Instructions for HyENA experiment

Thank you for joining the HyENA experiment! The goal of this experiment is to match key **Arguments** extracted from a discourse. The **Arguments** are based on opinions of Dutch residents in the context of covid-19. We ask you to <u>characterize</u> the relationship between **Arguments** in support of, or opposed to a proposed decision.

What you will be reading

In the HyENA experiment you will be reading pairs of **Arguments** stemming from a questionnaire, where citizens were asked to provide feedback on potential government policies regarding the relaxation of the Covid-19 measures.

In the questionnaire, participants selected policy **Options** that the government considers. If a participant selected an **Option**, participants were invited to motivate their choice with a short text comment, which we refer to as an **Argument**. Additionally, the participants were asked to provide **Arguments** <u>against</u> picking (some of) the remaining **Options**.

Arguments are written to justify choices. Analyzing them offers valuable insight into the opinions held by survey participants. You will be reading the **Arguments** in reply to a single **Option**. The **Arguments** might be in favor, or opposed to the **Option** at hand.

Lifting corona measures in the Netherlands

The questionnaire was conducted in the Netherlands between 29/04/2020 and 06/05/2020, when partial lockdown measures were in place in the Netherlands. The government wanted to gauge the opinion of the citizens on the eight possible **Options**. Each proposed **Option** came with an additional pressure on the healthcare system as a consequence (percentage in parentheses):

- Nursing and care homes allow visitors. (10-25%)
- Businesses open again, except for hotels, restaurants, cafes and contact professions (barbers, beauticians, etc.). (6-15%)
- Employees in contact professions (barbers, beauticians, etc.) go back to work. (8-15%)
- Young people may come together in groups. (4-8%)
- All restrictions are lifted for people who are immune.) (10-20%)
- Restrictions are lifted in Friesland, Groningen and Drenthe (Northern regions less affected by the virus). (15-30%)
- Social contact within families is allowed again. (6-15%)
- Hotels, restaurants, cafes, and the entertainment industry re-open. (15-25%)

The question you will be answering in the annotation, is:

What arguments are relevant in the context of relaxing COVID-19 measures, for or against a single proposed relaxation measure?

Arguments

Arguments are an intuitive way for people to describe the tradeoffs of decision. More precisely, Arguments are opinions or pieces of evidence that support or object to a decision. They should also adhere to the following criteria:

- Arguments should be addressing a single point at the time.
- Arguments should have a logical structure, where they provide an answer to the *why question*: an argument gives a single reason for or against taking a specific action.
- Argument should be either in support of (Pro) or against a proposed Option.

Arguments follow a template to match the three points given above.

For a Pro argument:

Based on this Motivation, a reason to support this Option is:

For a Con argument:

Based on this Motivation, a reason to refute this Option is:

Argument Matching ratings

In the annotation, you will assign ratings to Argument pairs. See below for the meaning of each rating:

- 1. The Arguments *match*. In this case, the Arguments are essentially bringing up the same point. They provide the same answer for picking or rejecting the proposed Option.
- 2. The Arguments do not *match*. In this case, the Arguments do not touch on the same point, and differ in the aspect they bring up. They provide a different answer for picking or rejecting the proposed Option.

Examples

Below, we give some example *Argument pairs in italics* in the context of **putting wind turbines and solar panels on land to battle climate change**.

- 1. We will be less reliant on gas from abroad & wind and solar power are renewable energy sources
 - Both are Arguments because they give a reason for **putting wind turbines and solar panels on land to battle climate change**
 - Finishing the template for both:
 - i. A reason to support the Option of **putting wind turbines and solar panels on land to battle climate change** is that *we will be less reliant on gas from abroad*
 - ii. A reason to support the Option of **putting wind turbines and solar panels on land to battle climate change** is that *wind and solar power are renewable energy sources*
 - Both arguments raise only a single point (i.e. reliance on foreign gas, renewability of sources)

