

APPENDIX: How Epidemics affect Margenalized Communities in
War-Torn Countries: Ebola, Securitization, and Public Opinion
about the Security Forces in Liberia

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1 Descriptive Statistics of Variables)

	Count	Mean	sd	Min	Max
DV: Demand for Police	941	0.82	0.38	0	1
DV: Demand for AFL	941	0.23	0.42	0	1
DV: Cut Cases Fairly	830	2.07	0.61	1	3
DV: Cut Cases Respectfully	804	2.13	0.69	1	3
IV: Post-Ebola	941	0.58	0.49	0	1
IV: West Point	941	0.51	0.50	0	1
Age	940	33.4	11.8	18	82
Female	941	0.61	0.49	0	1
Can Read	938	0.66	0.47	0	1
Number of Children	937	2.13	1.69	0	5
Born in Montserrado County	1280	0.35	0.48	0	1
Contact with UNMIL	941	0.25	0.43	0	1
Contact with Police	941	0.72	0.45	0	1

Table 1: NOTES: These are the descriptive statistics for the variables used from the 2012/2015 surveys.

2 Demand for Police and Military (Pre/Post Ebola Survey Data)

This table corresponds to the Figure 2 and 3 in the paper. As noted in the paper, the interaction term is positive, indicating that perceptions of the police improved in West Point relative to Peace Island after Ebola. The post-Ebola coefficient is negative and significant, however, indicating that across both communities, demand for the police declined.

	Count	Mean	sd	Min	Max
DV:Feel Safer with Police	1272	0.64	0.48	0	1
DV: Feel Safer with Military	1272	0.65	0.48	0	1
DV: Police with Beat Community Member	1278	2.49	14.6	0	98
DV: AFL will Beat Community Member	1278	1.59	11.2	0	99
Contact with LNP during Ebola	1268	0.34	0.47	0	1
Contact with AFL during Ebola	1265	0.35	0.48	0	1
Saw LNP Beat People	1251	0.47	0.50	0	1
Saw AFL Beat People	1269	0.59	0.49	0	1
West Point	1280	0.50	0.50	0	1
Age	1280	32.8	12.2	18	83
Sex	1280	0.57	0.50	0	1
Can Read	1280	0.65	0.48	0	1
Muslim	1280	.11	0.31	0	1
Income	1,280	4.98	1.64	1	9
Number of Children	978	2.72	1.46	1	5
Experienced a Dispute	1280	0.58	3.89	0	98
Experienced Wartime Violence	1274	0.54	2.81	0	99
Knew Someone Infected with Ebola	1269	0.32	0.47	0	1

Table 2: NOTES: These are the descriptive statistics for the variables used from the 2015 survey.

	(1)	(2)	(3)	(4)
	Demand for Police	Demand for Military	Demand for Police	Demand for Military
After Ebola	-1.599*** (0.348)	-0.0150 (0.237)	-0.954*** (0.199)	0.116 (0.166)
West Point	-0.979** (0.374)	-0.247 (0.258)	-0.195 (0.177)	-0.0914 (0.161)
After Ebola X West Point	1.057* (0.428)	0.257 (0.331)		
Age	0.0228* (0.00991)	-0.0213* (0.00886)	0.0216* (0.00981)	-0.0215* (0.00886)
Female	0.366+ (0.198)	-0.0843 (0.175)	0.355+ (0.197)	-0.0838 (0.175)
Can Read	0.798*** (0.203)	-0.438* (0.184)	0.808*** (0.203)	-0.432* (0.184)
Number of Children	0.0450 (0.0667)	-0.00239 (0.0586)	0.0512 (0.0666)	-0.00156 (0.0585)
Contact with Peacekeepers	0.0374 (0.225)	0.833*** (0.184)	0.0120 (0.224)	0.827*** (0.184)
Contact with Police	0.353+ (0.201)	0.311 (0.201)	0.314 (0.200)	0.299 (0.200)
Constant	0.951+ (0.507)	-0.611 (0.420)	0.505 (0.451)	-0.682+ (0.412)
N	933	933	933	933
R ²				
BIC	886.4	1021.7	886.1	1015.5

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3: NOTES: This is the Table for Figure 2 and 3 in the paper. The dependent variable is the survey question, “who do you think should provide security to the community?” We code the dichotomous variable for whether the respondent chose the police or the military. The independent variable is if the survey was taken before or after Ebola and whether the respondent lives in West Point.

