if reported</i>
Yearly or less	14	2.9	3.3	5.9	23	4.8	4.7	11.8
Quarterly	15	3.2	3.8	6.3	9	1.9	2.7	4.6
Monthly	52	11.0	10.9	21.9	38	8.0	8.2	19.5
Weekly	98	20.6	21.9	41.4	83	17.5	17.6	42.6
Daily	58	12.2	12.2	24.5	42	8.8	9.9	21.5
Don't know	32	6.7	8.0		43	9.1	9.7	
Refuse	18	3.8	5.0		16	3.4	4.1	
Not applicable	188	39.6	34.8		221	46.5	43.1	
Total	475	100	100	100	475	100	100	100
Total if reported	237	49.9	52.1		195	41.1	43.1	

Notes: ^a Question: "In general, how often do you receive money/food/help in exchange for doing men business?"

^b Question: "About how often do you have men business in exchange for something of value with a man who you think is a UN peacekeeper or works for the UN?"

TABLE 5. *Distribution of answers to the question: “When you receive something of value for doing men business, what do you usually receive?”*

	<i>Frequency</i>	<i>Percent</i>	<i>Survey-weighted percentage</i>	<i>Percent if reported</i>
Car	1	0.2	0.4	0.4
Clothing	2	0.4	0.4	0.8
Food	5	1.1	1.1	2.0
Help with a problem	4	0.8	0.9	1.6
Job	2	0.4	0.5	0.8
Money	237	49.9	52.3	92.6
Shelter	5	1.1	1.4	2.0
Don't know	22	4.6	5.6	
Refuse	12	2.5	3.5	
Not applicable	185	39.0	34.0	
Total	475	100	100	100
Total if reported	256	53.9	57.0	

TABLE 6. *Distribution of answers to the question: “When you think of all the things you receive in return for doing men business with a man (money, food, clothing, and so on), how much do you think you make in an average week for doing men business? What is the approximate dollar value?”*

<i>Amount</i>	<i>Frequency</i>	<i>Percent</i>	<i>Survey-weighted percentage</i>	<i>Percent if amount reported</i>
More than 200 USD	30	6.3	7.1	12.8
200 USD	20	4.2	3.3	8.5
100 USD	49	10.3	10.4	20.9
50 USD	58	12.2	11.5	24.7
20 USD	33	7.0	8.0	14.0
10 USD	31	6.5	9.2	13.2
5 USD	7	1.5	2.0	3.0
1 USD	7	1.5	1.7	3.0
Don't know	40	8.4	8.8	
Refuse	20	4.2	4.4	
Not applicable	180	37.9	33.7	
Total	475	100	100	100
Total if reported	235	49.5	53.1	

Women begin engaging in transactional sex at a young age. About 72 percent of those who provided an age of first transaction reported an age of eighteen or younger, and about 28 percent report having transactional sex before they were sixteen, as shown in Table 3. Among women who engage in transactional sex, about 25 percent do so on a daily basis and more than 65 percent on a daily or weekly basis, as seen in Table 4. These figures look very similar to those for women who engage in transactional sex with UN personnel: 22 percent report doing so on a daily basis and 64 percent on either a daily or weekly basis.

TABLE 7. *Characteristics of transactional sex partners*

	Frequency	Percent	Survey-weighted percentage	Percent if reported
Distribution of answers to the question: “The last time you did men business in exchange for something of value did the man work for the UN?”				
Not UN worker	128	27.0	31.0	50.6
UN worker	125	26.3	25.7	49.4
Don't know	18	3.8	4.0	
Refuse	15	3.2	4.0	
Not applicable	189	39.8	35.3	
Total	475	100	100	100
Total if reported	253	53.3	56.7	
Distribution of answers to the question: “Where do most of the foreign men who you did men business with come from?”				
Other African country	157	33.1	33.3	75.9
East Asia (China, Japan, Korea)	6	1.3	1.7	2.9
Europe	5	1.1	0.9	2.4
Latin America	3	0.6	0.2	1.5
Middle East	13	2.7	4.0	6.3
South Asia (India, Pakistan)	16	3.4	3.6	7.7
United States	7	1.5	1.2	3.4
Don't know	36	7.6	10.2	
Refuse	10	2.1	3.0	
Not applicable	222	46.7	41.8	
Total	475	100	100	100
Total if reported	207	43.6	45.0	

Money is by far the most common recompense. Table 5 shows that over 92 percent of the women who have engaged in transactional sex report that they received money in exchange. Sixty-seven percent of women who engage in transactional sex receive about 50 US dollars or more per week for doing so, as shown in Table 6. Remuneration is particularly high for transactional sex with UN personnel, as Figure 1 shows. Among subjects who reported the value of what they received in their last transaction with UN personnel, 74 percent received fifty US dollars or more, compared to 42 percent among subjects reporting the value of what they received in their last transactions with non-UN men.⁴⁵

45. These payments are not inconsistent with the salaries paid to UN personnel, including regular troops. Base salaries of soldiers in troop-contributing countries tend to be low and would probably be insufficient for a modal payment of fifty US dollars for transactional sex. However, most soldiers can expect an extraordinary increase in compensation while deployed as peacekeepers, plus no-cost on-base housing and meal plans. Ghanaian peacekeepers, for example, received about thirty US dollars per day in 2010. Aning and Aubyn 2013. The UN reimbursed troop-contributing countries US\$1,028 per soldier per month in 2010, a rate that increased to US\$1,332 in 2014, in addition to payments for equipment and support services. See Michelle Nichols, “UN States Overcome Impasse to Pass Peacekeeping Budget,” *Reuters*, 3 July 2014; and

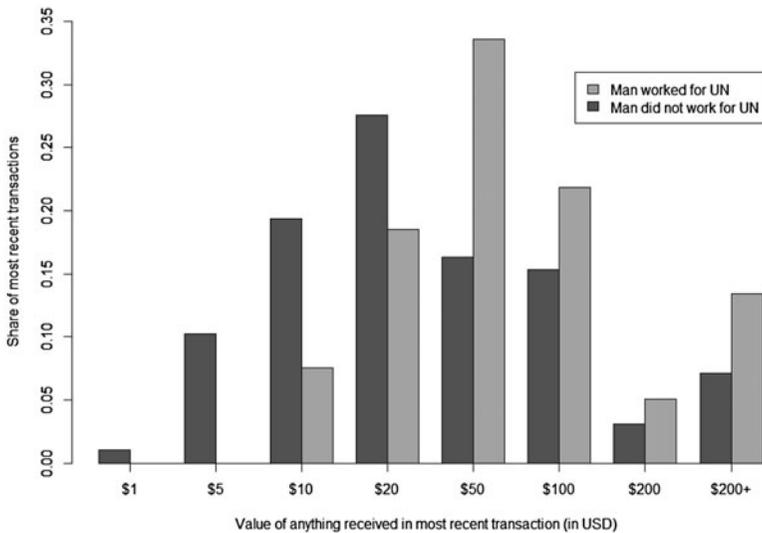


FIGURE 1. *Compensation received in most recent transaction, by UN status of transactional sex partner*

When we asked respondents where most of their foreign transactional sex partners come from, 76 percent of those who provided an answer said another African country (other than Liberia), as Table 7 shows. Other regions make up considerably smaller percentages: Middle Easterners and people from South Asia account for about 6 and 8 percent, respectively, and Americans account for 3 percent. The predominance of African partners is not surprising considering that the largest peacekeeper contingents in Monrovia are from Nigeria and Ghana.

