

Supernatural beliefs predict high-risk migration behavior

Daniel Auer
MZES, University of Mannheim &
WZB Berlin

Johanna Gereke
MZES, University of Mannheim

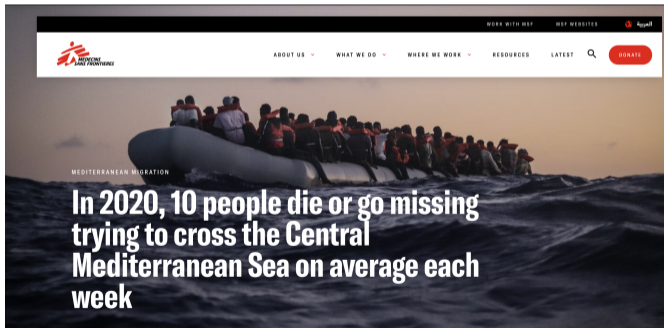
Max Schaub
WZB Berlin

Collegio Carlo Alberto, Online Seminar, 28 Jan 2021



Unprecedented Numbers of migrants attempting to cross Central Mediterranean from North Africa to Europe in recent years

- In 2020, approx. 34,000 ppl arrived in Italy [\[Italian Ministry of the Interior\]](#)
- Between 2014-2020, approx. 20,000 ppl lost their lives or went missing [\[IOM Missing Migrants Project\]](#)



Why willingness for high risk migration?

- Lack of awareness and information?
- Information campaigns to discourage irregular migration (e.g. Italian government's campaign & IOM in 2016, €1.5 million "Aware migrants" [\[https://awaremigrants.org\]](https://awaremigrants.org))



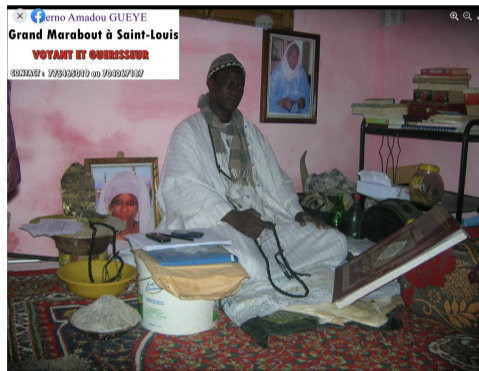
Migration Decision-Making Literature (Individual-level determinants)

- Focus on socioeconomic factors and regular migration flows
- Little work on perceptions of risk and uncertainty^[for a similar critique see Williams & Balaz 2012] but qualitative evidence that migrants “are willing to participate in the lottery called Europe, even if this means that they have to risk their lives”
[van Bommel 2020]
- Beliefs and norms can also shape (a) value individuals attach to different choices, (b) cognitive mechanisms to decide between different options
- Our Focus: how culturally-specific spiritual beliefs influence risk perceptions and migration behavior



Supernatural Beliefs as Risk Management Strategy

- Ethnographic literature documents how supernatural and religious beliefs & spiritual practices are used by aspiring migrants to address risks
- Example: Senegal “marabouts” provide a range of services [Hernandez-Carretero & Carling 2012].
 - * spiritual protection,
 - * suggesting appropriate departure dates,
 - * scanning passenger lists for problematic individuals with whom contact should be avoided



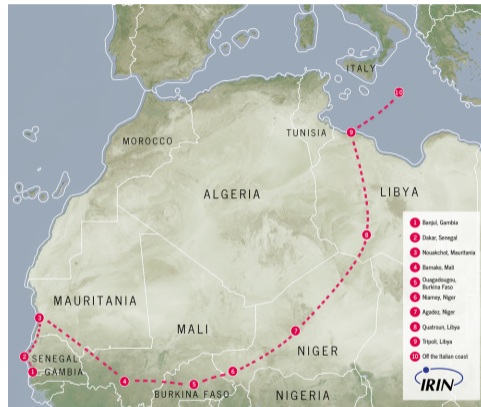
- ① How widespread is information about the risk of dying among aspiring migrants?
- ② How widespread are supernatural beliefs and spiritual practices?
- ③ Do supernatural beliefs predict actual migration?
- ④ Do perceptions of the risk of dying mediate how supernatural beliefs affect migration behavior?



