

Appendix

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A Project Materials & Ethical Review

All hypotheses and analysis procedures were pre-registered (ANONYMIZED). Materials used in project implementation of this project, including the Tolerant Engagement Forum Curriculum, are available in the ANONYMIZED of the ANONYMIZED. This project underwent institutional review and received approval by the Ethiopian Society of Sociologists, Social Workers and Anthropologists (ESSWA).

B How representative is the sample of the student population?

Given that we have a full roster of students at AAU, we can compare demographic characteristics of students in our sample against the broader student body to get a sense for how representative our sample is. The figures below compare our sample against the broader student body on the few characteristics we have information on: gender, the student's year in school, home region (closely tied to the concept of ethnicity in Ethiopia), and the student's major/department. Overall, while there are some small differences – for instance, women are slightly underrepresented in our sample relative to the student body – our sample appears largely similar to the broader student body population.

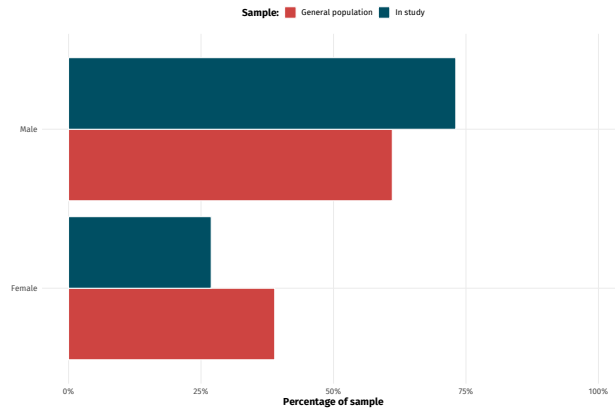


Figure A1: Comparison of gender distribution in study sample and student population.

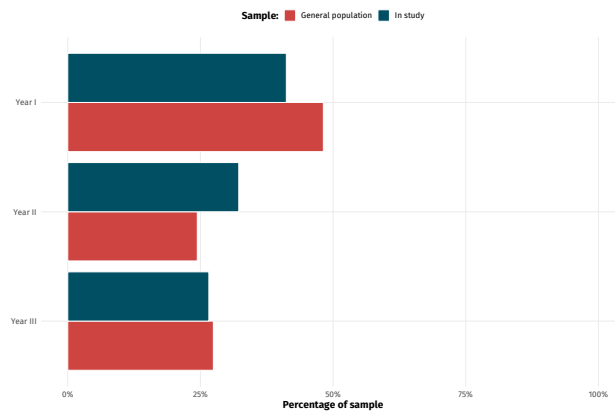


Figure A2: Comparison of class year distribution in study sample and student population.

Sample: ■ General population ■ In study

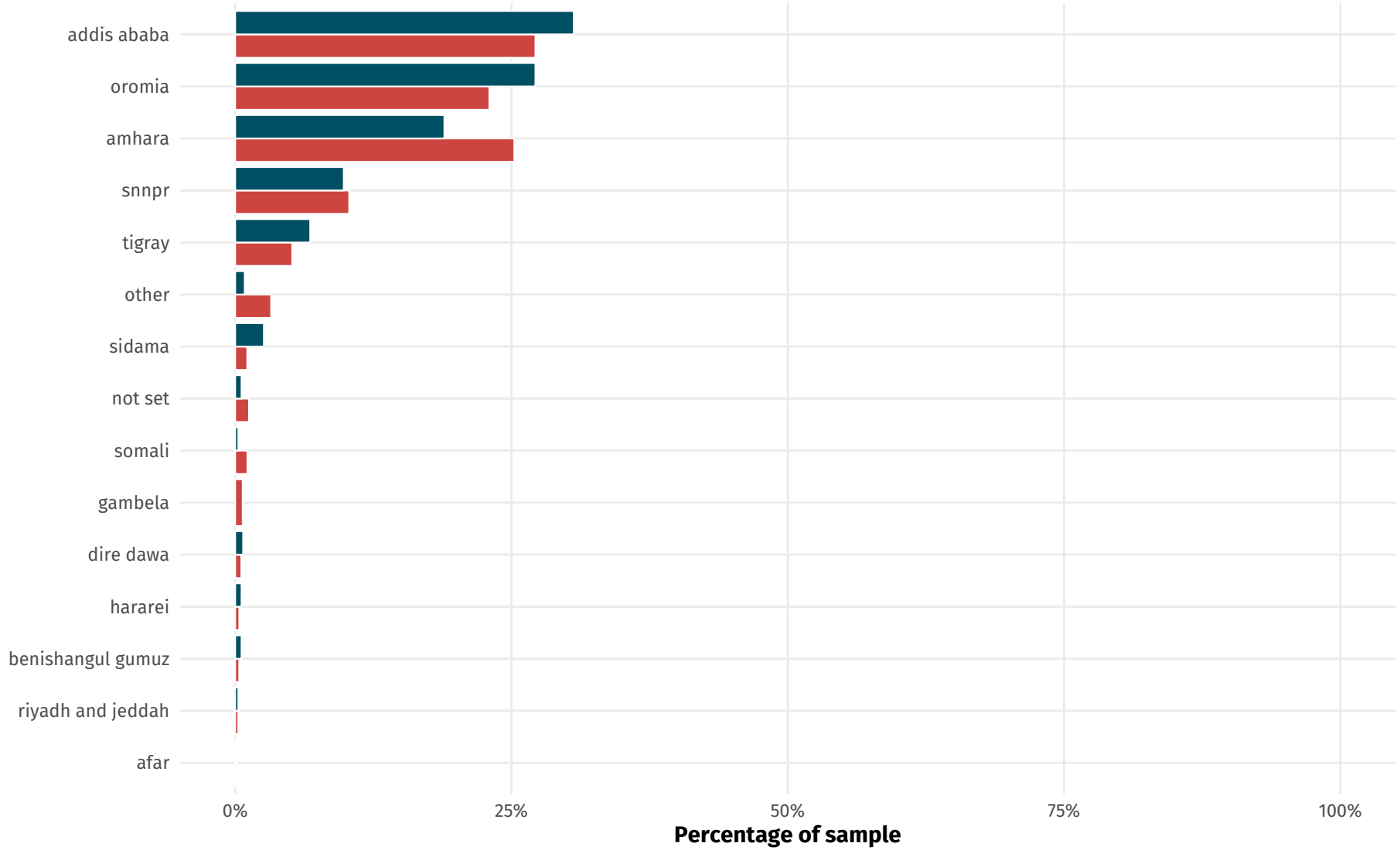


Figure A3: Comparison of home region distribution in study sample and student population.

