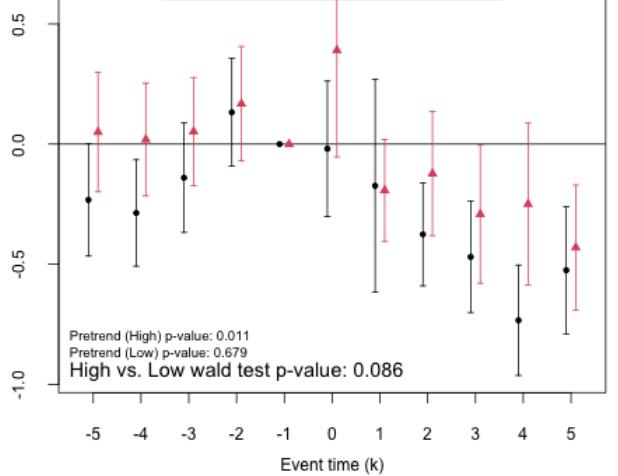
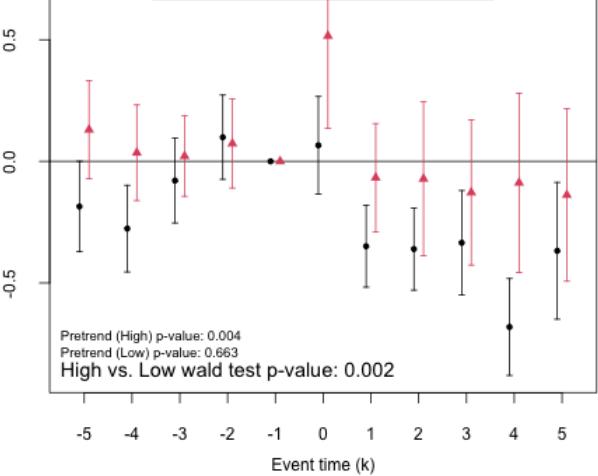


major_minor_release_count rolling5**Sample: num-qualified=1**knowledge_redundancy -> broad_expertise
activity_diversity_count -> avg_unique_types

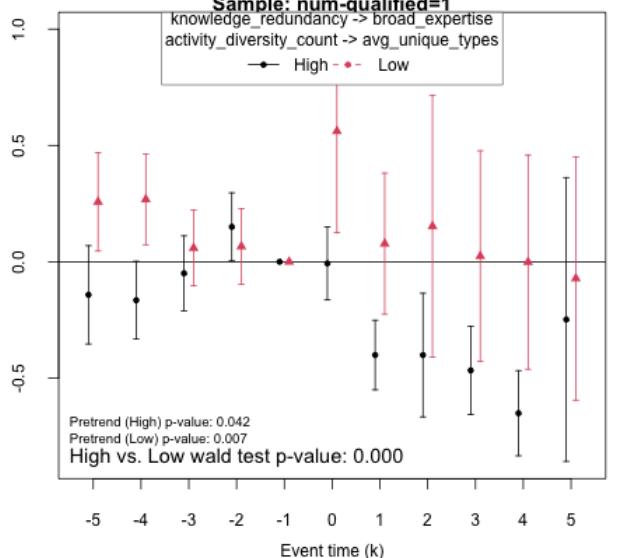
● High ▲ Low

**overall_new_release_count rolling5****Sample: num-qualified=1**knowledge_redundancy -> broad_expertise
activity_diversity_count -> avg_unique_types

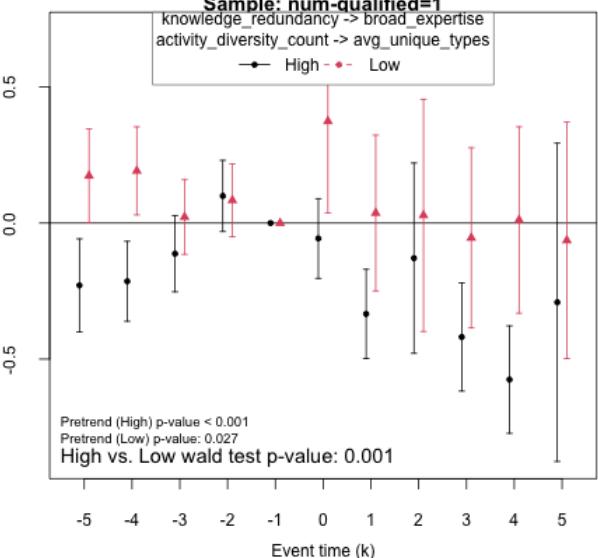
● High ▲ Low

**pull_request_merged rolling5****Sample: num-qualified=1**knowledge_redundancy -> broad_expertise
activity_diversity_count -> avg_unique_types

● High ▲ Low

**pull_request_opened rolling5****Sample: num-qualified=1**knowledge_redundancy -> broad_expertise
activity_diversity_count -> avg_unique_types