Research Setting and Design

The Gambia

- One of the highest migration rates in the world (2014-2017)
- 7% of approx. 2 mio population live abroad
[UN DESA (2020): Trends in International Migrant Stock]
- repressive dictatorship for 22 years until early 2017
- Youth unemployment at 41.5% in 2018 [The Gambia Labour Force Survey 2018]
- Human Development Index 2016: 173 out of 188 countries

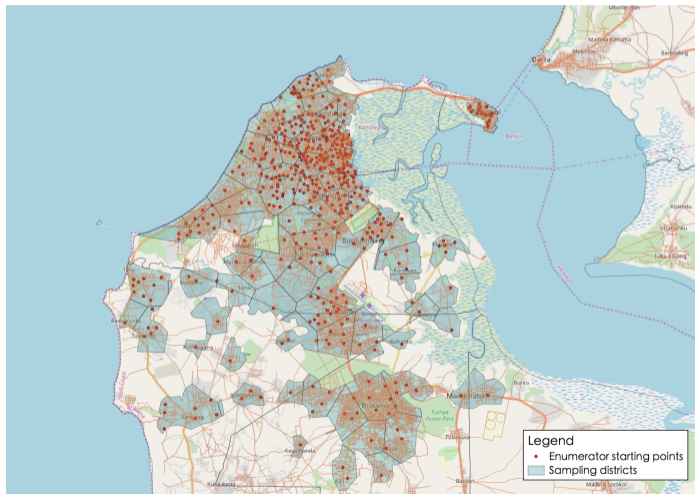


- Economy depends on remittances: 15.5% of (GDP)
[World Bank (2020): Migration and Remittances Data]



Longitudinal Study in The Gambia

- large-scale random sample of young adults in Greater Banjul (only urbanized area, starting point for international migrants) ($N = 10,181$)
- total of 3 waves over 1 year period
- W1 January 2019: > 30 local enumerators to 200 locations (census block-level)
- randomly selected streets and enumerators randomly approached individuals (age 15-35 years)
- contact information: phone numbers for follow-up in W2 & W3



Spiritual Practices in The Gambia

- religious/ (Sunni) Muslim society (approx. 95% of pop.)
- different types of local healers:
 - a Sheikh (religious healer)
 - b Billowo/Timowo (traditional healer)



Mr Bah, the marabout, reading the sand – The Gambia, West Africa.

Image © [Jason Florio](#)



Sample

Summary Statistics I

	(1) Wave 1	(2) Wave 2	(3) Wave 3	(4) $\Delta 1 - 2$	(5) $\Delta 1 - 3$
<i>Reported in wave 1</i>					
Male	0.815 (0.004)	0.817 (0.004)	0.820 (0.005)	0.002 (0.006)	0.005 (0.006)
Age	25.946 (0.059)	26.002 (0.065)	25.971 (0.071)	0.056 (0.088)	0.025 (0.092)
Single	0.699 (0.005)	0.703 (0.005)	0.700 (0.005)	0.005 (0.007)	0.002 (0.007)
No children	0.784 (0.004)	0.784 (0.004)	0.791 (0.005)	-0.000 (0.006)	0.006 (0.006)
Years of education	9.628 (0.041)	9.748 (0.045)	9.808 (0.048)	0.119** (0.061)	0.180*** (0.063)
Income (1000 GMD, group)	1.550 (0.023)	1.568 (0.026)	1.568 (0.028)	0.018 (0.035)	0.017 (0.037)
Meals skipped per week	0.335 (0.005)	0.331 (0.005)	0.327 (0.006)	-0.004 (0.007)	-0.007 (0.007)
N	10,181	8,372	6,993	18,553	17,174