C Baseline Characteristics

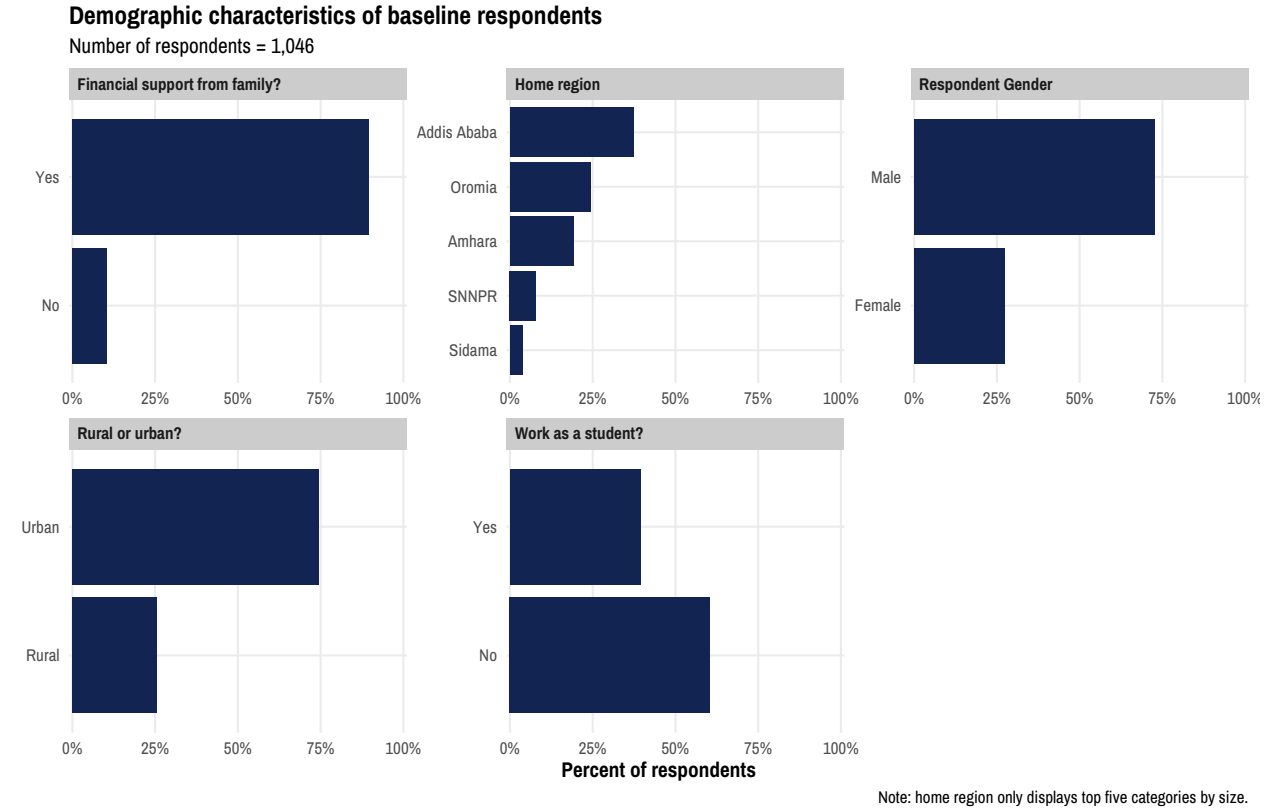


Figure A4: Baseline characteristics of study sample.

D Outcome measures

D.1 Index construction

As discussed in the pre-analysis plan (PAP), we aggregate outcome measures into averaged z-score *indices* for the purposes of hypothesis testing. Z-scores are constructed by subtracting the mean of the control group from each observation and dividing by the standard deviation of the control group, for each outcome measure. The averaged z-score index is constructed by averaging the z-scores across all the outcome measures that belong to that indicator. The result is indices measuring each of the primary and secondary outcome indicators.

The indices are constructed as follows:

$$Z_j = \frac{1}{N_j} \sum_{i=1}^{N_j} \frac{Y_{ij} - \mu_i^C}{\sigma_i^C} \quad (1)$$

where:

- Z_j is the average z-score for indicator j .
- N_j is the number of outcome measures related to indicator j .
- Y_{ij} is the observed value of outcome measure i for indicator j .
- μ_i^C is the mean value of outcome measure i in the control group.
- σ_i^C is the standard deviation of outcome measure i in the control group.

D.2 Civic and Political Engagement Outcome Measures

Primary Measure 1: Civic Engagement

First, we consider the impact of the TEF on civic engagement, which we define as voluntary engagement with non-government institutions and organizations. The intervention aimed to increase civic engagement by exposing participants to new information, encouraging the creation of new social ties, and connecting participants with representatives of civil society. The main outcome here is a civic engagement index comprised of survey responses on the following issues: 1) attending a community or student government meeting (count), 2) attending an NGO event, 3) contacting community/student government representative, 4) contacting an NGO, 5) intention of joining a voluntary organization, 6) becoming a member of a voluntary organization since the intervention, 7) participation in a protest and 8) volunteering for an NGO. Overall, based on the logic of the intervention, we expect that TEF participants will be more likely to engage in these civic activities by a) becoming more aware of new opportunities and b) establishing social ties with other students that lead to some form of social pressure to follow through and engage based on this information.

Primary Measure 2: Political Engagement

Second, we consider the impact of the TEF on political engagement, which we define as engagement with government institutions and political parties. Similarly to civic engagement, the intervention aimed to increase political engagement by encouraging new social ties and connecting participants with representatives of government agencies. Further, existing theories often point to a spillover effect in which new civic engagement can spur greater political participation as well (e.g. [Boulding and Holzner \(2021\)](#)). However, given the sensitive political context in Ethiopia at the time of our study, we expected increased engagement with government to be a more difficult objective than increased civic engagement.

In addition to attitudinal questions, we also include a behavioral measure of political engagement in our survey. To measure whether treated participants are more likely to engage in contact with formal political institutions, we partnered with several government agencies and provided students with an opportunity to write messages to officials at each agency. We assess whether treated respondents are more likely to send a message, more likely to send more messages, or more likely to write longer messages.

The main measure for this outcome family is a political engagement index constructed from survey responses on the following topics: 1) behavioral measures of messages to government ministries, 2) contacting a government official, 3) signing a petition and 4) intending to or becoming a member of a political party.

Secondary Measure 1: Sectarian Engagement

Next, we also test for whether the intervention specifically increases engagement through sectarian means rather than broader civic or political avenues. For this outcome, we use survey measures of 1) intention to join or become a member of an ethnic-based interest group and 2) intention to join or become a member of a religious group.

Secondary Measure 2: Efficacy and Obstacles

One mechanism through which contact with civil society and government employees and information about opportunities to participate may result in higher engagement is changes in perceived efficacy either of youth broadly or at the individual level. We measure efficacy via our respondents' perceptions on whether 1) youth are given adequate opportunities to engage, 2) youth participation can help bring positive change and 3) their personal participation can help bring positive change to the country.

The TEFs also focused on reducing barriers as a mechanism to increase engagement. For example, providing information about specific opportunities to participate, the intervention may reduce search costs or increase interest. Similarly, putting students in direct contact with politically active peers and elites may normalize participation and reduce concerns about potential risks. We measure this outcome using an index constructed from respondents' perceptions of following items as obstacles to engagement: 1) lack of time or economic resources, 2) lack of information, 3) lack of interest, 4) fear of other peoples' opinions and 5) fear of other consequences.

Secondary Measure 3: Future Plans

Finally, while the intervention was primarily designed to encourage immediate engagement with formal civic and political institutions, it may also encourage students' interest in or the legibility of careers in the public sector or civil society. To investigate this potential impact, we ask students several questions about their career plans after graduation including interest in working in civil society, politics, the public sector, running for political office, and starting an NGO.

