Survey Instruments

Language, Identity, and Ethnic Cohesion in Schools

Ari Anisfeld Pepi Pandiloski

This document reproduces the screens students saw in the Gostivar Friendship Study, a field experiment in which Macedonian, Albanian, and Turkish high school students in Gostivar, North Macedonia, were randomly paired with a same- or different-ethnicity partner to play the cooperative video game *Overcooked! 2*. It covers the registration and assent form, completed during recruitment, and the survey students took during the game-day session.

Contents

1 Overview . . . 2

2 Registration and assent (before baseline) . . . 3

3 Game-day survey . . . 11

3.1 Login and introduction . . . 11

3.2 Solo play . . . 14

3.3 Priming block (varies by treatment arm) . . . 18

3.4 Partner play . . . 27

3.5 Gameplay quiz . . . 29

3.6 Partner questions . . . 31

3.7 Dictator games . . . 33

3.8 Inclusion of Other in the Self . . . 36

3.9 Partner-choice experiment (BACE) . . . 36

3.10 Preferences for a future partner . . . 38

1 Overview

Students interacted with the study through two Qualtrics instruments:

1. **Registration and assent** (Section 2). Completed online during recruitment, *before* the baseline survey and well before any game-day session. Parental consent was collected separately through a form emailed to the parent or guardian. Only students who completed registration, received parental consent, and took the in-school baseline survey (administered by M-Prospect; not shown here) were eligible for randomization into pairs.

2. **Game-day survey** (Section 3). Completed on a computer during the video-game session, weeks after registration. Each student in a pair took the survey on their own computer; facilitators logged in each computer before the student sat down.

Screenshots show the English version of each instrument. On the first screen, students chose to take the survey in Macedonian, Albanian, Turkish, or English. Text in the live survey that was filled in from earlier answers (e.g., a student's school or chosen rival) appears blank in some screenshots, which were taken in Qualtrics preview mode.

Table 1 summarizes the game-day flow. All students saw the same screens except for the priming block, which differed by treatment arm (Section 3.3).

Table 1: Game-day survey flow

	Block	Seen by
1	Facilitator login	Facilitator, all sessions
2	Welcome, name confirmation, consent to recording	All
3	Video-game experience	All
4	Solo play: tutorials, Level 1-1 practice, Level 1-2 practice and official play	All
5	**Priming block**	**Varies by arm:**
	Placebo (cell phones)	Control (co-ethnic pairs) and T1
	Common identity (Gostivar and own school)	T2
	Common foe (rival town and rival school)	T3
6	Special gameplay tip	All
7	Partner play (practice and official play)	All; motivational GIF varies by arm
8	Gameplay quiz	All
9	Prior acquaintance with partner and partner ratings	All; follow-ups if partner known
10	Dictator games	All
11	Inclusion of Other in the Self (IOS)	All
12	Partner-choice experiment (BACE)	All
13	Preferences for a future partner	All

2 Registration and assent (before baseline)

Students completed this form during recruitment, before the baseline survey and well before game day. It collected identifying and contact information, the student's assent, and the parent or guardian's contact details for the separate parental consent form.