Summary Statistics II

	(1) Wave 1	(2) Wave 2	(3) Wave 3	(4) $\Delta 1 - 2$	(5) $\Delta 1 - 3$
<i>Reported in wave 1</i>					
Previous migration	0.298 (0.005)	0.295 (0.005)	0.285 (0.005)	-0.003 (0.007)	-0.013* (0.007)
Knows sb. who died mig.	0.757 (0.004)	0.756 (0.005)	0.758 (0.005)	-0.001 (0.006)	0.002 (0.007)
Wears juju	0.142 (0.003)	0.137 (0.004)	0.136 (0.004)	-0.005 (0.005)	-0.006 (0.005)
<i>Reported in multiple waves</i>					
Recent magic ritual	0.293 (0.005)	0.274 (0.005)	0.230 (0.005)	-0.019*** (0.007)	-0.063*** (0.007)
Migration intention	0.693 (0.003)	0.717 (0.004)	0.742 (0.004)	0.024*** (0.005)	0.048*** (0.006)
Willingness to take risks	0.395 (0.004)		0.427 (0.005)		0.033*** (0.006)
Migration attempt		0.139 (0.004)	0.093 (0.003)		
N	10,181	8,372	6,993	18,553	17,174



Some more background information

- Migration Intentions: *"How much are you considering to move to another country to live?"* [move = at least 3 months]
approx. 70% of sample
- Migration Plans to Europe: approx. 30% of the sample have concrete plans to move to Europe in the next six months
- Scarce networks in Europe: *"How many people do you know in Europe that would help you if you decided to migrate there, if any?"*
47% don't know anybody; 30 % 1 or 2 ppl
- Sample Attrition: W1-W3 31% with lottery incentive, advertisement of survey (and lottery) in advance in radio shows on one of The Gambia's largest stations
- Respondent answered self vs. family/friends in approx. 75% in all waves, 16 % answered one follow-up wave personally



Perceptions of own survival

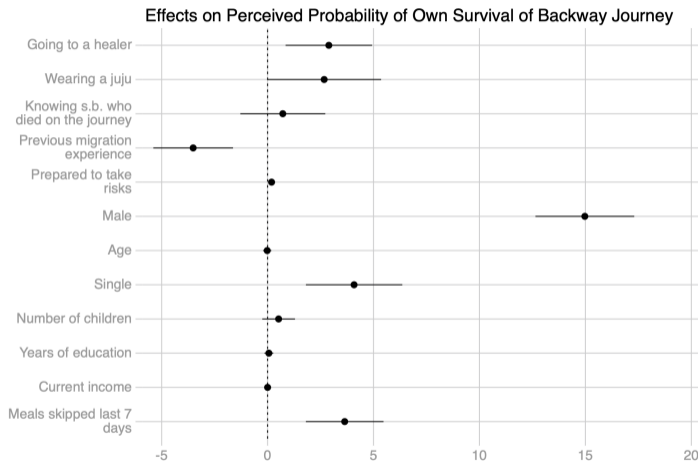


Figure 1: *"How likely is it that you would survive the "backway" journey (0-100) (W1)?"*

- ✓ DV migration attempt: went abroad between w1-w2 or w2-w3 but returned (1/0)
- ✓ IV spiritual beliefs: "Have you recently received a magic spell or gri-gri to protect or strengthen you?"
- ✓ Controls: prior migration experience, gender, age, marital status, children, level of education, income, had to skip meal in last 7 days, respondent answered self



Results

Main Result: Cross-sectional and Longitudinal

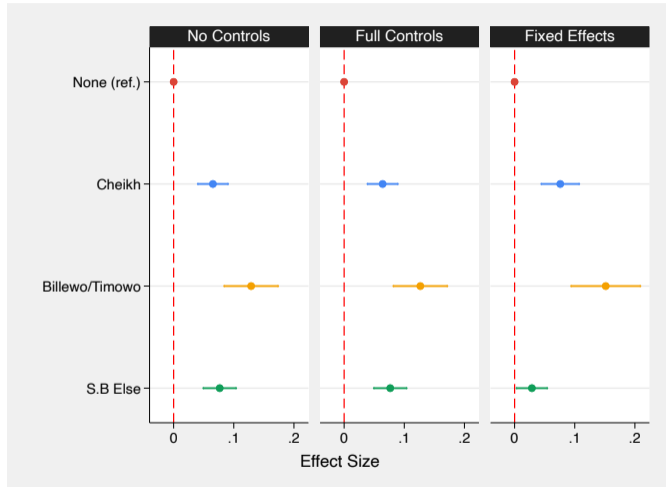


Figure 2: The Effect of Consulting a Healer on Migration Propensity

Why would visiting a healer go along with higher subsequent migration?