D.3 Tolerance and Social Cohesion Outcome Measures

Primary Indicator 1: Political and Inter-group Tolerance

To measure the effect of the TEFs on political and inter-group tolerance, we draw on a module of survey questions that measure varying aspects of tolerance, including attitudes towards other political parties and ethnic groups, supporting political violence against other groups, and disapproval of political compromise. Following the large theoretical and empirical literature related to contact theory and prejudice reduction, we expect that participation in the TEFs will tend to reduce intolerance towards outgroup members and reduce support for political violence and rule-breaking. Primarily, we expect this to occur via the establishment of new social ties with out-group members and the TEF's structured dialogue related to tolerance on sensitive political and social issues in Ethiopia.

Primary Indicator 2: Social Cohesion and Trust

Finally, to measure the effect of the TEFs on social cohesion and trust we draw on a module of questions that measures varying aspects of social unity and identity. We use the following variables to construct an index of social cohesion focusing on identity and ethnic tolerance: 1) Ranking of Ethiopian identity compared to regional and ethnic

identities, 2) Perceptions of diversity as strength (likert), 3) Perceptions of Ethiopian unity (likert), 4) Support for leaders from other ethnic groups (likert), and 5) Trust in students from other ethnic groups. We expect that the TEF would increase participants’ feelings of national unity and identity, while still respecting Ethiopia’s rich ethnolinguistic diversity. We expect these effects to occur via similar mechanisms as the inter-group tolerance ones outlined above, but with the additional mechanism that the TEFs sought to highlight national unity and commonalities amongst youth as an identity in its own right.

Secondary Measure 1: Perceptions of Discrimination

TEFs provide students with an opportunity to learn from inter-group discourse. We will examine the effect of this discourse on whether respondents believe that their own ethnic group discriminates against others (Q74). We expect that the TEF may cause students to become more aware of the discrimination faced by other groups.

Secondary Measure 2: Preferences for Ethnic Federalism

We also expect that dialogue will give students a chance to hear other perspectives and reflect on governance issues in Ethiopia. We will look at preferences for Ethiopia’s states to be drawn according to ethnic homeland boundaries or redrawn based on geographical features (Q23). We expect that the TEF may cause participants to prefer a non-ethnic arrangement for federal states.

Secondary Measure 3: Out-group Social Contact

Finally, we look at the impact of the TEF interventions on out-group social contact. If the TEFs created lasting social ties, inter-group dialogue may have provided opportunities to these ties to be forged between members of different ethnic and political groups. Specifically, we examine indicators of how frequently students report interacting with people from other ethnic groups and people from other political parties.

E Estimation

Our pre-registered approach uses ANCOVA rather than a difference-in-differences estimator. We base this choice on a literature that indicates the former has greater statistical power when autocorrelation of the outcomes across endline and baseline is relatively low (while not reducing power when autocorrelation is high) (McKenzie, 2012). Further, since respondents were assigned to treatment arms with differential probability across blocks, we include the interactions between the treatment indicator and block fixed effects suggested by Gibbons, Suárez Serrato and Urbancic (2018).

E.1 Complier Average Causal Effects

We estimate the CACE using the standard two-stage least squares (2SLS) approach, with the randomized invitation to participate serving as an instrument for actual participation. Our regression specification is as follows:

$$\text{Stage 1: Participation}_i = \alpha + \beta_1 \cdot \text{Invitation}_i + \epsilon_i \tag{2}$$

$$\text{Stage 2: } Y_i = \alpha + \beta_2 \cdot \hat{\text{Participation}}_i + \epsilon_i \tag{3}$$

where:

- $Participation_i$ is a binary variable indicating whether participant i actually attended the TEFs,
- $Invitation_i$ is a binary variable indicating whether participant i was invited to the TEFs,
- $\hat{Participation}_i$ is the predicted value from the first stage,
- Y_i represents the outcome of interest for participant i ,
- $\pi_0, \pi_1, \alpha,$ and β are coefficients to be estimated,
- ν_i and ϵ_i are error terms.

E.2 Heterogeneous treatment effects

We also have theoretical reasons to expect heterogeneous treatment effects across groups. For example, students that feel more confident participating in dialogue may experience a stronger treatment effect. This may include participants from dominant ethnic groups, male participants, and older students (Year 3). Alternatively, participants from more cosmopolitan backgrounds, such as those of higher socio-economic status¹ or originally from Addis Ababa or other urban areas, may be more exposed to diversity and opportunities for participation, thereby weakening the effect of the treatment. To estimate heterogeneous effects, we will interact a binary indicator for each group with the treatment variable.

F Additional estimates of ITT TEF effects

¹We operationalize family socio-economic status by asking whether citizens work in order to pay their tuition.

Effect of TEFs on political engagement

Intent-to-treat effect estimate of TEF participation.

