**Public Trust in Political Information in the AI Era**

*Simulated survey analysis using MySQL | Joe Wiegert*

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**Introduction**

With AI-generated content increasingly present in our information landscape, public trust in political information is more important than ever. This project explores simulated survey data to examine how confidence, trust, and political behavior are shaped by education, income, political affiliation, and age.

Using MySQL, I cleaned, reshaped, and rebalanced the dataset to simulate realistic distributions across 30 survey questions. The final dataset includes 90,000 responses across key demographic groups. I then performed analysis on six hand-picked questions that represent both quantitative and text-based responses.

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**Insight 1: Confidence in Understanding AI (Question 2)**

**What I asked:** How confident are respondents in their understanding of AI?
**Why I asked:** Groups that feel uninformed may be more susceptible to AI misinformation or disengaged from public discourse.

**Metric analyzed:** Education level

```
SELECT r.education, ROUND(AVG(nr.answer_score), 2) AS avg_conf
FROM numeric_responses AS nr
JOIN respondents AS r
    ON r.respondent_id = nr.respondent_id
WHERE nr.question_id = 2
GROUP BY r.education
ORDER BY avg_conf DESC
;
```

**Finding:** Confidence increases with education. Graduate degree holders averaged 8.03 on a 1-10 scale, while those with a high school education or less averaged just 3.98.

Result Grid | Filter Rows:

| education | avg_conf |
|---|---|
| Graduate degree | 8.03 |
| Bachelor's | 7.00 |
| Associate's | 5.53 |
| Some college | 5.00 |
| High school or less | 3.98 |

**Why it matters:** Civic messaging and AI education efforts should focus on less-educated populations to close knowledge gaps.

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**Insight 2: Confidence in Spotting Misinformation (Question 8)**

**What I asked:** How confident are people in spotting AI-generated misinformation?

**Metric analyzed:** Education level

```
SELECT
  r.education, ROUND(AVG(nr.answer_score), 2) AS avg_confidence
FROM numeric_responses AS nr
JOIN respondents AS r
  ON nr.respondent_id = r.respondent_id
WHERE nr.question_id = 8
GROUP BY r.education
ORDER BY avg_confidence DESC
;
```

**Finding:** Again, higher education correlates with more confidence. Graduate degree respondents averaged 7.92, while those with a high school education averaged only 4.01.

Result Grid | Filter Rows:

| education | avg_confidence |
|---|---|
| Graduate degree | 7.92 |
| Bachelor's | 7.00 |
| Associate's | 5.97 |
| Some college | 5.00 |
| High school or less | 4.01 |

**Why it matters:** This reinforces the education-trust link and shows that misinformation literacy needs to be addressed outside of college-educated groups.

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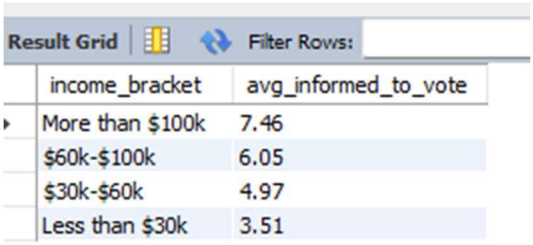
**Insight 3: Feeling Informed Enough to Vote in AI Era (Question 29)**

**What I asked:** Do people feel informed enough to vote, despite AI's impact on political content?

**Metric analyzed:** Income bracket

```
SELECT r.income_bracket, ROUND(AVG(nr.answer_score), 2) AS avg_informed_to_vote
FROM numeric_responses AS nr
JOIN respondents AS r
  ON r.respondent_id = nr.respondent_id
WHERE nr.question_id = 29
GROUP BY r.income_bracket
ORDER BY avg_informed_to_vote DESC
;
```

**Finding:** Wealthier respondents felt much more confident in their ability to vote smartly in the AI era. Those earning over $100k averaged 7.46, while those earning under $30k averaged just 3.51.



Result Grid | Filter Rows:

| income_bracket | avg_informed_to_vote |
|---|---|
| More than $100k | 7.46 |
| $60k-$100k | 6.05 |
| $30k-$60k | 4.97 |
| Less than $30k | 3.51 |

**Why it matters:** Economic inequality could become political disengagement. Lower-income voters may tune out if they feel disempowered or confused.

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**Insight 4: Trust in Political Info on Social Media (Question 6)**

**What I asked:** How much do people trust political info shared on social media?

**Metric analyzed:** Political affiliation

```sql
SELECT r.political_affiliation, sr.answer_text,
  COUNT(*) AS response_count,
  ROUND(100.0 * COUNT(*) / total.total_count, 1) AS percentage
FROM survey_responses AS sr
JOIN respondents AS r
ON sr.respondent_id = r.respondent_id
JOIN (
  SELECT political_affiliation, COUNT(*) AS total_count
  FROM survey_responses AS sr
  JOIN respondents AS r ON sr.respondent_id = r.respondent_id
  WHERE question_id = 6
  GROUP BY political_affiliation
) AS total
ON r.political_affiliation = total.political_affiliation
WHERE sr.question_id = 6
GROUP BY r.political_affiliation, sr.answer_text
ORDER BY r.political_affiliation, percentage DESC
;
```

**Finding:** Trust levels vary by party. 51.5% of Democrats said they have "Complete trust," compared to 30.1% of Republicans. Republicans were more likely to respond with "No trust" or "Moderate trust."