An important question is whether UNMIL actually caused an increase in the incidence of transactional sex. Perhaps women would have engaged in transactional sex to the same extent in the absence of a UN peacekeeping force, but with Liberian and other non-UN men. We answer this question by testing to what extent the probability of a woman entering the transactional sex market, that is, engaging in her first transaction, moves in tandem with UNMIL troop levels.

“Financing Peacekeeping,” United Nations, accessed 20 December 2015, available at <<http://www.un.org/en/peacekeeping/operations/financing.shtml>>. Ghana is not alone in allocating most, if not all, of the UN’s troop reimbursement to soldiers’ salaries. See, for example, Sotomayor 2013, 319; and Malik 2013, 218, who argues that for “a typical Pakistani soldier and for his counterparts from developing countries, the pecuniary benefits, though not huge, represent a once-in-a-career opportunity.” Troop-contributing countries benefit because they can recruit additional troops, upgrade equipment, and provide soldiers with training opportunities and deployment experience, all at essentially no cost to themselves. Police units and civilian personnel receive allowances directly from the UN mission with which they are deployed, and these allowances are generally more generous than the compensation that regular troops receive.

More specifically, we estimate a series of multivariate survival models to explain the time until a woman in our sample engages in her first transactional sex, if ever. Our models use the subject's life year until entry in the transactional sex market as the time unit for analysis, that is, the subject-year for subjects at risk. For example, the record of a woman whose first transaction occurred at the age of nineteen and who was interviewed when she was twenty-one would consist of nineteen rows in the data. If a woman had not engaged in transactional sex by the time of our survey, her record is right-censored, which is accounted for in the estimation. Thus the record of a twenty-five-year-old woman who by the time of our survey had never engaged in transactional sex would consist of twenty-five rows of data.

Our explanatory measure of interest is the number of UNMIL personnel stationed in the country as of 31 December each year.⁴⁶ We account for temporal dependence by including a linear calendar-year trend and indicators for Liberia's civil wars (1989–1996 and 1999–2003).⁴⁷ We also include a cognitive test score as a measure of employment prospects in the formal economy.⁴⁸

The estimates in Table 8 show how the number of UNMIL troops and other covariates are associated with the probability that a woman will enter the transactional sex market at a particular age, given that she has not done so up to that point. The results in columns (1) and (2) assume a discrete time logistic model, where the baseline hazard is specified using analysis-time (i.e., life year) indicators and thus extremely flexible. In columns (3) and (4), we assume continuous time and use a standard Weibull specification for the baseline hazard.⁴⁹

The results suggest that the number of UNMIL troops is positively related to a woman's probability of entering the sex trade for the first time. The estimates in columns (1) and (3) indicate that, all else equal, the probability that a woman will engage in her first transactional sex at a particular age is between 3 and 7 percent higher for each additional 1,000

46. We include all uniformed personnel, that is, troops, military observers, experts on mission, and police. We obtained data on UNMIL personnel by troop-contributing country from the UN's troop and police contributors archive available at <http://www.un.org/en/peacekeeping/resources/statistics/contributors_archive.shtml>. We use the December files for missions detailed by country. Year-end totals can also be obtained from the annual UN Peace Operations Year in Review publications. Note that the 2012 report apparently provides 2011 figures for UNMIL. An alternative source for that year is Security Council Report 2013, 22. We were unable to obtain a complete historical record of the exact number of uniformed personnel stationed in greater Monrovia. However, since available deployment maps suggest that the share of total UNMIL personnel stationed in greater Monrovia did not substantially fluctuate over the course of the mission, we use total UNMIL personnel levels as our key explanatory variable.

47. We cannot include calendar-year fixed effects because troop levels vary at an annual level in our data (and do not vary cross-sectionally). In Table S.2 in the supplementary materials, we alternatively account for temporal dependence by including either a linear birth-year trend (i.e., subject age at the time of survey) or birth-year (i.e., cohort) indicators, with results that are consistent with those included here.

48. We use an additive index of dichotomous (right or wrong) responses to three questions measuring cognitive reflection, literacy, and numeracy, as indicated by a Mokken scale procedure. Survey items used to measure cognitive ability are listed in Table S.3 in the supplementary materials along with all other survey questions analyzed in this article.

49. We obtain very similar results when we use a log-logistic specification with a non-monotonic baseline hazard in Table S.2 in the supplementary materials.

peacekeepers (roughly an extra battalion). Results in columns (2) and (4) show that this effect is even larger for an additional 1,000 troops from African countries, ranging from 6 to 12 percent. African contingents make up the majority of troops in Monrovia, so the larger estimates for African peacekeepers may in fact more accurately capture the effect of UN peacekeepers in the locale under study.

TABLE 8. *Correlates of first transactional sex among women 18–30 in Monrovia*

	(1)	(2)	(3)	(4)
	Discrete time, Logit		Continuous time, Weibull	
	Odds ratio (SE)	Odds ratio (SE)	Hazard ratio (SE)	Hazard ratio (SE)
UNMIL troops (in 1000s)	1.033* (0.019)		1.068*** (0.017)	
UNMIL troops from African countries		1.061* (0.035)		1.124*** (0.032)
Second War	1.425 (0.327)	1.343 (0.285)	2.546*** (0.506)	2.199*** (0.396)
First War	1.517 (0.755)	1.517 (0.752)	0.326** (0.152)	0.322** (0.150)
Cognitive score	0.739*** (0.051)	0.739*** (0.051)	0.668*** (0.043)	0.669*** (0.044)
Year	1.113*** (0.031)	1.126*** (0.029)	0.995 (0.026)	1.014 (0.026)
Shape parameter $\ln(p)$			0.834*** (0.118)	0.828*** (0.119)
Baseline Hazard		Age indicators, flexible hazard		Weibull, hazard increasing in age
Observations	3913	3913	9688	9688

Notes: * $p < .10$; ** $p < .05$; *** $p < .01$.

The estimated cumulative effect of the peacekeeping mission on a woman's probability of engaging in her first transactional sex is considerable. Figure 2 illustrates the difference in the survivor functions for varying levels of UNMIL troops in general (top panel) and UNMIL troops from African countries in particular (bottom panel), using the models from columns (3) and (4) in Table 8. By construction, a given cohort's share of women that have never engaged in transactional sex declines as the group ages, but it declines considerably more steeply in the presence of a peacekeeping mission as sizable as UNMIL. Figure 2 suggests that the probability with which a typical woman would live to the age of twenty-five without engaging in transactional sex would be about 72 percent in the absence of UNMIL, but only 49 percent when mission strength is close to its long-term average of about 12,000 (which is approximately equal to the mission's force strength in 2008).⁵⁰

50. The equivalent estimate using model (1) produces similar results in that it also suggests that a woman's chance of reaching the age of twenty-five without engaging in transactional sex would be close to 50 percent greater without UNMIL troops.

