

Do Women Peacekeepers Keep Peace?

An Analysis of United Nations Peacekeeping Missions
and the Duration of Peace after Civil Conflict

Lead author: Chelsey Johnson
Department of Political Science
Oklahoma State University
201 Murray Hall
Stillwater, OK 74075

Research mentor and co-author: Holley E. Hansen
Department of Political Science
Oklahoma State University
201 Murray Hall
Stillwater, OK 74075
holley.hansen@gmail.com

Abstract

Recent work on United Nations peacekeeping operations have begun to examine how operational factors may influence the ability of UN missions to help maintain peace in post-conflict societies. Some research analyzes mission type and peacekeeping success rates (Doyle and Sambanis 2006, Fortna 2008), others the impact of personnel type and strength in numbers (Hultman, Kathman and Shannon 2016). A further branch of study considers the diversity of the mission personnel, arguing that missions with a more diverse member base can draw on a wider “portfolio of skills,” helping to increase their performance effectiveness (Bove and Ruggeri 2015). In this paper, we focus on gender dynamics in peacekeeping missions. Drawing from previous theoretical and case study work on women in peacekeeping, we theorize that peacekeeping missions with more women will be better able to interact with local populations, influence public attitudes towards missions, and maintain greater internal accountability. Examining UN peacekeeping missions in Africa from 2006-2010 using the Uppsala Conflict Data Program and mission-level data on women in UN peacekeeping operations from the UN Peacekeeping website, we find that missions containing a higher percentage of female military personnel experience a longer duration of peace. Including missions with even a small percentage of women serving, we see a significant jump in peace duration compared to missions with no women, where the risk of peace failure is much higher.

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In October 2000, the United Nations (UN) passed Security Council Resolution 1325, a resolution considered landmark due to its promotion of the involvement and protection of women in peacemaking, humanitarian activity, and conflict resolution. While it was passed amidst growing evidence of gender-based violence in peacekeeping missions (Tryggestad 2009), proponents hoped that it would raise awareness of both the sexual violence women often endure during conflict *and* the important roles women may play in conflict mediation. Resolution 1325 aimed to increase representation of women at all decision-making levels, mainstream gender perspectives in peacekeeping operations, and acknowledge the “important role of women in the prevention and resolution of conflicts” (S/RES/1325, paragraph 1).

In evaluating the success of UN Resolution 1325, the results have been mixed at best. Women are beginning to emerge in leadership positions on these missions; in 2014, Major General Kristin Lund of Norway was appointed as the first woman to serve as Force Commander in a UN mission (Ivanovic 2014). However, this appointment was to the generally stable Cyprus mission; in the worst conflict zones in the world, peacekeeping remains a male-dominated position. To place women’s underrepresentation in peacekeeping under further perspective, though women comprise approximately 30 percent of UN general personnel (Karim 2013, 468), they only make up ten percent of UN police and three percent of UN military forces (United Nations Peacekeeping 2017). While this is a significant improvement over 1993, when women only comprised one percent of UN missions (Ivanovic 2014, para. 5), the reality is that today women are generally deployed as civilian support, not as soldiers, law enforcement, or officers.

As Resolution 1325 has slowly moved towards its goal of increasing the participation of women in UN peacekeeping missions, the ideas behind its promotion are worth investigating. For instance, is there evidence that including more women on peacekeeping missions improves the success of these missions? While there is plenty of anecdotal evidence that women peacekeepers can improve community connections and population access (Ivanovic 2014; Bridges and Horsfall 2009; Hudson 2005), we might expect a more general pattern by which peacekeeping missions with greater female representation would actually result in a more lasting post-conflict settlement.

One major benefit of Resolution 1325 is the regular collection and public reporting of women's participation in peacekeeping missions. Using this monthly data on the percentage of women in peacekeeping missions, we combine it with the Uppsala Conflict Data Program's Conflict Termination Dataset (UCPD-CTD) (Kreutz 2010) to identify African conflicts that have seen an end to hostilities. We also control for a number of conflict-specific and state-level factors (such as war duration and severity, regime type, population, and GDP per capita) that may influence the duration of peace. We do find that UN peacekeeping missions with more women are better than other missions at maintaining peace between combatants.