3 Ordinal Logit Models: 2012/2015 Surveys

This Table shows the questions about police fairness and respectfulness using an ordered logit model. The results are consistent with the results in the main paper. After Ebola, respondents were more likely to have negative beliefs with respect to fairness and respectfulness (stronger for the latter). The interactions term are not significant.

	(1)	(2)	(3)	(4)
	Cut Cases Fair_2	Cut Cases Fair	Cut Cases Respectful	Cut Cases Respectful
After Ebola	0.178 (0.209)	0.315* (0.146)	0.703*** (0.207)	0.623*** (0.143)
West Point	-0.380 ⁺ (0.219)	-0.228 (0.142)	-0.0774 (0.214)	-0.166 (0.137)
After Ebola X West Point	0.261 (0.287)		-0.150 (0.278)	
Age	-0.0121 ⁺ (0.00735)	-0.0124 ⁺ (0.00735)	-0.00498 (0.00718)	-0.00487 (0.00717)
Female	0.150 (0.152)	0.150 (0.152)	0.144 (0.148)	0.144 (0.148)
Can Read	0.212 (0.165)	0.214 (0.165)	0.269 ⁺ (0.161)	0.266 ⁺ (0.161)
Number of Children	0.168** (0.0511)	0.168** (0.0511)	0.109* (0.0494)	0.109* (0.0494)
Contact with UNMIL	0.119 (0.171)	0.110 (0.170)	0.212 (0.165)	0.217 (0.165)
Contact with Police	0.195 (0.173)	0.185 (0.173)	-0.141 (0.167)	-0.134 (0.167)
Cut 1	-1.403*** (0.364)	-1.337*** (0.356)	-0.947** (0.355)	-0.988** (0.347)
Cut 2	1.633*** (0.365)	1.696*** (0.359)	1.453*** (0.357)	1.412*** (0.349)
N	823	823	798	798
R ²				
BIC	1557.4	1551.5	1661.1	1654.7

Standard errors in parentheses

⁺ p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001

Table 4: NOTES: The dependent variable is the survey question “Are the ways the LNP cut cases usually fair/respectful to all people involved?” The “I don’t know” responses are removed, which allows for an ordinal scale, where higher numbers represent a worse opinion. The model is an ordinal logit model. The results demonstrate that after Ebola, there was an increase in negative attitudes especially believing that the police do not cut cases respectfully.

4 Linear Probability Models: 2012/2015 Surveys

This Table shows the questions about police fairness and respectfulness using a linear probability model. The results are consistent with the results in the main paper. After Ebola, respondents were more likely to have negative beliefs with respect to fairness and respectfulness (stronger for the latter). The interactions term are not significant.

	(1)	(2)	(3)	(4)
	Cut Cases Fair	Cut Cases Fair	Cut Cases Respectfully	Cut Cases Respectfully
After Ebola	0.0621 (0.0622)	0.0966* (0.0433)	0.248*** (0.0712)	0.221*** (0.0494)
West Point	-0.103 (0.0641)	-0.0663 (0.0424)	-0.0234 (0.0744)	-0.0530 (0.0484)
After Ebola X West Point	0.0660 (0.0855)		-0.0513 (0.0979)	
Age	-0.00350 (0.00221)	-0.00355 (0.00221)	-0.00210 (0.00252)	-0.00205 (0.00251)
Female	0.0473 (0.0451)	0.0476 (0.0451)	0.0489 (0.0520)	0.0484 (0.0520)
Can Read	0.0673 (0.0494)	0.0688 (0.0493)	0.0957+ (0.0568)	0.0947+ (0.0568)
Number of Children	0.0499** (0.0152)	0.0501** (0.0152)	0.0362* (0.0173)	0.0362* (0.0172)
Contact with UNMIL	0.0398 (0.0507)	0.0382 (0.0506)	0.0798 (0.0586)	0.0812 (0.0585)
Contact with Police	0.0525 (0.0517)	0.0500 (0.0516)	-0.0472 (0.0583)	-0.0455 (0.0582)
Constant	1.955*** (0.109)	1.937*** (0.107)	1.924*** (0.125)	1.938*** (0.122)
N	823	823	798	798
R ²	0.029	0.029	0.038	0.038
BIC	1562.2	1556.1	1700.1	1693.7