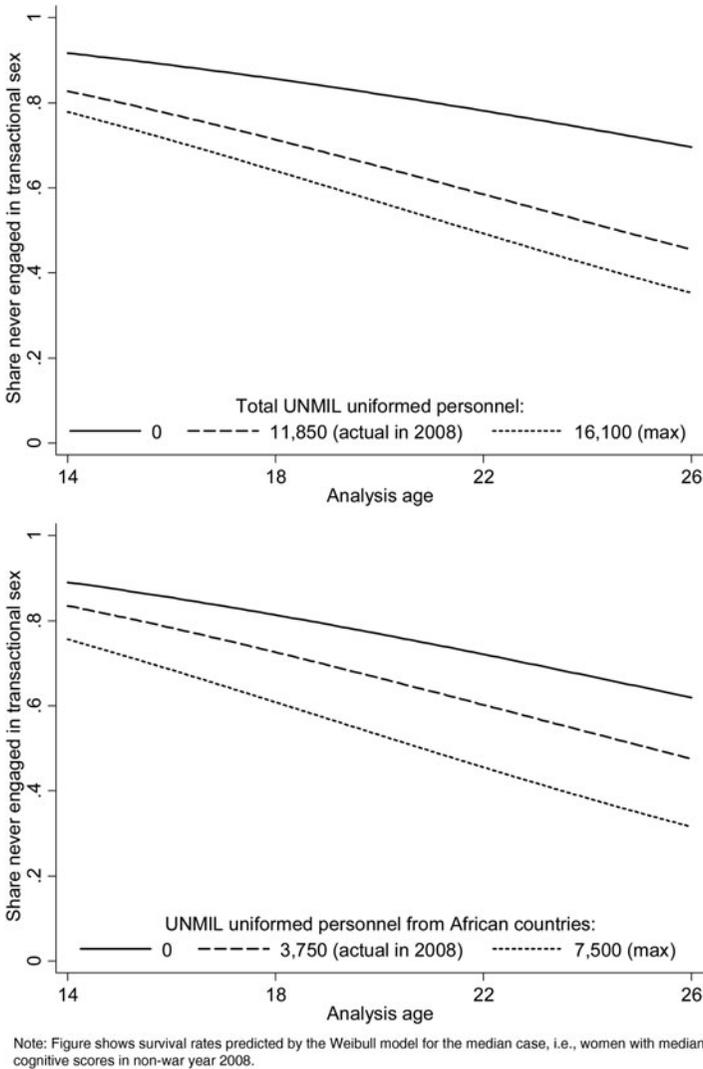


FIGURE 2. *Expected share of women engaging in transactional sex across UNMIL deployment scenarios*

Since our survey took place in 2012 only, one could be concerned that subjects do not accurately recall the timing of their first transactional sex. Perhaps subjects simply provide salient dates, even if they are salient for other reasons, such as the arrival of UNMIL troops. We are not particularly worried about this issue for two reasons. First, we did not actually ask subjects to date their first transactional sex, but we asked them

how old they were when they first had sex in exchange for something of value (and then inferred the year from this information and their current age). Related work on women's sexual histories and sex work in India reports "age at first sex" as being a more reliable measure than "year of first sex."⁵¹ This also ensures that any one value of the age measure cuts across calendar years, since we interviewed women from different cohorts. That is, even if respondents were biased toward reporting certain salient ages (for example, eighteen), this will not principally mean that a particular calendar year (such as a year with a large number of peacekeepers) will be reported more frequently than it should be (since our subjects turned eighteen in different calendar years).

Second, variation in our measure of cognitive ability could indicate subjects' ability to accurately recall past events. We therefore run our analysis using only the data from the 40 percent of subjects who received a perfect score on cognitive performance. The results are reported in [Table 9](#) and are consistent with the argument that women enter the transactional sex market as a result of UNMIL's presence. In fact, the effects appear considerably stronger when we look at only women who perform well on cognitive tasks. These women are significantly less likely to engage in transactional sex in general, because they are more likely to be gainfully employed in other ways, but the rate at which they enter the transactional market is more responsive to the presence of well-paying peacekeepers than it is for other women.

Another important concern is that we interviewed women aged eighteen to thirty in 2012, which means that our age distribution shifts as we analyze different years. In 2003, for example, subjects in our sample were between nine and twenty-one years old, and it is possible that women who first engaged in transactional sex prior to UNMIL's arrival in 2003 were not included in our sample. Our analysis does take into account age effects, either through the inclusion of analysis-age indicators (in the first two models in [Table 8](#)) or by modeling a subject's baseline hazard as a parametric function of age (in the last two models).⁵² But this may not fully address problems arising from the fact that analysis age is not balanced across calendar years.

We address this problem by analyzing an adjusted sample for which age distributions are comparable across all calendar years. This involves two steps. First, we have to limit the range of age groups and calendar years. We could not, for example, include both 1997 and 2010 in such an analysis because the age distribution for 1997 has no support above age fifteen (the oldest subjects who answered questions about transactional sex were thirty in 2012) and the age distribution for 2010 has no support below age sixteen (our youngest subjects were eighteen in 2012). Similarly, we cannot include twenty-five-year-olds in an analysis that covers 2003, because we did not ask any thirty-four-year-old subjects about transactional sex in 2012. We identify an optimal interval given these limitations and focus on fourteen-

51. Mishra et al. 2012, 829.

52. Analysis age refers to a subject's age in a given analysis year. For example, a subject's analysis age would be twenty-four in 2006 if she was thirty years old at the time of the survey.

to eighteen-year-olds in the years 2000 to 2008.⁵³ Second, we construct and use weights to ensure that each calendar year’s age distribution reflects our estimate of the true age distribution of women at that time.⁵⁴

TABLE 9. *Correlates of first transactional sex among women 18–30 in Monrovia, including only subjects with top scores on cognitive ability tests*

	(1) <i>Discrete time, Logit</i>	(2) <i>Discrete time, Logit</i>	(3) <i>Continuous time, Weibull</i>	(4) <i>Continuous time, Weibull</i>
	Odds ratio (SE)	Odds ratio (SE)	Hazard ratio (SE)	Hazard ratio (SE)
UNMIL troops (in 1000s)	1.071** (0.034)		1.111*** (0.032)	
UNMIL troops from African countries		1.122** (0.064)		1.203*** (0.061)
Second War	1.442 (0.549)	1.249 (0.436)	3.180*** (1.098)	2.448*** (0.750)
First War	1.004 (0.894)	0.994 (0.880)	0.289 (0.241)	0.271 (0.224)
Calendar year	1.133** (0.059)	1.164*** (0.055)	1.015 (0.048)	1.044 (0.048)
Shape parameter $ln(p)$			0.331 (0.314)	0.307 (0.321)
Baseline Hazard		Age indicators, flexible hazard		Weibull, hazard increasing in age
Observations	1798	1798	4199	4199

Notes: * $p < .10$; ** $p < .05$; *** $p < .01$.