● High ▲ Low

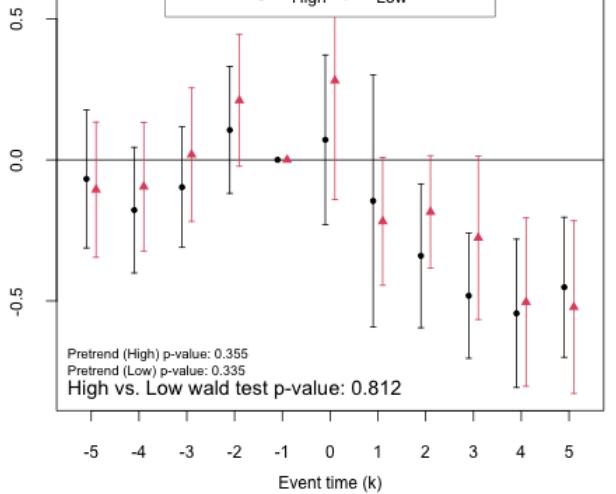


major_minor_release_count rolling5

Sample: num-qualified=1

knowledge_redundancy -> broad_expertise
discussion_content -> cos_sim_diff_actor

● High ▲ Low

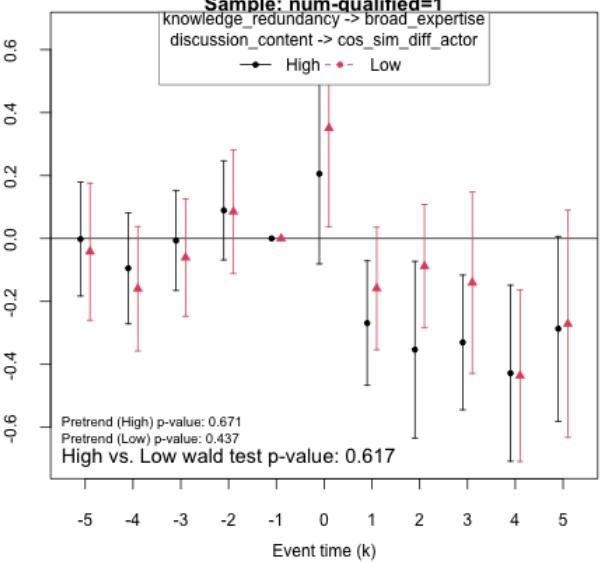


overall_new_release_count rolling5

Sample: num-qualified=1

knowledge_redundancy -> broad_expertise
discussion_content -> cos_sim_diff_actor

● High ▲ Low

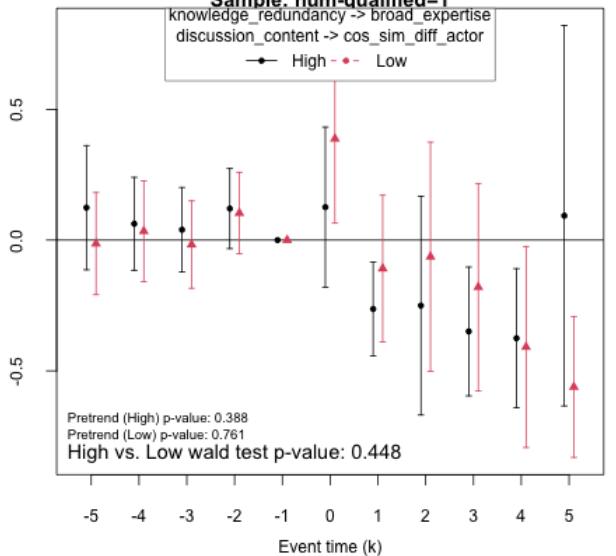


pull_request_merged rolling5

Sample: num-qualified=1

knowledge_redundancy -> broad_expertise
discussion_content -> cos_sim_diff_actor

● High ▲ Low

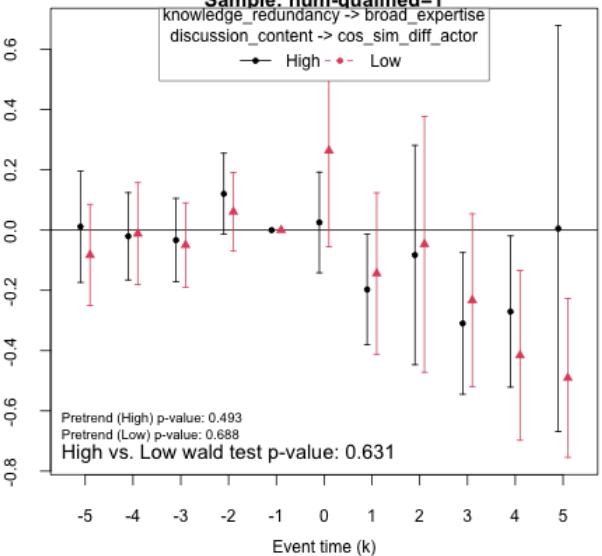


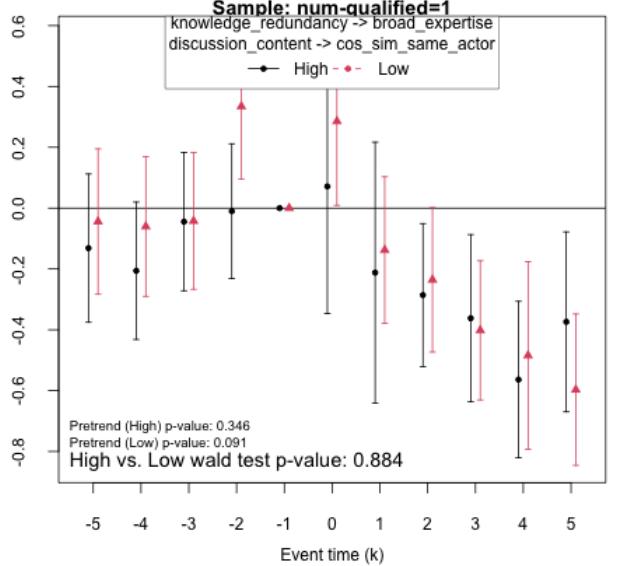
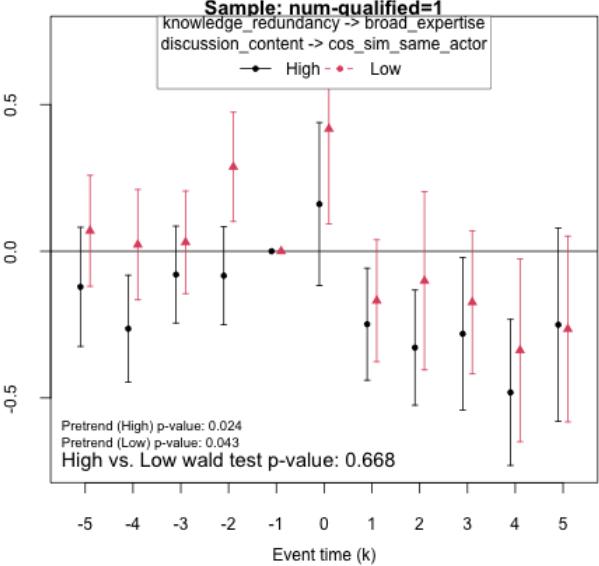
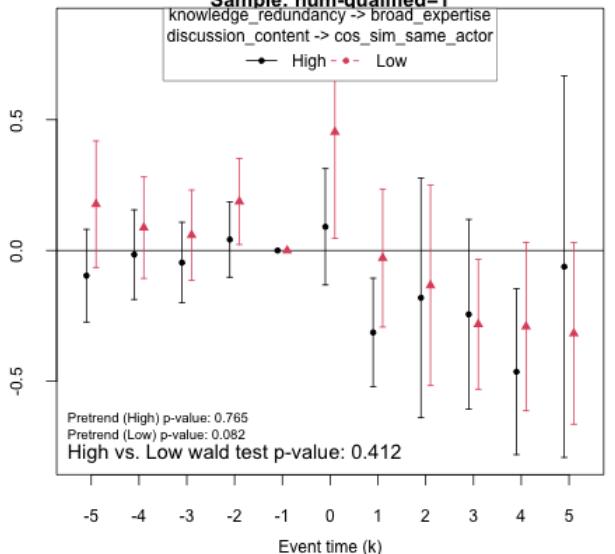
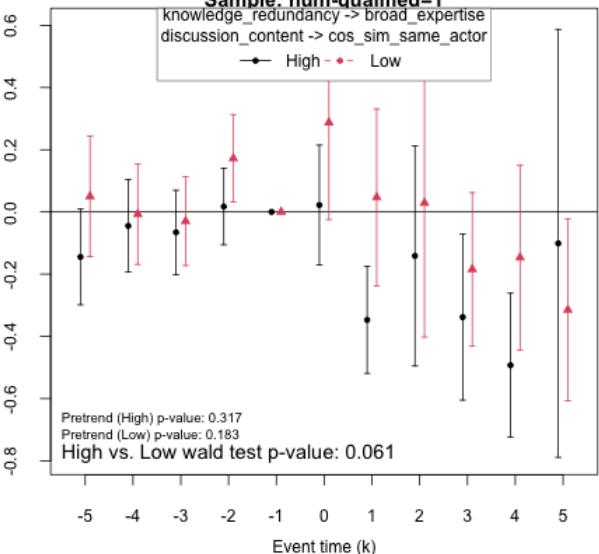
pull_request_opened rolling5

