BRILL
NIJHOFF

The Impact of Integrated UN Missions on Humanitarian NGO Security

A Quantitative Analysis

Emizet F. Kisangani | ORCID: 0000-0003-3415-873
Department of Political Science, Kansas State University,
Manhattan, KS, USA
emizetk@ksu.edu

David F. Mitchell
Independent Consultant, Prairie Village, KS, USA
dfmitchell330@gmail.com

Abstract

Since the end of the Cold War, the UN has extended many of its missions in conflict zones to include political, military, and humanitarian activities. Many humanitarian nongovernmental organizations have been critical of these "integrated" UN missions, claiming that they can blur the distinction between political, military, and humanitarian action, thus placing humanitarian aid workers at risk of retaliation from warring factions opposed to the UN's political objectives. This proposition is empirically tested using generalized methods of moments statistical analysis of sixty-seven countries that experienced intrastate conflict between 1997 and 2018. When assessing attacks in general—to include the sum of aid workers killed, wounded, and kidnapped—the results indicate that humanitarian aid workers are more likely to come under attack in countries that have an integrated UN mission. However, when the attacks are assessed separately, results show that this relationship holds only with aid workers who are killed in the field.

Keywords

1 Introduction

Beginning in the early 1990s, the United Nations has, through "integrated missions," extended its peacekeeping initiatives in war-torn societies to include human rights, rule of law, and many other political actions. The UN intends through this strategy "to maximize its contribution towards countries emerging from conflict by engaging its different capabilities in a coherent and mutually supportive manner."[1] The UN Department of Peacekeeping Operations (UNDPKO) notes that "the way in which [humanitarian] assistance is designed and delivered, especially the selection of local partners and intermediaries, will almost invariably have important political consequences. It is critical to strategize and to maximize the effectiveness of humanitarian assistance for beneficiaries and *ensure that the UN humanitarian assistance complements UN efforts to resolve conflict.*"[2]

The UN's peacebuilding and peace enforcement initiatives reflect a significant shift in the post-Cold War political and legal environment. Member States began to subtly extend the acceptable scope of UN activity in the world, to include humanitarian and political interventions within the borders of sovereign nations.[3] This shift was partially influenced by the Vienna Declaration and Program of Action (VDPA), a human rights declaration adopted by the World Conference on Human Rights (WCHR) in June 1993. The declaration proclaimed human rights to be a universal standard and resulted in the creation of the Office of the UN High Commissioner for Human Rights (OHCHR) in December 1993. The VDPA also called on the UN to "assume a more active role in the promotion and protection of human rights in ensuring full respect for international humanitarian law in all situations of armed conflict."[4]

The debate over the role of integrated UN missions has been contentious since the concept was first proposed in the early 1990s.[5] In recent years, more attention has been drawn to the discussion with the launch of the Humanitarian-Development-Peace Initiative (HPDI). The HPDI "triple nexus" is based on the belief that humanitarian, development, and peacebuilding efforts are complementary and need to reinforce each other.[6] In the UN's New Way of Working (NWoW), actors engaged in these three areas are expected to work together.

---

1   UNDPKO 2006, 1. The UNDPKO was renamed the Department of Peace Operations in 2019.
2   UNDPKO 2003, 159 (emphasis added).
3   Doyle 1998, 3.
4   WCHR 1993.
5   Combaz 2013.
6   World Bank 2017.

While the NWoW originally focused on removing "unnecessary barriers" hindering the collaboration between humanitarian and development actors, UN Secretary-General António Guterres called in 2016 for "sustaining peace" to be considered "the third leg of the triangle."[7] Although the concept is not new, the revival of the triple nexus has drawn increasing scrutiny regarding the appropriate level of interaction and coordination between these actors.

Several humanitarian nongovernmental organizations (NGOs) have argued that the close association between political, military, and humanitarian objectives undermines the independence, impartiality, and neutrality of the aid community.[8] Many NGO leaders strongly accept the view that integrated UN missions have created a perception among local populations that humanitarian action is subordinated to the political and military goals of the international community. As a result, humanitarian NGOs are more likely to experience physical insecurity in areas where the UN is carrying out an integrated mission.

However, empirical evidence to support these claims has been lacking. This article helps fill this gap by assessing the impact of integrated UN missions with a humanitarian support aspect on NGOs' insecurity in countries experiencing conflict using a time series cross-sectional of sixty-seven countries from 1997 to 2018.

Aid workers are defined as "the employees and associated personnel of not-for-profit aid agencies who provide material and technical assistance in humanitarian relief contexts."[9] This restrictive definition from the Aid Worker Security Database (AWSD) helps us to focus exclusively on humanitarian NGOs and to exclude aid workers affiliated with Red Cross/Red Crescent organizations, donor agencies, intergovernmental organizations, and the UN.[10]

This article is organized as follows. First, we provide an overview of integrated UN missions and NGOs' concerns. This is followed by a brief literature review and the working hypothesis. We then develop the research design, and present the empirical analysis. Some concluding remarks follow.

---

7   ICVA 2018, 1.

8   Harmer 2008, 528. See also de Torrenté 2004, 6. According to MSF's Nicolas de Torrenté, aid organizations that are associates "of politico-military efforts makes them prominent targets for violent opposition."

9   Humanitarian Outcomes 2019.

10   The AWSD provides data on attacks against these additional organizations, but they are not assessed here. We excluded attacks against the Red Cross since it is a unique international organization that is not technically an NGO. By the organization's own admission, the Red Cross's "mandate and legal status sets us apart from both intergovernmental organizations (such as the specialized agencies of the UN) and non-governmental organizations." See ICRC n.d.

