

SocialQA Data Issues Analysis

This document contains some examples for the categories of data issues we discussed in the paper.

Structural Flaws

In this example, answer A also contains the context of the question, which makes it the most selected by the evaluated models:

"context": "Riley looked at Jesse."

"question": "What will Riley want to do next?"

"answerA": "Question: At the awards dinner, Riley looked at Jesse with admiration. Why did Riley do this? Jesse had won the top prize for the company and the team"

"answerB": "had planned the awards dinner and it had gone very smoothly"

"answerC": "Look at something else"

Another issue encountered consists of **identical answer options**:

"context": "Tracy enjoyed constructing things and made a table."

"question": "How would she feel as a result?"

"answerA": "accomplished"

"answerB": "accomplished"

"answerC": "proud"

Semantic Flaws

The issue in the following example is a **violation of temporal logic**, since, according to the question, "notice the sun" is a better answer compared to answer C (ground truth):

"context": "It was a pretty sunny day outside. Quinn walked instead."

"question": "What does Quinn need to do before this?"

"answerA": "have fun"

"answerB": "notice the sun"

"answerC": "move their feet"

Another semantic flaw is related to items for which **more answers are equally plausible**, like in this case all the three options:

"context": "Skylar was so excited that her mother bought her a new dress."

"question": "How would you describe Skylar?"

"answerA": "elated"

"answerB": "very happy"

"answerC": "a person who likes fashion"

Pragmatic Flaws

The following example contains **unnatural answer options** in relation to the context:

"context": "Tracy the bus driver took Jesse's students on a field trip to a remote location."

"question": "How would Tracy feel afterwards?"

"answerA": "lost"

"answerB": "accurate"

"answerC": "incompetent"

This is another case for which the answers don't make sense, taking into consideration the given context and question:

"context": "Bailey was a shy kid at school. They made no friends."

"question": "What will happen to Bailey?"

"answerA": "get work done"

"answerB": "go to a party"

"answerC": "Nothing will happen to others"