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**Step 2**

**Classification Results - Protected Class Variables:**

* **Race**: African American, Asian, Indian
* **Color**: Black, White
* **Sex**: Male, Female, Non-Binary, Transgender, Trans
* **Religion**: Christian, Muslim, Jewish, Buddhist, Catholic, Protestant, Sikh, Taoist
* **National Origin**: African, Hispanic, Latino, Latina, Latinx, Mexican, Chinese, Japanese, Middle Eastern, European, Canadian, American
* **Age**: Old, Older, Young, Younger, Teenage, Millennial, Middle Aged, Elderly
* **Disability Status**: Blind, Deaf, Paralyzed

**Step 3**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Age** | **Color** | **Disability Status** | **National Origin** | **Race** | **Religion** | **Sex** |
| **TOXICITY** | -0.01 | 0.02 | 0.04 | -0.10 | -0.06 | 0.02 | 0.06 |
| **CORRELATION STRENGTH** | Very weak correlation | Very weak correlation | Very weak correlation | Very weak correlation | Very weak correlation | Very weak correlation | Very weak correlation |

**Step 4**

**Population Mean:** 0.0522

**Population Standard Deviation:** 0.3663

**Value Range - 95% of TOXICITY:** -0.2109and1.2545

**Using 10% Sample Data**

**Mean:** 0.5268

**Standard Deviation:** 0.3673

**Margin of Error:** 0.00914

**Using 60% Sample Data**

**Mean:** 0.5209

**Standard Deviation:** 0.3667

**Margin of Error:** 0.00372

**Step 5**

**Protected Class:** Disability Status

**Population Mean:** 0.5824

**Population Standard Deviation:** 0.3349

**Using 10% Sample Data**

**Mean:** 0.5662

**Standard Deviation:** 0.3351

**Within Margin of Error:** No

**Using 60% Sample Data**

**Mean:** 0.5794

**Standard Deviation:** 0.3381

**Within Margin of Error:** No

**Step 6**

**Protected Class - Subgroup:** Disability Status - Paralyzed

**Population Mean:** 0.5552

**Population Standard Deviation:** 0.3444

**Using 10% Sample Data**

**Mean:** 0.5820

**Standard Deviation:** 0.3366

**Within Margin of Error:** No

**Using 60% Sample Data**

**Mean:** 0.5480

**Standard Deviation:** 0.3439

**Within Margin of Error:** No

**Protected Class - Subgroup:** Disability Status - Blind

**Population Mean:** 0.6369

**Population Standard Deviation:** 0.3079

**Using 10% Sample Data**

**Mean:** 0.6362

**Standard Deviation:** 0.3041

**Within Margin of Error:** No

**Using 60% Sample Data**

**Mean:** 0.6378

**Standard Deviation:** 0.3119

**Within Margin of Error:** No

**Protected Class - Subgroup:** Disability Status - Deaf

**Population Mean:** 0.5552

**Population Standard Deviation:** 0.3444

**Using 10% Sample Data**

**Mean:** 0.5524

**Standard Deviation:** 0.3483

**Within Margin of Error:** No

**Using 60% Sample Data**

**Mean:** 0.5669

**Standard Deviation:** 0.3411

**Within Margin of Error:** No

**Step 7**

**Explanation**

Using the disability status protected class, the **blind** subgroup has the highest TOXICITY value with a population mean of **0.6369**. As for the lowest TOXICITY valued subgroup, there was a tie between **paralyzed** and **deaf** subgroups which has a population mean of **0.5552**. From this data, the subgroup with the largest difference in TOXICITY when compared to the population mean calculated in Step 4 (**0.0522**) was the **blind** subgroup.

From the calculated data, I believe there’s a tad of human bias involved when comparing the population mean of the disability status subgroups with the overall dataset. In particular, the **blind** subgroup seems to be the anomaly seeing that the other subgroups, **paralyzed** and **deaf**, have an equal mean value. My original hypothesis based on my personal experience was that the paralyzed subgroup would garner the highest TOXICITY average, however, the data shows otherwise. I think this is a great example of how personal bias can differ with actual data when it comes to word embedding.