2   Integrated UN Missions and Humanitarian NGO Security Concerns: An Overview

Following the end of the Cold War, the UN increasingly found itself in the midst of a series of highly complicated and large-scale humanitarian crises.[11] When the UN Security Council convened in January 1992, the members discussed limitations and concluded that traditional peacekeeping was not an adequate means of securing a lasting peace. In part, the members stated that "the non-military sources of instability in the economic, social, humanitarian and ecological fields have become threats to peace and security … and member states need to give the highest priority to the solution of these matters."[12]

In response to the Security Council's recommendation, then Secretary-General Boutros Boutros-Ghali published a report entitled *An Agenda for Peace* in June 1992, which provided recommendations for strengthening the UN's capacity for peace operations. He envisioned that UN missions should interconnect five roles to influence post-Cold War international politics. The report introduced the concepts of "peacebuilding" and "peace enforcement" to add to the existing roles of preventative diplomacy, peacemaking, and peacekeeping.[13]

Boutros-Ghali claimed that peacemaking and peacekeeping operations must adopt comprehensive efforts through the peacebuilding concept to be successful. These include disarming previously warring parties, confiscation/destruction of weapons, advising and training security personnel, strengthening governmental institutions, promoting political participation, monitoring elections, protecting human rights, repatriation of refugees, humanitarian assistance, and development projects.[14]

Boutros-Ghali stressed that humanitarian assistance must be provided in accordance with the principles of neutrality and impartiality, and only with the consent of the affected country. Given this framework, *An Agenda for Peace* proposed that the UN should pursue the *partial* engagement of peacebuilding while providing humanitarian assistance in an *impartial* manner. A number of observers have been critical of this encompassing aspect of UN missions by pointing out that the UN's attempt to engage simultaneously in partial and

---

11   Eide et al. 2005, 10.
12   UNSC 1992, 3.
13   Boutros-Ghali 1992.
14   Boutros-Ghali 1992.

impartial action ultimately creates a burdensome element of complexity for those involved in integrated missions.[15]

Although Boutros-Ghali introduced the concept of the integrated UN mission, his successor, Secretary-General Kofi Annan, greatly expanded the argument for an integrated approach. In his July 1997 report, Annan called not only for greater integration of UN missions, but also for increased collaboration with governments and NGOs to promote development and deliver humanitarian assistance.[16] Annan centralized all UN entities functioning at the country level by requiring them to operate in common premises and under a single UN flag. All funds and programs as well as UN information centers became part of a single UN office under the resident coordinator. He further tightened civilian-military integration of missions, giving the special representative of the Secretary-General (SRSG) in each country authority over the UN force commanders, civilian police commissioners, resident coordinators, and humanitarian coordinators.[17] Annan's movement toward greater integration was influenced in part by the failures of UN endeavors in the 1990s—particularly Rwanda—which were believed to be partially the result of independent operations by different parts of the UN. The assumption was that if the UN could act more coherently in its missions, it would have a better chance of success.[18]

In March 2000, Annan tasked a commission to review UN peace and security activities and provide recommendations for improvements. The commission subsequently published the Brahimi Report in August 2000 that addressed the need to reform and modernize peacekeeping given the nature of conflicts and the weaknesses of missions faced in the field. As part of its findings and recommendations, the Brahimi Report gave greater impetus to the drive for integration.[19] The report reiterated the importance of humanitarian and development work in integrated UN missions, claiming that these efforts are "essential complements to effective peacebuilding."[20] It thus recommended that the UN's humanitarian coordinator should report to the SRSG, who is responsible for humanitarian, political, and military strategies.

Shortly after the publication of the Brahimi Report in 2000, the Inter-Agency Standing Committee (IASC) issued a critique of the recommended integrated

---

15   Eide et al. 2005.
16   Annan 1997, 20.
17   Annan 1997, 39.
18   Ferris 2014.
19   UN 2000.
20   UN 2000, 3, 5.

UN mission structure. The IASC contended that the concept of "impartiality," as defined by the UN, differs substantially from how it is understood by humanitarian organizations.[21] The Brahimi Report explains that impartiality will be upheld in "adherence to the principles of the Charter: where one party to a peace agreement clearly and incontrovertibly is violating its terms, continued equal treatment of all parties by the UN can, in the best case, result in ineffectiveness and in the worst may amount to complicity with evil. No failure did more to damage the standing and credibility of UN peacekeeping in the 1990s than its reluctance to distinguish victim from aggressor."[22]

However, impartiality as it is understood by many NGOs is based on the obligation to deliver aid on the basis of need, and "regardless of the race, creed or nationality of the recipients and without adverse distinction of any kind."[23] The IASC warned that the confusion around the term *impartiality* may have an adverse effect on the security of aid workers, as they may be seen as enemies by parties to the conflict.[24] The Humanitarian Practice Network issued a similar critique shortly thereafter.[25]

In addition to impartiality, the principles of neutrality and independence are often cited by the NGO community as imperative for creating "humanitarian space."[26] *Humanitarian space* refers to "an operating environment in which the right of populations to receive protection and assistance is upheld, and aid agencies can carry out effective humanitarian action by responding to their needs in an impartial and independent way."[27] The broader NGO community contends that adherence to these core principles allows them to assist populations in need without fear of attack or obstruction by political barriers to their work.[28]

Many NGOs are wary of integrated UN missions in conflict zones because of their potential to blur the distinction between humanitarian, political, and mil-

---

21   IASC 2000, 2.

22   UN 2000, ix.

23   IFRC n.d.

24   IASC 2000, 2.

25   HPN 2001, 38–39.

26   See MSF 2018. According to MSF, impartiality means considering only a person's humanitarian needs, not who they are. This implies not discriminating "according to nationality, race, gender, identity, religious beliefs, class or political opinions. Neutrality, on the other hand, means not taking sides." It is possible for humanitarian organizations to remain impartial in their assistance, but not neutral (e.g., MSF called for military intervention during the 1994 genocide in Rwanda to stop the perpetrators).

27   Oxfam 2008, 2.

28   Oxfam 2008, 2.

itary action.[29] They claim that a close relationship between peacekeeping missions and humanitarian activity "implicates humanitarians in political action to which elements of the local population are opposed, thereby putting them at risk of retaliation."[30] Furthermore, NGOs have argued that integrated missions often prioritize political and military goals over the immediate humanitarian concerns of local populations. Consequently, numerous aid workers have stated that they are more likely to experience insecurity in the field in the presence of an integrated UN mission.[31]

3   Literature Review

The bulk of the literature on NGO insecurity has overlooked the potential impact of integrated UN missions. Prior research has mostly focused on the effect of demographic, social, political, developmental, and military factors on attacks against aid workers.