Understanding Peacekeeping Effectiveness

United Nations peacekeepers are often sent to the most difficult of civil conflicts (Gilligan and Stedman 2003; Fortna 2008), with the hope that their multinational peace efforts prove more effective than those of individual states' or local disputants (Fortna 2008). And, while earlier work questions the effectiveness of UN missions at maintaining peace (Diehl et al. 1996), more recent work using more nuanced measures have led to a growing consensus that peacekeeping does significantly increase the duration of peace (Doyle and Sambanis 2000, 2006;

Fortna 2004, 2008; Gilligan and Sergenti 2008; Hultman et al. 2016). Overall, the presence of UN peacekeepers “has been shown to extend the length of ceasefires, increase the likelihood of successful post-conflict democratization, and reduce conflict recidivism,” (Hultman, Kathman and Shannon 2014, 738).

More recent work on UN peacekeeping operations has begun to examine how operational factors influence the ability of UN missions to help maintain peace in post-conflict societies. Costalli (2013), for instance, examines the local distribution of peacekeeping forces within a country, arguing that much of the “failings of peacekeeping” may be attributed to forces being sent to the most severe outbreak in violence. Focusing on the impact of personnel numbers and the type of staff positions, Hultman, Kathman and Shannon (2016) find that increasing the number of armed troops is more effective in reducing battlefield hostilities in peacekeeping operations and extending the duration of peace.

Previous work has also suggested that the people who comprise a peacekeeping mission also impact how the mission mission operates. Diversity has been proposed as one such factor, and it may play a significant role in determining mission effectiveness in a variety of ways. Multinational operations benefit from multiple national budgets and armory resources, improving the capacity to carry out peacekeeping efforts. Missions with more diversity in their personnel training may also be better at sharing information between conflict parties, helping them better uphold peace settlements (Hultman, Kathman, and Shannon 2016).

As Bove and Ruggeri (2015, 684) argue, missions with a more diverse member base can also draw from a wider “portfolio of skills, talents, and interests on which to draw and [facilitate] mutual learning,” helping to increase their performance effectiveness. This benefits both the complementarity and monitoring roles of peacekeeping missions. Complementarity relies on the

peacekeepers demonstrating a wide knowledge and resource base in which to interact with local situations, while monitoring focuses on internal and external accountability. As civil wars occur and re-occur “as result of information asymmetries and commitment problems between combatant factions” (Hultman, Kathman, and Shannon 2016, 234), mission members that improve the communicative abilities of a peacekeeping mission are highly valuable.

How Women (May) Make the Difference on Peacekeeping Missions

While women are not necessarily by nature more peaceful than men, there are many reasons to think a female perspective would significantly impact a peace process. As Hudson (2005, 792) puts forth, “women have a different understanding of peace, security, conflict resolution, and the use of force given their socially constructed identities and experiences.” Including women in the peace process at any level, therefore, improves the multidimensionality of the process. Even if women are limited to serving as token members of a force, the perception of gender inclusion may be enough to change the behavior of local populations. As DeGroot (2001) points out, one of the advantages women have in calming situations is that they are expected to be peaceful, which alters how people around them respond to provocation.

Peacekeeping missions that contain more women may be better able to connect with and impact the local community. In an overview of case studies based on UN missions, Carey (2007) highlights how women peacekeepers can shift the dynamics of negotiations. Local women confide more in female peacekeepers and are better able to understand the peace process when communicating with female negotiators. In addition, local women are significantly more likely to join peace committees when the proportion of women peacekeepers exceeds a critical mass.¹ Women may also be better at resolving certain policy problems, as additional research has shown that women may have the advantage in addressing health, gender issues, and abuse

¹ Carey cites a study that lists this critical mass as 30% of mission personnel (2007, 54).