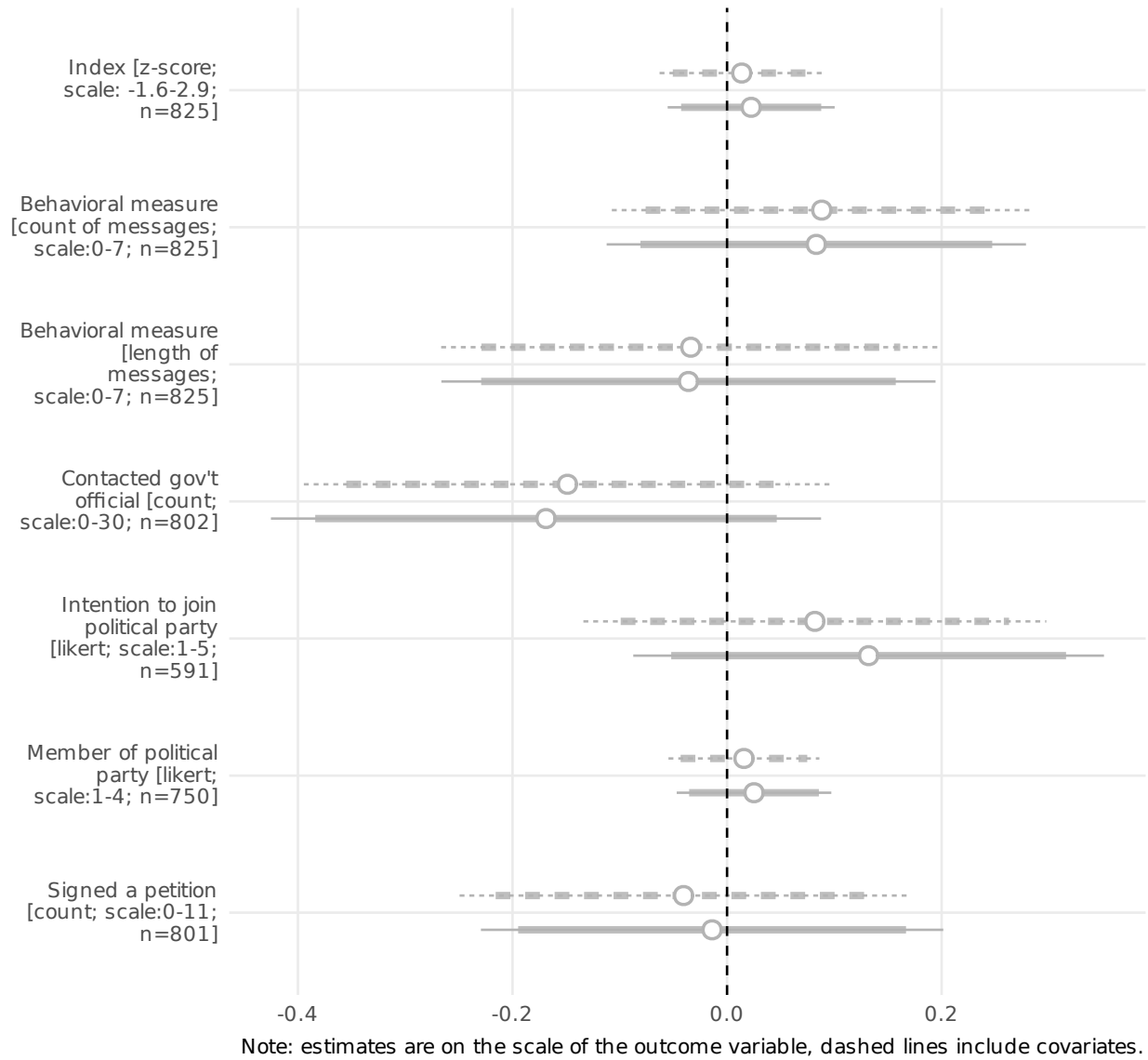


Figure A5: Effect of the TEFs on political engagement. Estimates are on the scale of the outcome variable, dashed lines include estimates from models using pre-treatment covariates.

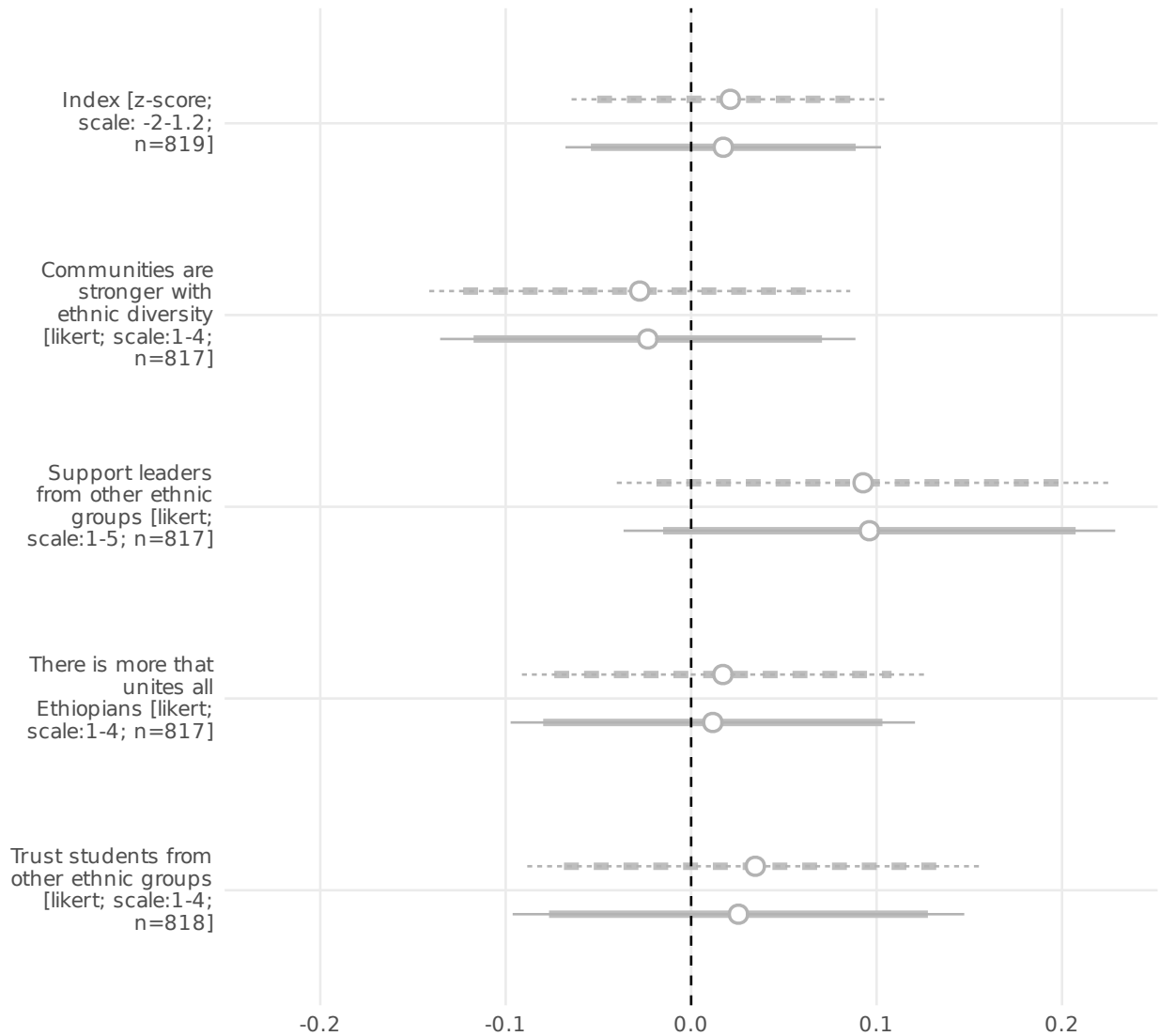
Effect of TEFs on uptake of volunteer opportunities:
Intent-to-treat effect estimate of TEF participation

	Base	Covariates
Treatment	0.084*** (0.017)	0.081*** (0.017)
Constant	0.026* (0.010)	-0.003 (0.058)
Work for income		0.013 (0.015)
Urban background		0.017 (0.017)
Family support		-0.020 (0.028)
Region background		0.004+ (0.002)
Ethnic background		0.000 (0.000)
Num.Obs.	825	825
R2 Adj.	0.044	0.045

Figure A6: Effect of the TEFs on Behavioral Volunteering Outcomes.

Effect of TEFs on social cohesion

Intent-to-treat effect estimate of TEF participation.



Note: estimates are on the scale of the outcome variable, dashed lines include covariates.

Figure A7: Effect of the TEFs on social cohesion. Estimates are on the scale of the outcome variable, dashed lines include estimates from models using pre-treatment covariates.

Effect of TEFs on efficacy

Intent-to-treat effect estimate of TEF participation.