A key demographic element is the size of the NGO population in the field. While the number of absolute attacks against NGOs has increased globally in recent decades, so has the aid worker population.[32] However, research has shown that the overall rate of attacks has risen over time as well. Abby Stoddard, Adele Harmer, and Victoria DiDomenico analyzed global attacks against NGOs, nonpeacekeeping UN personnel, and Red Cross organizations that occurred between 1998 and 2008. Their study showed that attacks had increased from 4 per 10,000 personnel in 1997 to 9 per 10,000 personnel in 2008.[33]

Unsurprisingly, the magnitude of armed conflict has been found to be a significant predictor of insecurity. In their country-level statistical analysis between 1997 and 2014, Kristian Hoelscher, Jason Miklian, and Håvard Mokleiv Nygård discovered that the number of attacks against aid workers roughly doubled from medium-intensity conflicts to high-intensity conflicts.[34]

Another explanation is that aid workers are likely to be attacked in areas with high levels of violence against other civilians. This suggests that aid workers may not be the deliberate targets of combatants, but rather collaterals. Marcos Ferreiro found a positive relationship between attacks against aid work-

---

29   Metcalfe, Giffen, and Elhawary 2011, 45.

30   HPN 2001, 39.

31   Glad 2012, 8; Weir 2006, 24.

32   See Stoddard, Harmer, and Haver 2006, 16; Humanitarian Outcomes 2017, 3.

33   Stoddard, Harmer, and DiDomenico 2009.

34   Hoelscher, Miklian, and Nygård 2017.

ers and civilian casualties caused by antigovernment forces in Afghanistan between 2006 and 2011.[35] However, Neil Narang and Jessica A. Stanton showed in their analysis of attacks in Afghanistan between 2008 and 2012 that insurgents strategically targeted aid workers where NGOs' services were perceived to strengthen government support.[36]

A few scholars have also argued that weak governments tend to be better predictors of attacks than entrenched polities. A study by Kathryn M. Lambert showed that violence against aid workers was related to political instability and weak government institutions.[37]

Modernization is another element that seems to explain security of aid workers. Using literacy rate as a measure of modernization, David F. Mitchell found that at both the country and subnational levels, the literacy rate had a mitigating impact on attacks. As a region becomes better educated, attacks against aid workers seemed to decline.[38]

Perhaps the most popular anecdotal explanation for insecurity advanced by the broader NGO community is that of "blurred lines." This line of reasoning suggests that military engagement in humanitarian and relief work has made it so that insurgent actors can no longer distinguish between combatants and civilians. However, existing empirical analyses do not support this argument.[39] Although the reasoning that the militarization of aid increases security incidents is compelling, "the evidentiary basis is not, at present, equally compelling even though anecdotal evidence does exist."[40]

While anecdotal evidence supports the claim that integrated UN missions with a humanitarian support aspect have a negative impact on NGO security, only a few empirical analyses have been carried out to date. The Centre for Humanitarian Dialogue (CHD) conducted a comparative study in examining the humanitarian consequences of UN missions in Sierra Leone, the Democratic Republic of Congo (DRC), and Afghanistan.[41] The Sierra Leone project examined the 1996–2002 period. However, the UN mission in the country was not integrated with a humanitarian support aspect until 1999, giving the research team only three years. The CHD discovered that the political strategy of the UN mission was based around strong support to the Sierra Leone gov-

---

35   Ferreiro 2012.
36   Narang and Stanton 2017.
37   Lambert 2018.
38   Mitchell 2016.
39   See Watts 2004; Mitchell 2015; Hoelscher, Miklian, and Nygård 2017.
40   Fast 2010, 381.
41   CHD 2003.

ernment, resulting in the UN system being widely viewed as deeply partisan. Furthermore, the CHD found that when political and humanitarian objectives clashed, humanitarian concerns "unquestionably" came second to political ones.

The CHD's study in the DRC covered the period from 1999 to 2002. Unlike UN missions in Sierra Leonne, the UN mission in the DRC had a loose and non-integrated component structure. The mission was also comparatively weaker. While Sierra Leone—a country with a population of 6 million—received a peacekeeping force of over 14,000 soldiers, the DRC—with a population of 56 million—had a peak of only 4,000 troops during the period under investigation. The CHD researchers found that the impact of the weak and noninte-grated mission to the DRC was "neither negative nor positive on humanitarian space."[42] In other words, the results were inconclusive.

The Afghanistan study was conducted in 2002 and assessed the UN Assistance Mission in Afghanistan (UNAMA). Although UNAMA was integrated, partial, and supported the government in Kabul, the study found "little evidence to suggest that the mission integration model in itself necessarily places pressure on humanitarian space."[43]

Given these findings, the three case studies provide no substantial evidence to support the claim that decreased security of aid workers is attributable to the presence of integrated UN missions. However, one of the shortcomings of the CHD study is that its Afghanistan case study covered only one year (2002), which preceded the Taliban resurgence and the International Security Assistance Force's expansion beyond Kabul. The other two cases also covered a relatively short period of time, making it difficult to generalize the findings.

The UN Integration Steering Group commissioned a separate study on the impact of UN integration on humanitarian space in 2011 directed by Victoria Metcalfe, Alison Giffen, and Samir Elhawary. In a series of interviews with security analysts in Afghanistan, Central African Republic (CAR), the DRC, Liberia, and Somalia, they found that integration had both positive and negative impacts on the security of humanitarian aid workers.[44]

From a positive standpoint, the study discovered that aid workers in some countries were able to provide assistance to those in need thanks to the protection of UN peacekeepers. The DRC case indicated that some NGOs in the Haut-Uele and Bas-Uele regions in the northeastern part of the country relied

---

42   CHD 2003, 13.
43   CHD 2003, 16.
44   Metcalfe, Giffen, and Elhawary 2011.

heavily on the UN mission as military escorts for area security. In Liberia, representatives of UN mission participated in working-level humanitarian coordination meetings to provide security briefings for NGOs. A number of NGO respondents in Liberia identified information sharing as one of the primary benefits of the integrated mission.

Similarly, in CAR, the UN Integrated Peacebuilding Office in the country held informal meetings to share security-related information and respondents reported positive engagement between the UN and NGO communities. However, this was not the case in Somalia, where humanitarians were reluctant to exchange any security-related information with the UN since this led to accusations that these actors were spying for the government or the United States.