Figure 1: Registration: Welcome and invitation

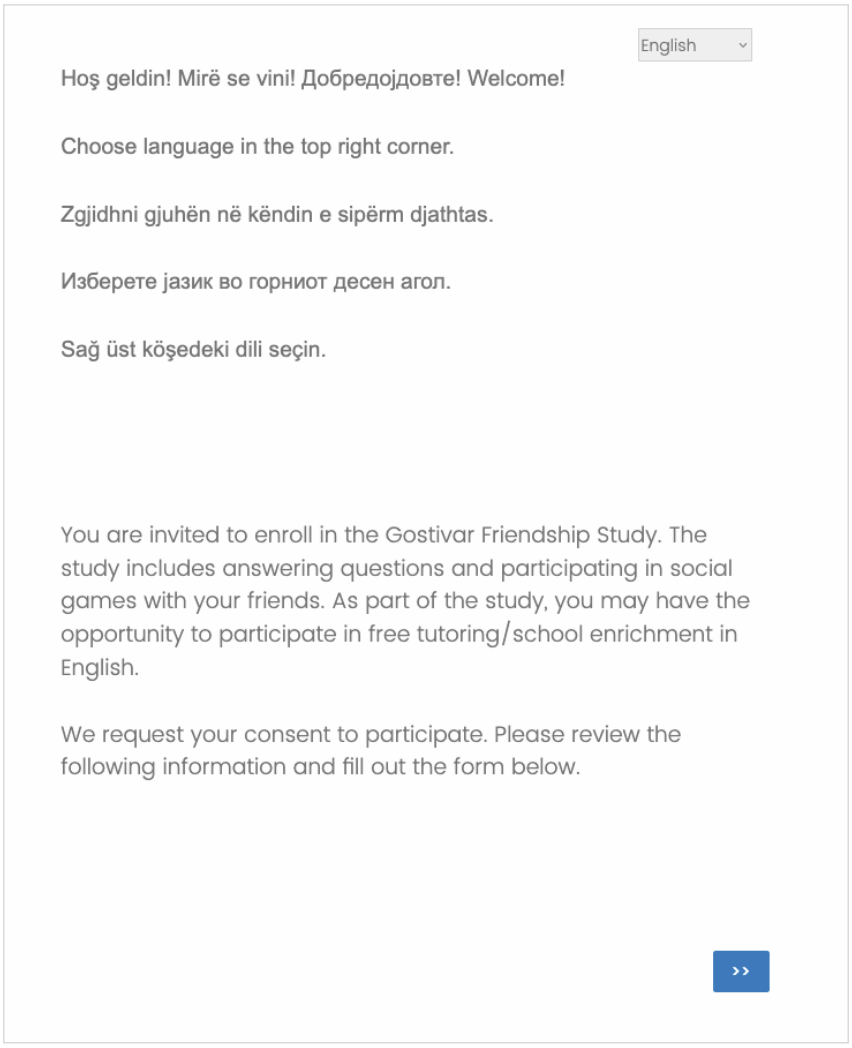


Figure 2: Registration: Name, date of birth, and sex

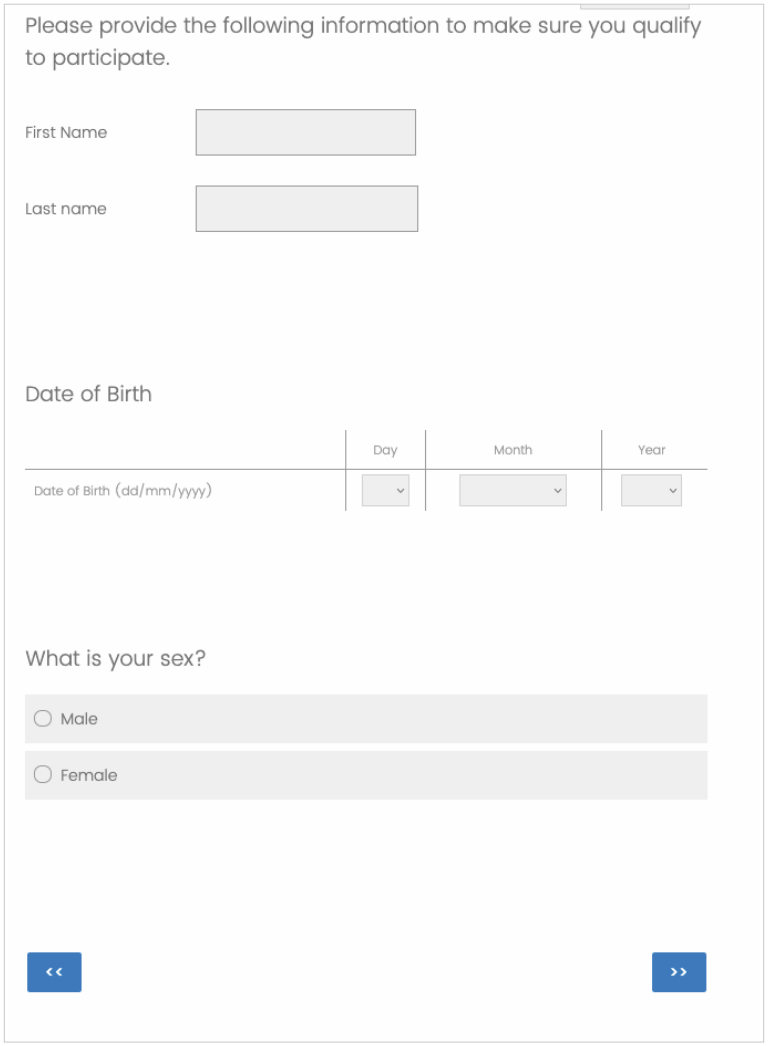


Figure 3: Registration: School

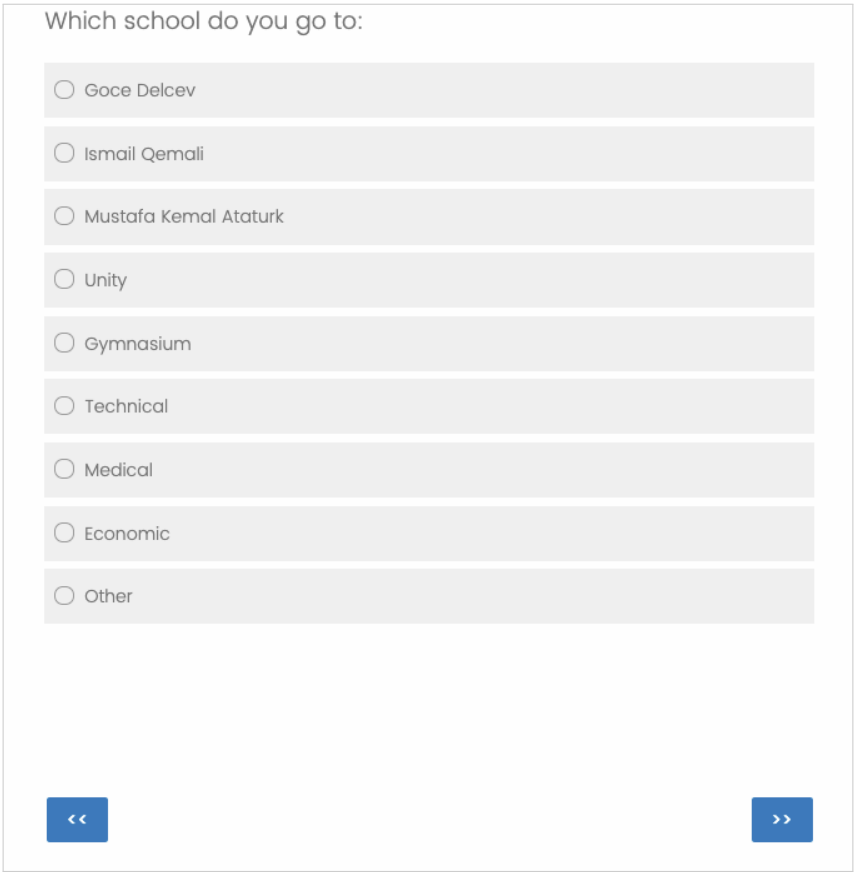


Figure 4: Registration: Student contact information

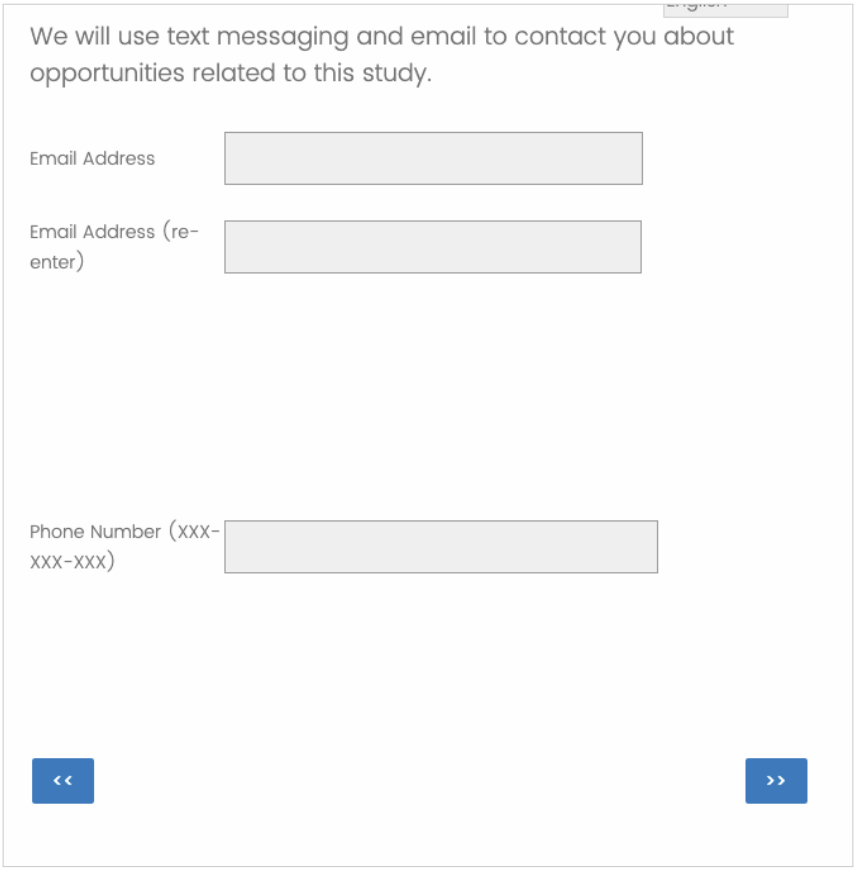


Figure 5: Registration: Parent or guardian contact for parental consent

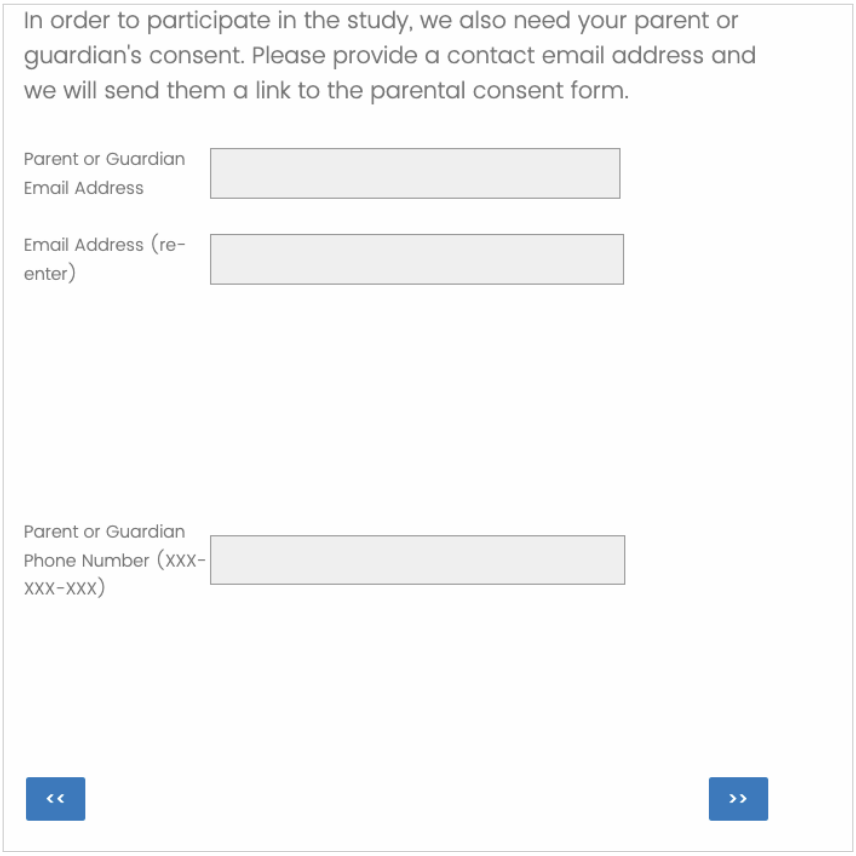


Figure 6: Registration: Assent form (1 of 2)

Study number: IRB22-1589

Study name: Gostivar Friendship Study

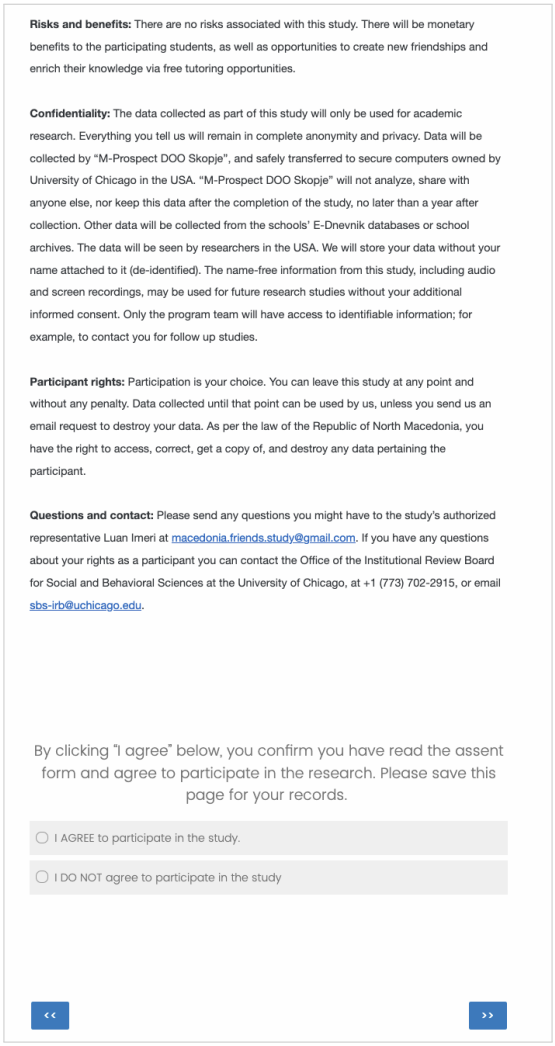
Title of Study: Friendships and educational attitudes in Gostivar's schools

Description: We are researchers from the University of Chicago in the USA. We are conducting a study to understand how students make friends and learn about educational opportunities. Participation includes answering questions and participating in games. As part of the study, you may have the opportunity to participate in free tutoring/school enrichment in English.

The initial survey will last roughly 20 - 30 minutes and will occur in the during this academic year. If you choose to participate, we will ask questions about how you make and maintain friends and about your educational attitudes. The survey will be done by a professional survey firm "M-Prospect DOO Skopje". After the initial survey, you may have opportunities to play social computer games, participate in free tutoring, and participate in other surveys. During study sessions, we may record your voice and may also record the computer screen when you play computer games.

Compensation: Students will have opportunities to win awards as part of compensation for the study. Awards will include cash—the typical rewards will be roughly 1150 Denar over the course of the study. The exact amount depends on random chance and how students play the various games.

Figure 7: Registration: Assent form (2 of 2)



Notes: Continuation of the same page as Figure 6.

Figure 8: Registration: Recruiting interviewer ID

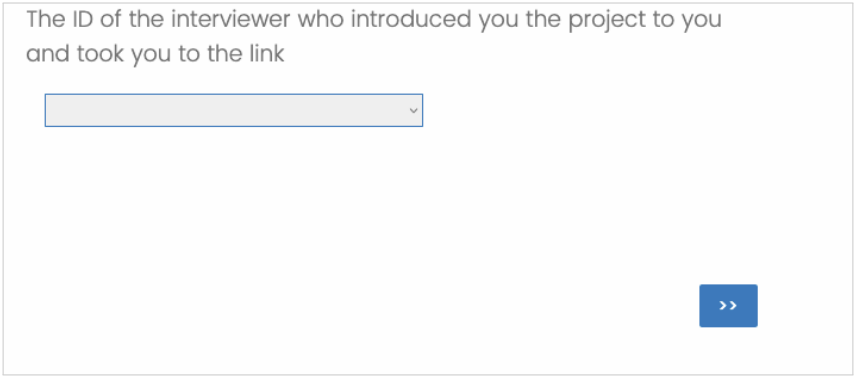
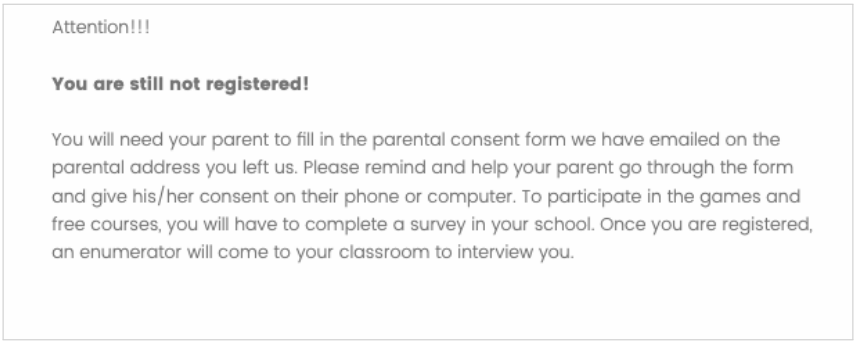


Figure 9: Registration: Closing screen

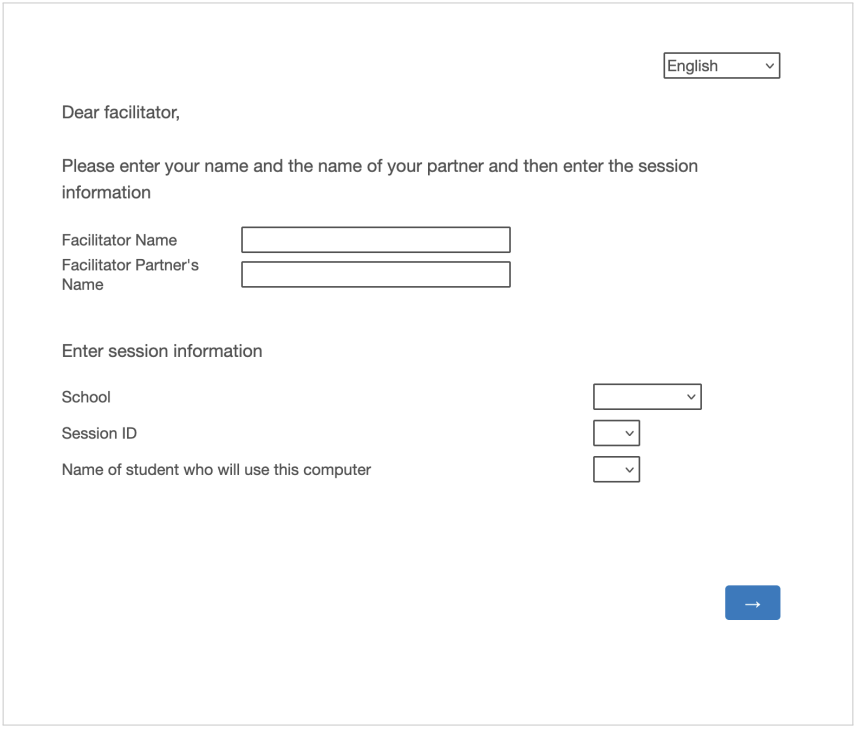


Notes: Students were registered only after a parent or guardian completed the emailed parental consent form.

3 Game-day survey

3.1 Login and introduction

Figure 10: Facilitator login



Notes: Completed by the facilitator before the student sat down. The student's name is selected from the session roster.