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5: NOTES: The dependent variable is the survey question “Are the ways the LNP cut cases usually fair/respectful to all people involved?” The “I don’t know” responses” are removed, which allows for an ordinal scale, where higher numbers represent a worse opinion. The model is a linear probability model. The results demonstrate that after Ebola, there was an increase in negative attitudes especially believing that the police do not cut cases respectfully.

5 Models Using the 2015 Representative Survey: With Interaction Term

These models use the representative survey from 2015 and include interactions terms with West Point. The interaction terms are not significant for the police, but are positive in Table 7. We attribute this finding to the fact that in West Point, the military engaged in humanitarian relief after they engaged in abuse as a way to reconcile with the community.

	(1)	(2)	(3)
	Feel Safer with LNP	Feel Safer with LNP	Feel Safer with LNP
Contact with Police (during Ebola)	-0.156 (0.176)		-0.338* (0.133)
West Point	0.519*** (0.155)	0.352+ (0.180)	0.414** (0.127)
Contact with Police X West Point (during Ebola)	-0.339 (0.255)		
Saw LNP Beat People (during Ebola)		-0.653*** (0.177)	-0.585*** (0.132)
Saw LNP Beat X West Point		0.0778 (0.251)	
Age	-0.0105+ (0.00557)	-0.0138* (0.00564)	-0.0131* (0.00570)
Female	-0.229+ (0.133)	-0.137 (0.135)	-0.166 (0.136)
Can Read	0.184 (0.139)	0.169 (0.142)	0.156 (0.143)
Muslim	0.128 (0.204)	0.0601 (0.204)	0.0223 (0.205)
Born in Montserrat County	-0.260* (0.130)	-0.241+ (0.133)	-0.249+ (0.134)
Income	-0.0583 (0.0376)	-0.0657+ (0.0384)	-0.0592 (0.0386)
Experienced Dispute	-0.00901 (0.0148)	-0.00999 (0.0147)	-0.0110 (0.0146)
Experienced Wartime Violence	0.268* (0.128)	0.320* (0.131)	0.332* (0.133)
Saw AFL Beat People (during Ebola)	-0.308* (0.128)	-0.205 (0.135)	-0.177 (0.136)
Knew Someone Infected with Ebola	0.254+ (0.136)	0.158 (0.138)	0.227 (0.140)
Constant	1.223*** (0.347)	1.576*** (0.359)	1.593*** (0.357)
N	1236	1219	1211
R ²			
BIC	1651.1	1600.9	1582.9

Standard errors in parentheses

+ p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001

Table 6: NOTES: The dependent variable is the survey question asking whether they agree or disagree with the following statement: “I feel safer when the LNP are in my community.” This question was only asked in the 2015 survey. The independent variables are whether they had contact with the police and whether they saw the police beat people during the epidemic. The model is a logit.