We report results in Table 10. As before, the estimated odds and hazard ratios indicate that women, in this case fourteen to eighteen year olds, are more likely to engage in their first transactional sex when the number of deployed UN peacekeepers is larger, in particular if these peacekeepers come from African countries. But while these estimates are statistically significant when we impose parametric structure on the baseline hazard in models (3) and (4), they are not in models (1) ($p = .16$) and (2) ($p = .14$). Note that the estimated odds ratios have in fact gotten larger compared to Table 8, but are much more inefficiently estimated. This is consistent with the fact that the restricted sample is less than a third of the full sample used for Table 8. While we have presented overwhelming evidence that UN personnel are frequent participants in the transactional sex market, this means that we cannot rule out the

53. We use the range of years that covers the largest total annual cases of women at risk, given that it (1) includes the year of UN deployment, that is, 2003, and the year before and after deployment, (2) includes women aged sixteen to eighteen in the risk set because they are particularly likely to engage in transactional sex for the first time, and (3) does not include girls aged thirteen or younger in the risk set because they are relatively unlikely to engage in transactional sex.

54. We use the household roster data we collected, which provide information for individuals of all ages, to compute expected shares for each age group in each calendar year. Computational details are available in the online appendix.

possibility that the apparent association between UNMIL troop levels and women's entry into the transactional sex market is coincidence.

TABLE 10. *Correlates of first transactional sex in an age-balanced sample of women*

	(1) <i>Discrete time, Logit</i>		(3) <i>Continuous time, Weibull</i>	
	Odds ratio (SE)	Odds ratio (SE)	Hazard ratio (SE)	Hazard ratio (SE)
UNMIL troops (in 1000s)	1.051 (0.037)		1.056* (0.033)	
UNMIL troops from African countries		1.090 (0.063)		1.105** (0.056)
Second War	2.024 (1.013)	1.803 (0.816)	3.151*** (1.351)	2.826*** (1.108)
Cognitive score	0.727*** (0.081)	0.727*** (0.081)	0.695*** (0.073)	0.695*** (0.073)
Calendar year	1.114 (0.096)	1.135 (0.094)	1.280*** (0.096)	1.304*** (0.092)
Shape parameter $ln(p)$			2.309*** (0.074)	2.305*** (0.075)
Baseline Hazard		Age indicators, flexible hazard		Weibull, hazard increasing in age
Observations	1107	1107	1107	1107

Notes: * $p < .10$; ** $p < .05$; *** $p < .01$.

Figure 3 provides some intuition for why it is difficult to conclusively attribute changes in the size of the transactional sex market to variation in the size of UNMIL, given our sample of women aged fourteen to eighteen in the years 2000 to 2008. The figure shows the share of women who engage in their first transactional sex in a given year as well as the size of the UNMIL force. Clearly larger shares of women at risk engage in their first transactional sex once UNMIL deploys in 2003. But Liberia's second civil war also ended in 2003, and we include a war indicator in our statistical analysis to absorb the mean shift in transactional sex propensities that distinguishes the post-war era from earlier years. We also include a yearly time trend that absorbs any linear increase in the share of women engaging in their first transactional sex because we want to separate the impact of UNMIL from other contemporaneous developments (e.g., rising acceptance of transactional sex or technological advancements that facilitate transactional sex).⁵⁵ Thus the only changes in the rates of

55. The linear time trend also helps to address the problem that women engaged in transactional sex may suffer from high mortality rates. Women who had their first sexual transaction before UNMIL arrived could be less likely to have survived and to have been sampled by us. Such attrition would depress the rate at which past transactional sex is reported in the present, and we would expect this negative bias to increase in the distance between survey date and reporting period. We allow for such a time effect by including a yearly trend in our analysis. Note also that the prevalence of HIV,

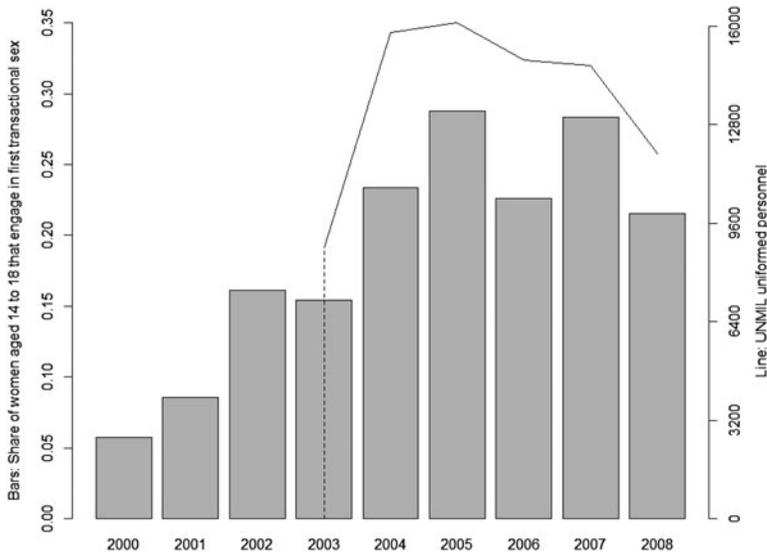


FIGURE 3. *UNMIL troop levels and share of women aged 14–18 who engage in transactional sex for the first time*

entry into the transactional sex market that we associate with UNMIL throughout this article are deviations from a long-term, war-adjusted trend, which leaves us with suggestive statistical evidence that UNMIL's presence led to women engaging in transactional sex who would not otherwise have done so, but not enough statistical power to say so conclusively.

Implications for the Literature on Norm Compliance

Clearly international norms forbid transactional sex between UN peacekeepers and host-country civilians. The UN Security Council agreed on clear standards of behavior for UN peacekeepers, and the adoption of several resolutions (1325, 1820, 1888, 1889, 1960, and 2122) placed the issue at the forefront of the UN's agenda. The Department of Peacekeeping Operations developed its Gender Office, nearly all peacekeeping mandates include a specific prohibition of engaging in sexual exploitation and abuse since

which is generally associated with poor mortality rates among sex workers, is relatively low in Liberia (0.9 percent of fifteen to forty nine year olds in 2012) and among the lowest in sub-Saharan Africa. UNAIDS 2013. For comparison, the prevalence rate exceeds 20 percent in Botswana, Lesotho, and Swaziland and is estimated at 4.7 percent for all of sub-Saharan Africa. Finally, condom usage is relatively common in Liberia. According to the Liberian Demographic and Health Survey, close to 48 percent of all fifteen- to forty-nine-year-old men who paid for sexual intercourse in the previous twelve months (and 68 percent of those in Monrovia) used a condom. LISGIS et al. 2008, 173.