Figure 11: Welcome and language selection

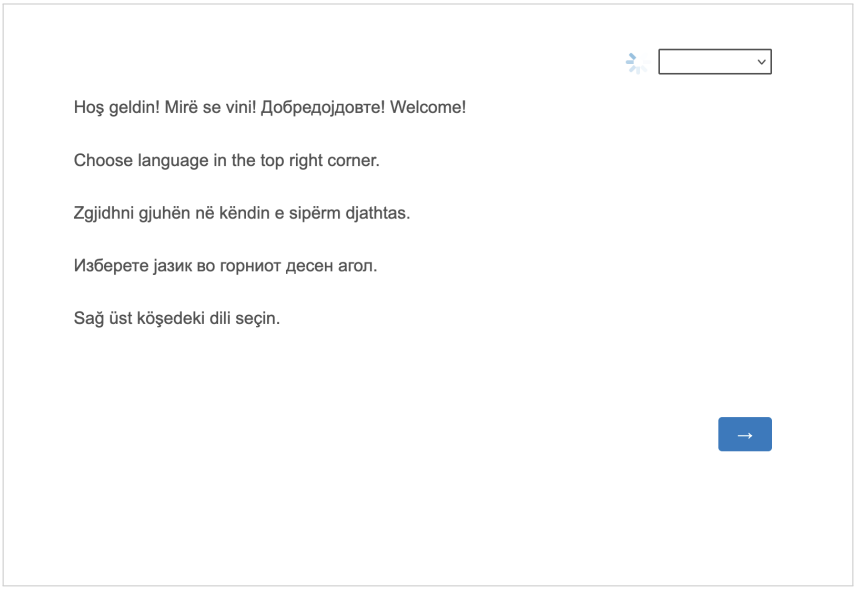


Figure 12: Session overview

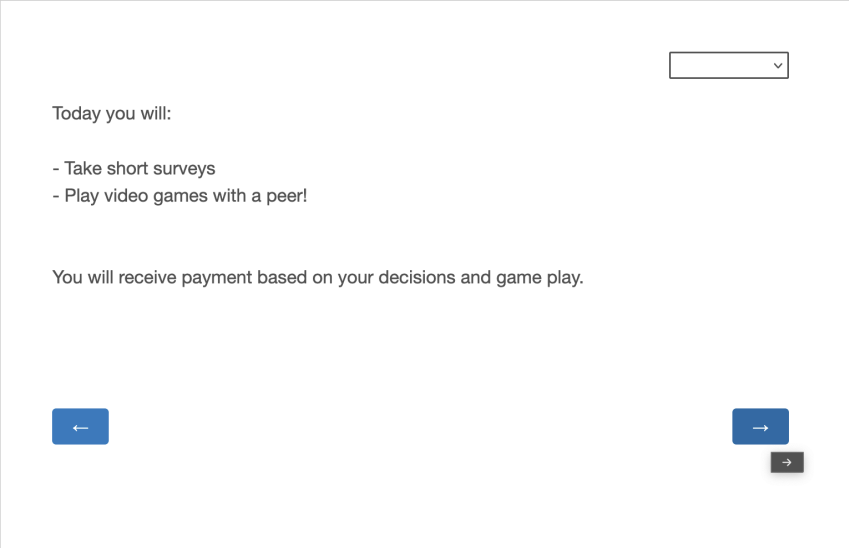
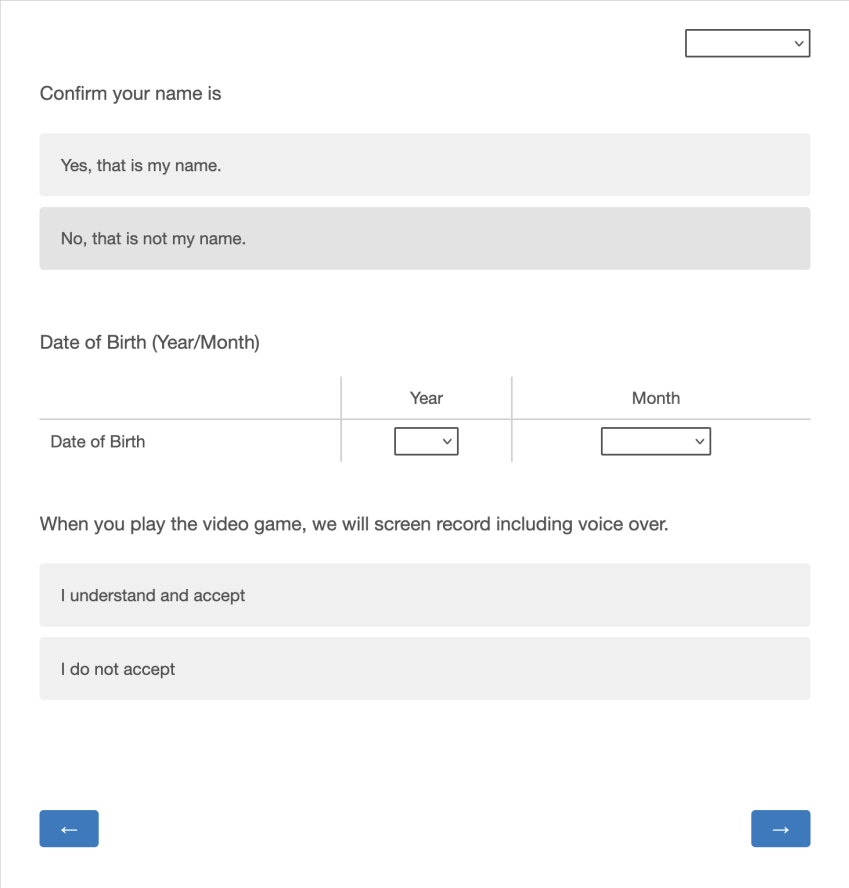
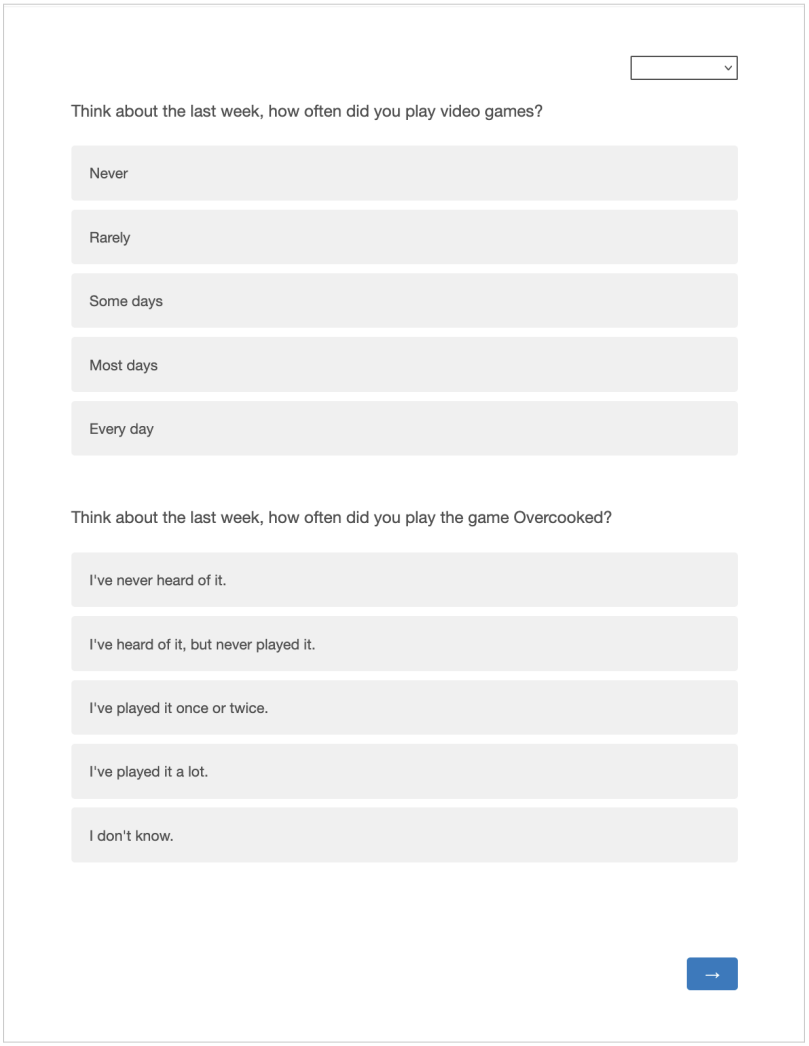


Figure 13: Name confirmation, date of birth, and consent to recording



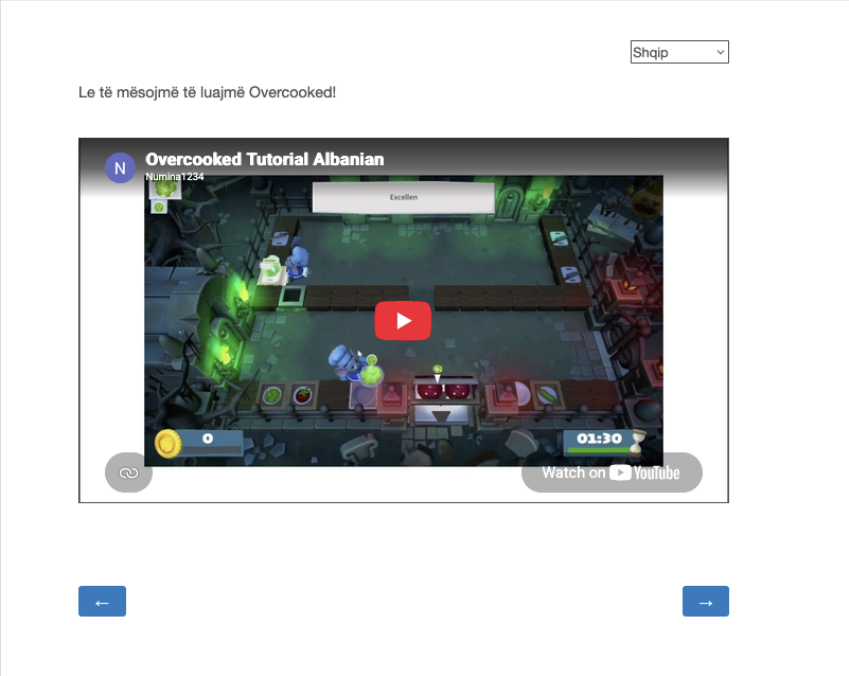
Notes: In the live survey, the student's name (from the facilitator login) appears after "Confirm your name is." If the student answered "No," the survey ended and they were told to alert their teacher.

Figure 14: Video-game experience



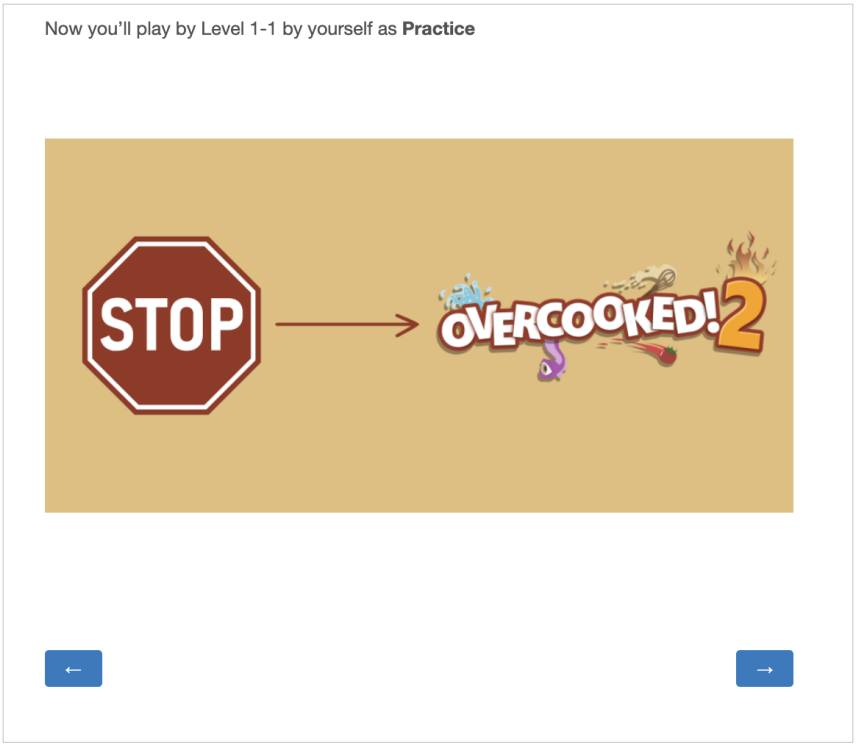
3.2 Solo play

Figure 15: Tutorial video: Let's learn to play Overcooked!