	(1)	(2)	(3)
	Feel Safer with AFL	Feel Safer with AFL	Feel Safer with AFL
Contact with AFL (During Ebola)	0.273 (0.186)	0.290* (0.140)	0.270 ⁺ (0.139)
West Point	0.224 (0.153)	-0.145 (0.207)	0.196 (0.125)
Contact with AFL X West Point	-0.138 (0.258)		
Saw AFL Beat People (during Ebola)		-0.751*** (0.190)	-0.484*** (0.137)
Saw AFL Beat People X West Point		0.537* (0.259)	
Age	-0.0176** (0.00556)	-0.0184** (0.00563)	-0.0187*** (0.00562)
Female	0.135 (0.131)	0.0764 (0.134)	0.0791 (0.133)
Can Read	-0.282* (0.143)	-0.267 ⁺ (0.145)	-0.258 ⁺ (0.145)
Muslim	0.461* (0.216)	0.468* (0.217)	0.446* (0.217)
Born in Montserrat	-0.0881 (0.131)	-0.123 (0.133)	-0.120 (0.133)
Income	0.0279 (0.0376)	0.0248 (0.0380)	0.0263 (0.0380)
Experienced Dispute	0.0222 (0.0316)	0.0251 (0.0328)	0.0254 (0.0318)
Experienced Wartime Violence	0.335* (0.131)	0.305* (0.132)	0.307* (0.132)
Saw LNP Beat People (during Ebola)	-0.527*** (0.128)	-0.413** (0.132)	-0.423** (0.132)
Knew Someone Infected with Ebola	0.0918 (0.136)	0.0956 (0.137)	0.103 (0.137)
[1em] Constant	1.048** (0.340)	1.534*** (0.365)	1.370*** (0.354)
N	1222	1212	1212
R ²			
BIC	1631.2	1610.5	1607.7

Standard errors in parentheses

⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 7: NOTES: The dependent variable is the survey question asking whether they agree or disagree with the following statement: “I feel safer when the AFL are in my community.” This question was only asked in the 2015 survey. The independent variables are whether they had contact with the police and whether they saw the police beat people during the epidemic. The model is a logit.

	(1)	(2)	(3)
	Police Abuse	Police Abuse	Police Abuse
Contact with LNP (during Ebola)	0.288 (0.180)		0.435** (0.141)
West Point	-0.564*** (0.168)	-0.553** (0.205)	-0.466*** (0.136)
Saw LNP Beat People X West Point	0.279 (0.266)		
Saw LNP Beat People (during Ebola)		0.758*** (0.185)	0.765*** (0.141)
Saw LNP Beat People X West Point		0.146 (0.272)	
Age	-0.00544 (0.00580)	-0.00291 (0.00587)	-0.00427 (0.00593)
Female	-0.508*** (0.138)	-0.651*** (0.143)	-0.651*** (0.143)
Can Read	-0.0891 (0.149)	-0.0560 (0.154)	-0.0516 (0.155)
Muslim	0.129 (0.204)	0.219 (0.207)	0.260 (0.208)
Born in Montserrat	0.0590 (0.138)	0.0582 (0.143)	0.0357 (0.144)
Income	0.0638 (0.0398)	0.0723+ (0.0412)	0.0707+ (0.0414)
Experienced Dispute	0.000770 (0.0192)	0.00452 (0.0198)	0.00392 (0.0208)
Experienced War Victimization	0.0662 (0.101)	0.0485 (0.0566)	0.0474 (0.0544)
Saw AFL Beat People (during Ebola)	0.300* (0.136)	0.218 (0.146)	0.166 (0.147)
Knew Someone Infected with Ebola	0.116 (0.141)	0.190 (0.144)	0.130 (0.147)
Constant	-0.895* (0.361)	-1.292*** (0.379)	-1.347*** (0.375)
N	1242	1225	1217
R ²			
BIC	1534.7	1452.2	1437.8

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 8: NOTES: The dependent variable is the survey question asking whether they agree or disagree with the following statement: “If the LNP come to your village, do you think they would beat community members?” This question was only asked in the 2015 survey. The independent variable is whether they had contact with the police and whether they saw the police beat people during the epidemic. The model is a logit.