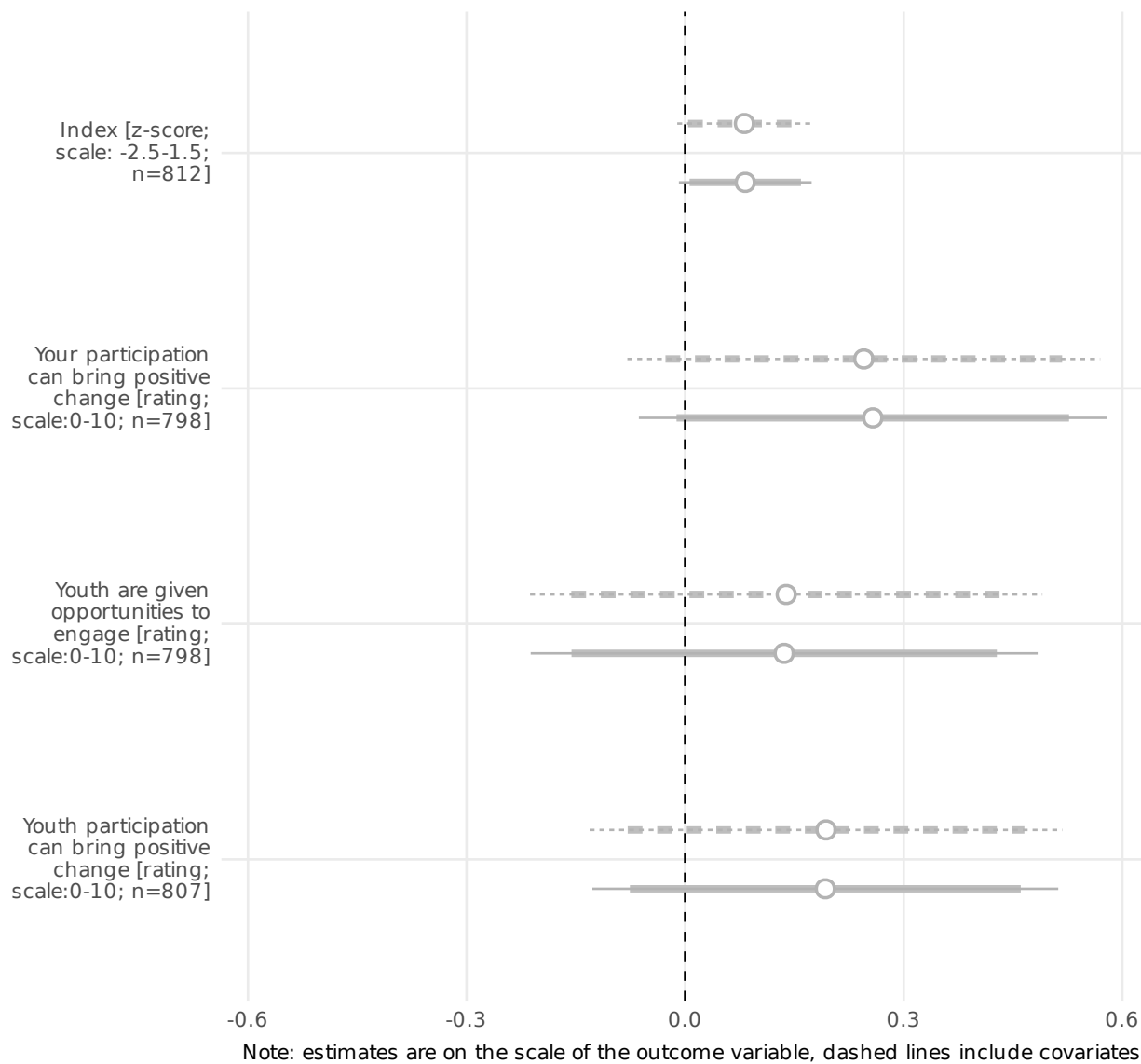
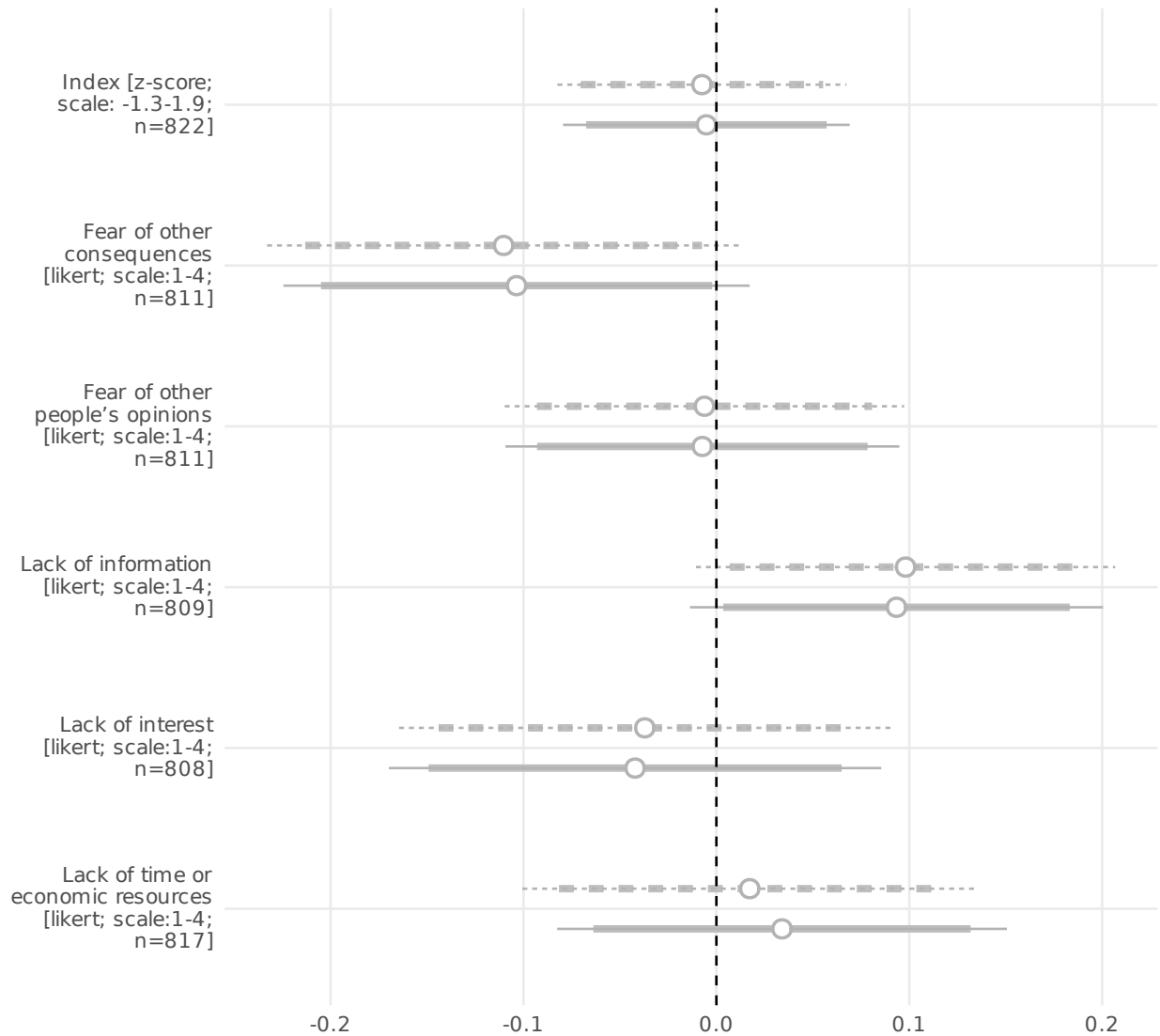


Figure A8: Effect of the TEFs on Perceptions of Efficacy. Estimates are on the scale of the outcome variable, dashed lines include estimates from models using pre-treatment covariates.

Effect of TEFs on obstacles to participation

Intent-to-treat effect estimate of TEF participation.