(Reeve 2012). Through these community relations, women peacekeepers have helped create trust towards mission personnel in the host nation (Bridges and Horsfall 2009, 126).

Missions with more women may also operate more effectively. More women on missions has been argued to cut down on sexual misconduct by mission personnel (Bridges and Horsfall 2009) and may reduce corruption (Transparency International 2013). Missions with more women may also experience more peace within the mission team (Bridges and Horsfall 2009). Since missions with less internal problems are better able to concentrate their efforts on their missions, we would predict improved operational effectiveness to result in longer post-conflict peace. As we expect that peacekeeping missions with more women will be better able to interact with local populations, influence public attitudes, and maintain greater operational effectiveness, we hypothesize:

Influence of Women in Peacekeeping: Peacekeeping missions with more women are more likely to increase the duration of peace following civil war.

Methodology

To test this hypothesis, we base our analysis on the work of Hultman et al. (2016), who use a Cox proportional hazards model with robust standard errors to examine whether peacekeeping mission capacity (measured in the number of troops, police, and observers on each mission) increases the duration of peace following a civil war. We use the same dependent variable - peace duration - which is based on data from the Uppsala Conflict Data Program Conflict Termination Dataset (UCPD-CTD). This dataset covers all civil wars in which at least one of the groups in the conflict was the state government, and allows us to identify civil wars and code for the month in which this war ended. While the full UCPD-CTD dataset begins in

1946 and ends in 2013 and is global in scope, Hultman et al. limit their analysis to African civil wars ending between 1989 and 2010 (Hultman, Kathman, and Shannon 2016, 238).

Hultman et al.'s reasoning (p. 238) is primarily data availability, but limiting the analysis to Africa has some additional benefits. It allows us to better control for regional-specific factors, and it presents a "hard test" of our theory given that these civil wars are often some of the most difficult to resolve. Finally, as Hultman et al. point out, African civil conflicts see considerable variation in peace-keeping mission type, which makes them a good microcosm of global trends. Given that data on women's involvement in UN peacekeeping missions is only available beginning in 2006, this further limits our dataset to civil wars ending between 2006 and 2010.

Hultman et al. also follow the lead of Nilsson (2008) by examining peace as dyadic settlements between the government and different rebel groups.² Therefore, the unit of analysis in our dataset is monthly peace data for African civil war conflict dyads from 2006 to 2010, with our dataset covering each conflict from the end of their conflict until either the war recurs or we reach the temporal end of the dataset.