Although the security provided by troops and information-sharing capabilities were useful for NGOs operating in certain countries, Metcalfe, Giffen, and Elhawary found that integration also negatively impacted aid workers' security. In some cases, the UN mission was perceived to have taken sides in support of the government. According to interviews conducted by both the UN and NGO personnel in 2011, association with—and physical proximity to—the UN mission means that aid workers share the security risks facing the UN mission. As a result, out of security concerns many NGOs stopped or restricted their visits to UN offices in places like Afghanistan. Although Metcalfe, Giffen, and Elhawary found no "direct link" between UN integration and attacks on aid workers, they warned that it could nonetheless pose as an additional risk factor in "high-risk environments."[45]

In sum, many within the NGO community contend that integrated UN missions with a humanitarian support aspect in conflict zones blur the distinction between humanitarian, political, and military action. Consequently, aid workers argue that they will be more likely to experience attacks in the field when an integrated UN mission is present.[46] However, limited research has been conducted to examine the validity of this claim. We attempt to fill this gap in the literature. Our working hypothesis is:

> H: Aid workers affiliated with humanitarian NGOs operating in countries with an integrated UN mission are more likely to experience insecurity.

---

45   Metcalfe, Giffen, and Elhawary 2011, 2.
46   See Glad 2012, 4.

4   Research Design

Attacks against humanitarian NGO aid workers were analyzed using a time series cross-sectional of sixty-seven countries experiencing armed conflict from 1997 to 2018. The unit of analysis was country-year. The availability of data on the dependent variable restricted the temporal domain of the analysis. It was not until the late 1990s that governments, agencies, NGOs, and media sources began to make contributions to outlets such as ReliefWeb, which is used as a starting point for data collection.[47] To identify nations experiencing conflict, we used the Uppsala Conflict Data Program/International Peace Research Institute Dataset that operationalizes an *armed conflict* in terms of at least twenty-five battle-related deaths in a given year.[48]

4.1   *Dependent and Independent Variables*

NGO insecurity was operationalized as the total number of humanitarian aid workers associated with both international and local NGOs who were killed, wounded, and kidnapped in a country during a given year. Only security incidents that involved deliberate acts of violence affecting aid workers were assessed and, thus, excluded incidents in which aid workers were killed or wounded as a result of accidents. Information on aid worker attacks is from the AWSD.[49]

The independent variable was the presence of integrated UN missions in countries experiencing armed conflict.[50] Both peacekeeping and political missions were considered. A review was conducted of each UN peacekeeping and political mission's mandate between 1997 and 2018 to determine if the mission was integrated and included a humanitarian support aspect.[51] A dummy vari-

---

47   See Stoddard, Harmer, and Haver 2006, 7.

48   Gleditsch et al. 2002; Pettersson, Högbladh, and Öberg 2019.

49   See Humanitarian Outcomes 2019. The AWSD "is a global compilation of reports on major security incidents involving *deliberate* acts of violence *affecting* aid workers" (emphasis added). It should be noted that there are some limitations with the AWSD. Namely, the database does not include information on kidnappings that lasted for less than twenty-four hours. However, the database is currently the best source of information for attacks against NGOs. A comparison with the Global Terrorism Database (GTD) revealed that the GTD includes information on 756 unique attacks against NGOs between 1997 and 2018, while the AWSD includes over twice as much information with data on 1,953 unique attacks over the same time period.

50   A complete list of the countries and UN missions included in this analysis is available in a dataset that accompanies this article. This can be downloaded at the author's website: http://www.davidfmitchell.com/publications.

51   UNSC 2019a, 2019b, 2019c. The review of the mandates revealed that a relatively few UN

TABLE 1   Descriptive statistics of 67 countries experiencing armed conflict, 1997–2018

Variables	Observations	Mean	SD	Minimum	Maximum
Aid workers attacked (total)	1,460	2.24	9.53	0	140
Aid workers killed	1,460	0.81	3.71	0	56
Aid workers wounded	1,460	0.75	3.35	0	45
Aid workers kidnapped	1,460	0.67	3.89	0	76
Integrated UN mission	1,460	0.15	0.35	0	1
Humanitarian aid (millions$)	1,460	26.90	72.45	0	1,244
Battle-related deaths	1,460	639.16	3,421.15	0	69,202
Civilian casualties	1,460	323.13	1,464.06	0	25,876
Anocracies	1,460	0.52	0.50	0	1
Political stability	1,460	14.16	5.08	2	25
Literacy rate	1,460	68.81	23.40	14	99
International ground troops	1,460	0.11	0.31	0	1

able was used to account for the presence of an integrated UN peacekeeping or political mission in a country during a given year, scored 1 if present and 0 otherwise.

Table 1 provides descriptive statistics. Of the 67 countries that experienced armed conflict between 1997 and 2018, the highest number of aid workers attacked in a single country during a given year was 140 in Afghanistan in 2013. Of the 1,460 country-year observations, 211 had integrated UN missions with a humanitarian support mandate.

4.2   Control Variables

Extant research provided a number of variables explaining the security of NGO aid workers. These include the size of the aid worker population in the field, the presence and magnitude of conflict, general civilian targeting, government instability, modernization, and the presence of international ground troops. With the exception of modernization, all of these control variables tend to increase the likelihood of aid workers' insecurity.

Since there was no information on the size of aid workers at the country level, the total amount of *humanitarian aid* provided to local and international

integrated missions did not include a humanitarian support aspect. Given that many NGOs are strictly concerned with the humanitarian component of these missions, only integrated UN missions that include a humanitarian support aspect are assessed here.

NGOs in each country was used as a proxy to control for the aid worker population. The data are from the UN Financial Tracking Service (FTS).[52] This variable was logged to remove significant variance between cross-sectional units and time points. Countries that received no aid in any given year were given the value of $1.00 so that their natural logs were equal to 0.

The magnitude of armed conflict was accounted for by using the total number of *battle-related deaths* that occurred in a country during a given year.[53] Integrated missions primarily operate in conflict-afflicted areas where actors address political and security issues, in addition to humanitarian activity. This context differs from areas where aid workers are addressing humanitarian disasters caused by natural, environmental challenges—such as floods, hurricanes, earthquakes, droughts, or famine—where there may be no security challenges or conflict. Although our model only included countries that experienced armed conflict during the period under analysis, it is also important to account for the magnitude of these conflicts.