UNSC Resolution 1325, and all UN peacekeeping missions have a Conduct and Discipline Team tasked with the prevention of SEA incidents.⁵⁶

The gulf between the rules that govern UN personnel's interaction with local populations and our findings of actual conduct raises a general question of whether social sanctions are sufficient to enforce international norms or whether material incentives and punishments are necessary to produce compliance. Many constructivist scholars claim that social inducements can engender state compliance with international norms and rules, while political economists tend to be skeptical of social sanctions' power and argue that compliance results from material incentives.⁵⁷

We offer an interesting test case of these two approaches. It is hard to imagine a more robust socialization campaign than the one conducted in Monrovia to stamp out transactional sex involving peacekeepers. Although the UN has widely disseminated the rules, regulations, and standards to its personnel and impressed upon them the inappropriateness of such conduct through training programs and information campaigns,⁵⁸ we find no evidence that the norm is being adopted by ordinary personnel and ample evidence that it is being ignored.⁵⁹

At the same time, material incentives to refrain from transactional sex are largely ineffectual because neither troop-contributing countries nor the UN monitor compliance among peacekeepers routinely and proactively. To be sure, the UN has put in place punishments for soldiers who are caught engaging in transactional sex, including dismissal and repatriation, but the UN relies on an allegation-based system of investigations that fails if local units do not effectively report misconduct. While the UN's Conduct and Discipline Unit (CDU) and its field teams are supposed to solicit and process allegations, they are also in charge of preventing incidents in the first place and have therefore been less than keen to uncover misconduct.⁶⁰

This leaves local commanders of peacekeeping troops to play a central role in the monitoring and sanctioning of SEA violations. In many cases they are the most obvious point of contact for residents wishing to register a complaint, and

56. Karim and Beardsley 2013.

57. For examples, see Downs 2000; Goodman and Jinks 2004; and their discussions of the expansive literature on this point.

58. A SEA training poster developed by the UN's Conduct and Discipline Unit is exhibited as Figure S.4 and an example of materials created as part of UNMIL's and the Liberian government's attempts to raise community awareness about SEA is shown in Figure S.5 in the supplementary materials. See also Carlon 2008; and United Nations 2005.

59. Since we do not observe the counterfactual to the UN's adoption of a zero-tolerance policy, we are not claiming that UN prohibitions have failed in the sense that rates of transactional sex with UN personnel would be the same or lower in their absence. However, the UN's policies have failed when measured against their stated objectives. While we cannot be certain that things would not have been even worse without the UN's zero-tolerance policy, we do know that they have been worse than UN policy-makers expected. This was also the conclusion of the UN's own evaluation in this regard. UN OIOS 2015a.

60. In the case of UNMIL, an audit in 2009 found that calls to the CDU's allegations hotline were redirected to an answering machine, without instructing callers on how to provide the information required for a complaint. At that point in time, the CDU had not logged a single actionable, hotline-initiated complaint. UN OIOS 2009, 8. For another audit in 2015, repeated hotline calls by OIOS in June, July, and August were not returned or answered. UN OIOS 2015b, 5.

troop-contributing countries retain full authority over any deployment-related legal proceedings that may be initiated against peacekeepers. However, troop-contributing countries have largely failed to implement procedures that would ensure compliance. If the norm against transactional sex had been effectively propagated through the UN's socialization campaign, we would expect local contingents and their commanders to take actions in support of the UN's zero-tolerance policy and to coordinate effectively with the relevant UN institutions. This is not the case.⁶¹

Constructivists might object that their claim about the effect of socialization processes on international norms concerns the behavior of states, not outcomes at the level of the individual soldier. We would respond that troop-contributing states have both the legal and the material wherewithal to make rules for the conduct of their soldiers and to enforce them. Thus the behaviors that we catalog here are as much a failure of states to enforce international norms to which they have putatively subscribed as they are a failure of individual soldiers to comply with those norms. Socialization among states, that is, persuasion and peer pressure among high-level politicians and decision makers, has surely contributed to a consensus among policy-makers that transactional sex involving peacekeepers constitutes inappropriate behavior, but this does not amount to much in the absence of enforcement at the mission level.

Thus our findings leave us skeptical of claims that socialization can bring about compliance with international norms in the absence of material incentives. In the case we document in this article, we observe both UN-sponsored socialization campaigns to encourage compliance and a virtual absence of material incentives resulting from a lack of effective monitoring, and the result appears to be widespread non-compliance in the form of transactional sex.

Conclusion

We report results from a survey that addresses UN peacekeeping and transactional sex. The survey, conducted in Monrovia, Liberia, in the summer of 2012, shows transactional sex between UN personnel and local women to be quite common. More than half of all women aged eighteen to thirty reported having transactional sex and more than three-quarters of those have done so with UN personnel. These women almost always received money for sex. Our estimates also suggest that the demand for transactional sex by UN personnel may have led to an expansion of the transactional sex market. Women's hazard of engaging in transactional sex for the first time rises as additional peacekeepers are stationed in Liberia. This is a problem that can impede the international community's broad peace-building goals of public health, economic development, and gender equality and should be cause for alarm.

Our findings in Liberia must also raise concerns about the possible involvement of UN personnel in transactional sex elsewhere. It is possible that Liberia, and more specifically greater Monrovia, is an unusual case. The Liberian civil war brought heavy

61. UN OIOS 2009, 8. Troop-contributing countries rarely initiate investigations.

fighting to the capital region and so a particularly large share of all UN personnel deployed to Liberia has been sent to Monrovia, where our survey took place. In Monrovia's dense metropolitan environment, it is relatively easy for foreigners to interact with local residents without arousing suspicion, which could result in high rates of transactional sex compared to what we might expect in more remote locations where UN personnel may be stationed in camps that are physically removed from local settlements. Furthermore, a large portion of UN personnel in Monrovia come from other English-speaking West African countries, so cultural and linguistic similarities could reduce the effort required to engage in transactional sex compared to, for example, Mongolian peacekeepers in South Sudan. It is also conceivable that there is little social stigma attached to transactional sex, at least relative to other UN deployment sites such as Mali. In fact, social pressure sometimes cuts the opposite way in Liberia, as UNMIL campaign materials suggest that are targeted at young women and encourage them to resist parental demands to sell sex.⁶²

On the other hand, numerous other UN missions have deployed troops to high-density urban areas, and Liberia is not so different from many other postconflict societies in terms of characteristics that have long been associated with extensive transactional sex markets in the literature, such as lack of economic opportunity, poverty, and inequality.⁶³ Liberia is also one of many post-war societies in which wartime sexual violence was widespread—a correlate of allegations of sexual exploitation and abuse during subsequent peacekeeping missions.⁶⁴ Finally, Liberia is one of numerous countries where media reports and qualitative studies have alleged the involvement of UN personnel in the transactional sex market.⁶⁵

At this point we lack systematic cross-mission data on local transactional sex markets and the extent to which they cater to UN personnel. This means we need to be cautious in generalizing beyond the Liberian experience. It also means there is an urgent need for future data collection efforts to fill this gap.

We can already suggest implications for two related scholarly literatures. First, our Liberian data indicate that the literature on peacekeeping should more carefully consider potential social costs and negative side effects of peacekeeping deployments. Existing studies have shown that UN peacekeeping appears to strengthen security and stability, but future assessments should broaden their scope to discuss benefits and costs beyond the provision of security.