	(1)	(2)	(3)
	Military Abuse	Military Abuse	Military Abuse
Contact with AFL (during Ebola)	-0.368 ⁺ (0.201)	-0.127 (0.145)	-0.118 (0.144)
West Point	-0.0349 (0.165)	0.325 (0.224)	0.169 (0.132)
Contact with AFL X West Point	0.601* (0.272)		
Saw AFL Beat People (during Ebola)		0.553** (0.209)	0.426** (0.147)
Saw AFL Beat People X West Point		-0.240 (0.278)	
Age	0.0171** (0.00561)	0.0183** (0.00568)	0.0185** (0.00567)
Female	-0.268 ⁺ (0.139)	-0.207 (0.141)	-0.208 (0.140)
Can Read	0.537*** (0.155)	0.560*** (0.158)	0.557*** (0.157)
Muslim	0.445* (0.203)	0.446* (0.204)	0.455* (0.204)
Born in Montserrado	-0.0640 (0.140)	-0.0439 (0.141)	-0.0452 (0.141)
Income	-0.0200 (0.0404)	-0.0144 (0.0407)	-0.0152 (0.0406)
Experienced Dispute	0.0174 (0.0146)	0.0145 (0.0146)	0.0141 (0.0146)
Experienced Wartime Violence	0.0385 (0.0438)	0.0410 (0.0471)	0.0414 (0.0467)
Saw LNP Beat People (during Ebola)	0.282* (0.134)	0.207 (0.138)	0.212 (0.138)
Knew Someone Infected with Ebola	0.473*** (0.139)	0.469*** (0.140)	0.465*** (0.140)
Constant	-1.928*** (0.363)	-2.444*** (0.392)	-2.364*** (0.380)
N	1224	1214	1214
R ²			
BIC	1501.7	1491.2	1484.9

Standard errors in parentheses

⁺ p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001

Table 9: NOTES: The dependent variable is the survey question asking whether they agree or disagree with the following statement: “If the AFL come to your village, do you think they would beat community members?” This question was only asked in the 2015 survey. The independent variable is whether they had contact with the police and whether they saw the police beat people during the epidemic. The model is a logit.

6 Table 3 from the Paper

	(1)	(2)	(3)	(4)
	Feel Safe with LNP	Feel Safe with AFL	Police Abuse	Military Abuse
Contact with LNP (during Ebola)	-0.338* (0.133)		0.435** (0.141)	
Saw LNP Beat People (during Ebola)	-0.585*** (0.132)	-0.423** (0.132)	0.765*** (0.141)	0.212 (0.138)
Contact with AFL (during Ebola)		0.270+ (0.139)		-0.118 (0.144)
Saw AFL Beat People (during Ebola)	-0.177 (0.136)	-0.484*** (0.137)	0.166 (0.147)	0.426** (0.147)
West Point	0.414** (0.127)	0.196 (0.125)	-0.466*** (0.136)	0.169 (0.132)
Age	-0.0131* (0.00570)	-0.0187*** (0.00562)	-0.00427 (0.00593)	0.0185** (0.00567)
Female	-0.166 (0.136)	0.0791 (0.133)	-0.651*** (0.143)	-0.208 (0.140)
Can Read	0.156 (0.143)	-0.258+ (0.145)	-0.0516 (0.155)	0.557*** (0.157)
Muslim	0.0223 (0.205)	0.446* (0.217)	0.260 (0.208)	0.455* (0.204)
Born in Montserrado	-0.249+ (0.134)	-0.120 (0.133)	0.0357 (0.144)	-0.0452 (0.141)
Income	-0.0592 (0.0386)	0.0263 (0.0380)	0.0707+ (0.0414)	-0.0152 (0.0406)
Experienced Dispute	-0.0110 (0.0146)	0.0254 (0.0318)	0.00392 (0.0208)	0.0141 (0.0146)
Experienced Wartime Violence	0.332* (0.133)	0.307* (0.132)	0.0474 (0.0544)	0.0414 (0.0467)
Knew Someone Infected with Ebola	0.227 (0.140)	0.103 (0.137)	0.130 (0.147)	0.465*** (0.140)
Constant	1.593*** (0.357)	1.370*** (0.354)	-1.347*** (0.375)	-2.364*** (0.380)
N	1211	1212	1217	1214
R ²				
BIC	1582.9	1607.7	1437.8	1484.9

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 10: NOTES: For Models 1 and 2, the dependent variable is the survey question asking whether they agree or disagree with the following statement: “I feel safer when the LNP/AFL are in my community.” For Models 3 and 4, the dependent variable is the survey question asking whether they agree or disagree with the following statement: “If the LNP/AFL come to your village, do you think they would beat community members?” The independent variable is whether they had contact with the LNP/AFL and whether they saw the LNP/AFL beat people during the epidemic. These questions were only asked in the 2015 survey. The models are logit.