Civilian casualties was operationalized by the total number of civilians killed, injured, and kidnapped during terrorist attacks in a country during a given year. The data were from the Global Terrorism Database.[54] The correlation between this variable and battle-related deaths was only .31. To control for the effect of a weak government on aid workers' security, the Polity 2 variable was used, which ranges from –10 to +10.[55] "Weak governments" or *anocracies* are classified here as countries that fell between –5 and +5. These unstable polities were scored 1, the rest were assigned the value of 0.

The State Fragility Index (SFI) provides the operational definition of *political instability*.[56] The SFI rates countries on a scale of 0 (no fragility) to 25 (extreme fragility). The correlation between this variable and battle-related deaths was only 0.11.

The operational definition of modernization is *literacy* rate. Data on adult literacy rates were from the UN Educational, Scientific and Cultural Organization (UNESCO).[57] The measure of "blurred lines" was the presence of *international ground troops*.[58]

---

52   UNFTS 2019.
53   Pettersson, Högbladh, and Öberg 2019.
54   START 2019. The Global Terrorism Database includes incidents of terror attacks against NGOs and noncivilians, but these have not been included for the purpose of this analysis.
55   Marshall, Gurr, and Jaggers 2019.
56   Marshall and Elzinga-Marshall 2017.
57   UNESCO n.d.
58   The data are from NATO 2019; Grossman n.d.; European Union 2019; African Union n.d.a.; African Union n.d.b.; Khobe 2000.

4.3 *A Few Methodological Issues*

The research design raised two potential methodological concerns. The first is the common issue of potential multicollinearity. Multicollinearity occurs when two or more variables (or combinations of variables) are highly associated with each other.[59] A consequence of multicollinearity is that the estimate of a variable's impact on the dependent variable, while controlling for others, may be less precise than if the predictors were uncorrelated. It is problematic because it can increase the variance of the regression coefficients, making them unstable and difficult to interpret. A variance inflation factor (VIF) test was conducted to assess this potential problem. The results suggest that collinearity was not an issue in the statistical models, as the individual VIF scores and the mean VIF outcome remained far below the threshold of 10 indicating that multicollinearity did not have a pernicious effect on the estimates.

The second concern was more challenging for the estimation. The relationships analyzed were endogenous. In other words, both the dependent and independent variables were causally related. Lance Lochner and Enrico Moretti's tests failed to reject the null hypothesis of "no endogeneity" at the 10 percent level or better between the dependent variable and UN integrated missions.[60] As explained below, the system generalized method of moments (GMM) estimation was used to control for endogeneity and to provide robust or stable estimates.

5   Statistical Analysis

System GMM uses lagged differences to develop instruments for endogenous relationships.[61] In fact, it is a dynamic estimator that uses the lagged of the dependent variable as a predictor. It offers consistent and efficient estimates when analyzing dynamic cross-sectional, time series models with endogenous variables, and has less bias than comparable methods such as two-stage least squares.[62]

Although the GMM estimator is quite flexible and requires few assumptions about the data-generating process, the estimation of dynamic cross-sectional data with system GMM has one potential limitation: it can create too many

---

59   Pindyck and Rubenfield 1991, 84.
60   Lochner and Moretti 2015.
61   See Blundell and Bond 1998.
62   Blundell, Griffith, and Windmeijer 2002.

instrumental variables.[63] As a result, there is a potential for bias from over-fitting the model as the number of moment conditions expands and begins to outweigh efficiency gains. The principal component method was thus used to control for instrument proliferation.[64] The robust estimator was added to the analysis to ensure that the resulting standard error estimates were consistent.

Table 2 presents the model of the total number of aid workers attacked, which includes the sum of aid workers killed, wounded, and kidnapped. The table also provides first-order and second-order serial correlations, which suggest that the estimates are consistent.[65] The Hansen test is also reported for overidentifying restrictions. The statistically insignificant Hansen test indicates that the restrictions and the set of instruments used in the estimates are appropriate. Furthermore, the principal component method extracted some 129 principal components in Model 1 to reduce the number of instruments, thus explaining almost 91 percent of variance in the dependent variable. The Kasiser-Meyer-Olkin measure confirmed model adequacy.

The results show that the number of aid workers attacked contemporaneously is likely to be influenced by what occurred in the previous year. This number is quite small as indicated by a statistically significant coefficient of 0.6445. Thus, the attack of aid workers last year is likely to lead to one worker being attacked in the current year, holding other variables constant.

The presence of an integrated UN mission is likely to increase aid workers' insecurity. Table 2 shows that this variable is statistically significant at the 5 percent level. In terms of causality, statistical significance at 5 percent level means that we are 95 percent confident that the independent variable, integrated UN missions, causes aid workers' insecurity. The average number of aid workers attacked in the presence of integrated UN missions is about seven (coefficient is 7.3493). Consistent with NGO concerns, Model 1 suggests that if an integrated UN mission was present within a country, an average of seven aid workers were likely to experience an attack in a given year.

---

63   Roodman 2009.
64   Bontempi and Mammi. 2015. The *collapse* and *lagging* methods were also used to reduce the instrument count in our estimates, and these methods produced results consistent with those presented. Nonetheless, these two methods tend to reduce statistical efficiency.
65   According to Manuel Arellano and Stephen Bond, the presence of first-order serial correlation in the differenced residuals does not imply that the estimates are inconsistent; however, the existence of second-order serial correlation does. See Arellano and Bond 1991, 282.