Sample: num-qualified=1

knowledge_redundancy -> broad_expertise
discussion_content -> cos_sim_diff_actor

● High ▲ Low



major_minor_release_count rolling5**Sample: num-qualified=1****overall_new_release_count rolling5****Sample: num-qualified=1****pull_request_merged rolling5****Sample: num-qualified=1****pull_request_opened rolling5****Sample: num-qualified=1**

major_minor_release_count rolling5**Sample: num-qualified=1**

knowledge_redundancy -> broad_expertise

discussion_content -> text_sim_ratio

● High ▲ Low

0.5
0.0
-0.5

Pretrnd (High) p-value: 0.421

Pretrnd (Low) p-value: 0.367

High vs. Low wald test p-value: 0.435



Event time (k)

overall_new_release_count rolling5**Sample: num-qualified=1**

knowledge_redundancy -> broad_expertise

discussion_content -> text_sim_ratio

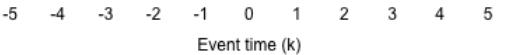
● High ▲ Low

0.6
0.4
0.2
0.0
-0.2

Pretrnd (High) p-value: 0.447

Pretrnd (Low) p-value: 0.488

High vs. Low wald test p-value: 0.673



Event time (k)

pull_request_merged rolling5**Sample: num-qualified=1**

knowledge_redundancy -> broad_expertise

discussion_content -> text_sim_ratio

● High ▲ Low

1.0
0.5
0.0
-0.5

Pretrnd (High) p-value: 0.499

Pretrnd (Low) p-value: 0.785

High vs. Low wald test p-value: 0.175



Event time (k)

pull_request_opened rolling5**Sample: num-qualified=1**

knowledge_redundancy -> broad_expertise

discussion_content -> text_sim_ratio

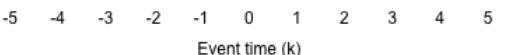
● High ▲ Low

0.5
0.0
-0.5

Pretrnd (High) p-value: 0.483

Pretrnd (Low) p-value: 0.324

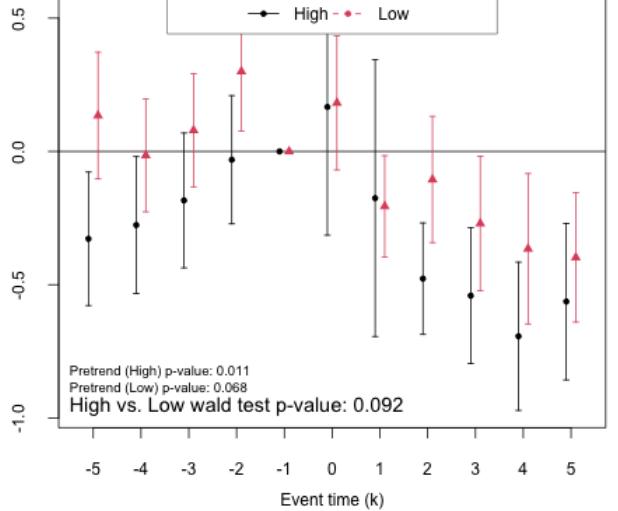
High vs. Low wald test p-value: 0.056



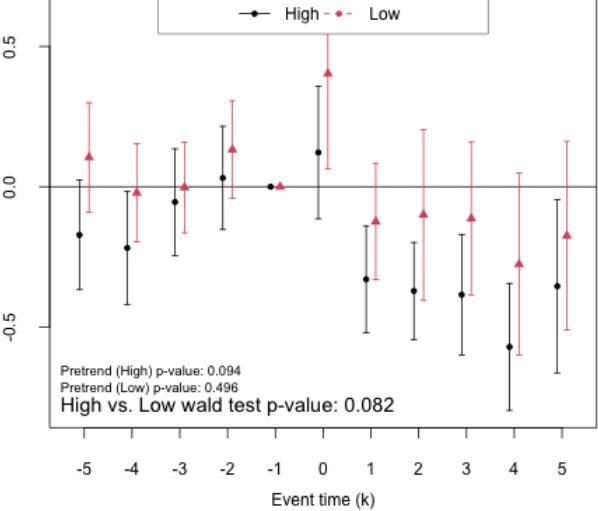
Event time (k)

major_minor_release_count rolling5**Sample: num-qualified=1**

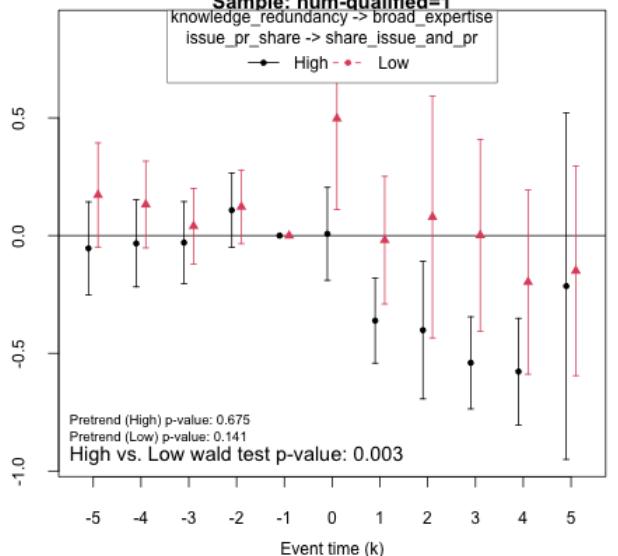
knowledge_redundancy -> broad_expertise
 issue_pr_share -> share_issue_and_pr
 ● High ▲ Low

**overall_new_release_count rolling5****Sample: num-qualified=1**

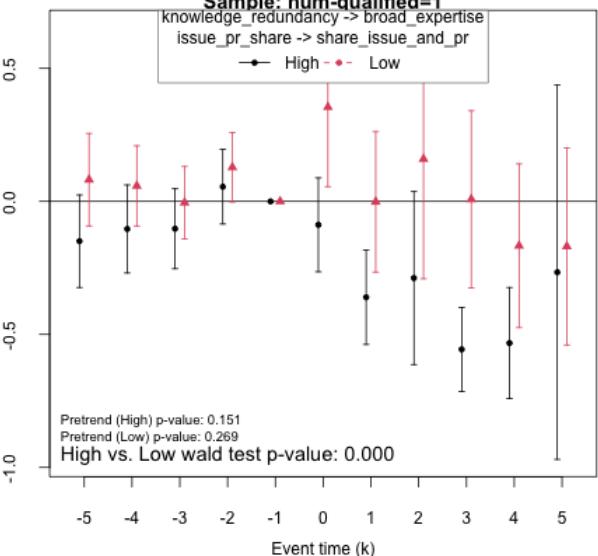
knowledge_redundancy -> broad_expertise
 issue_pr_share -> share_issue_and_pr
 ● High ▲ Low