Second, we contribute to the literature on compliance with international norms by discussing a case in which there is widespread agreement among high-level diplomats and

62. For an example, see Figure S.5 in the supplementary materials.

63. Davis 1993.

64. Nordås and Rustad 2013. On sexual violence in armed conflicts, see Cohen 2013; Cohen and Nordås 2014; and Wood 2014.

65. Colum, Lynch, "UN Faces More Accusations of Sexual Misconduct: Officials Acknowledge 'Swamp' of Problems and Pledge Fixes Amid New Allegations in Africa, Haiti," *Washington Post*, 13 March 2005, A22; Emily Wax, "Congo's Desperate 'One-Dollar UN Girls': Shunned Teens, Many Raped by Militiamen, Sell Sex to Peacekeepers," *Washington Post*, 21 March 2005, A1; Jennings and Nikolić-Ristanović 2009.

government officials engaged in addressing global security challenges—transactional sex involving UN personnel is inappropriate. Yet despite the fact that this norm has been codified in numerous UN rules and procedures, compliance by front-line personnel has been lacking, at least in Monrovia. We do not see high-level consensus translating into norm adoption by on-the-ground UN personnel, despite the UN’s concerted efforts. The lack of monitoring by both troop-contributing countries and the UN makes it difficult to gauge the effects of material incentives, but our findings clearly indicate that a UN-led socialization campaign is a weak mechanism to bring about compliance.

Is there a way to close this compliance gap? Our study did not intend to evaluate policy solutions, but we conclude by tentatively offering three suggestions. One short-term solution to the problem of SEA by peacekeepers may be to staff missions with personnel from countries where gender-equality norms are already widely held throughout society (including, for example, the Philippines). There is some evidence suggesting that the number of sexual exploitation and abuse allegations is lower in missions that are composed of personnel from relatively more gender-equal countries,⁶⁶ although others have found no significant relationship between the main troop-contributing country’s spousal rape laws as an indicator of gender norms and SEA allegations.⁶⁷ Sufficient troop contributions from the relevant set of countries may, in any case, be unattainable.⁶⁸

Second, it could be helpful to include more women in peacekeeping contingents. The UN has long recognized the need for female peacekeepers. It has successfully deployed all-female formed police units since 2007, when the first such unit of Indian police officers arrived in Liberia,⁶⁹ and Secretary-General Ban Ki Moon launched an effort in 2009 to increase the share of women to 20 percent in police and 10 percent in military contingents by 2014.⁷⁰ Unfortunately, these goals have proved elusive.⁷¹ Across all missions, a mere 7 percent of police officers in formed units and 3 percent of troops were women at the end of 2015 because troop-contributing countries either cannot or will not recruit more women.⁷² So while it is possible that a large increase in the share of female peacekeepers could meaningfully reduce rates of transactional sex among deployed personnel, such an increase appears presently unachievable.

66. Karim and Beardsley 2016. Our study suggests that many cases of SEA go unreported, so any inferences based on the UN’s SEA data should be drawn with caution.

67. Nordås and Rustad 2013. Note also that French soldiers have been implicated in the sexual abuse of children in the Central African Republic. Deschamps, Jallow, and Sooka 2015.

68. Alternatively, peacekeeping missions could seek to improve troop-contributing country’s national recruitment standards, for example, by including support for gender equality. Basic job competency may also correlate with gender awareness. Karim and Gorman 2016.

69. “History of United Nations Police,” United Nations, accessed 20 December 2015, available at <<http://www.un.org/en/peacekeeping/sites/police/history.shtml>>.

70. “Women UN Peacekeepers—More Needed,” *IRIN News*, 20 May 2010.

71. Beardsley and Karim 2015; Karim and Beardsley, 2017.

72. “Gender Statistics by Mission,” United Nations, accessed 21 January 2016, available at <<http://www.un.org/en/peacekeeping/contributors/gender/2015gender/dec15.pdf>>. Among the smaller numbers of individual police officers and military experts on mission, 17 percent and 5 percent are women, respectively.

Finally, the UN could develop alternative monitoring and enforcement mechanisms to increase compliance with SEA rules. Currently, an investigation, which is usually conducted by the Office of Internal Oversight Services (OIOS), is initiated once an allegation is received by the Conduct and Discipline Unit (CDU) or one of its field teams.⁷³ The problem is that CDU teams are a poor conduit for allegations because these teams are in charge of preventing SEA incidents, and SEA allegations they log could be construed as statements of their own poor performance. Prevention on the one hand and the processing of allegations on the other should therefore be housed in separate units. Furthermore, OIOS, another independent office within the UN, or perhaps a third party should be authorized and funded to monitor compliance on an ongoing and proactive basis. Allegation-based investigations and infrequent audits are not sufficient for a comprehensive compliance assessment, as the evidence we presented in this article shows.

Supplementary Material

Supplementary material for this article is available at <<http://dx.doi.org/10.1017/S0020818316000242>>.

References

- Aning, Kwesi, and Festus K. Aubyn. 2013. Ghana. In *Providing Peacekeepers: The Politics, Challenges, and Future of United Nations Peacekeeping Contributions*, edited by Alex J. Bellamy and Paul D. Williams, 269–90. Oxford, UK: Oxford University Press.
- Atwood, Katherine A., Stephen B. Kennedy, Ernie M. Barbu, Wede Nagbe, Wede Seekey, Prince Sirleaf, Oretha Perry, Roland B. Martin, and Fred Sosu. 2011. Transactional Sex among Youths in Post-conflict Liberia. *Journal of Health, Population, and Nutrition* 29 (2):113–22.
- Baird, Sarah, Craig McIntosh, and Berk Özler. 2011. Cash or Condition? Evidence from a Cash Transfer Experiment. *Quarterly Journal of Economics* 126 (4):1709–53.
- Baker, Anni P. 2004. *American Soldiers Overseas: The Global Military Presence*. Westport, CT: Praeger.
- Bearce, David H., and Stacy Bondanella. 2007. Intergovernmental Organizations, Socialization, and Member-State Interest Convergence. *International Organization* 61 (4):703–33.
- Beadsley, Kyle. 2011. Peacekeeping and the Contagion of Armed Conflict. *Journal of Politics* 73 (4): 1051–64.
- Beadsley, Kyle, and Sabrina Karim. 2015. Ladies Last: Peacekeeping and Gendered Protection. In *Gender, Peace and Security: Implementing UN Security Council Resolution 1325*, edited by Theodora-Ismene Gizelis and Louise Olsson, 62–95. New York: Routledge.

73. Allegations can be reported directly to OIOS, but this appears to be rare and not encouraged by peacekeeping missions. UNMIL's instructions for how to report misconduct include contact details for its CDU team, but not for the relevant OIOS division. "Conduct and Discipline," United Nations Mission in Liberia, accessed 20 December 2015, available at <<https://unmil.unmissions.org/conduct-and-discipline>>. Local commanders of peacekeeping troops also receive allegations but do not necessarily log them with either the relevant CDU team or OIOS for further investigation. UN OIOS 2009, 8.