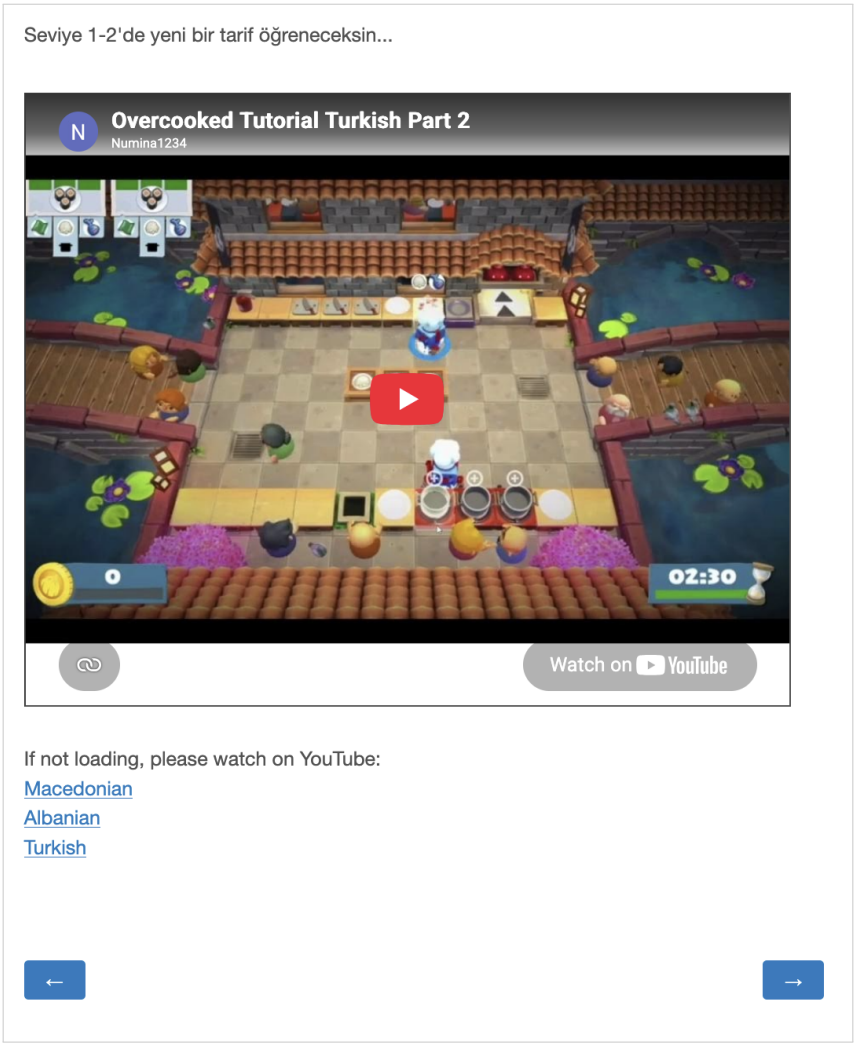
Notes: Shown here in the Albanian version. Each language version embeds its own video.

Figure 16: Solo practice: Level 1-1



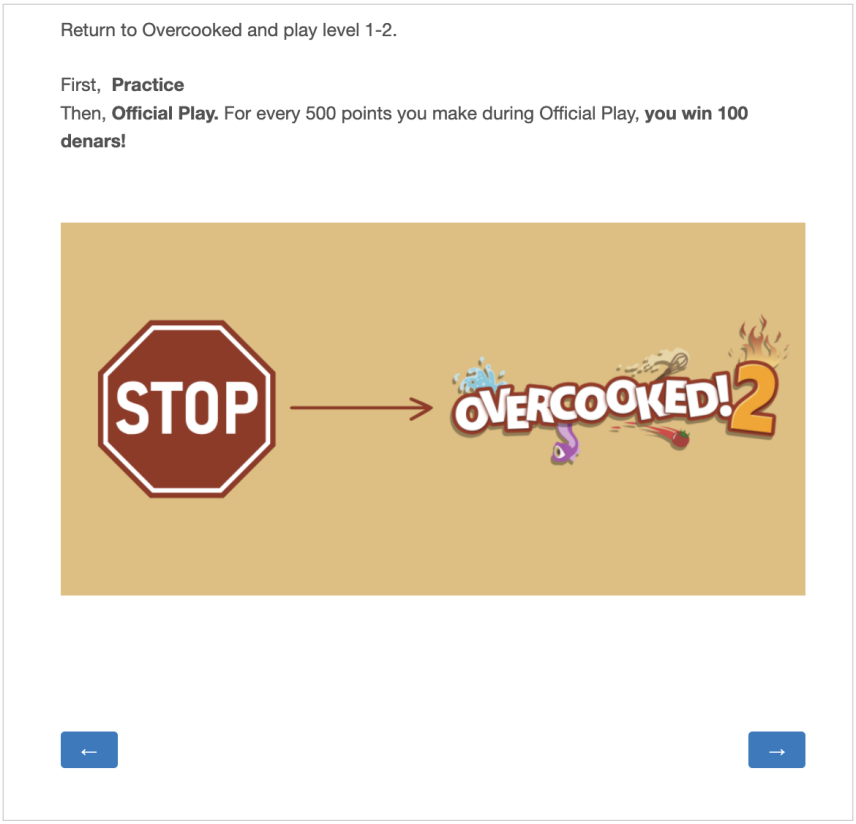
Notes: Students switched to *Overcooked! 2* and played alone, controlling both chefs.

Figure 17: Tutorial video for Level 1-2



Notes: Shown here in the Turkish version. Each language version embeds its own video, with fallback YouTube links.

Figure 18: Solo play: Level 1-2 (practice, then official play)



Notes: Official-play scores were incentivized at 100 denars per 500 points.

3.3 Priming block (varies by treatment arm)

After solo play and before partner play, each student saw one of three priming blocks, determined by the pair's randomized treatment arm. Control (co-ethnic) pairs and T1 cross-ethnic pairs saw the same identity-neutral placebo block. T2 primed shared town and school identity. T3 primed shared identity against a common rival. See the paper's appendix on treatment arms for analysis by arm.

Placebo block: Control and T1.

Figure 19: Placebo (Control and T1): Cell-phone questions

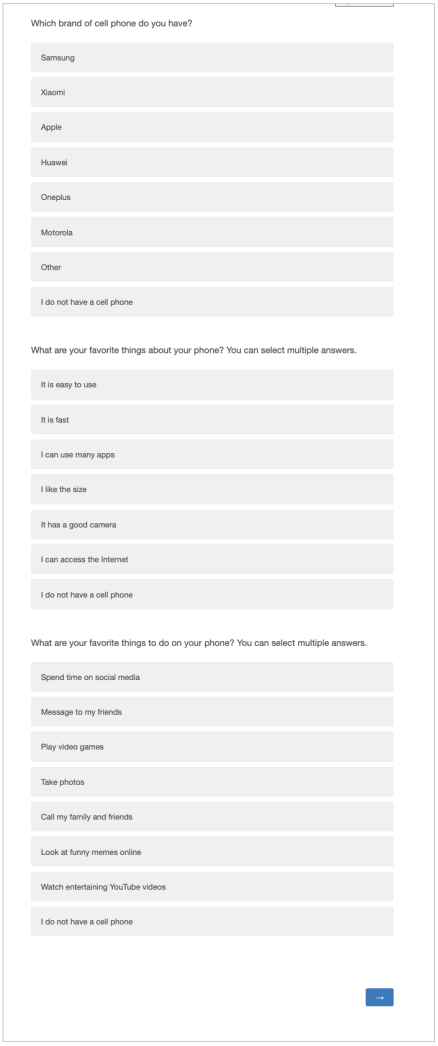


Figure 20: Placebo (Control and T1): Cell-phone images

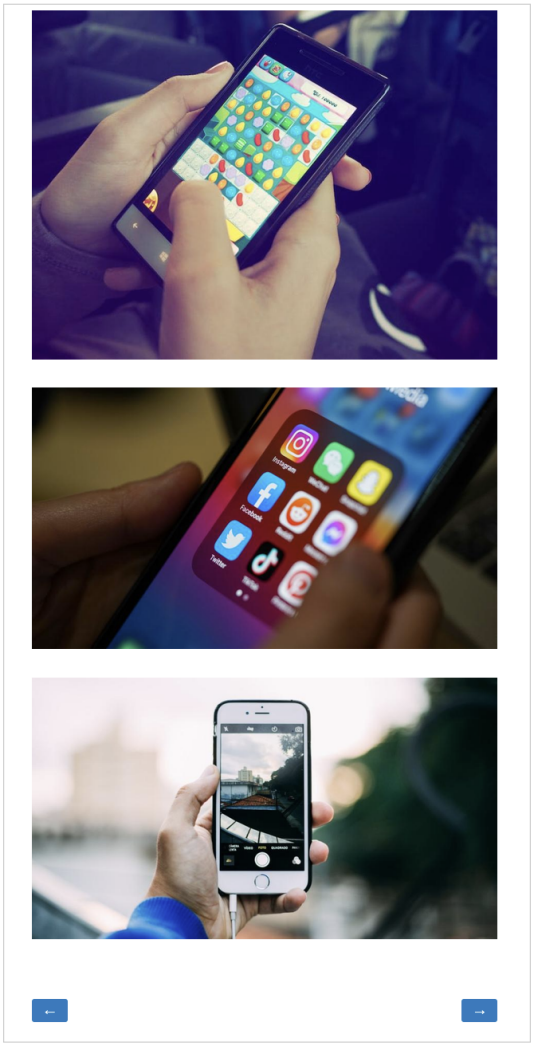
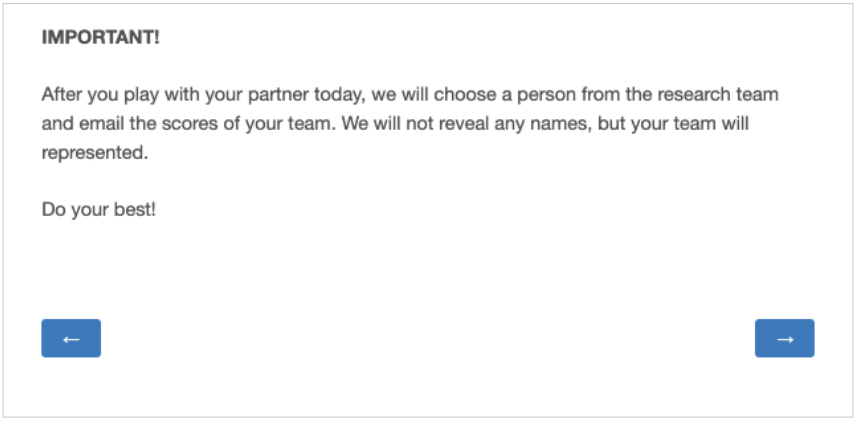


Figure 21: Placebo (Control and T1): Score-sharing notice



Common identity block: T2.

