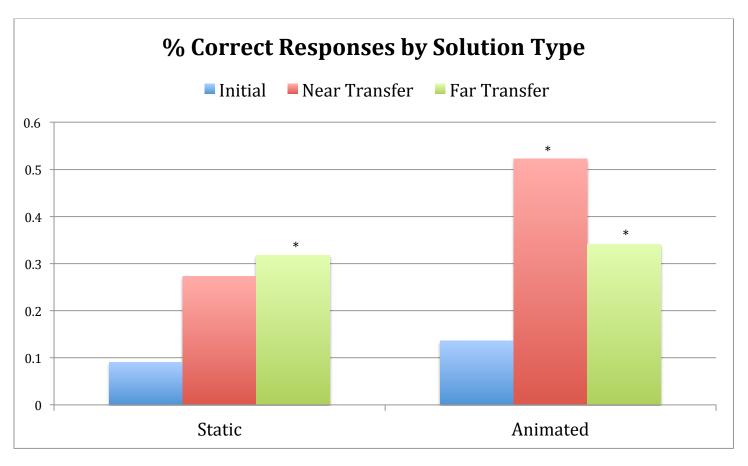
SUMMARY OF CHI SQUARE TEST RESULTS

Comparison by Solution Type

- For the static condition, there is no significant difference in the percentage of students who answered the initial and near transfer problems correctly. However, there is a significant difference in the percentage of students who answered the initial and far transfer problems correctly.
- For the animated condition, there is a significant difference in the percentage of students who answered the initial and near transfer problems correctly. There is also a significant difference in the percentage of students answering the initial and far transfer problems correctly.

| Condition | Problem | # Correct | # Incorrect | χ^2 | df _{effect} | df _{error} | р | Cramer's V |
|-----------|-----------------|-----------|-------------|----------|----------------------|---------------------|-------------------|---------------|
| Static | 1 | 4 | 40 | 4.889 | 1 | 88 | .051 | .236 |
| | 4 | 12 | 32 | 4.889 | | | | |
| | <u>1</u> | 4 | 40 | 6.984 | 1 | 88 | <mark>.016</mark> | .282 |
| | <mark>5</mark> | 14 | 30 | 0.984 | | | | |
| Animated | <mark>6</mark> | 6 | 38 | 14.864 | 1 | 88 | <.001 | .411 |
| | <mark>9</mark> | 23 | 21 | 14.004 | 1 | 00 | | |
| | <mark>6</mark> | 6 | 38 | 5.066 | 1 | 88 | <mark>.044</mark> | .240 |
| | <mark>10</mark> | 15 | 29 | 5.000 | | | | |



Comparison by Problem Type

- There is no significant difference in the percentage of students who answered the initial problem correctly in the static vs. animated conditions. The same is true for the percentage of students who answered the far transfer problem correctly.
- There is a significant difference in the percentage of students who answered the near transfer problem correctly in the static vs. animated conditions for the worked-out problems viewed.

| Condition | Problem | | # Correct | # Incorrect | χ^2 | df_{effect} | $\mathrm{df}_{\mathrm{error}}$ | р | Cramer's V |
|-----------------|---------------|----------------|--------------|----------------|----------|----------------------|--------------------------------|-------------------|---------------|
| Static | (with a) | 1 | 4 | 40 | 0.454 | 4 | 00 | 720 | 072 |
| Animated | Initial | 6 | 6 | 38 | 0.451 | 1 | 88 | .739 | .072 |
| <u>Static</u> | Noor Transfor | <mark>4</mark> | 12 | 32 | F 74 | 1 | 00 | 020 | 255 |
| Animated | Near Transfer | 9 | 23 | 21 | 5.74 | 1 | 88 | <mark>.029</mark> | .255 |
| Static | Fan Tuan efen | 5 | 14 | 30 | 0.054 | 4 | 00 | 1 000 | 024 |
| Animated | Far Transfer | 10 | 15 | 29 | 0.051 | 1 | 88 | 1.000 | .024 |