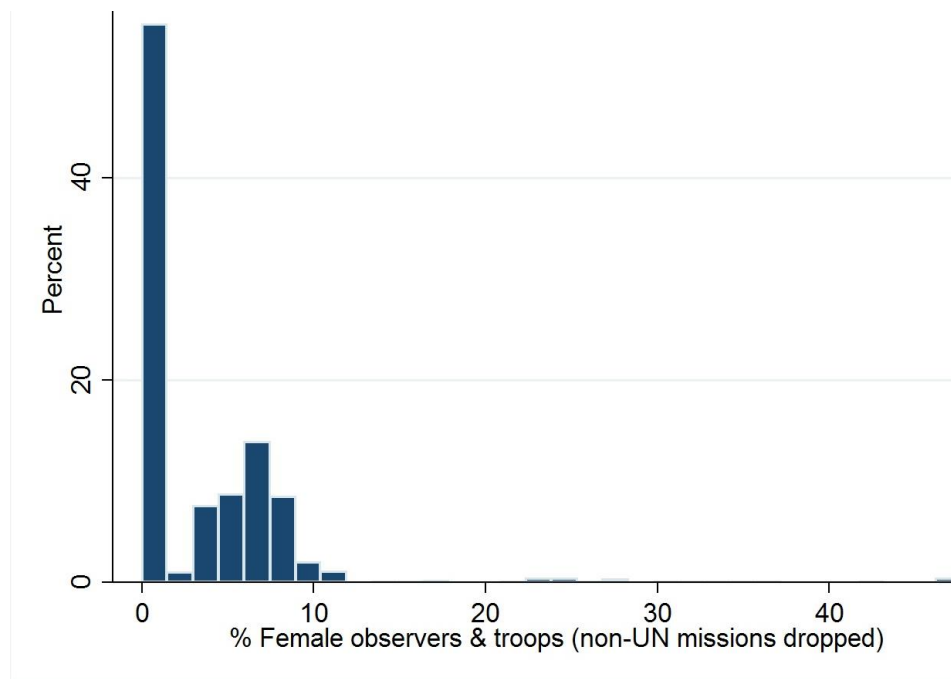
Women in Peacekeeping

Our main variable of interest is the percentage of women peacekeepers on each mission, collected from the United Nations Peacekeeping website (2017). Gender data are collected monthly, and are available from August 2006 through February 2017. While more recent years include data on women as part of police forces, given our already limited time frame, we instead focus our analyses on data that has consistently been reported since the beginning of the UN's data collection efforts - women on military observer missions and women who served as troops on peacekeeping missions. We use this to create our variable, *Percent Women Peacekeepers*.

² Nilsson notes that not only do rebel groups cease fighting at different times, but also that the exclusion of certain groups to a peace agreement does not noticeably impact the decision by the signatories to abide by this agreement.

Figure 1: The Distribution of Women in UN Peacekeeping Missions

(Post-Civil War Missions in Africa)



It is important to note that very few women participate in UN peacekeeping missions. In fact, our data demonstrates that the average proportion of women on a UN peacekeeping mission is only 3.4%; most of our monthly data on UN missions finds that over 55% have *no women* as part of their military operations (see Figure 1).

Control Variables

For our control variables, we include the mission capacity variables used by Hultman et al. (2016). Given our limited time frame and the analysis difficulties this presents, we simplify our analyses and use the only mission capacity variable that consistently shows significant across their models - the number of UN troop numbers.

We also control for a number of conflict-specific and state-level factors that past research finds relate to peace duration. As longer and more costly conflicts have a more difficult

time maintaining peace, *conflict duration* measures the length of time (in months) of the terminated conflict (Fortna 2008). *Previous war deaths* are the number of government and rebel fatalities, collected from the UCDP Georeferenced Event Dataset (GED) (Sundberg and Melander 2013). We also expect the risk of conflict re-emergence to be much higher if the government and rebel groups have a shared legacy of failed past peace agreements; for this reason, we include a count of the number of past conflict episodes between these groups (Hultman et al. 2016).

Using the UCDP Conflict Termination Dataset, we also code the way in which the war ended, as past research has shown that civil wars that end with a clear victory - with one side often eliminating the military capabilities of the opposing group - tend to have a more durable peace than ones that end in stalemate or a negotiated settlement (Fortna 2008). We include the dichotomous *victory* and *negotiated settlement* conditions as control variables in our analyses. As we might expect that rebel groups that possess a political wing are better prepared to transition to post-conflict politics and thus, should extend the duration of peace, we also include a dichotomous variable (*Rebel political wing*) drawn from Cunningham et al. (2009).

Conflict is also more likely to re-emerge in countries with non-democratic regimes, higher populations, and less wealth. Regime type is measured using the Polity IV dataset (Marshall et al, 2011). As we are borrowing from the Hultman et al. (2016) analysis, we are including the 21-point autocracy-democracy scale and square this scale ($Polity^2$) to account for the possible non-monotonic effect of regime type on peace duration. Similarly, we use Hultman et al.'s (2016) state population size variable, which is a component part of a country's CINC score in the Correlates of War project (Singer et al. 1972). As for wealth, we use the *GDP per*

capita data from Gleditsch (2002). The population and GDP per capita data are both log-transformed.