Figure 22: Common identity (T2): Favorite things about Gostivar

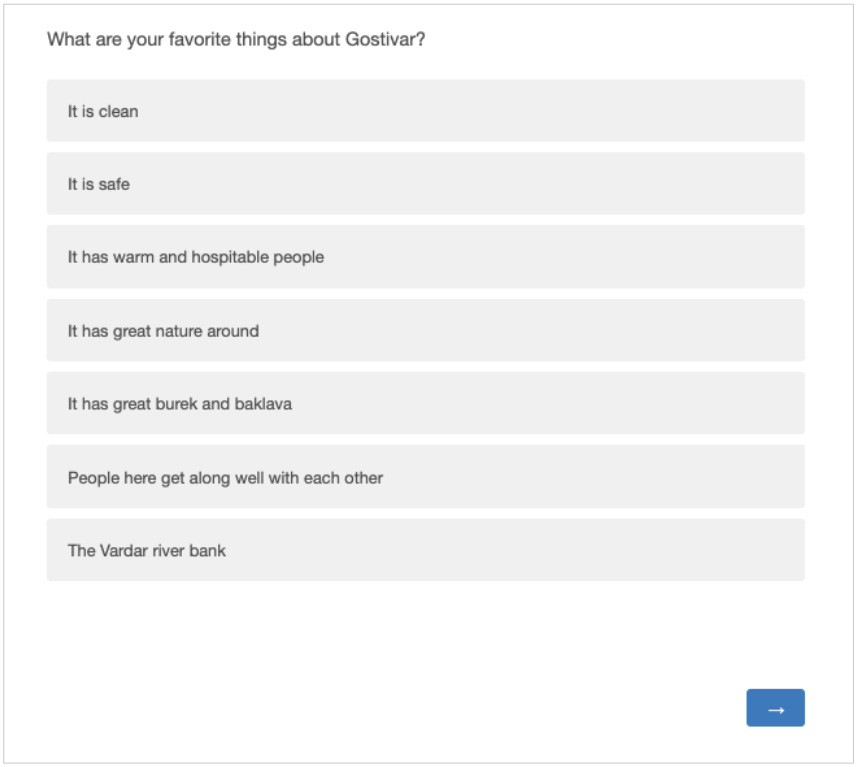
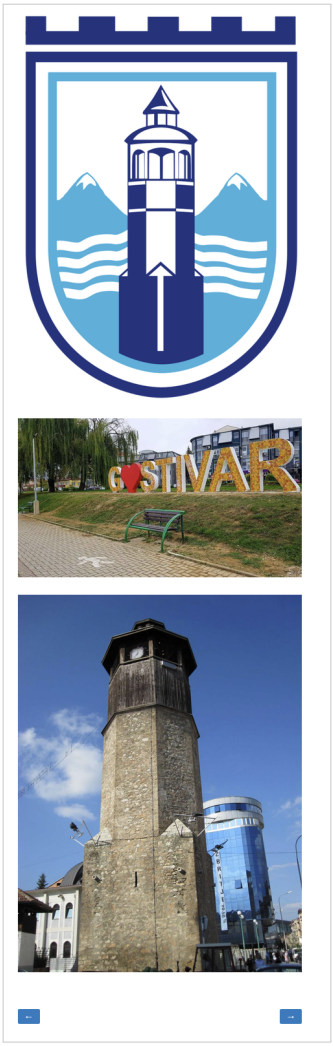
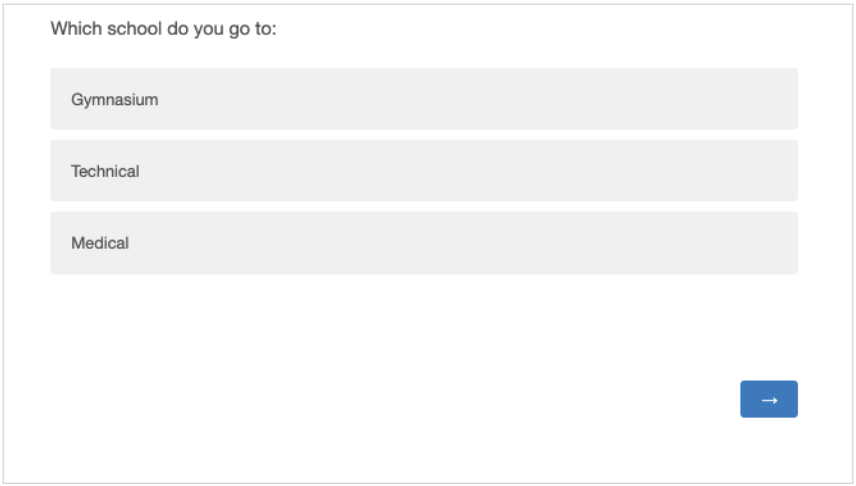


Figure 23: Common identity (T2) and common foe (T3): Images of Gostivar



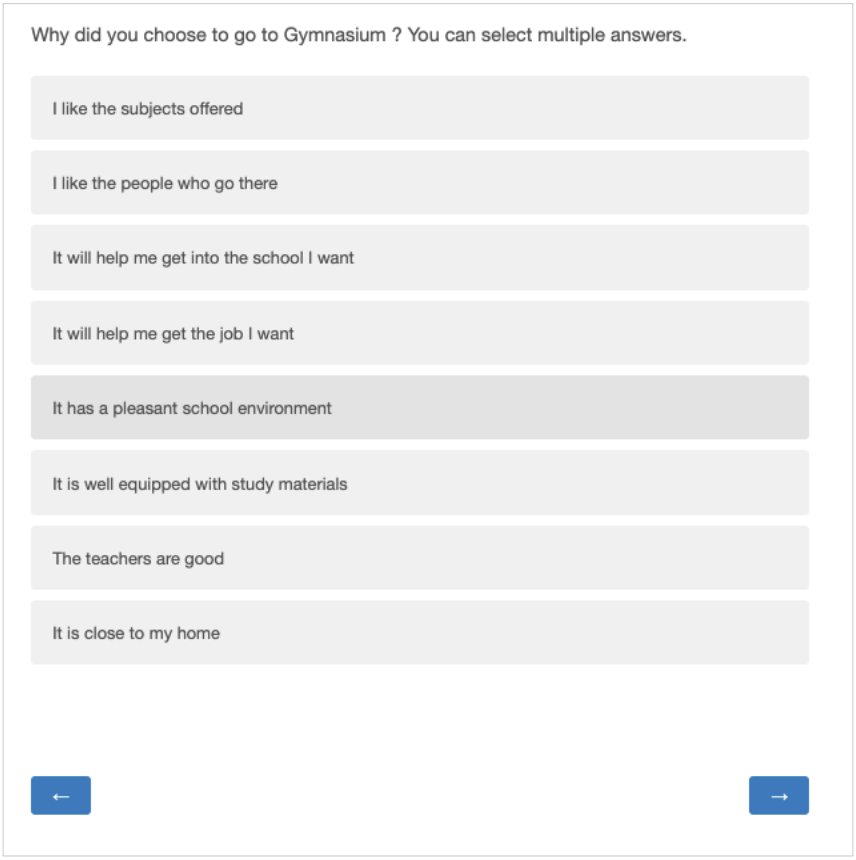
Notes: The Gostivar crest, the Gostivar sign on the Vardar river walk, and the clock tower. Shown to both T2 and T3.

Figure 24: Common identity (T2) and common foe (T3): School



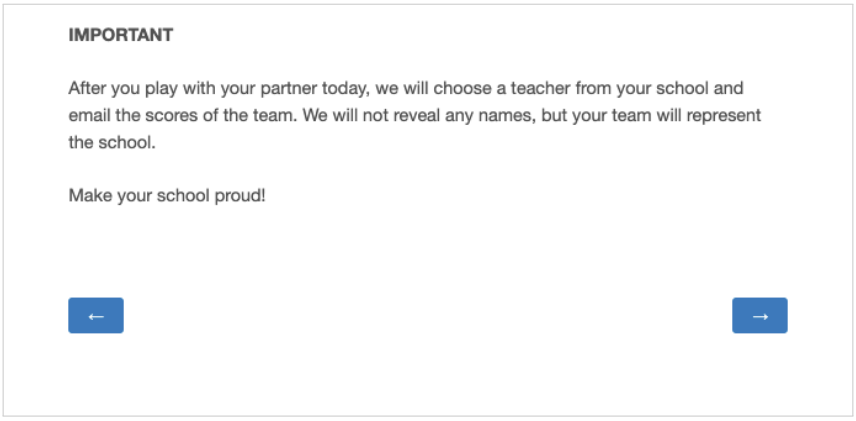
Notes: Shown to both T2 and T3.

Figure 25: Common identity (T2): Reasons for choosing own school



Notes: The student's school is filled in from the previous answer.

Figure 26: Common identity (T2): Score-sharing notice

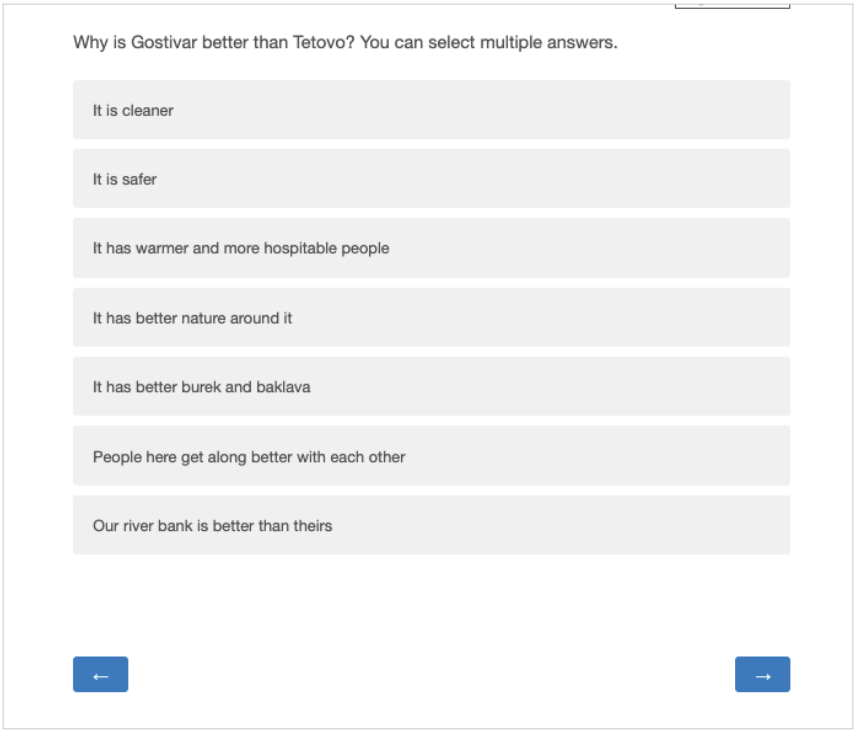


Common foe block: T3. T3 students saw the Gostivar images (Figure 23) and the school question (Figure 24) in addition to the screens below.