**pull_request_merged rolling5****Sample: num-qualified=1**

knowledge_redundancy -> broad_expertise
 issue_pr_share -> share_issue_and_pr
 ● High ▲ Low

**pull_request_opened rolling5****Sample: num-qualified=1**

knowledge_redundancy -> broad_expertise
 issue_pr_share -> share_issue_and_pr
 ● High ▲ Low



major_minor_release_count rolling5**Sample: num-qualified=1**

knowledge_redundancy -> broad_expertise
issue_pr_share -> share_issue_only

● High ▲ Low

0.5
0.0
-0.5

Pretrend (High) p-value: 0.814

Pretrend (Low) p-value: 0.070

High vs. Low wald test p-value: 0.462

-5 -4 -3 -2 -1 0 1 2 3 4 5
Event time (k)

overall_new_release_count rolling5**Sample: num-qualified=1**

knowledge_redundancy -> broad_expertise
issue_pr_share -> share_issue_only

● High ▲ Low

0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6

Pretrend (High) p-value: 0.899

Pretrend (Low) p-value: 0.361

High vs. Low wald test p-value: 0.956

-5 -4 -3 -2 -1 0 1 2 3 4 5
Event time (k)

pull_request_merged rolling5**Sample: num-qualified=1**

knowledge_redundancy -> broad_expertise
issue_pr_share -> share_issue_only

● High ▲ Low

0.5
0.0
-0.5
-1.0

Pretrend (High) p-value: 0.142

Pretrend (Low) p-value: 0.628

High vs. Low wald test p-value: 0.008

-5 -4 -3 -2 -1 0 1 2 3 4 5
Event time (k)

pull_request_opened rolling5**Sample: num-qualified=1**

knowledge_redundancy -> broad_expertise
issue_pr_share -> share_issue_only

● High ▲ Low

0.5
0.4
0.3
0.2
0.1
0.0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1.0

Pretrend (High) p-value: 0.114

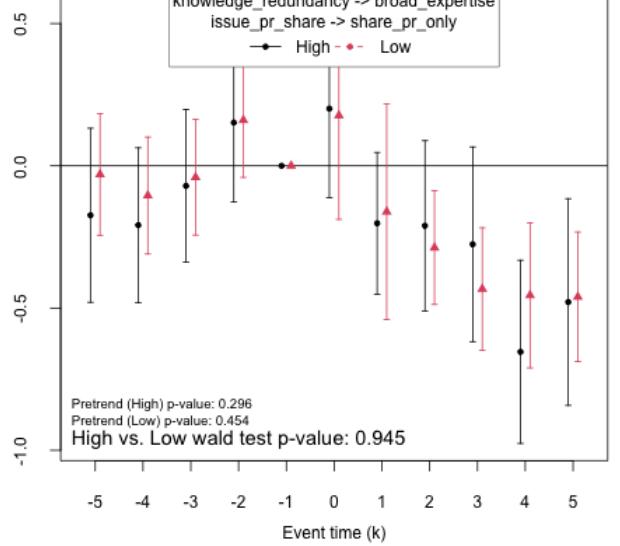
Pretrend (Low) p-value: 0.132

High vs. Low wald test p-value: 0.000

-5 -4 -3 -2 -1 0 1 2 3 4 5
Event time (k)

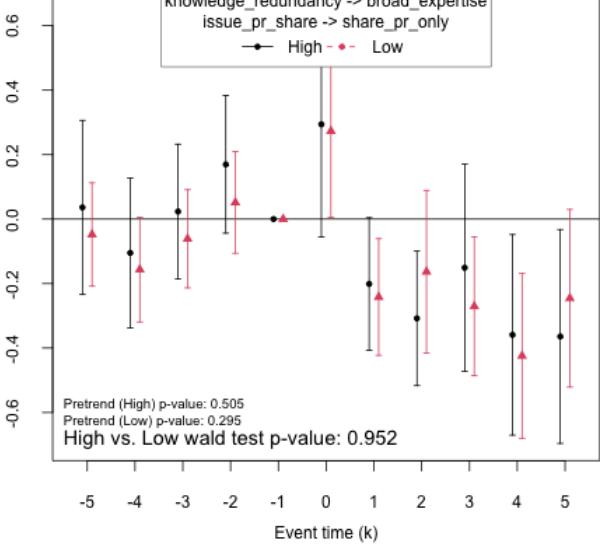
major_minor_release_count rolling5

Sample: num-qualified=1
knowledge_redundancy -> broad_expertise
issue_pr_share -> share_pr_only
● High ▲ Low



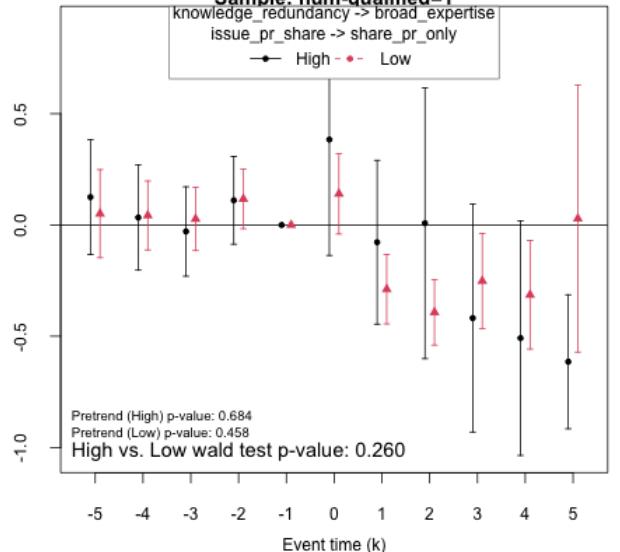
overall_new_release_count rolling5

Sample: num-qualified=1
knowledge_redundancy -> broad_expertise
issue_pr_share -> share_pr_only
● High ▲ Low



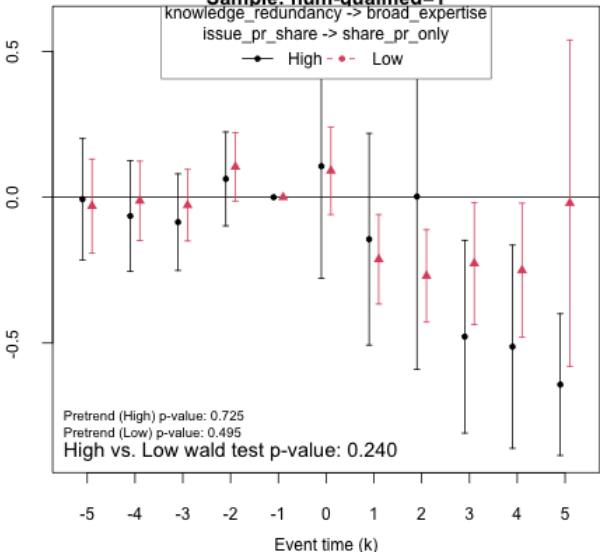
pull_request_merged rolling5

Sample: num-qualified=1
knowledge_redundancy -> broad_expertise
issue_pr_share -> share_pr_only
● High ▲ Low