- Beber, Bernd, Philip Roessler, and Alexandra Scacco. 2014. Intergroup Violence and Political Attitudes: Evidence from a Dividing Sudan. *Journal of Politics* 76 (3):649–65.
- Bolkovac, Kathryn, and Cari Lynn. 2011. *The Whistleblower: Sex Trafficking, Military Contractors, and One Woman's Fight for Justice*. New York: Palgrave Macmillan.
- Carlson, James J. 2008. *National SEA Awareness Campaign: Evaluation Report. National Gender Based Violence Taskforce*. Available at <http://www.pseataaskforce.org/uploads/tools/evaluationnationalea-awarenesscampaign_jamescarlsonnationalgbvtaskforceliberia_english.pdf>. Accessed 12 June 2015.
- Carnahan, Michael, William Durch, and Scott Gilmore. 2006. *Economic Impact of Peacekeeping: Final Report*. New York: Building Markets. Available at <http://buildingmarkets.org/sites/default/files/economic_impact_of_un_peacekeeping_march_2006.pdf>. Accessed 27 April 2015.
- Chatterji, Minki, Nancy Murray, David London, Philip Anglewicz. 2005. The Factors Influencing Transactional Sex among Young Men and Women in Twelve Sub-Saharan African Countries. *Social Biology* 52 (1–2):56–72.
- Cohen, Dara Kay. 2013. Explaining Rape During Civil War: Cross-National Evidence (1980–2009). *American Political Science Review* 107 (3):461–77.
- Cohen, Dara Kay, and Amelia Hoover Green. 2012. Dueling Incentives: Sexual Violence in Liberia and the Politics of Human Rights Advocacy. *Journal of Peace Research* 49 (3):445–58.
- Cohen, Dara Kay, and Ragnhild Nordås. 2014. Sexual Violence in Armed Conflicts: Introducing the SVAC Dataset, 1989–2009. *Journal of Peace Research* 51 (3):418–28.
- Davis, Nanette J., ed. 1993. *Prostitution: An International Handbook on Trends, Problems, and Policies*. Westport, CT: Greenwood Press.
- Deschamps, Marie, Hassan B. Jallow, and Yasmin Sooka. 2015. *Taking Action on Sexual Exploitation and Abuse by Peacekeepers: Report of an Independent Review on Sexual Exploitation and Abuse by International Peacekeeping Forces in the Central African Republic*. Available at <<http://www.un.org/News/dh/infocus/centafricrepub/Independent-Review-Report.pdf>>. Accessed 15 January 2016.
- Downs, George W. 2000. Constructing Effective Environmental Regimes. *Annual Review of Political Science* 3:25–42.
- Doyle, Michael W., and Nicholas Sambanis. 2006. *Making War and Building Peace: United Nations Peace Operations*. Princeton, NJ: Princeton University Press.
- Dunkle, Kristin L, Rachel K. Jewkes, Heather C. Brown, Glenda E. Gray, James A. McIntyre, Siobán D. Harlow. 2004. Transactional Sex Among Women in Soweto, South Africa: Prevalence, Risk Factors, and Association with HIV Infection. *Social Science and Medicine* 59 (8):1581–92.
- Dunkle, Kristin L., Rachel Jewkes, Mzikazi Nduna, Nwabisa Jama, Jonathan Levin, Yandisa Sikweyiya, and Mary P. Koss. 2007. Transactional Sex with Casual and Main Partners Among Young South African Men in the Rural Eastern Cape: Prevalence, Predictors, and Associations with Gender-based Violence. *Social Science and Medicine* 65 (6):1235–48.
- Dunkle, Kristin L., Gina M. Wingood, Christina M. Camp, and Ralph J. DiClemente. 2010. Economically Motivated Relationships and Transactional Sex Among Unmarried African American and White Women: Results from a US National Telephone Survey. *Public Health Reports* 125 (4):90–100.
- Dupas, Pascaline. 2011. Do Teenagers Respond to HIV Risk Information? Evidence from a Field Experiment in Kenya. *American Economic Journal: Applied Economics* 3 (1):1–34.
- Ellis, Stephen. 2006. *The Mask of Anarchy: The Destruction of Liberia and the Religious Dimension of an African Civil War*. 2nd ed. New York: New York University Press.
- Finnemore, Martha, and Kathryn Sikkink. 1998. International Norm Dynamics and Political Change. *International Organization* 52 (4):887–917.
- Florini, Ann. 1996. The Evolution of International Norms. *International Studies Quarterly* 40 (3):363–89.
- Fortna, Virginia Page. 2008. *Does Peacekeeping Work? Shaping Belligerents' Choices after Civil War*. Princeton, NJ: Princeton University Press.
- Gertler, Paul, Manisha Shah, and Stefano M. Bertozzi. 2005. Risky Business: The Market for Unprotected Commercial Sex. *Journal of Political Economy* 113 (3):518–50.
- Gilligan, Michael J., and Ernest J. Sergenti. 2008. Do UN Interventions Cause Peace? Using Matching to Improve Causal Inference. *Quarterly Journal of Political Science* 3 (2):89–122.