Figure 27: Common foe (T3): Gostivar's rival town

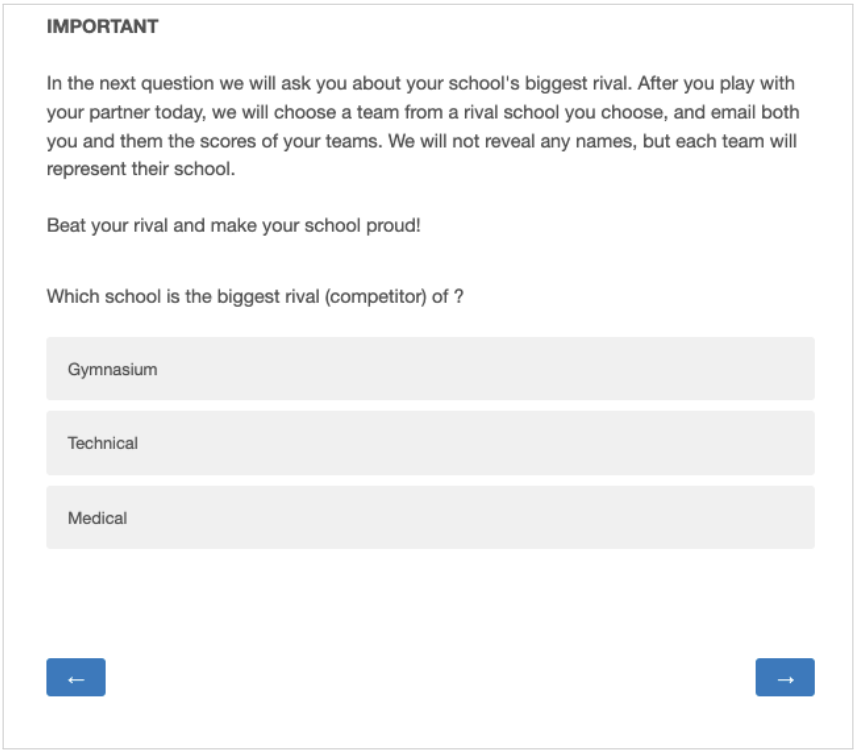


Figure 28: Common foe (T3): Why Gostivar is better than the rival town



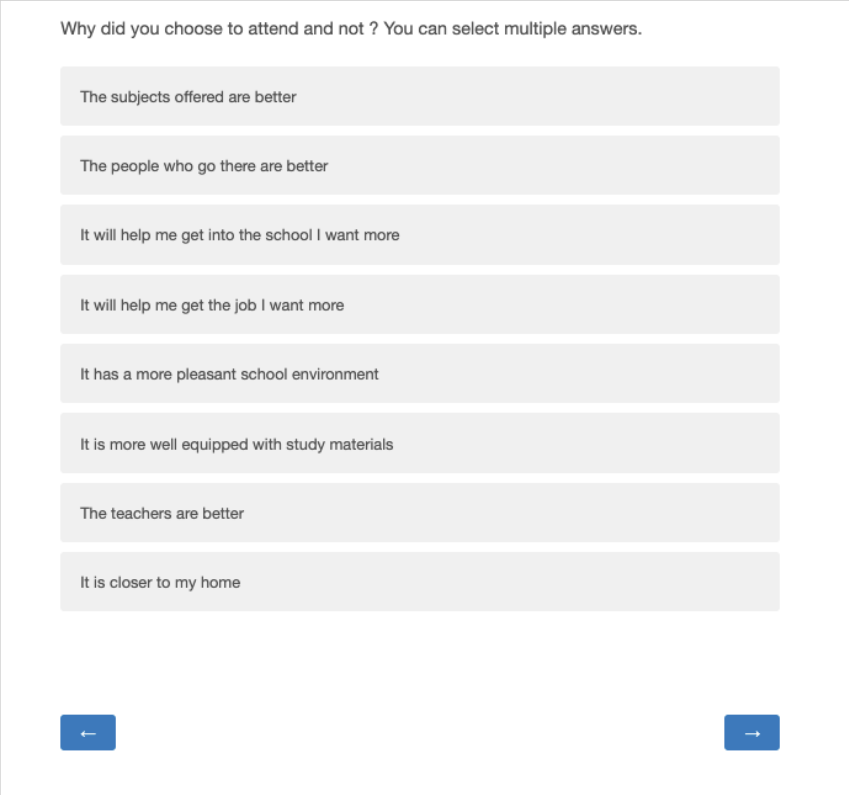
Notes: The rival town is filled in from the previous answer (Tetovo in this example).

Figure 29: Common foe (T3): Score-sharing notice and rival school



Notes: In the live survey, the student's school appears after "biggest rival (competitor) of."

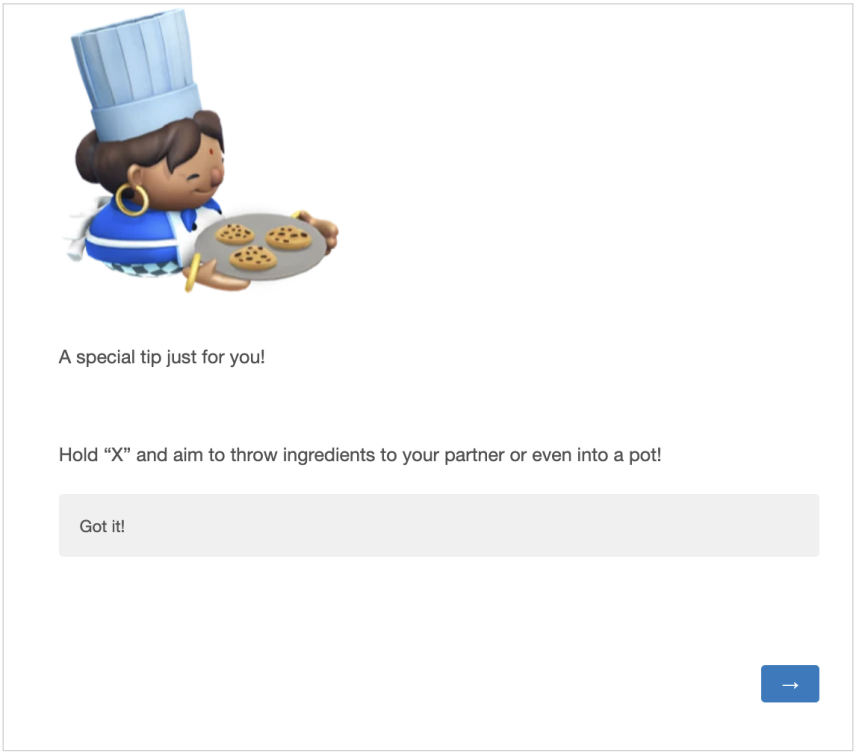
Figure 30: Common foe (T3): Why own school is better than the rival school



Notes: In the live survey, the blanks are filled in with the student's school and the chosen rival school.

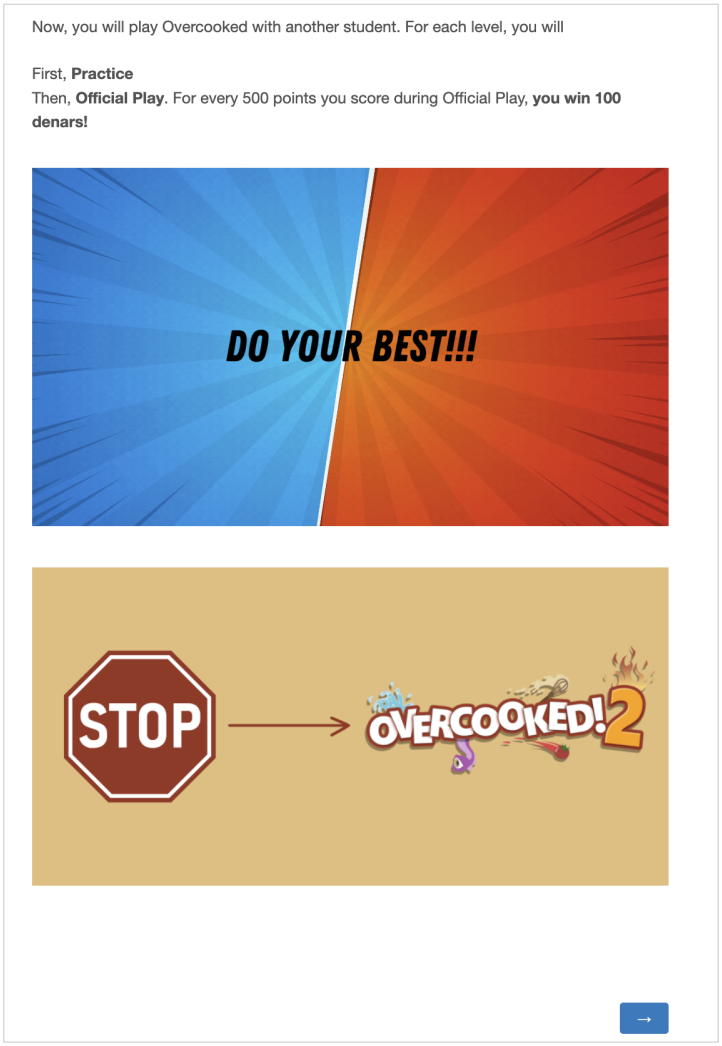
3.4 Partner play

Figure 31: Special gameplay tip



Notes: Each student saw one of four tips, randomized so that each tip was displayed equally often: dash with B, throw with X, scoop cooked food directly onto a plate with A, and combo multipliers for serving orders in sequence.

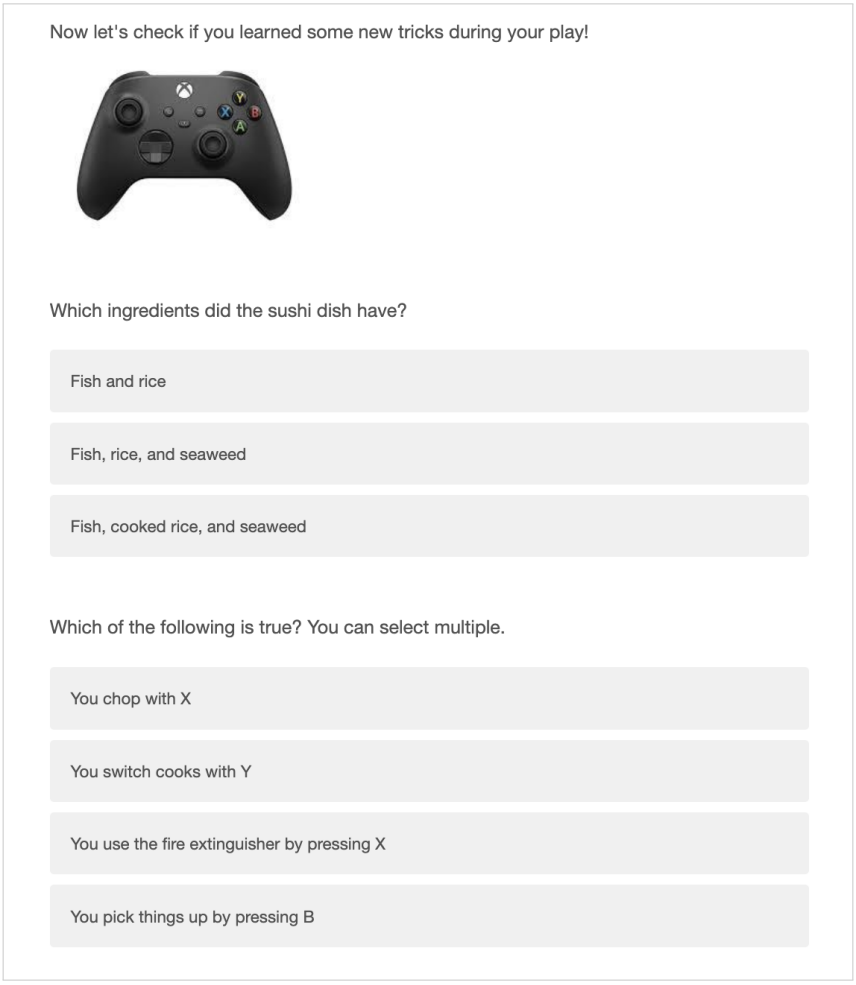
Figure 32: Partner play: Levels with practice and official play



Notes: The "Do your best!" GIF shown here was seen by Control and T1. T2 saw a GIF reading "Do it for ⟨high school⟩!" and T3 saw "Beat ⟨rival school⟩ and make ⟨high school⟩ proud!"