TABLE 2   System GMM of total number of aid workers attacked

Variables	Model 1	
	Coefficients	Robust standard errors
Intercept	−0.3413	6.0073
Aid workers attacked$_{t-1}$	0.6445***	0.0685
UN integrated$_t$	7.3493*	4.2051
UN integrated$_{t-1}$	−0.0255	3.3059
Humanitarian aid$_t$	0.0106	0.2054
Battle-related deaths$_t$	0.0003	0.0003
Civilian casualties$_t$	−0.0009	0.0007
Anocracies$_t$	0.0341	1.1306
Political stability$_t$	−0.0347	0.1891
Literacy rate$_t$	0.0051	0.0534
Int'l ground troops$_t$	3.8469*	2.3857
Wald χ^2	243.97***	
First-order serial correlation	−1.82*	
Second-order serial correlation	0.90	
Hansen test	55.24	
PVEC (90 principal components or PC) [a]	0.91 (129 PC)	
Kaiser-Meyer-Olkin measure	0.763	
N	1,393	

Notes: GMM, system generalized method of moments.
a. Portion of variance explained by the components.
*$p < 0.10$, **$p < 0.05$, ***$p < .01$, two-tailed test.

Since the lagged UN integrated mission variable is not statistically significant, it can be stated with confidence that the results in Table 2 lend full support to the working hypothesis that the presence of a UN integrated mission is likely to result in aid workers being attacked whenever this mission is present. Thus, the attack of aid workers last year is unlikely to lead to attacks in the current year.

The benchmark category or the omitted dummy variable is *no integrated UN missions* captured by the intercept. The mean of the number of aid workers attacked for this benchmark is not only negative (−0.3413), but is also statis-

tically 0 even at the 10 percent level. Thus, no aid worker was attacked in the absence of integrated UN missions.[66]

The results seem quite robust in the presence of alternative explanations or causes of aid workers' insecurity. In fact, most control variables or causes are not statistically significant at the 10 percent level, except *international ground troops*. This variable seems to increase the likelihood of aid workers' insecurity as predicated by previous studies. On average, at least four aid workers are likely to be attacked in a given year in the presence of these troops. Other alternative explanations in extant research seem to have no impact on aid workers' insecurity despite the claim that they do.

Table 3 provides an assessment of the three separate indicators of aid worker attacks, which include *killed, wounded*, and *kidnapped* in Models 2, 3, and 4 respectively. The dynamic models show that all lagged dependent variables are positive and statistically significant as expected. In other words, aid workers' insecurity this year is causally related to their last year's insecurity environment.

If an integrated UN mission was present within a country, almost three aid workers were likely to be killed given the coefficient 2.6175, but none were likely to be either wounded or kidnapped, holding other variables constant. The argument is based on the statistically significant level of 5 percent. The contemporaneous UN integrated variable missed the 10 percent level of significance by quite a small margin in the *wounded model*. Statistically, no aid worker was killed, wounded, or kidnapped in the absence of UN integrated missions. Last year's UN integrated mission seems to have no impact on aid workers' insecurity as indicated by the lagged variable.

Unlike Model 1, Model 2 has two statistically significant control or causal variables. The variable *civilian casualties* is negative and statistically significant at the 10 percent level in Model 2, suggesting that aid workers are less likely to be killed when civilian casualties increase as a result of terrorism, holding other variables constant. This finding seems to contradict previous studies arguing that aid workers are likely to be killed in areas with high levels of violence against civilians.[67] The result suggests that aid workers are not collaterals.[68]

---

66   The statistical significance of the intercept is 91 percent meaning that perhaps one aid worker was killed, but we can affirm it with only a 9 percent level of confidence. In other words, the probability that this case occurred is only 9 percent, holding other variables constant. This is statistically equal to 0.

67   See Ferreiro 2012.

68   This finding is consistent with Wille and Fast 2010, 13, who found that humanitarian agen-

Also, the presence of *international ground troops* tends to increase insecurity of aid workers.

Models 3 and 4 provide no statistical evidence that UN integrated missions are likely to increase insecurity of aid workers. Both lagged and contemporaneous UN integrated variables are not statistically significant at the 10 percent level.

The analysis of the four models partly supports the working hypothesis or aid workers' claim that integrated UN missions are more likely to have a negative impact on their security. However, this claim should be taken with caution. The assessment of the three indicators of aid workers' insecurity raises some doubts about this claim when it comes to wounded and kidnapped aid workers. Perhaps, these two categories respond to other factors that need further investigation. Nonetheless, the positive relationship between integrated UN missions and attacks against aid workers, in general, and aid workers killed, seems to hold and provide some support for aid workers' claims about their increasing insecurity in the presence of integrated UN missions.

6 Conclusion

The concept of integrated UN missions has remained contentious since its introduction in the early 1990s. However, the debate has become more vocal in recent years. Many humanitarian NGO aid workers contend that the UN's conflation of political, military, and humanitarian activity has made them vulnerable to retaliation from warring factions in conflict zones. So far, much of the evidence to support this claim has been anecdotal.

In this study, we analyzed sixty-seven countries that experienced armed conflict between 1997 and 2018 to empirically test this claim. The statistical results indicate that, in general, humanitarian aid workers were more likely to come under attack in countries that had an integrated UN mission. However, on further analysis this relationship does not hold when it comes to wounded and kidnapped aid workers.

A possible explanation for this finding is that aid workers who are killed in the field are the deliberate targets of combatants. When an integrated UN mission is present, the likelihood of death increases for aid workers who, intentionally or inadvertently, become associated with the political and military

---

cies were rarely affected by indirect "general terrorist events" but were likely to be the victims of targeted attacks in certain countries.