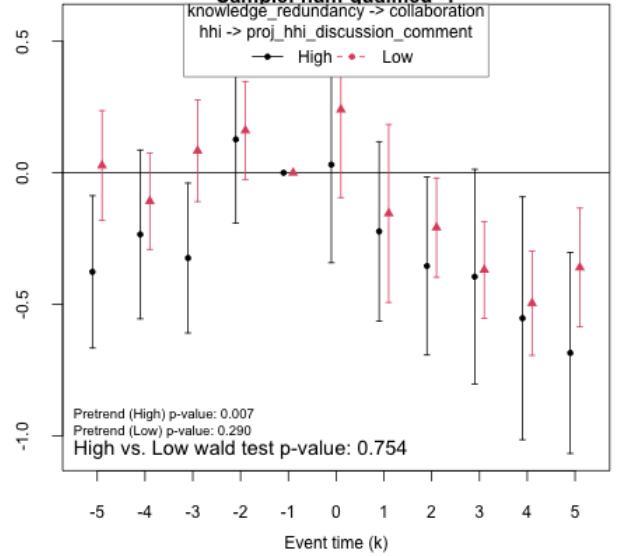
pull_request_opened rolling5

Sample: num-qualified=1
knowledge_redundancy -> broad_expertise
issue_pr_share -> share_pr_only
● High ▲ Low

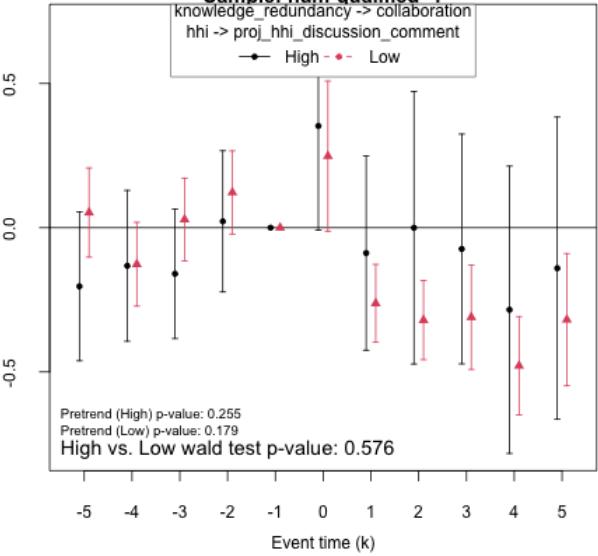


major_minor_release_count rolling5

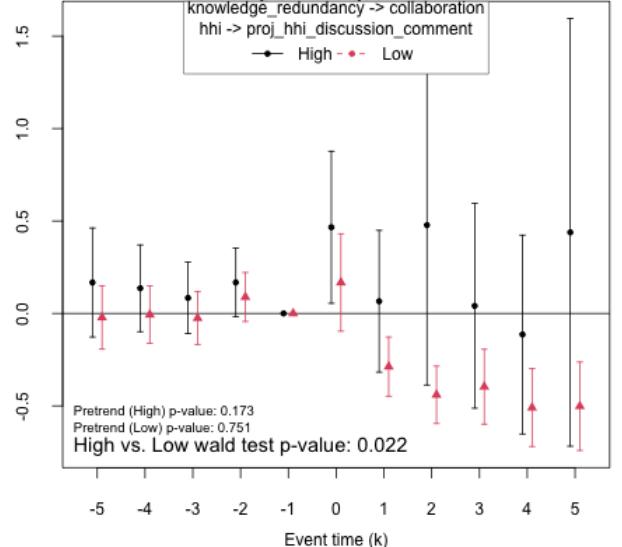
Sample: num-qualified=1

**overall_new_release_count rolling5**

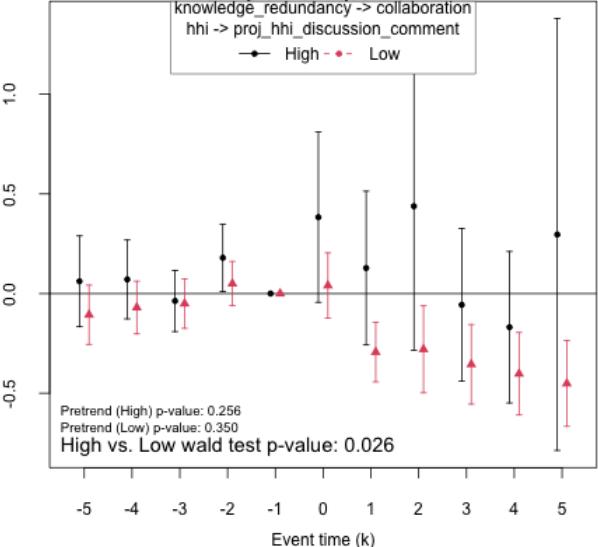
Sample: num-qualified=1

**pull_request_merged rolling5**

Sample: num-qualified=1

**pull_request_opened rolling5**

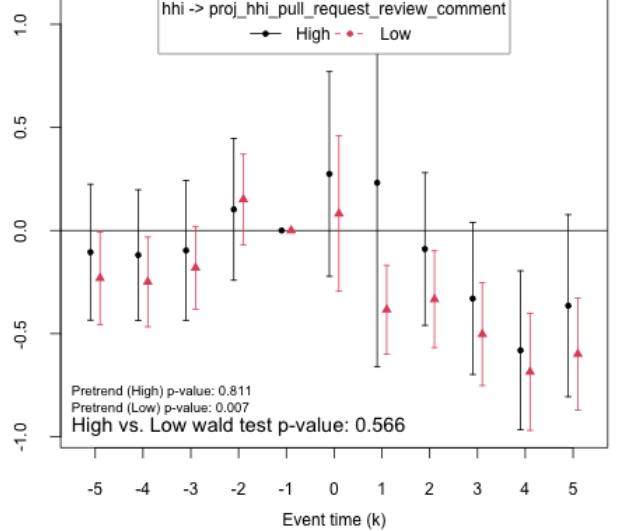
Sample: num-qualified=1



major_minor_release_count rolling5

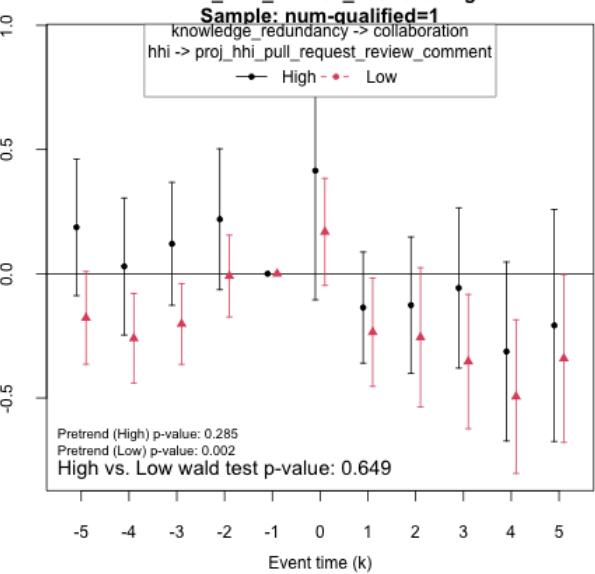
Sample: num-qualified=1

knowledge_redundancy->collaboration
 $hh_i \rightarrow proj_hh_i_pull_request_review_comment$
● High ● Low

