

Table 1: Local-project scenario - Knowledge groups created by past prs: Results of Mann-Whitney test (adj.  $p$ -value) and Cliff’s Delta ( $d$ ).

| Test  | adj. $p$ -value | $d$                  |
|---|-----------------|----------------------|
| <b>Acceptance Rate</b>  |                 |                      |
| low <i>vs</i> medium-low  | < <b>0.01</b>   | -0.069 (Negligible)  |
| low <i>vs</i> medium-high                                       | < <b>0.01</b>   | -0.095 (Negligible)  |
| low <i>vs</i> high  | < <b>0.01</b>   | -0.094 (Negligible)  |
| medium-low <i>vs</i> medium-high                                | < <b>0.01</b>   | -0.031 (Negligible)  |
| medium-low <i>vs</i> high                                       | < <b>0.01</b>   | -0.033 (Negligible)  |
| medium-high <i>vs</i> high                                      | 0.58            | -0.0092 (Negligible) |
| <b>Accepted PR Closing Time</b>                                 |                 |                      |
| low <i>vs</i> medium-low  | 0.054           | -0.03 (Negligible)   |
| low <i>vs</i> medium-high                                       | < <b>0.01</b>   | -0.057 (Negligible)  |
| low <i>vs</i> high  | 0.054           | -0.029 (Negligible)  |
| medium-low <i>vs</i> medium-high                                | 0.057           | -0.027 (Negligible)  |
| medium-low <i>vs</i> high                                       | 0.74            | 0.004 (Negligible)   |
| medium-high <i>vs</i> high                                      | <b>0.043</b>    | 0.031 (Negligible)   |
| <b>General Comments Received</b>                                |                 |                      |
| low <i>vs</i> medium-low  | < <b>0.01</b>   | -0.051 (Negligible)  |
| low <i>vs</i> medium-high                                       | < <b>0.01</b>   | -0.084 (Negligible)  |
| low <i>vs</i> high  | < <b>0.01</b>   | -0.094 (Negligible)  |
| medium-low <i>vs</i> medium-high                                | <b>0.014</b>    | -0.032 (Negligible)  |
| medium-low <i>vs</i> high                                       | < <b>0.01</b>   | -0.041 (Negligible)  |
| medium-high <i>vs</i> high                                      | 0.51            | -0.0078 (Negligible) |
| <b>Source Code Comments Received</b>                            |                 |                      |
| low <i>vs</i> medium-low  | <b>0.039</b>    | 0.035 (Negligible)   |
| low <i>vs</i> medium-high                                       | < <b>0.01</b>   | 0.072 (Negligible)   |
| low <i>vs</i> high  | < <b>0.01</b>   | 0.088 (Negligible)   |
| medium-low <i>vs</i> medium-high                                | <b>0.032</b>    | 0.038 (Negligible)   |
| medium-low <i>vs</i> high                                       | < <b>0.01</b>   | 0.053 (Negligible)   |
| medium-high <i>vs</i> high                                      | 0.28            | 0.016 (Negligible)   |
| <b>Sentiment Analysis on General Comments: SentiStrength-SE</b> |                 |                      |
| low <i>vs</i> medium-low SSE                                    | 0.62            | 0.012 (Negligible)   |
| low <i>vs</i> medium-high SSE                                   | 0.099           | 0.027 (Negligible)   |
| low <i>vs</i> high SSE  | < <b>0.01</b>   | 0.041 (Negligible)   |
| medium-low <i>vs</i> medium-high SSE                            | 0.62            | 0.016 (Negligible)   |
| medium-low <i>vs</i> high SSE                                   | 0.082           | 0.03 (Negligible)    |
| medium-high <i>vs</i> high SSE                                  | 0.62            | 0.014 (Negligible)   |
| <b>Sentiment Analysis on General Comments: Senti4SD</b>         |                 |                      |
| low <i>vs</i> medium-low 4SD                                    | 0.41            | 0.015 (Negligible)   |
| low <i>vs</i> medium-high 4SD                                   | < <b>0.01</b>   | 0.043 (Negligible)   |
| low <i>vs</i> high 4SD  | < <b>0.01</b>   | 0.051 (Negligible)   |
| medium-low <i>vs</i> medium-high 4SD                            | 0.081           | 0.027 (Negligible)   |
| medium-low <i>vs</i> high 4SD                                   | <b>0.017</b>    | 0.035 (Negligible)   |
| medium-high <i>vs</i> high 4SD                                  | 0.49            | 0.0084 (Negligible)  |
| <b>Sentiment Analysis on Code Comments: SentiStrength-SE</b>    |                 |                      |
| low <i>vs</i> medium-low SSE                                    | 1.00            | -0.0024 (Negligible) |
| low <i>vs</i> medium-high SSE                                   | 0.094           | -0.04 (Negligible)   |
| low <i>vs</i> high SSE  | 1.00            | -0.0076 (Negligible) |
| medium-low <i>vs</i> medium-high 4SD                            | 0.16            | -0.037 (Negligible)  |
| medium-low <i>vs</i> high SSE                                   | 1.00            | -0.0052 (Negligible) |
| medium-high <i>vs</i> high SSE                                  | 0.21            | 0.032 (Negligible)   |
| <b>Sentiment Analysis on Code Comments: Senti4SD</b>            |                 |                      |
| low <i>vs</i> medium-low 4SD                                    | 0.26            | -0.033 (Negligible)  |
| low <i>vs</i> medium-high 4SD                                   | 1.00            | -0.0047 (Negligible) |
| low <i>vs</i> high 4SD  | 1.00            | 0.0035 (Negligible)  |
| medium-low <i>vs</i> medium-high 4SD                            | 0.46            | 0.028 (Negligible)   |
| medium-low <i>vs</i> high 4SD                                   | 0.24            | 0.036 (Negligible)   |
| medium-high <i>vs</i> high 4SD                                  | 1.00            | 0.008 (Negligible)   |