- Goodman, Ryan, and Derek Jinks. 2004. How to Influence States: Socialization and International Human Rights Law. *Duke Law Journal* 54 (3):621–703.
- Graham, Erin R., Charles R. Shipan, and Craig Volden. 2013. The Diffusion of Policy Diffusion Research in Political Science. *British Journal of Political Science* 43 (3):673–701.
- Greenhill, Brian. 2010. The Company You Keep: International Socialization and the Diffusion of Human Rights Norms. *International Studies Quarterly* 54 (1):127–45.
- Haas, Peter M. 1992. Introduction: Epistemic Communities and International Policy Coordination. *International Organization* 46 (1):1–35.
- Howard, Lise Morjé. 2008. *UN Peacekeeping in Civil Wars*. New York: Cambridge University Press.
- Hultman, Lisa, Jacob Kathman, and Megan Shannon. 2014a. United Nations Peacekeeping and Civilian Protection in Civil War. *American Journal of Political Science* 57 (4):875–91.
- . 2014b. Beyond Keeping Peace: United Nations Effectiveness in the Midst of Fighting. *American Political Science Review* 108 (4):737–53.
- Hunter, Mark. 2002. The Materiality of Everyday Sex: Thinking Beyond “Prostitution.” *African Studies* 6 (1):99–120.
- Jennings, Kathleen M. 2008. Protecting Whom? Approaches to Sexual Exploitation and Abuse in UN Peacekeeping Operations. Fafo-report 2008:36. Oslo, Norway: Fafo Foundation.
- Jennings, Kathleen M., and Vesna Nikolić-Ristanović. 2009. UN Peacekeeping Economies and Local Sex Industries: Connections and Implications. MICROCON Research Working Paper 17. Brighton, UK: University of Sussex, Institute of Development Studies.
- Kanetake, Machiko. 2010. Whose Zero Tolerance Counts? Reassessing a Zero Tolerance Policy Against Sexual Exploitation and Abuse by UN Peacekeepers. *International Peacekeeping* 17 (2):200–14.
- Karim, Sabrina, and Kyle Beardsley. 2013. Female Peacekeepers and Gender Balancing: Token Gestures or Informed Policymaking? *International Interactions* 39 (4):461–88.
- . 2016. Explaining Sexual Exploitation and Abuse in Peacekeeping Missions: The Role of Female Peacekeepers and Gender Equality in Contributing Countries. *Journal of Peace Research* 53 (1):100–15.
- . 2017. *Equal-Opportunity Peacekeeping*. Oxford, UK: Oxford University Press.
- Karim, Sabrina, and Ryan Gorman. 2016. Building a More Competent Security Sector: The Case of UNMIL and the Liberian National Police. *International Peacekeeping* 23 (1):158–91.
- Leclerc-Madlala, Suzanne. 2003. Transactional Sex and the Pursuit of Modernity. *Social Dynamics: A Journal of African Studies* 29 (2):213–33.
- Lee, Jin-kyung. 2010. *Service Economies: Militarism, Sex Work, and Migrant Labor in South Korea*. Minneapolis: University of Minnesota Press.
- Liberia Institute of Statistics and Geo-Information Services (LISGIS), Ministry of Health and Social Welfare, National AIDS Control Program, and Macro International Inc. 2008. *Liberia Demographic and Health Survey 2007*. Available from <<http://dhsprogram.com/pubs/pdf/fr201/fr201.pdf>>. Accessed 27 May 2015. Monrovia, Liberia: Liberia Institute of Statistics and Geo-information Services and Macro International Inc.
- Luke, Nancy, and Kathleen Kurz. 2002. Cross-generational and Transactional Sexual Relations in Sub-Saharan Africa: Prevalence of Behavior and Implications for Negotiating Safer Sexual Practices. Washington, DC: International Center for Research on Women. Available from <<https://www.icrw.org/files/publications/Cross-generational-and-Transactional-Sexual-Relations-in-Sub-Saharan-Africa-Prevalence-of-Behavior-and-Implications-for-Negotiating-Safer-Sexual-Practices.pdf>>. Accessed 12 June 2015.
- Malik, Inam-ur-Rahman. 2013. Pakistan. In *Providing Peacekeepers: The Politics, Challenges, and Future of United Nations Peacekeeping Contributions*, edited by Alex J. Bellamy and Paul D. Williams, 204–24. Oxford, UK: Oxford University Press.
- Mishra, Sharmistha, Satyanarayana Ramanaiik, James F. Blanchard, Shiva Halli, Stephen Moses, T. Raghavendra, Parinita Bhattacharjee, Rob Lorway, and Marissa Becker. 2012. Characterizing Sexual Histories of Women before Formal Sex-work in South India from a Cross-sectional Survey: Implications for HIV/STI Prevention. *BMC Public Health* 12 (1):829.

- Moon, Katharine H.S. 1997. *Sex Among Allies: Military Prostitution in US-Korea Relations*. New York: Columbia University Press.
- Moore, Ann M., Ann E. Biddlecom, and Eliya M. Zulu. 2007. Prevalence and Meanings of Exchange of Money or Gifts for Sex in Unmarried Adolescent Sexual Relationships in Sub-Saharan Africa. *African Journal of Reproductive Health* 11 (3):44–61.
- Nikolić-Ristanović, Vesna. 2003. Sex Trafficking: The Impact of War, Militarism, and Globalization in Eastern Europe. *Michigan Feminist Studies* 17:1–26.
- Nordås, Ragnhild, and Siri C.A. Rustad. 2013. Sexual Exploitation and Abuse by Peacekeepers: Understanding Variation. *International Interactions* 39 (4):511–34.
- Pankhurst, Donna. 2007. Gender Issues in Post-War Contexts: A Review of Analysis and Experience, and Implications for Policies. Working Paper 9. Bradford, UK: University of Bradford, Department of Peace Studies.
- Robinson, Jonathan, and Ethan Yeh. 2011. Transactional Sex as a Response to Risk in Western Kenya. *American Economic Journal: Applied Economics* 3 (1):35–64.
- Scacco, Alexandra. 2010. Who Riots? Explaining Individual Participation in Ethnic Violence. PhD diss., Columbia University.
- Security Council Report. 2013. Monthly Forecast: March 2013. Available at <http://www.securitycouncil-report.org/af/cf/%7B65BF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/2013_03_forecast.pdf>. Accessed 12 June 2015.
- Simic, Olivera. 2009. Rethinking “Sexual Exploitation” in UN Peacekeeping Operations. *Women’s Studies International Forum* 32 (4):288–95.
- . 2012. *Regulation of Sexual Conduct in UN Peacekeeping Operations*. Berlin: Springer-Verlag.
- Sotomayor, Arturo C. 2013. Nepal. In *Providing Peacekeepers: The Politics, Challenges, and Future of United Nations Peacekeeping Contributions*, edited by Alex J. Bellamy and Paul D. Williams, 291–311. Oxford, UK: Oxford University Press.
- Tickner, J. Ann. 2001. *Gendering World Politics: Issues and Approaches in the Post-Cold War Era*. New York: Columbia University Press.
- UNAIDS. 2013. HIV Estimates with Uncertainty Bounds 1990–2012. Available at <<http://www.unaids.org/en/resources/campaigns/globalreport2013/globalreport>>. Accessed 27 May 2015.
- United Nations. 2005. A Comprehensive Strategy to Eliminate Future Sexual Exploitation and Abuse in United Nations Peacekeeping Operations. Letter dated 24 March 2005 from the Secretary-General to the President of the General Assembly, A/59/710. Available at <<https://cdu.unlb.org/Portals/0/Documents/KeyDoc5.pdf>>. Accessed 24 April 2016.
- United Nations Conduct and Discipline Unit. 2015. Statistics: Allegations for All Categories of Personnel Per Year (Sexual Exploitation and Abuse). Available at <<https://cdu.unlb.org/Statistics/AllegationsbyCategoryofPersonnelSexualExploitationandAbuse/AllegationsforAllCategoriesofPersonnelPerYearSexualExploitationandAbuse.aspx>>. Accessed 15 June 2015.
- UN Office of Internal Oversight Services. 2009. Audit of the Conduct and Discipline Unit in UNMIL. Assignment No. AP2008/626/01. Available at <http://usun.state.gov/sites/default/files/organization_pdf/140723.pdf>. Accessed 20 December 2015.
- . 2013. Activities of the Office of Internal Oversight Services on Peacekeeping Operations for the Period from 1 January to 31 December 2012. A/67/297 (Part II). Available at <[http://www.un.org/ga/search/view_doc.asp?symbol=A/67/297\(PartII\)](http://www.un.org/ga/search/view_doc.asp?symbol=A/67/297(PartII))>. Accessed 12 June 2015.
- . 2015a. Evaluation of the Enforcement and Remedial Assistance Efforts for Sexual Exploitation and Abuse by the United Nations and Related Personnel in Peacekeeping Operation. Assignment No. IED-15-001. Available at <<https://oios.un.org/page/download2/id/13>>. Accessed 15 June 2015.
- . 2015b. Audit of the Conduct and Discipline Function in the United Nations Mission in Liberia. Assignment No. AP2014/626/04. Available at <<https://oios.un.org/page/download/id/418>>. Accessed 20 December 2015.
- Wood, Elisabeth Jean. 2014. Conflict-Related Sexual Violence and the Policy Implications of Recent Research. *International Review of the Red Cross* 96 (894):457–78.