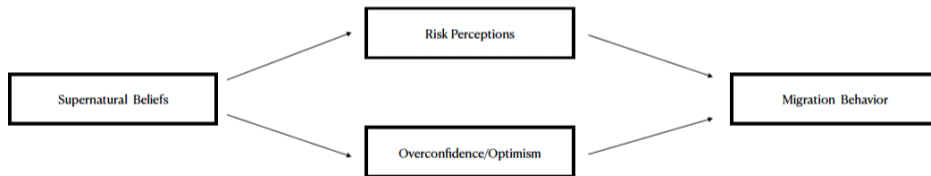


Figure 3: Overview of potential mechanisms included in the study

① General willingness to take risks

"How do you see yourself: are you generally a person who is fully prepared to take risks or do you try to avoid taking risks? Please answer on a scale from 0 to 100, where the value 0 means: 'not at all willing to take risks' and the value 100 means: 'very willing to take risks'."

② Subjective likelihood of own survival of "backway" journey

Placebo: Estimated likelihood of others' survival

"Out of 100 migrants from Gambia who try to get to Europe on the backway, how many do you think do not survive the journey?"



"Treatment Effect" of magic rituals in t-1 on mechanisms in t

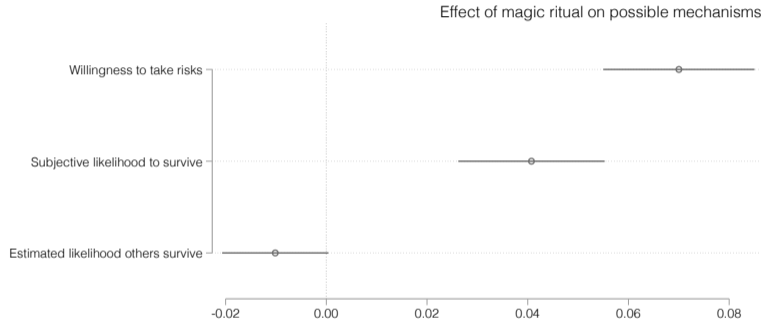


Figure 4: Effect of going to a healer on mechanisms



Pairwise Correlations between mechanisms and Outcome

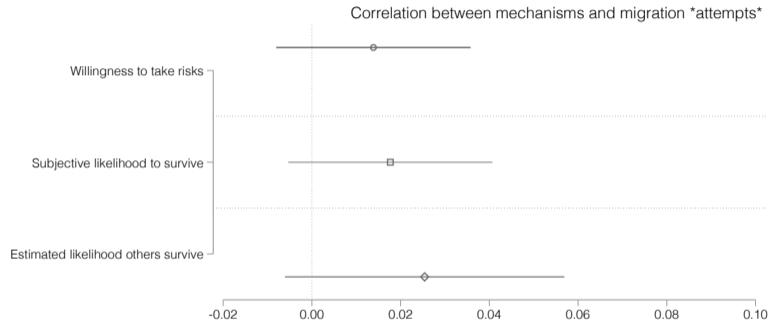


Figure 5: Effect of mechanisms and migration propensity



Discussion and Conclusion

- Robust empirical evidence (both cross-sectional & longitudinal) that supernatural beliefs predict migration propensity in Gambia:
 - ✓ prospective migrants who consult a healer for spiritual protection are approx. 5% more likely to migrate abroad
- Exploratory analysis of mediating role of general risk attitudes and overconfidence in causal chain connecting supernatural beliefs and migration behavior:
 - ✓ statistically significant correlation between visiting a healer and possible mechanisms but no correlation between our outcome measure (migration) and mechanisms



- First quantitative study on supernatural beliefs and practices and migration propensity with migration behavior as outcome (over time)
 - adds to the literature on individual level determinants of high-risk migration
- Spiritual beliefs & practices may help migrants navigate intrinsic uncertainty by providing them with a sense of control
- Policy implications: information campaigns highlighting the risks of migration may be less useful if migrants perceive themselves to be “blessed with spiritual protection”



Thank you for your attention

johanna.gereke@mzes-uni.mannheim.de