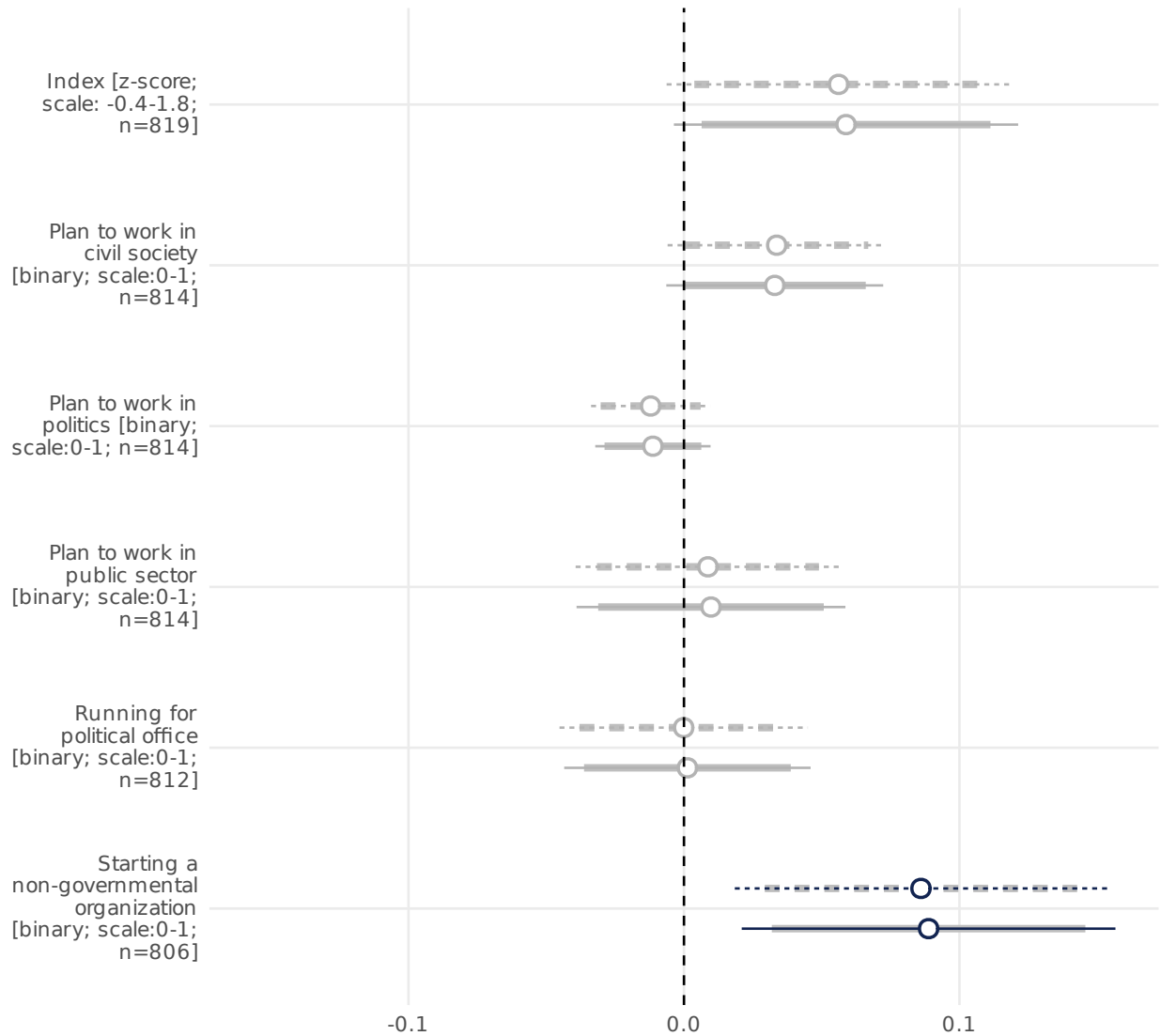


Note: estimates are on the scale of the outcome variable, dashed lines include covariates.

Figure A9: Effect of the TEFs on social cohesion. Estimates are on the scale of the outcome variable, dashed lines include estimates from models using pre-treatment covariates.

Effect of TEFs on future plans

Intent-to-treat effect estimate of TEF participation.



Note: estimates are on the scale of the outcome variable, dashed lines include covariates.

Figure A10: Effect of the TEFs on Future Career Plans. Estimates are on the scale of the outcome variable, dashed lines include estimates from models using pre-treatment covariates.

Effect of TEFs on outgroup contact

Intent-to-treat effect estimate of TEF participation.