TABLE 3   System GMM models of aid workers killed, wounded, and kidnapped

Variables	Model 2 (Killed) coefficients (RSE)	Model 3 (Wounded) coefficients (RSE)	Model 4 (Kidnapped) coefficients (RSE)
Intercept	−0.9109	−2.4274	2.1002
	(2.0628)	(2.6883)	(2.7907)
Aid workers$_{t-1}$	0.5137***	0.3465***	0.7135***
	(0.1816)	(0.0633)	(0.0769)
UN integrated$_t$	2.6175**	2.9892++	−0.4118
	(1.2207)	(1.9383)	(2.1319)
UN integrated$_{t-1}$	−0.6844	0.2122	2.7462
	(1.4887)	(1.8869)	(2.1112)
Humanitarian aid$_t$	0.0129	0.0863	−0.0202
	(0.0797)	(0.0836)	(0.0834)
Battle-related deaths$_t$	0.0001	0.0001	0.0001
	(0.0001)	(0.0002)	(0.0001)
Civilian casualties$_t$	−0.0003*	−0.0003	−0.0002
	(0.0002)	(0.0003)	(0.0002)
Anocracies$_t$	0.2642	0.1943	−0.0620
	(0.5768)	(0.5802)	(0.4468)
Political stability$_t$	−0.0144	0.0498	−0.0466
	(0.0850)	(0.0814)	(0.0796)
Literacy rate$_t$	0.0123	0.0185	−0.0218
	(0.0187)	(0.0229)	(0.0253)
Int'l ground troops$_t$	1.4109*	2.7742*	0.5813
	(0.7769)	(1.4830)	(0.9676)
Wald χ²	104.51***	111.22***	207.05***
First-order serial correlation	−2.06**	−2.22**	−2.35**
Second-order serial correlation	0.36	0.25	−0.04
Hansen test	52.21	53.43	48.23
PVEC	0.91 (129 PC)	0.91 (129 PC)	0.91 (129 PC)
Kaiser-Meyer-Olkin measure	0.763	0.763	0.763
N	1,393	1,393	1,393

Note: GMM, system generalized method of moments.
++missed the 0.10 level by *t* statistic = 0.10; *p < 0.10, **p < 0.05, ***p < .01, two-tailed test.

objectives of such missions. Given that we found no statistical relationship with aid workers who were wounded or kidnapped, we can surmise that perhaps many of these types of attacks are criminal in nature. It is not uncommon for common criminals to abduct aid workers and demand ransom payments in exchange for their safe return. Aid workers also fall victim to criminals who physically assault them and steal their belongings. While deliberate, these types of attacks occur in unstable regions irrespective of the political objectives of UN or NGO personnel, which would explain the findings. This requires further investigation, and we hope that future research will build and expand on this area as more data and information become available.[69]

Bibliography

African Union. "African Union Mission in Somalia (AMISOM)." n.d.a. http://amisom
-au.org.

African Union. "African-Led International Support Mission to the Central African Republic (MISCA)." n.d.b. http:/misca.peaceau.org.

Annan, Kofi A. *Renewing the United Nations: A Programme for Reform* (New York: UN, 1997).

Arellano, Manuel, and Stephen Bond. "Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations." *Review of Economic Studies* 58 (2) (1991), 277–297.

Blundell, Richard, and Stephen Bond. "Initial Conditions and Moment Restrictions in Dynamic Panel Data Models." *Journal of Econometrics* 87 (1) (1998), 115–143.

Blundell, Richard, Rachel Griffith, and Frank Windmeijer. "Individual Effects and Dynamics in Count Data Models." *Journal of Econometrics* 108 (1) (2002), 113–131.

Bontempi, Maria Elena, and Irene Mammi. "Implementing a Strategy to Reduce the Instrument Count in Panel GMM." *Stata Journal* 15 (4) (2015), 1075–1097.

Boutros-Ghali, Boutros. *An Agenda for Peace: Preventive Diplomacy, Peacemaking and Peace-Keeping* (New York: UN, 1992).

CHD (Centre for Humanitarian Dialogue). "Politics and Humanitarianism: Coherence in Crisis?" (Geneva: CHD, 2003).

Combaz, Emilie. "The Impact of Integrated Missions on Humanitarian Operations." 2013. http://www.gsdrc.org/docs/open/hdq939.pdf.

de Torrenté, Nicolas. "Humanitarianism Sacrificed: Integration's False Promise." *Ethics and International Affairs* 18 (2) (2004), 3–12.

---

69   One important area of future research is to distinguish perpetrators of violence against aid workers, and whether these perpetrators are political actors or common criminals.

Doyle, Michael W. "Introduction: Discovering the Limits and Potential of Peacekeeping." In *Peacemaking and Peacekeeping for the New Century*, eds. Olara A. Otunnu and Michael W. Doyle (Lanham, MD: Rowman and Littlefield, 1998), 1–18.

Eide, Espen Barth, Anja Therese Kaspersen, Randolph Kent, and Karen von Hippel. "Report on Integrated Missions: Practical Perspectives and Recommendations" (New York: UN, 2005).

European Union. "Military and Civilian Missions and Operations." 2019. https://eeas.europa.eu/headquarters/headquarters-homepage/430/military-and-civilian-missions-and-operations_en.

Fast, Larissa. "Mind the Gap: Documenting and Explaining Violence against Aid Workers." *European Journal of International Relations* 16 (3) (2010), 365–389.

Ferreiro, Marcos. "Blurring of Lines in Complex Emergencies: Consequences for the Humanitarian Community." *Journal of Humanitarian Assistance* (2012). http://sites.tufts.edu/jha/archives/1625.

Ferris, Elizabeth G. "Military Engagement in Humanitarian Response." In *Human Rights, Human Security, and State Security: The Intersection*, vol. 1, ed. Saul Takahashi (Santa Barbara: Praeger, 2014), 139–162.

Glad, Marit. "A Partnership at Risk? The UN-NGO Relationship in Light of UN Integration: An NRC Discussion Paper" (Olso: Norwegian Refugee Council, 2012).

Gleditsch, Nils Petter, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg, and Håvard Strand. "Armed Conflict 1946–2001: A New Dataset." *Journal of Peace Research* 39 (5) (2002), 615–637.

Grossman, Zoltan. "From Wounded Knee to Syria: A Century of U.S. Military Interventions." Evergreen State College, n.d. https://sites.evergreen.edu/zoltan/interventions/.

Harmer, Adele. "Integrated Missions: A Threat to Humanitarian Security?" *International Peacekeeping* 15 (4) (2008), 528–539.

Hoelscher, Kristian, Jason Miklian, and Håvard Mokleiv Nygård. "Conflict, Peacekeeping, and Humanitarian Security: Understanding Violent Attacks against Aid Workers." *International Peacekeeping* 24 (4) (2017), 538–565.

HPN (Humanitarian Practice Network). "The Brahimi Report: Politicizing Humanitarianism?" *Humanitarian Exchange*, March 2001.

Humanitarian Outcomes. "Aid Worker Security Report 2017: Behind the Attacks: A Look at the Perpetrators of Violence against Aid Workers" (London: Humanitarian Outcomes, 2017).

Humanitarian Outcomes. "Aid Worker Security Database (AWSD)." 2019. https://aidworkersecurity.org/.