**overall_new_release_count rolling5**

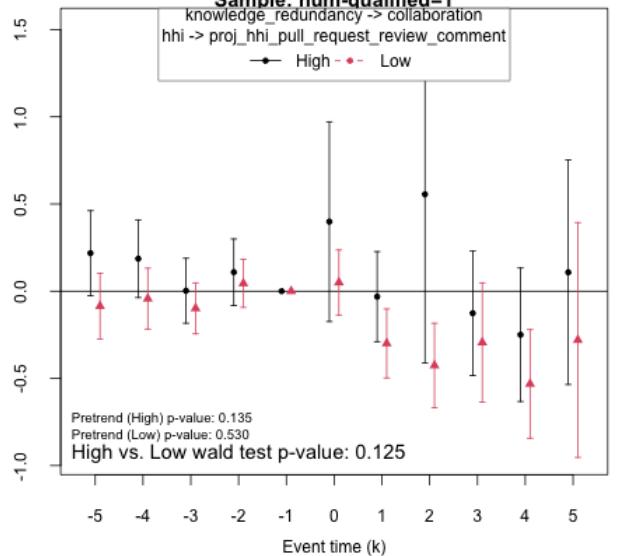
Sample: num-qualified=1

knowledge_redundancy->collaboration
 $hh_i \rightarrow proj_hh_i_pull_request_review_comment$
● High ● Low

**pull_request_merged rolling5**

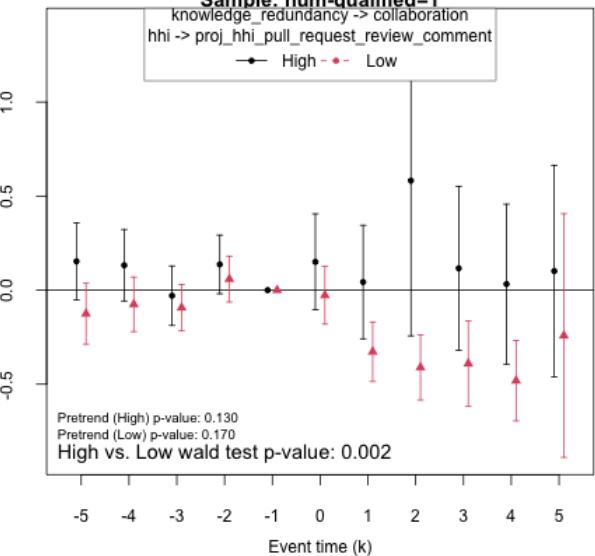
Sample: num-qualified=1

knowledge_redundancy->collaboration
 $hh_i \rightarrow proj_hh_i_pull_request_review_comment$
● High ● Low

**pull_request_opened rolling5**

Sample: num-qualified=1

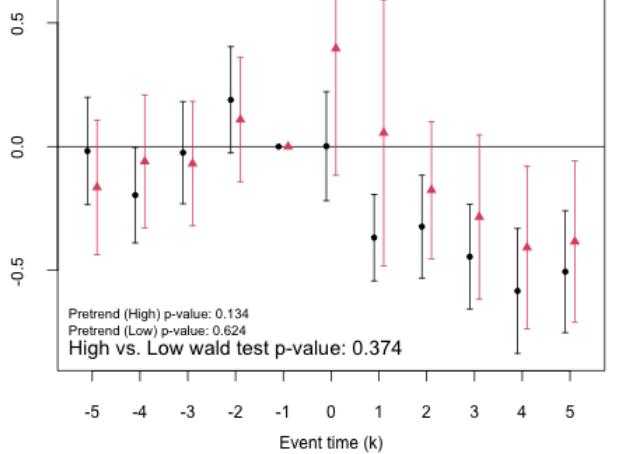
knowledge_redundancy->collaboration
 $hh_i \rightarrow proj_hh_i_pull_request_review_comment$
● High ● Low



major_minor_release_count rolling5

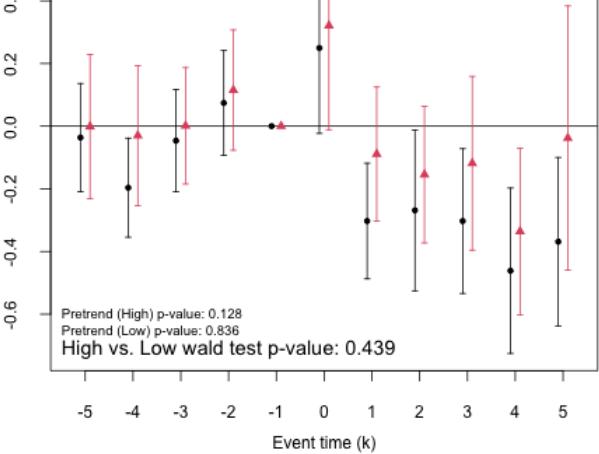
Sample: num-qualified=1

knowledge_redundancy -> collaboration
 member_count -> avg_members_per_problem
 ● High ▲ Low

**overall_new_release_count rolling5**

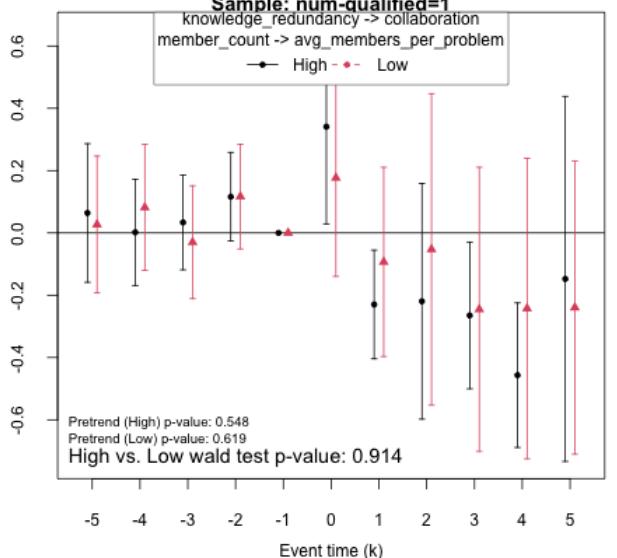
Sample: num-qualified=1

knowledge_redundancy -> collaboration
 member_count -> avg_members_per_problem
 ● High ▲ Low