- The relationship between the two arguments is *not a match* because the points they raise are different. So, we annotate this pair by stating that the pairs do not match.
- 2. Solar and wind power are less demanding on the environment & wind and solar power are renewable energy sources
 - Both are Arguments because they give a reason for **putting wind turbines and solar panels on land to battle climate change**
 - Finishing the template for both:
 - *i.* A reason to support the Option of **putting wind turbines and solar panels on land to battle climate change** is that *solar and wind power are less demanding on the environment.*
 - *ii.* A reason to support the Option of **putting wind turbines and solar panels on land to battle climate change** is that *wind and solar power are renewable energy sources.*
 - Both arguments raise only a single point (i.e. less demanding on environment, renewability of sources)
 - The relationship between the two arguments is a *match*, since both arguments raise a point about the beneficial impact on the environment. So, we annotate this pair by stating that the pairs match.
- 3. Windmills require a lot of space, which means they have to be placed closer to residential areas & the view from homes will be polluted by windmills
 - Both are Arguments because they give a reason against putting wind turbines and solar panels on land to battle climate change
 - Finishing the template for both:
 - *i.* A reason to refute the Option of **putting wind turbines and solar panels on land to battle climate change** is that *Windmills require a lot of space, which means they have to be placed closer to residential areas*.
 - *ii.* A reason to refute the Option of **putting wind turbines and solar panels on land to battle climate change** is that *the view from homes will be polluted by windmills.*
 - Both arguments raise only a single point (i.e. windmills need to be placed near cities, pollution of views)
 - The relationship between the two arguments is a *match*, since both arguments are about the placement of windmills in relation to urban areas. So, we annotate these as matching.

Here are some examples of things that are <u>not</u> Arguments for or against the option of **putting wind turbines and solar panels on land to battle climate change**. If they occur as one of the arguments in an Argument pair, indicate that they are an **Unclear Argument**.

- 1. "I think this is a ridiculous suggestion"
 - a. This is not an argument because it does not address the why question.
- 2. "I believe we should rely on nuclear energy instead"
 - a. This is not an argument because it mentions an alternative option, but does not motivate why the current option is or is not a good one.
- 3. "I have stated this before, it corresponds to my earlier answer"
 - a. This is not an argument because the text does not give the argument.
- 4. "Agreed, it does not apply here"

a. This is not an argument because the author is stating agreement, but not providing the argument

Annotation

The Annotation phase is to be performed by you, individually. You will be shown pairs of **Arguments**, and the **Option** they relate to. We ask you to annotate these **Arguments** as described below.

Note! We are not asking for your personal opinion, but rather are interested in the content of the Argument.

Annotation workflow

Please follow these steps:

- Read Argument pair: Read the Option, and both Arguments; For each argument, you will also see their polarity (supporting "Pro" and opposing "Con"). Now you can:
 - Indicate one of the two Arguments is unclear, and thus no action can be made (see
 2. Check Arguments)
 - Annotate with an action to indicate the relation between the two Arguments (see 3.
 Argument Action)
- 2. **Check Arguments** After reading both Arguments, ensure they make sense to you in the context of the shown Option, and try to answer the following questions for yourself. For a more complete description, see <u>Arguments</u>.
 - Does the Argument give a reason for picking (or not picking) the Option?
 - Does the Argument address any of the "why" questions? Either "Why is choice A a good idea?" or "Why is choice A a bad idea?"
 - Does Argument address a single point?

If you are able to answer all questions with "yes," you can move on to the next step. If at least one of the answers is "no" for either of the two Arguments, please indicate so by pressing the "**Unclear Argument"** button for that Argument. In case both Arguments are unclear, you can click the button for either Argument.

- 3. **Argument Action** Given that the two Arguments make sense to you, now indicate their relationship. Depending on the relationship between the two Arguments, fill in your choice of the following:
 - These Arguments *Match.*
 - These Arguments do not Match.

Click the **Submit** button to submit your choice.

When to stop?

Please continue until 50 Argument Pairs have been annotated. The platform will provide you with a button to return to Prolific.