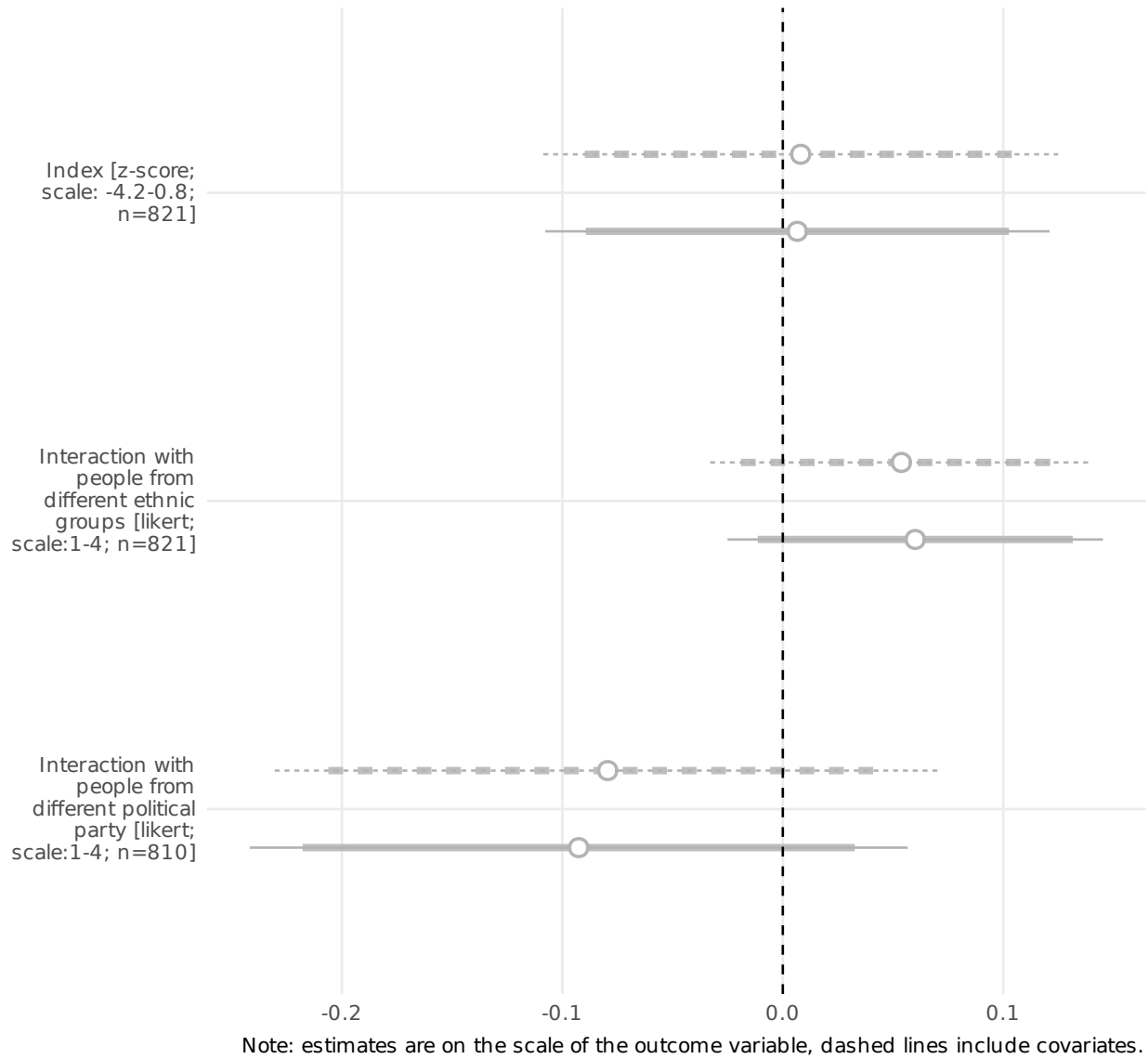
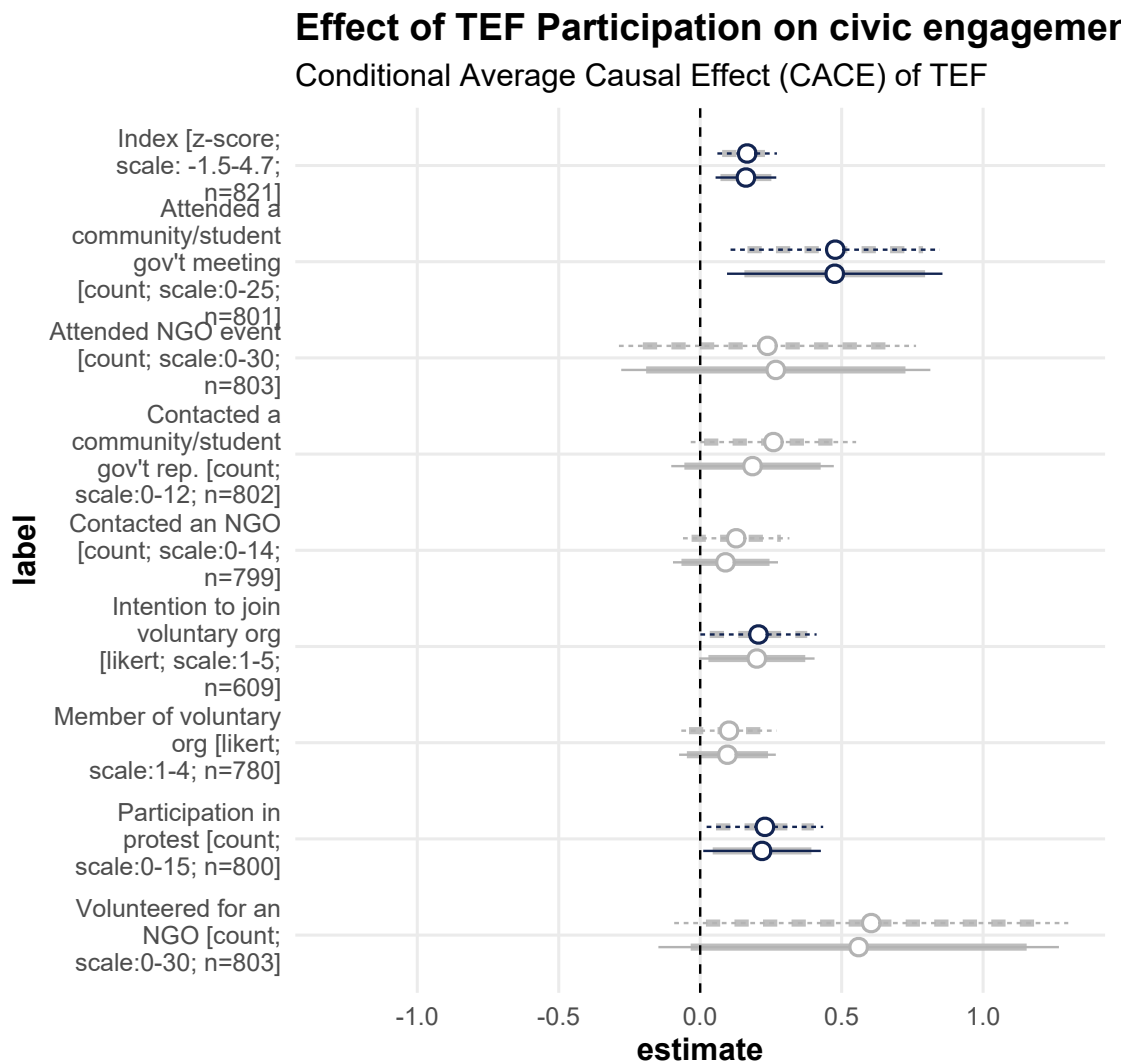


Figure A11: Effect of the TEFs on Out-Group Contact. Estimates are on the scale of the outcome variable, dashed lines include estimates from models using pre-treatment covariates.

G Compliance Average Causal Effects



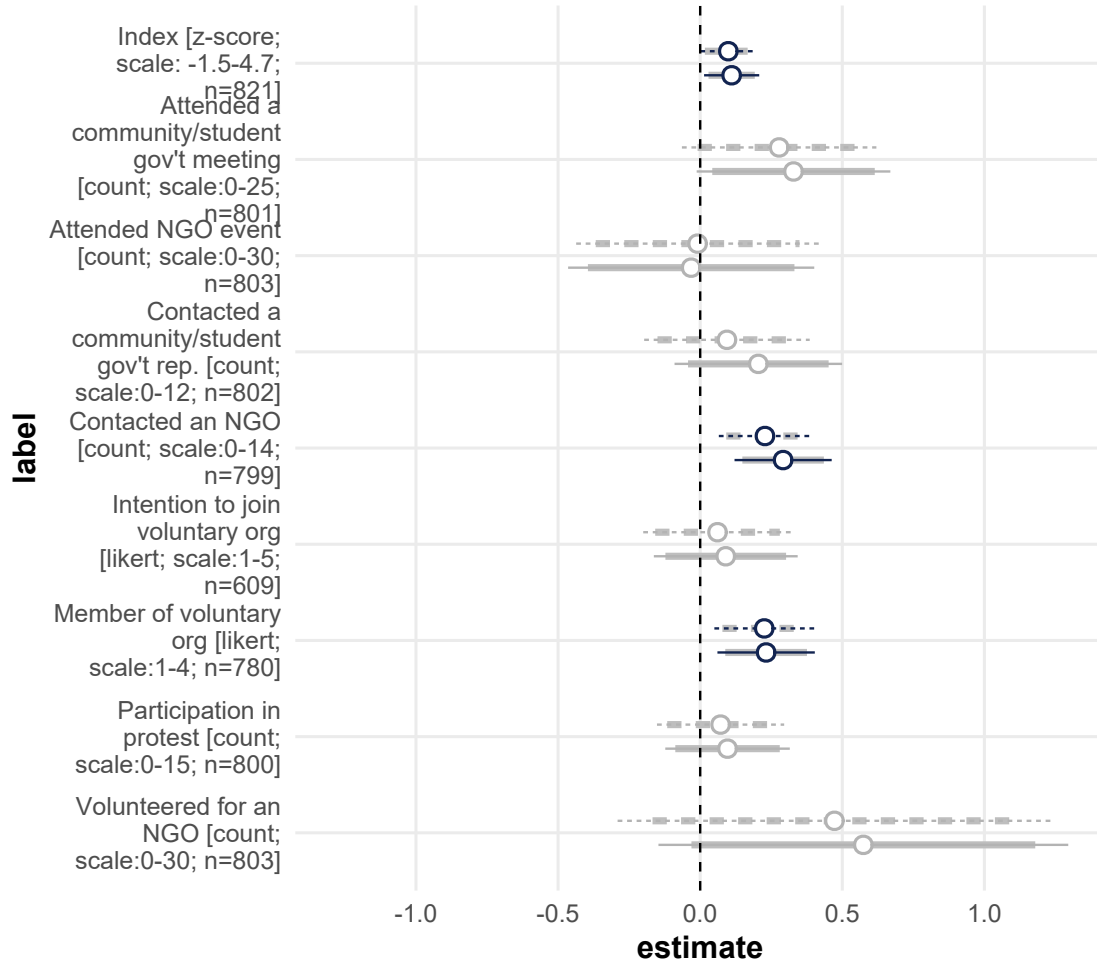
Note: estimates are on the scale of the outcome variable, dashed lines include covariates.