**pull_request_merged rolling5**

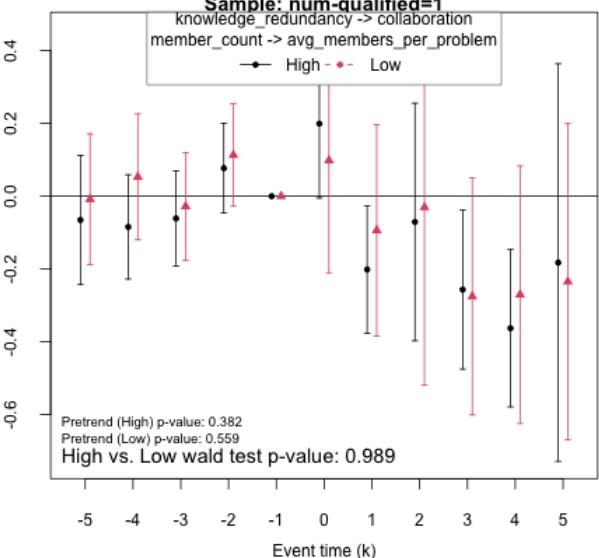
Sample: num-qualified=1

knowledge_redundancy -> collaboration
 member_count -> avg_members_per_problem
 ● High ▲ Low

**pull_request_opened rolling5**

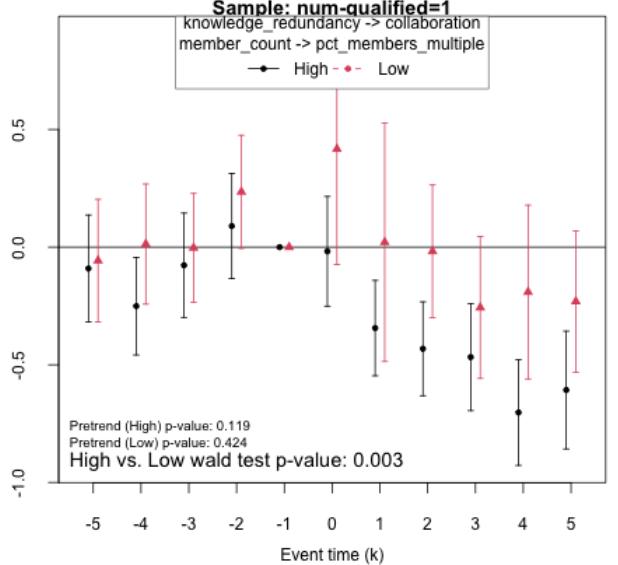
Sample: num-qualified=1

knowledge_redundancy -> collaboration
 member_count -> avg_members_per_problem
 ● High ▲ Low

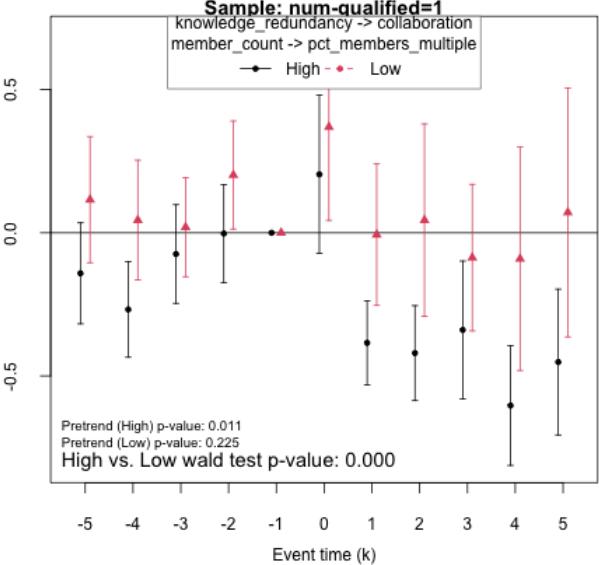


major_minor_release_count rolling5

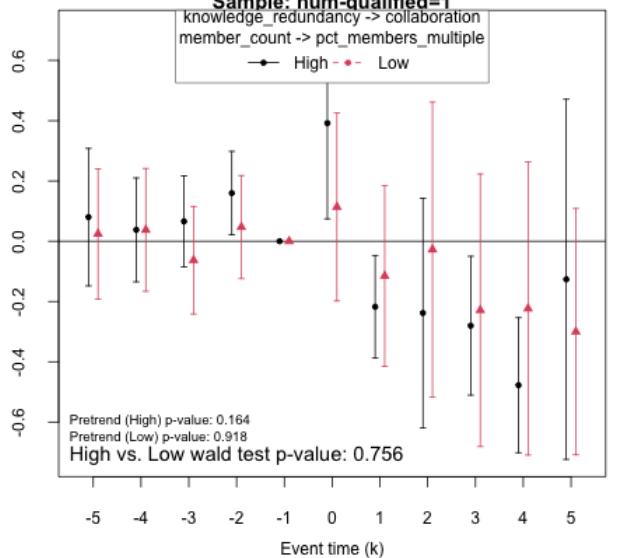
Sample: num-qualified=1
knowledge_redundancy -> collaboration
member_count -> pct_members_multiple
● High ▲ Low

**overall_new_release_count rolling5**

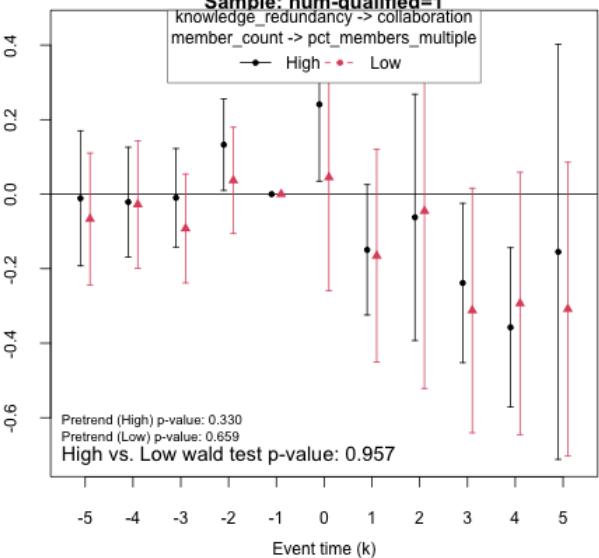
Sample: num-qualified=1
knowledge_redundancy -> collaboration
member_count -> pct_members_multiple
● High ▲ Low

**pull_request_merged rolling5**

Sample: num-qualified=1
knowledge_redundancy -> collaboration
member_count -> pct_members_multiple
● High ▲ Low

**pull_request_opened rolling5**

Sample: num-qualified=1
knowledge_redundancy -> collaboration
member_count -> pct_members_multiple
● High ▲ Low

