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## The Determinants of Religious Radicalization: Evidence from Kenya

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# Appendix: The Determinants of Religious Radicalization

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## 1 Appendix

### 1.1 Descriptive Statistics of the Sample

The descriptive statistics of the sample are given in Table 1. Columns 4-6 refer to the full sample, columns 7-9 depict the Muslim subsample, and columns 10-12 depict the Christian subsample. For each sample, we report the sample size ( $N$ ), mean ( $Mean$ ) and standard deviation ( $SD$ ). Given our block-randomized sampling strategy, the religious subsamples are balanced across religion, gender, and age (*Muslim, Male, Age*).

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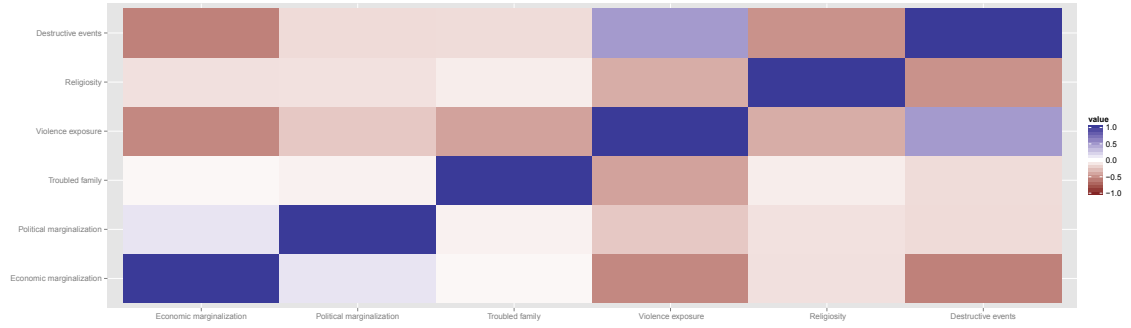
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Table 1: Descriptive Statistics of Sample and Indexes

<i>%, unless stated</i>	<i>Min</i>	<i>Max</i>	<i>N</i>	<b>Sample</b>		<i>N</i>	<b>Muslim</b>		<i>N</i>	<b>Christian</b>	
				<i>Mean</i>	<i>SD</i>		<i>Mean</i>	<i>SD</i>		<i>Mean</i>	<i>SD</i>
<b>Covariates</b>											
Muslim	0	100	576	50.0	50.0	288	100.0	0.0	288	0.0	0.0
Male	0	100	576	50.0	50.0	288	50.0	50.1	288	50.0	50.1
Age	18	41	575	26.0	4.4	288	25.6	4.5	287	26.4	4.2
Married	0	100	576	46.4	49.9	288	44.1	49.7	288	45.1	49.8
Convert	0	100	576	11.3	31.7	288	14.9	35.7	288	7.6	26.6
Income (KES)	0	200000	576	6560	13422	288	6869	15935	288	6684	10770
Knows Somali Migrant	0	100	478	22.0	41.4	239	30.5	46.2	239	13.4	34.1
Kamba	0	100	576	11.6	32.0	288	7.3	26.0	288	16.7	37.3
Kikuyu	0	100	576	16.8	37.4	288	10.1	30.1	288	24.7	43.2
Luo	0	100	576	10.9	31.2	288	4.2	20.0	288	18.4	38.8
Somali	0	100	576	15.0	35.7	288	30.9	46.3	288	0.0	0.0
Other	0	100	576	45.7	49.9	288	47.6	50.0	288	40.3	49.1
<b>Economic marginalization</b>											
Employed	0	100	576	47.2	50.0	288	43.8	49.7	288	50.7	50.1
Income (ln)	0	12	576	3.6	4.6	288	3.5	4.6	288	4.0	4.7
Any Income	0	100	576	38.5	48.7	288	36.5	48.2	288	43.1	49.6
Economic Prospects	1	7	576	5.4	1.4	288	5.4	1.4	288	5.5	1.3
<b>Political marginalization</b>											
Turnout	0	100	574	82.2	38.3	286	78.0	41.5	288	86.5	34.3
Representation	1	7	576	4.3	1.5	288	4.1	1.6	288	4.5	1.5
Political Prospects	1	5	568	2.2	1.0	284	2.3	1.0	284	2.2	1.1
<b>Religiosity</b>											
Attendance	0	100	576	0.5	0.5	288	0.8	0.4	288	0.3	0.4
Identification	0	100	576	28.4	45.1	288	43.4	49.6	288	15.3	36.0
<b>Negative catalyst events</b>											
Lost Relative	0	100	575	42.4	49.5	288	46.9	50.0	287	38.0	48.6
Lost Job	0	100	576	13.0	33.7	288	10.4	30.6	288	15.6	36.4
Arrest	0	100	576	21.7	41.3	288	22.6	41.9	288	20.8	40.7
Raid	0	100	576	2.8	16.4	288	3.5	18.3	288	2.1	14.3
Anomie	0	100	576	1.7	13.1	288	1.7	13.1	288	1.7	13.1
Lost Partner	0	100	576	22.0	41.5	288	20.5	40.4	288	23.6	42.5
Friend Emigrated	0	100	576	30.2	46.0	288	37.2	48.4	288	23.3	42.3
<b>Troubled social relations</b>											
Maternal Relationship	1	5	536	1.3	0.6	265	1.3	0.6	271	1.3	0.6
Paternal Relationship	1	5	453	1.7	0.9	222	1.7	1.0	231	1.7	0.9
Respect	1	5	575	1.7	0.6	288	1.6	0.7	287	1.7	0.6
<b>Violence exposure</b>											
Inter-Religious Violence	0	100	575	30.6	46.1	287	31.0	46.3	288	30.2	46.0
State-Muslim Violence	0	100	576	40.5	49.1	288	43.8	49.7	288	37.2	48.4