Figure A12: Effect of TEF Participation on civic engagement. Estimates are on the scale of the outcome variable, dashed lines include estimates from models using pre-treatment covariates.

H Heterogeneous treatment effects by new connections

Effect of Social Ties on civic engagement

Conditional Effect of New Friend via TEF



Note: estimates are on the scale of the outcome variable, dashed lines include covariates.

Figure A13: Conditional Effect of Making New Friend during TEF on civic engagement. Estimates are on the scale of the outcome variable, dashed lines include estimates from models using pre-treatment covariates.

I Focus Group Discussions

Here, we provide a brief overview of the focus group discussions (FGDs) held at AAU in the lead-up to the TEF events. The purpose of the FGDs was to inform the design of the TEFs and develop a better understanding of civic engagement from the students' point of view. FGDs were held primarily with students who were already active in student clubs but varied in gender, ethnic background, and year at the university.

FGD conversations and notes were transcribed and then summarized by FGD moderators and members of the team. We present some of this content below. Portions of the summaries below were further condensed for clarity and brevity through the use of a large language model.

I.1 Background Overview of the AAU Student Clubs

There are a wide range of student clubs at AAU. One such group is the Peace Club which operates in almost all public universities in Ethiopia. The group also has significant longevity: it was established in 2002 with the purpose of promoting peace among students within the campus and outside of campus in the communities where the students typically come from. At different points, the Club has collaborated with the Ministry of Federal Affairs and most recently the Ministry of Peace.

Participants' stressed that the group works primarily on peace-building and peace related matters in Ethiopia. The group organizes workshops and activities for the broader student body and locals in the community, including organizing sustainable dialogue forums, conflict-resolution skills training and workshops, and interactive meetings. In our interviews, participants' viewed these activities positively and generally saw them as efficacious and valuable. We spoke to students who belonged to a range of other organizations, the 'Good Man Club' (*Yebege Sew Kileb*), and 'Anti-Corruption Club' (*Yetsere Musena Kileb*).

With respect to youth engagement in these organizations, participants' highlighted the potential for broad student interest but low uptake. Some participants reported their organizations having over 1,000 members yet only a fraction participated regularly.

I.2 Understanding of Civic Engagement:

One goal of the FGDs was to explore students' conceptualization of civic engagement. For students, civic engagement included a broad range of behaviors and attitudes that were not necessarily tied to formal institutions. These activities can also manifest at different levels: the individual level, the community level, and at the level of society.

One theme that emerged in discussions was a widely-shared view that in more urban, "modern" communities civic participation was thin and "fragmented". For some of these students, the point of comparison was rural areas or areas further from the capital where they perceived more forms of civic participation. In the more traditional and rural communities of Ethiopia, students perceive greater participation in mutual aid work to reach community goals or to assist vulnerable factions of the population. They saw these practices as deeply embedded in the values and beliefs of these communities. Participants

added that the demographic composition of these communities, the long entrenched culture of cooperation, and the sense of belonging helped entrench civic engagement as a norm, in their view. According to participants, this is especially the case in rural areas where social bonds remain intact and strong and where they perceive that people help each other regardless of their social status or personal beliefs (e.g., religious practices).

However, many participants observed that this culture of engagement has been eroding over time, particularly in urban settings. They noted that civic participation in these areas is increasingly influenced by the 'values of modernization' and a growing sense of individualism and self-centeredness. This shift in mindset has negatively impacted civic participation in various ways. Participants noted what they viewed as a "loosening of connections" within neighborhoods, declining involvement in civic activities, and the fading participation of individuals in longstanding indigenous associations, such as the *edir*. The *edir* traditionally provides members with psychosocial, emotional, spiritual, and economic support, especially during times of loss and hardship.

Participants further commented that civic participation in urban areas, especially among elites, is being affected by the rise of social media. They viewed elites in particular as using civic engagement as a form of personal promotion rather than motivated by a genuine intent to help others and contribute to societal development. Additionally, they stressed that not everyone engages in civic activities to make a difference in their communities; some expect something in return. Overall, the focus group discussion participants agreed that while civic engagement has historically been present and takes various forms in the Ethiopian context, it needs to be nurtured to ensure its consistency and sustainability.

I.3 Barriers of Participation

The FGD participants identified several factors that served as barriers to youth engagement in Ethiopia. These factors include: i) students' low expectations of their own impact; ii) weak norms surrounding voluntary work and serving others; iii) insufficient financial resources allocated to youth activities; and iv) weak attention and support for student clubs from the university's management.

The FGD participants also emphasized that ethnic tension in Ethiopia has been a major source of conflict and internal displacement, especially in recent years. Polarized views and ethnically motivated political movements have exacerbated the problem. Public universities have become hot-spots for such tensions and violent conflicts, leading to significant disruptions in the regular teaching and learning process. According to the participants, ethnic tensions among students in public universities sometimes escalate into violence, resulting in loss of life and destruction of property. This environment has discouraged student participation and engagement in various organizational activities.

The participants unanimously agreed that the lack of tolerance among university students, leading to lethal conflicts, is a symptom of the broader failure of the education system and elites. They believe that the ongoing ethnic tensions and related disruptions in Ethiopia are largely driven by educated and political elites. The education system's failure has, according to the participants, led to the creation and perpetuation of false narratives and misunderstandings about the country's history.

Participants strongly asserted that the elites have manipulated the teaching of history in public settings in order to foster internal conflict and divisiveness. They argue that elites have distorted the true value of historical education, which is to learn from the past, celebrate positive experiences, and correct past mistakes. Despite this, the participants note that many false historical narratives are being propagated, leading to societal mistrust and division.

One participant elaborated:

“We have been taught a curriculum that allows textbooks to provide false narratives that magnify divisive outlooks along ethnic and religious lines. The textbooks were not designed to promote unity; instead, they often emphasize negative deeds.”

Another participant adds:

What we see now is an obvious result of this education system that produces ‘elites’ who do not seem to be a source of solutions...Universities have become a place where conflicts triggered by ethno-centric views and divisions based on various social and individual characteristics such as ethnicity, religious or political affiliations are entertained. I believe most of the textbooks developed in the last few decades give more focus on the negative parts of our history than the positive deeds. For example you may have heard of Emperor Haile Selassie as an oppressor of the Muslim community in Ethiopia; yet he played a key role in expanding Islamic schools in the country about which our Muslim brothers and sisters may not be taught to applaud. We should teach history not to aggravate negative deeds and thoughts, but to learn from past mistakes, if any, and move to the future with a strong sense of brotherhood.

Apart from issues with the education system and curriculum, the FGD participants noted that conflicts are also driven by competition for resources. This is particularly evident in the frequent conflicts that have erupted between neighboring regions over the past few decades.

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