Results and Analyses

Table 1 presents the results of our Cox proportional hazards model (with robust standard errors). The Cox hazards model analyzes the probability a case will leave the dataset at a given time; in other words, it measures the probability at any given time that the peace process fails and conflict re-emerges. Therefore, the significant coefficients should be interpreted so that positive coefficients are associated with *shorter* peace, and negative coefficients with a *longer* peace.

Despite our limited time frame and how few women actually participate in peacekeeping missions, the significant and negative coefficient for women peacekeepers means that we do find that UN missions in Africa that contain a higher percentage of female military personnel experience a longer duration of peace. This finding holds true even when controlling for overall UN troop numbers or when adding many of the controls from the Hultman et al. (2016) study. In other words, with all other factors being equal, more women on peacekeeping missions extends the duration of peace following the cessation of conflict between feuding groups.

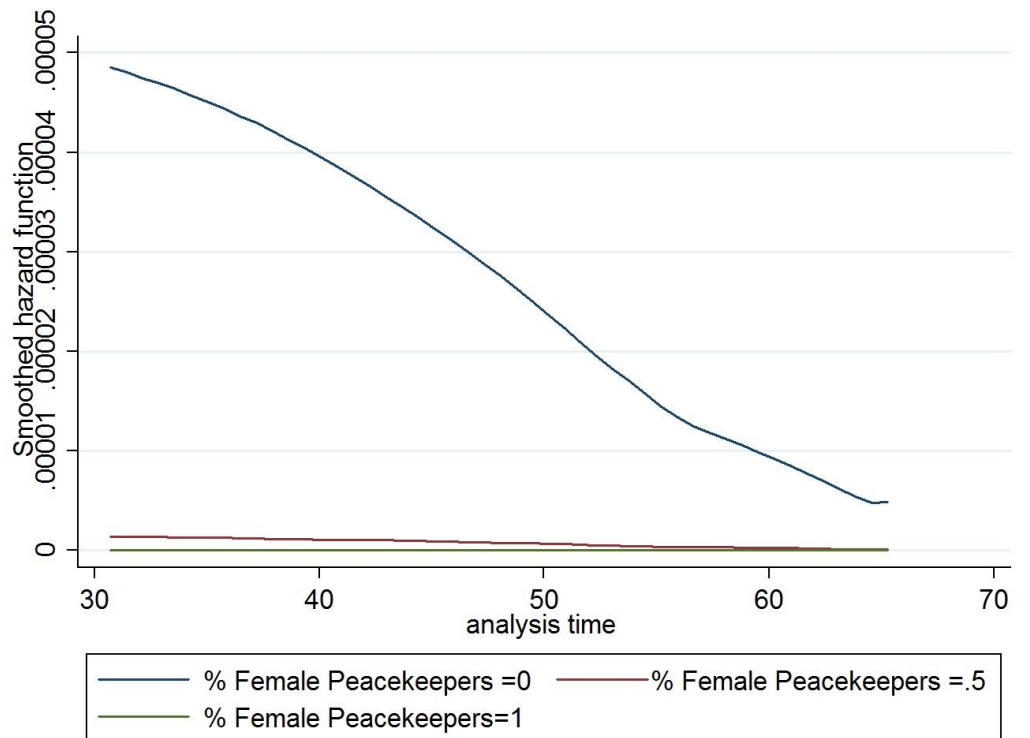
Table 1: Cox duration analysis of the likelihood of conflict re-emergence following civil war (Africa, 2006-2010)

	Model 1	Model 2
<i>% Women Peacekeepers</i>	-7.181*** (2.340)	-7.102* (3.800)
<i>UN Troops</i>	-.002*** (.001)	-.002** (.001)
<i>Conflict Duration</i>		.0002 (.006)
<i>Previous War Deaths</i>		.0003* (.0002)
<i>GDP per capita</i>		-.171 (.596)
<i>Population</i>		.507 (.397)
<i>Polity</i>		-.116 (.101)
<i>Polity²</i>		.033 (.027)
<i>Rebel Political Wing</i>		-.335 (.911)
<i>Number of Previous Episodes</i>		.604** (.284)
<i>Negotiated Settlement</i>		-.911 (.575)
<i>Victory</i>		.789 (1.755)
Observations	4801	4671
Number of subjects	106	103
Number of failures	11	11
Wald χ^2	781.20***	1998.78***
Log pseudo-likelihood	-30.445	-23.676