3.5 Gameplay quiz

Figure 33: Gameplay quiz (1 of 3)



Notes: Figures 33–35 are a single survey page.

Figure 34: Gameplay quiz (2 of 3)

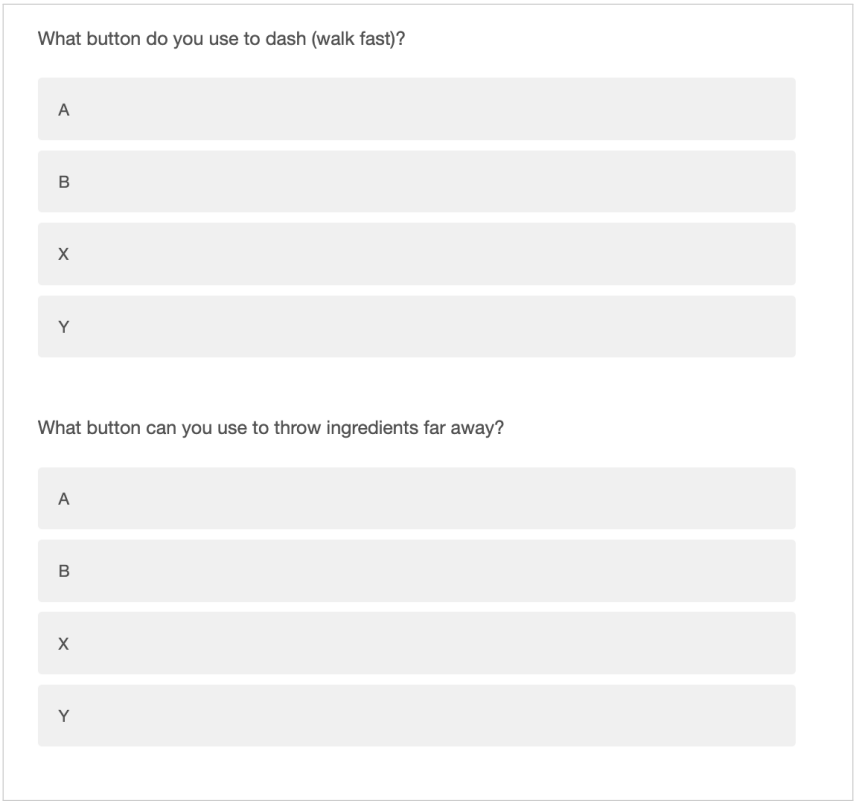
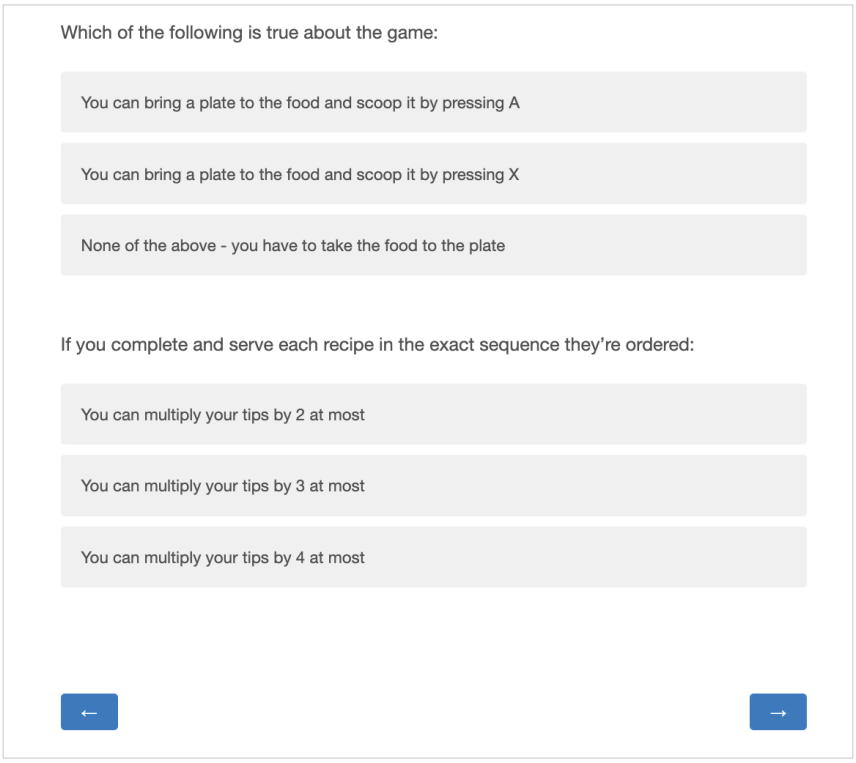


Figure 35: Gameplay quiz (3 of 3)



3.6 Partner questions

Figure 36: Prior acquaintance with partner

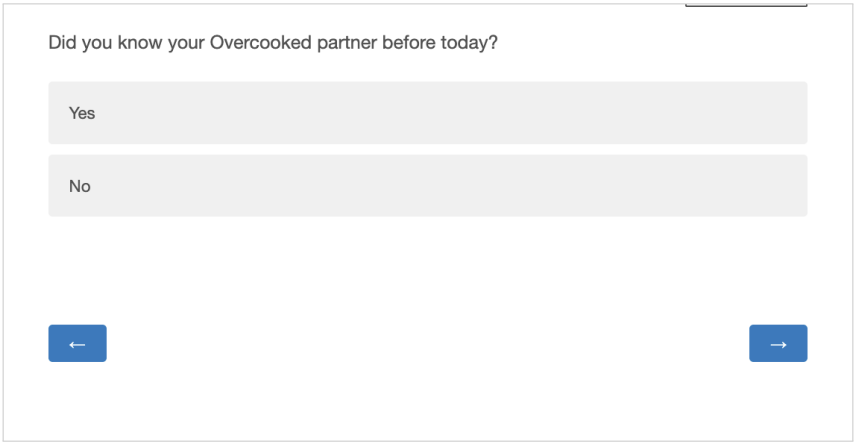
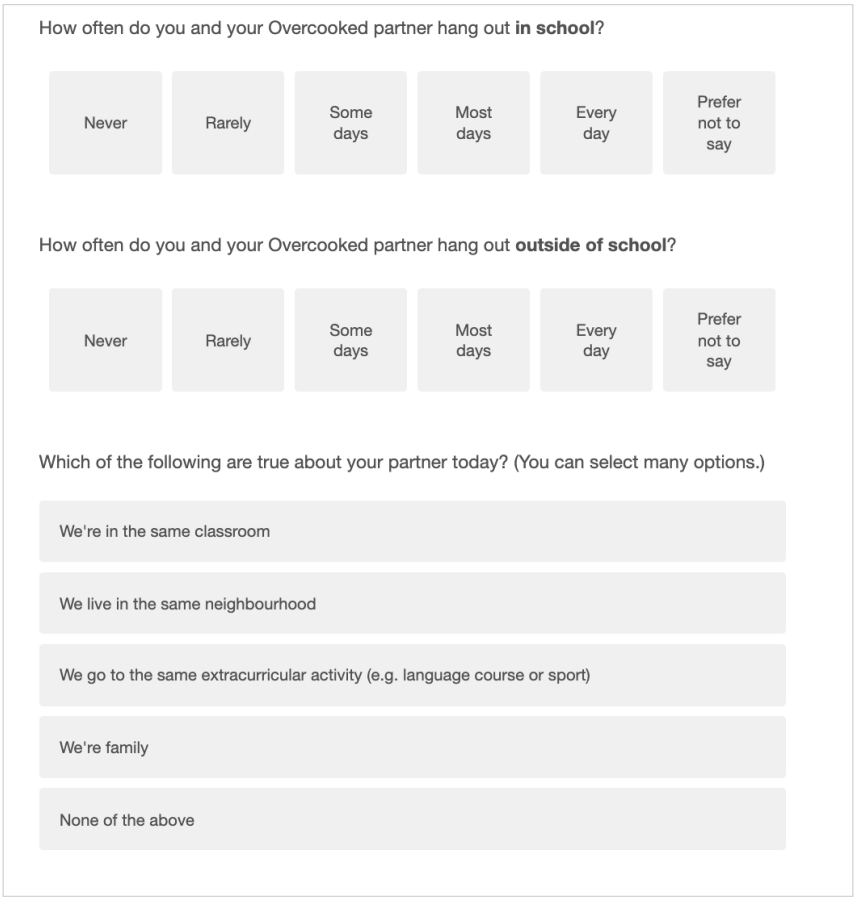


Figure 37: Relationship with partner (if partner known)



Notes: Shown only to students who answered "Yes" in Figure 36. These questions appear on the same page as the partner ratings in Figure 38.

Figure 38: Partner ratings



Notes: Shown to all students.

