

Turkish PIQA: A Manually Constructed Dataset for Physical Commonsense Reasoning in Turkish

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1 Dataset Construction

We created 100 examples in Turkish. Each item consists of a prompt describing a physical goal or problem, and two candidate solutions differing minimally (one or two words). Exactly one solution is correct. The examples cover diverse domains such as cooking, household chores, cleaning, traditional health remedies, first aid, and outdoor activities.

The format follows PIQA:

```
{ "prompt": "...", "solution0":  
  "...", "solution1": "...",  
  "label": 0/1 }
```

Unlike translations, all examples are original, ensuring cultural grounding. The dialect represented is standard modern Turkish as used in Turkey.

2 Cultural and Source Justification

To ensure cultural authenticity, we drew on Turkish language sources authored for Turkish readers, including food blogs, household advice websites, and health institution pages.

For example, onion cutting without tears is explained by chilling onions before chopping¹. Baklava preparation emphasizes pouring cooled syrup onto hot pastry², and yogurt fermentation requires consistent warmth³. Deodorizing refrigerators with baking soda⁴, and loosening jar lids with hot water⁵. Health institutions like Acıbadem caution against applying toothpaste to burns⁶,

¹<https://www.kubracatering.com.tr/tr/post/208/sogan-dograrken-goz-yasarmasi-nasil-engellenir>

²<https://www.nefisyemektarifleri.com/blog/baklava-serbeti-nasil-yapilir>

³<https://www.rafinera.com/blog/yemek-pisirme-onerileri/yogurt-yapiminin-puf-noktalari>

⁴<https://www.samsung.com/tr/explore/brand/how-to-remove-refrigerator-odor-tips-and-tricks>

⁵<https://www.lezzet.com.tr/lezzetten-haberler/kavanoz-kapagi-nasil-acilir>

⁶<https://www.acibadem.com.tr/hayat/yaniga-yogurt-ve-dis-macunu-surulurmu>

while TÜBİTAK Bilim Genç explains why salt melts ice⁷.

These culturally relevant practices ensure our dataset is not merely a translation of English PIQA but instead reflects commonsense reasoning familiar to Turkish speakers.

⁷<https://bilimgenc.tubitak.gov.tr/makale/tuz-buzu-nasil-eritir>