Note: Robust clustering of coefficients and standard errors on the conflict dyad. *** p<.01, ** p<.05, * p<.01

In fact, we see a significant jump in peace duration when we go from no women on the mission to even a small percentage of women. Figure 2 displays the estimates of the smoothed hazard function from Model 2, with control variables held at their mean or modal values. Higher numbers on the Y-axis are associated with a higher probability of the conflict re-emerging (in other words, the peace failing), accounting for the length of time since the end of the conflict. The X-axis represents the amount of time following the end of the conflict. As seen in the Figure below, all three lines decline over time, meaning that the risk of peace failing also declines. In other words, peace has the highest tendency to fail early in the process, but a peace process that has gone on for several months becomes more likely to endure.

Figure 2: Smoothed hazard function estimates of post-conflict re-emergence in states with varying levels of women deployed as part of peacekeeping missions.



Note: Hazard function derived from the analysis in Model 2.

The most interesting comparison is between the blue line (no women in the mission) to the other two lines (missions that include women in at least a .5% and 1% of their forces). Immediately following the end of a conflict, we see that the risk of peace failure is much higher for conflicts with no female peacekeepers than missions with even a small percentage of women.

Turning to our control variables, similar to Hultman et al. (2016), we find that more UN peacekeeping troops does result in a longer peace duration, while conflicts that were more deadly and have seen more peace failures in the past are at a much higher risk of conflict re-emergence. We do not find a significant relationship for any of our other controls, even the ones that Hultman et al. (2016).

Conclusion: Directions for Future Research

While the initial results are promising, we do face considerable data issues - specifically, a limited time frame for analysis - that limit our ability to make significant claims regarding our findings. To even allow the analysis to run, we had to drop many of the control variables used by Hultman et al. (2016) and cited by other authors as important factors determining the success or failure of a peace process. In the future, we would need to temporally and geographically extend our analysis in order to collect enough cases to see sufficient variance in failure for us to adequately assess our causal relationship.

We may be able to do this by including non-African civil conflicts and/or by collecting data after our original 2010 limitation, though both options pose challenges. The first option may raise questions of comparability, as the dynamics of African conflicts and peacekeeping missions may be significantly different than missions in other regions.³ As for the second, one of our major controls, *GDP per capita*, has only been collected until 2011 (Gleditsch 2002), which

³ UNFICYP, the UN's Cyprus mission, stands out as an obvious outlier. It has a fairly high involvement of women, but is also a "cold" conflict with little chance of hostilities re-emerging. The UN mission, therefore, is considered one of the most favorable missions to be deployed to.

is what limits our current analysis to January 2011. The Gleditsch dataset is unique in that it compiles data from a number of different sources to obtain GDP data even in cases when traditional data sources (such as the World Bank) would leave as missing. African countries, especially those experiencing an ongoing or recent conflict, are significantly more likely to be missing economic data, which necessitates our reliance on a Gleditsch-style data collection effort.

Nevertheless, our findings show promise. While UN peacekeeping missions have been recognized as effective in extending the duration of peace following conflict (Forta 2008), the specific factors that contribute to operation effectiveness are still being explored (Doyle and Sambanis 2006). While previous work has examined troop strength (Hultman, Kathman and Shannon 2016) and multinational contributions (Bove and Ruggeri 2015) as factors, this analysis pioneers the examination of the specific impact of women peacekeepers. While it requires further study, our initial findings suggest that deploying *any* women on UN peacekeeping operations – even a “token” showing – dramatically improves the chances of peace following a civil war.

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