3.7 Dictator games

Figure 39: Dictator games: Introduction

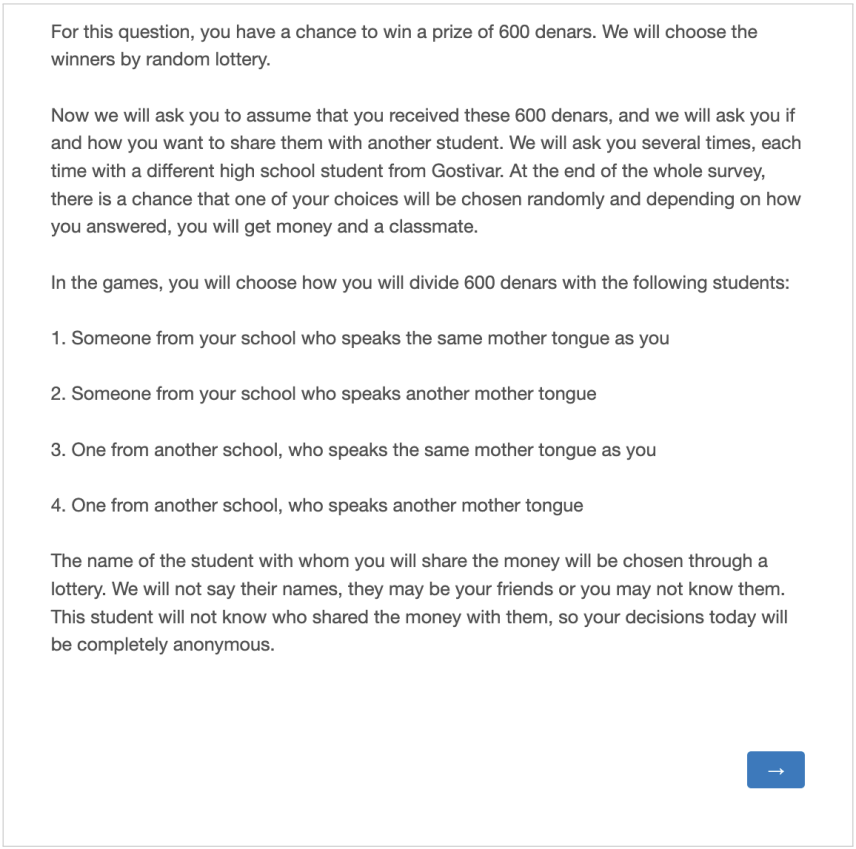


Figure 40: Dictator games: Comprehension check

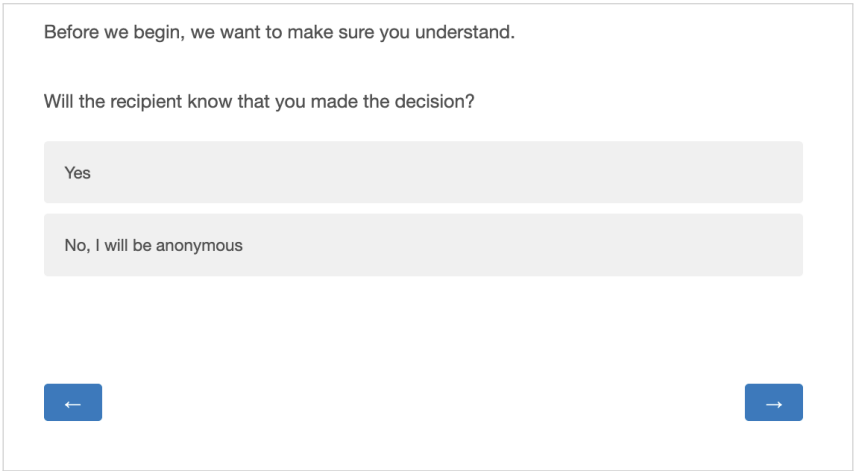


Figure 41: Dictator game: Same school, same mother tongue

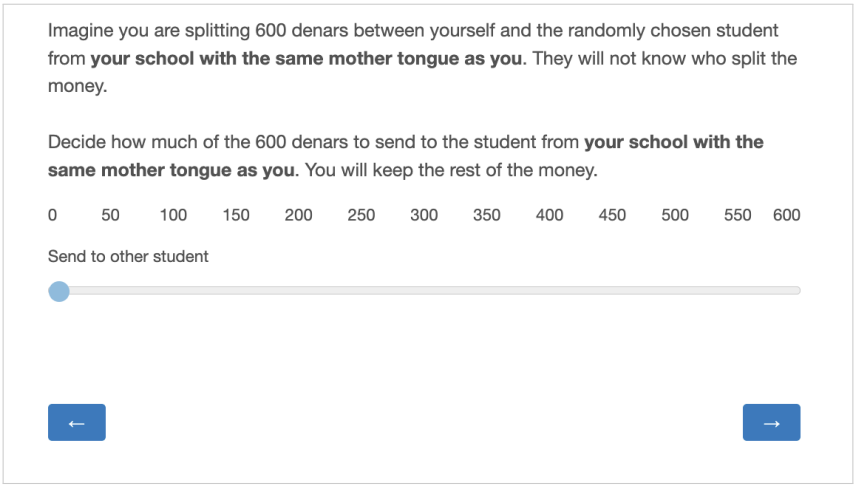


Figure 42: Dictator game: Same school, different mother tongue

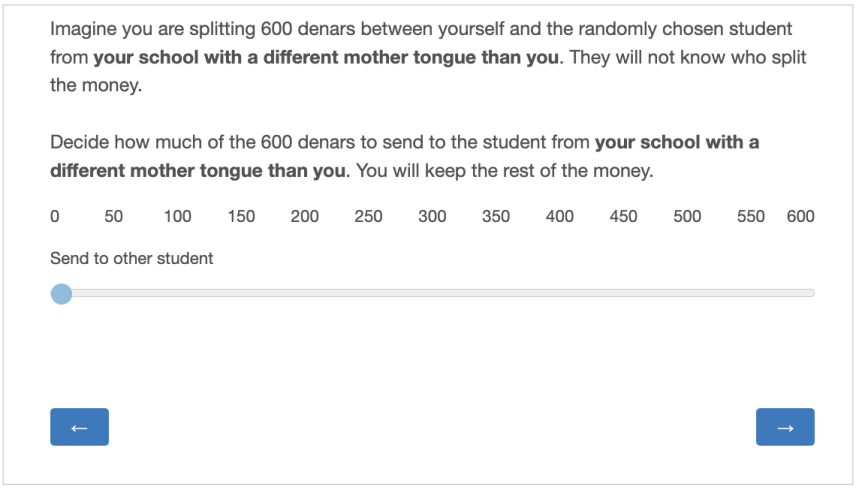


Figure 43: Dictator game: Different school, same mother tongue

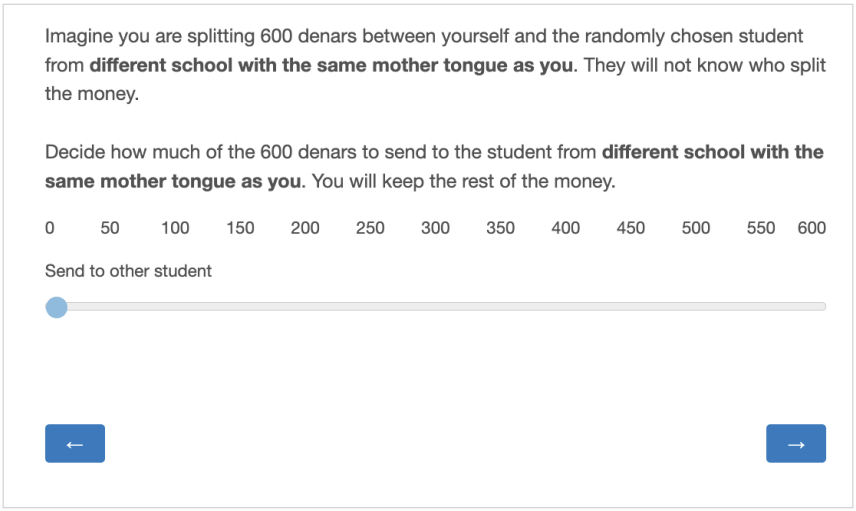
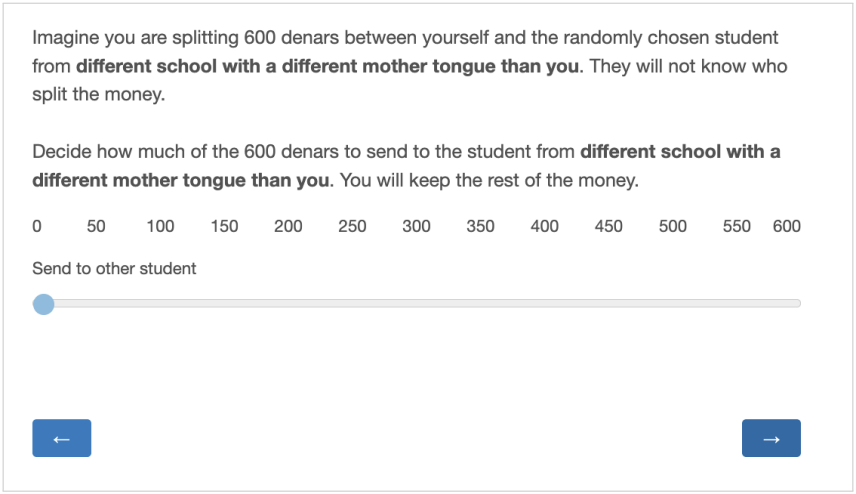
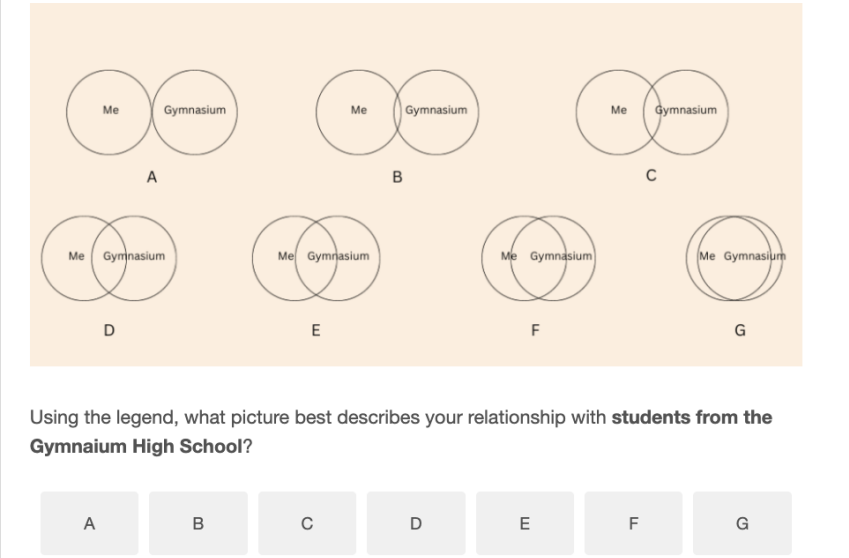


Figure 44: Dictator game: Different school, different mother tongue



3.8 Inclusion of Other in the Self

Figure 45: Inclusion of Other in the Self: Example



Notes: Students answered six versions of this question, about students at each of the three high schools (Gymnasium, Technical, Medical) and about Macedonians, Albanians, and Turks.

3.9 Partner-choice experiment (BACE)

Figure 46: Partner-choice experiment: Introduction

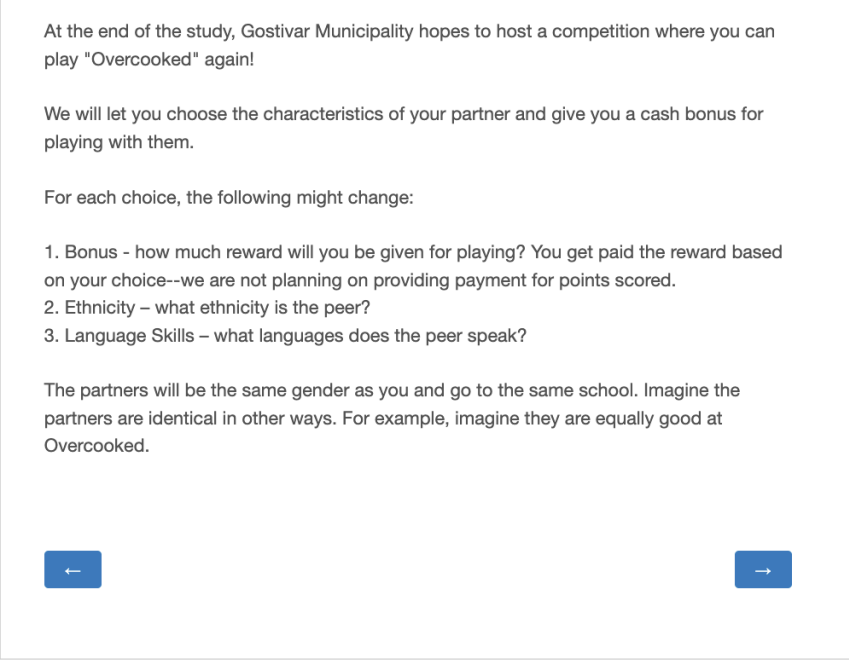
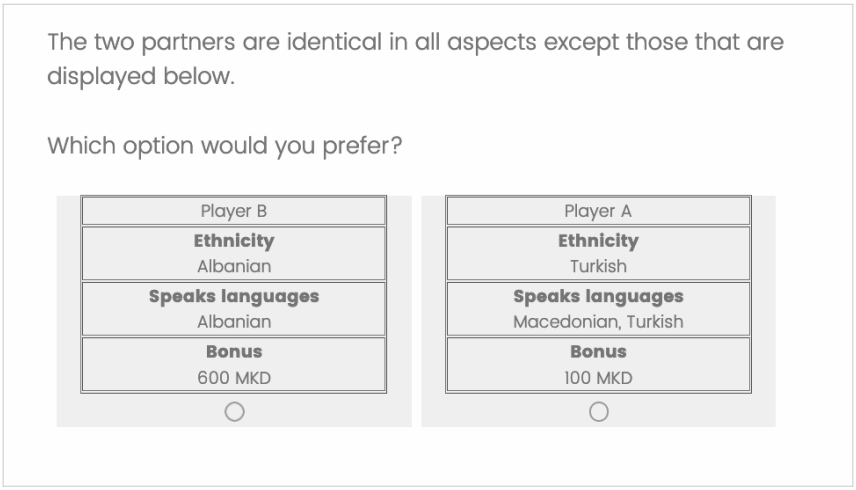


Figure 47: Partner-choice experiment: Example choice



Notes: Students made a sequence of choices like this one. Attribute levels for each choice were selected adaptively by Bayesian Adaptive Choice Experiments (BACE) based on the student's previous answers.

3.10 Preferences for a future partner

Figure 48: Preferences for a future partner and motives during play