IASC (Inter-Agency Standing Committee). "Some NGO Views on the Humanitarian Implications of Implementing the Brahimi Report" (Geneva: IASC, 2000).

ICRC (International Committee of the Red Cross). "What is the ICRC?" n.d.

ICVA (International Council of Voluntary Agencies). "Learning Stream: Navigating the Nexus" (Geneva: ICVA, 2018).

IFRC (International Federation of the Red Cross). "Code of Conduct." n.d. http://www .ifrc.org/en/publications-and-reports/code-of-conduct/.

Khobe, Maxwell. "The Evolution and Conduct of ECOMOG Operations in West Africa" (Pretoria, South Africa: Institute for Security Studies, 2000).

Lambert, Kathryn M. "Assessing the Impact of the Political Environment on INGO Vulnerability to Terrorist Attack." *Risks, Hazards and Crisis in Public Policy* 9 (4) (2018), 431–454.

Lochner, Lance, and Enrico Moretti. "Estimating and Testing Models with Many Treatment Levels and Limited Instruments." *Review of Economics and Statistics* 97 (2) (2015), 387–397.

Marshall, Monty G., and Gabrielle Elzinga-Marshall. "Global Report 2017: Conflict, Governance and State Fragility." Center for Systemic Peace, 2017. http://www.systemicpe ace.org/inscrdata.html.

Marshall, Monty G., Ted Robert Gurr, and Keith Jaggers. "Polity IV Project: Political Regime Characteristics and Transitions, 1800–2018." Center for Systemic Peace, 2019. http://www.systemicpeace.org/inscrdata.html.

Metcalfe, Victoria, Alison Giffen, and Samir Elhawary. "UN Integration and Humanitarian Space: An Independent Study Commissioned by the UN Integration Steering Group" (London: Overseas Development Institute, 2011).

Mitchell, David F. "Blurred Lines? Provincial Reconstruction Teams and NGO Insecurity in Afghanistan, 2010–2011." *Stability: International Journal of Security and Development* 4 (1) (2015), 1–18.

Mitchell, David F. *NGO Insecurity in High-Risk Conflict Zones: The Politicization of Aid and Its Impact on "Humanitarian Space,"* Doctoral Dissertation (Department of Security Studies, Kansas State University, 2016).

MSF (Médecins Sans Frontières). "Neutrality vs. Impartiality: What's the Difference?" 2018. https://www.doctorswithoutborders.ca/article/neutrality-vs-impartiality-wha t's-difference.

Narang, Neil, and Jessica A. Stanton. "A Strategic Logic of Attacking Aid Workers: Evidence from Violence in Afghanistan." *International Studies Quarterly* 61 (1) (2017), 38–51.

NATO (North Atlantic Treaty Organization). "Operations and Missions: Past and Present." 2019. https://www.nato.int/cps/en/natohq/topics_52060.htm.

Oxfam. "OI Policy Compendium Note on United Nations Integrated Missions and Humanitarian Assistance" (Oxford: Oxfam, 2008).

Pettersson, Thérése, Stina Högbladh, and Magnus Öberg. "Organized Violence, 1989–2018 and Peace Agreements." *Journal of Peace Research* 56 (4) (2019), 589–603.

Pindyck, Robert S., and Daniel L. Rubenfield. *Econometric Models and Economic Forecasts*, 3rd ed. (New York: McGraw-Hill, 1991).

Roodman, David. "A Note on the Theme of Too Many Instruments." *Oxford Bulletin of Economics and Statistics* 71 (1) (2009), 135–158.

START (National Consortium for the Study of Terrorism and Responses to Terrorism). "Global Terrorism Database." 2019. https://www.start.umd.edu/gtd.

Stoddard, Abby, Adele Harmer, and Victoria DiDomenico. "Providing Aid in Insecure Environments: 2009 Update" (London: Overseas Development Institute, 2009).

Stoddard, Abby, Adele Harmer, and Katherine Haver. "Providing Aid in Insecure Environments: Trends in Policy and Operations" (London: Overseas Development Institute, 2006). UN. "Report of the Panel on the UN Peace Operations" (New York: UN, 2000).

UNDPKO (UN Department of Peacekeeping Operations). *Handbook on United Nations Multidimensional Peacekeeping Operations* (New York: UN, 2003).

UNDPKO. "Note of Guidance on Integrated Missions: Clarifying the Role, Responsibility and Authority of the Special Representative of the Secretary-General and the Deputy Special Representative of the Secretary General/Resident Coordinator/Humanitarian Coordinator" (New York: UN, 2006).

UNESCO (UN Educational, Scientific and Cultural Organization). "UIS.Stat." n.d. http://data.uis.unesco.org.

UNFTS (UN Financial Tracking Service). "Humanitarian Aid Contributions". 2019. https://fts.unocha.org/.

UNSC (UN Security Council). "Note by the President of the Security Council" (New York: UN, 1992).

UNSC. "Field Missions Mandate Table." 2019a. https://www.un.org/securitycouncil/file/122688.

UNSC. "Peacekeeping Missions." 2019b. https://www.un.org/securitycouncil/content/repertoire/peacekeeping-missions#reg21.

UNSC. "Political Missions and Offices." 2019c. https://www.un.org/securitycouncil/content/repertoire/political-missions-and-offices.

Watts, Clinton. "Indicators of NGO Security in Afghanistan" (West Point, NY: US Military Academy, Combating Terrorism Center, 2004).

WCHR (World Conference on Human Rights). "Vienna Declaration and Programme of Action." 1993. http://www.ohchr.org/EN/ProfessionalInterest/Pages/Vienna.aspx.

Weir, Erin A. "Conflict and Compromise: UN Integrated Missions and the Humanitarian Imperative" (Accra, Ghana: Kofi Annan International Peacekeeping Training Centre, 2006).

Wille, Christina, and Larissa Fast. "Is Terrorism an Issue for Humanitarian Agencies?" (Geneva: Security Management Initiative, 2010).

World Bank. "The Humanitarian-Development-Peace Initiative." 3 March 2017. https://www.worldbank.org/en/topic/fragilityconflictviolence/brief/the-humanitarian-development-peace-initiative.