Result Grid | Filter Rows: | Export: | Wra

| political_affiliation | answer_text | response_count | percentage |
|---|---|---|---|
| Democrat | Complete trust | 319 | 51.5 |
| Democrat | High trust | 300 | 48.5 |
| Independent | Low trust | 209 | 35.8 |
| Independent | High trust | 188 | 32.2 |
| Independent | Moderate trust | 186 | 31.9 |
| Other | High trust | 227 | 36.8 |
| Other | Low trust | 207 | 33.5 |
| Other | Moderate trust | 183 | 29.7 |
| Prefer not to say | Low trust | 289 | 52.0 |
| Prefer not to say | Moderate trust | 267 | 48.0 |
| Republican | Moderate trust | 222 | 35.5 |
| Republican | No trust | 215 | 34.4 |
| Republican | Low trust | 188 | 30.1 |

**Why it matters:** Different parties need different messaging strategies. This trust gap can shape how information is received across partisan lines.

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**Insight 5: Changed Political Opinion from Online Content (Question 11)**

**What I asked:** Have people changed their political views because of something they saw online?

**Metric analyzed:** Political affiliation

```
SELECT r.political_affiliation, sr.answer_text,
  COUNT(*) AS response_count,
  ROUND(100.0 * COUNT(*) / total.total_count, 1) AS percentage
FROM survey_responses AS sr
JOIN respondents AS r
  ON sr.respondent_id = r.respondent_id
JOIN (
  SELECT political_affiliation, COUNT(*) AS total_count
  FROM survey_responses sr
  JOIN respondents r ON sr.respondent_id = r.respondent_id
  WHERE sr.question_id = 11
  GROUP BY political_affiliation
) AS total
  ON r.political_affiliation = total.political_affiliation
WHERE sr.question_id = 11
GROUP BY r.political_affiliation, sr.answer_text
ORDER BY r.political_affiliation, percentage DESC
;
```

**Finding:** Republicans (61.3%) and Independents (58.1%) were more likely than Democrats (40.5%) to say "Yes."

| political_affiliation | answer_text | response_count | percentage |
|---|---|---|---|
| Democrat | No | 368 | 59.5 |
| Democrat | Yes | 251 | 40.5 |
| Independent | Yes | 339 | 58.1 |
| Independent | No | 244 | 41.9 |
| Other | Yes | 310 | 50.2 |
| Other | No | 307 | 49.8 |
| Prefer not to say | Yes | 279 | 50.2 |
| Prefer not to say | No | 277 | 49.8 |
| Republican | Yes | 383 | 61.3 |
| Republican | No | 242 | 38.7 |

**Why it matters:** This suggests Republicans and Independents may be more open to persuasion from online content, or perhaps more vulnerable to misleading information.

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**Insight 6: Debates About Misinformation (Question 15)**

**What I asked:** Are people having discussions about misinformation?

**Metric analyzed:** Age group

```sql
WITH age_grouped AS (
  SELECT sr.answer_text,
    CASE
      WHEN r.age < 30 THEN '18-29'
      WHEN r.age BETWEEN 30 AND 44 THEN '30-44'
      WHEN r.age BETWEEN 45 AND 64 THEN '45-64'
      ELSE '65+'
    END AS age_group
  FROM survey_responses AS sr
  JOIN respondents AS r
    ON sr.respondent_id = r.respondent_id
  WHERE sr.question_id = 15
),
totals AS (
  SELECT age_group, COUNT(*) AS total_count
  FROM age_grouped
  GROUP BY age_group
)
SELECT
  ag.age_group,
  ag.answer_text,
  COUNT(*) AS response_count,
  ROUND(100.0 * COUNT(*) / t.total_count, 1) AS percentage
FROM age_grouped AS ag
JOIN totals AS t
    ON ag.age_group = t.age_group
GROUP BY ag.age_group, ag.answer_text, t.total_count
ORDER BY ag.age_group, percentage DESC
;
```

**Finding:** 71.4% of 18–29-year-olds said they have, compared to just 28% of people 65+.

Result Grid | Filter Rows: | Export: | Wra

| age_group | answer_text | response_count | percentage |
|---|---|---|---|
| 18-29 | Yes | 432 | 71.4 |
| 18-29 | No | 173 | 28.6 |
| 30-44 | Yes | 538 | 63.4 |
| 30-44 | No | 310 | 36.6 |
| 45-64 | No | 525 | 51.6 |
| 45-64 | Yes | 493 | 48.4 |
| 65+ | No | 381 | 72.0 |
| 65+ | Yes | 148 | 28.0 |

**Why it matters:** Young people are clearly engaging more in conversations about misinformation. Targeted outreach may be needed to bring older generations into these conversations.

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**Final Thoughts**

This simulated project represents a realistic workflow for analyzing public sentiment in the AI age. I designed and rebalanced the dataset manually in Excel using VLOOKUPs and various formulas for realism, then performed SQL-based demographic analysis across six survey questions using JOINs, subqueries, temp tables, and creating a view.

This project gave me hands-on experience with data cleaning, demographic breakdowns, and insight extraction. I'm excited to take these skills even further by working with messy, real-world datasets.