## 1.2 Correlation of Indexes

Figure 1: Correlation of indexes



### 1.3 Determinants of Radicalization

Table 2: Determinants of Radicalization

	Outcome: Radicalization (1-7)		
	(1) Full Sample	(2) Muslim Sample	(3) Christian Sample
<b>MACRO-LEVEL: GRIEVANCES</b>			
<b>Economic Marginalization Items</b>			
Employed	-0.404 (0.244)	-0.636 (0.396)	-0.401 (0.306)
Income (ln)	-0.084 (0.121)	-0.019 (0.212)	-0.137 (0.141)
Any Income	1.153 (1.131)	0.685 (1.958)	1.600 (1.318)
Economic Prospects	0.085 (0.056)	0.175 (0.089)	0.069 (0.073)
<b>Political Marginalization Items</b>			
Turnout	0.087 (0.201)	0.117 (0.313)	-0.113 (0.268)
Representation	0.015 (0.050)	0.034 (0.080)	-0.025 (0.063)
Political Prospects	-0.109 (0.075)	-0.258* (0.126)	0.027 (0.088)
<b>MESO-LEVEL: PROCESSES</b>			
<b>Religiosity</b>			
Attendance	0.126 (0.164)	0.017 (0.312)	0.126 (0.190)
Identification	0.666*** (0.167)	0.705** (0.238)	0.572* (0.245)
<b>Convert</b>			
	0.127 (0.231)	0.215 (0.331)	0.062 (0.360)
<b>Knows Somali Migrant</b>			
	0.507** (0.173)	0.823** (0.263)	0.033 (0.226)

Note:

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Determinants of Radicalization [Continued]

	Outcome: Radicalization (1-7)		
	(1) Full Sample	(2) Muslim Sample	(3) Christian Sample
<b>MICRO-LEVEL: PSYCHOLOGY</b>			
<b>Negative Catalyst Events Items</b>			
Lost Relative	0.437** (0.142)	0.658** (0.234)	0.268 (0.174)
Lost Job	0.157 (0.212)	0.858* (0.387)	-0.227 (0.250)
Arrest	-0.067 (0.175)	0.216 (0.289)	-0.133 (0.213)
Raid	0.991 (0.513)	1.418 (0.807)	0.358 (0.707)
Anomie	-1.161* (0.556)	-1.316 (0.939)	-0.692 (0.773)
Lost Partner	-0.083 (0.165)	0.076 (0.266)	-0.170 (0.211)
Friend Emigrated	-0.001 (0.171)	-0.402 (0.270)	0.424 (0.219)
<b>Troubled Social Relations Items</b>			
Maternal Relationship	0.162 (0.134)	0.276 (0.234)	0.264 (0.168)
Paternal Relationship	0.110 (0.083)	0.200 (0.130)	0.036 (0.114)
Respect	0.374** (0.125)	0.401 (0.207)	0.277 (0.159)

Note:

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Determinants of Radicalization [Continued]

	Outcome: Radicalization (1-7)		
	(1)	(2)	(3)
	Full Sample	Muslim Sample	Christian Sample
<b>Violence Exposure Items</b>			
Inter-Religious Violence	-0.082 (0.169)	0.244 (0.268)	-0.249 (0.217)
State-Muslim Violence	0.215 (0.162)	0.242 (0.250)	0.244 (0.212)
<b>Covariates</b>			
Muslim	0.235 (0.172)		
Male	0.073 (0.142)	0.033 (0.251)	-0.037 (0.169)
Age	-0.006 (0.017)	-0.007 (0.027)	-0.018 (0.021)
Married	0.084 (0.154)	0.068 (0.251)	0.147 (0.190)
Observations	433	210	223

Note:

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001

## **1.4 Control variables**

We briefly discuss the four control variables in the regression models. First, when estimating the full sample, we included a dummy variable if the respondent was Muslim. Interestingly, while being Muslim has a positive effect overall, it is not significant. This finding is in contrast to several scholarly and media accounts arguing that religious radicalization and fundamentalism is more pronounced among Muslims (e.g., Koopmans 2015). Second, we assess the gender dimension of religious radicalization by including a dummy whether the respondent is male. In line with Speckhard (2008), we find that being male is *not* a significant predictor of religious radicalization. Third, we assess to what degree age dynamics predict radicalization. Some authors have argued that radical Islamic activism conforms to the pattern of biographical availability and that the majority of activists are young. Bakker (2006, 48), for example, reports an average age of 27 years in his sample of Islamic terrorists, while Sageman (2004, 92) sample of extremists exhibits an average age of 26 years. In our sample, the coefficient for age is close to zero, highlighting that, in the Kenyan context, age is not a salient predictor of radicalization. Finally, we assess whether marriage has an impact on radicalization. Some authors have argued that marriage foster strong social relations, which work against religious radicalization. We find that marriage is not associated with radicalization with effect sizes close to zero.

## **1.5 Ethical concerns**

Before delving into the empirical strategy, we briefly want to discuss the ethical considerations we took into account before commencing the project. A survey on radicalization in a religiously-divided neighborhood poses risks to subjects and enumerators. We took these risks seriously and devised five steps to mitigate them. First, before conducting the survey, we conducted qualitative interviews with 14 of community leaders about the feasibility of the project. While all leaders were convinced that the surveying was justified, they suggested modifications to several survey items in order to reduce risk, suggestions



which we subsequently incorporated. Suggestions included, for instance, the use of but one radicalization measure in order to minimize the risk posed to enumerators. They also advised that the survey be brief and to add but one item regarding religious radicalization. Second, we exclusively recruited local enumerators from Eastleigh who had excellent knowledge of the area. Third, we invested a significant amount of time in the training of the enumerators, sensitizing them in particular to the security situation, the rights of research subjects, and protocol to follow in case of unexpected problems. All enumerators also obtained a human subjects training certificate from the Collaborative Institutional Training Initiative and were registered as enumerators under the [Anonymized] University Institutional Review Board. Fourth, we put in place a number of security measures, including the payment of respondents via MPESA (an electronic cellphone-based payment service) as well as a constant response system, asking enumerators to report back on an hourly basis. Fifth, we instructed enumerators to abort surveys as soon as the subject or enumerator was experiencing the slightest feeling of unease. Even so, there was one instance where an enumerator felt that people were following her in the Majengo area of Eastleigh, at which point we instructed enumerators to avoid the block altogether. Overall, the security measures worked exceptionally well, allowing us to obtain realistic data on radicalization, while securing the safety of all involved subjects.

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