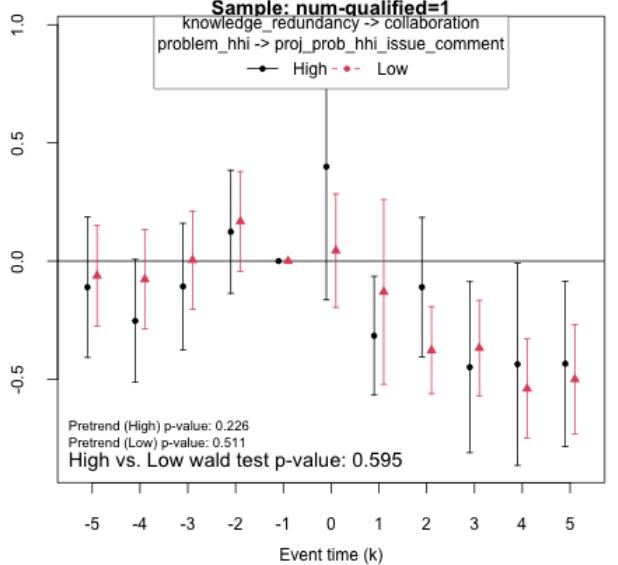


major_minor_release_count rolling5

Sample: num-qualified=1

knowledge_redundancy -> collaboration
 problem_hhi -> proj_prob_hhi_issue_comment

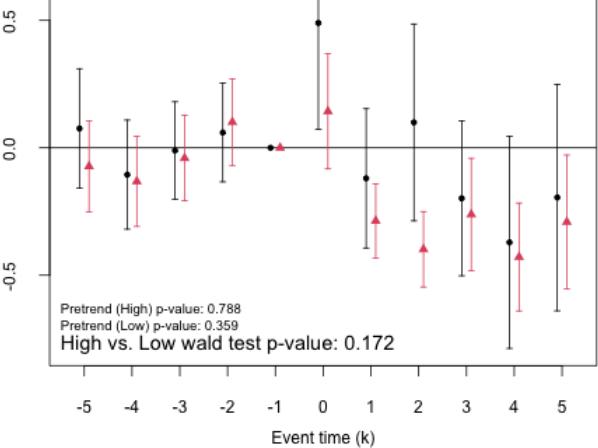
- High
- Low

**overall_new_release_count rolling5**

Sample: num-qualified=1

knowledge_redundancy -> collaboration
 problem_hhi -> proj_prob_hhi_issue_comment

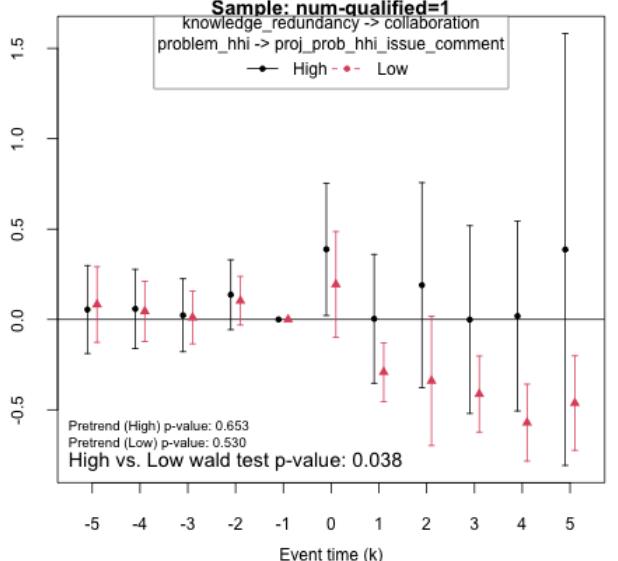
- High
- Low

**pull_request_merged rolling5**

Sample: num-qualified=1

knowledge_redundancy -> collaboration
 problem_hhi -> proj_prob_hhi_issue_comment

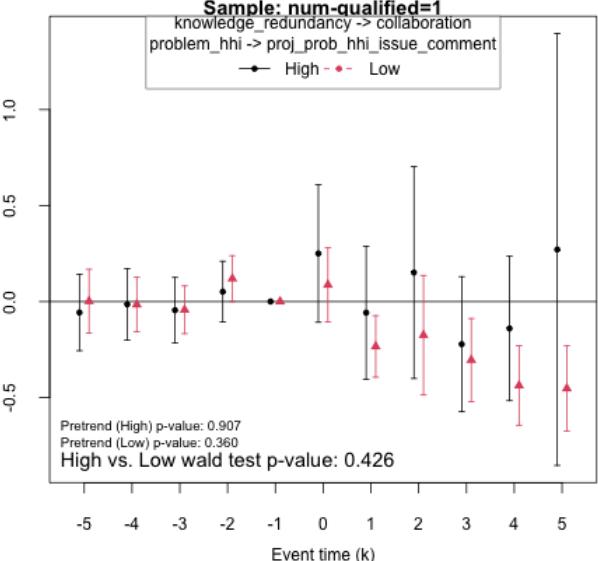
- High
- Low

**pull_request_opened rolling5**

Sample: num-qualified=1

knowledge_redundancy -> collaboration
 problem_hhi -> proj_prob_hhi_issue_comment

- High
- Low

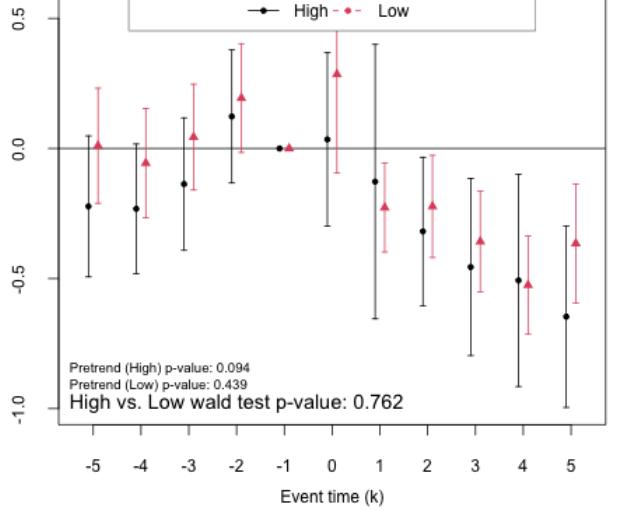


major_minor_release_count rolling5

Sample: num-qualified=1

knowledge_redundancy -> collaboration
problem_hhi -> proj_prob_hhi_pull_request_comment

● High ▲ Low

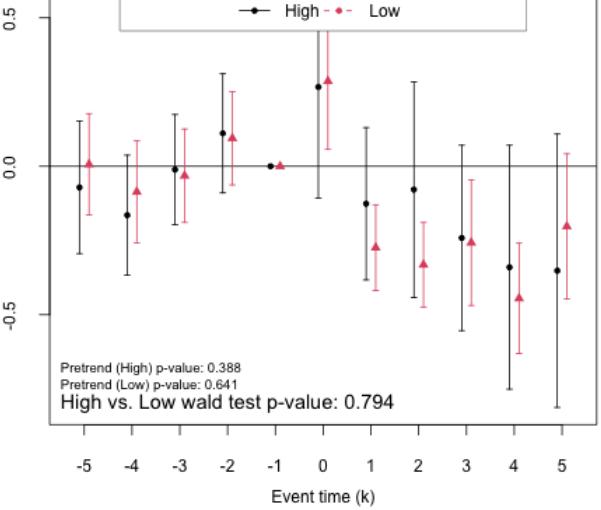


overall_new_release_count rolling5

Sample: num-qualified=1

knowledge_redundancy -> collaboration
problem_hhi -> proj_prob_hhi_pull_request_comment

● High ▲ Low

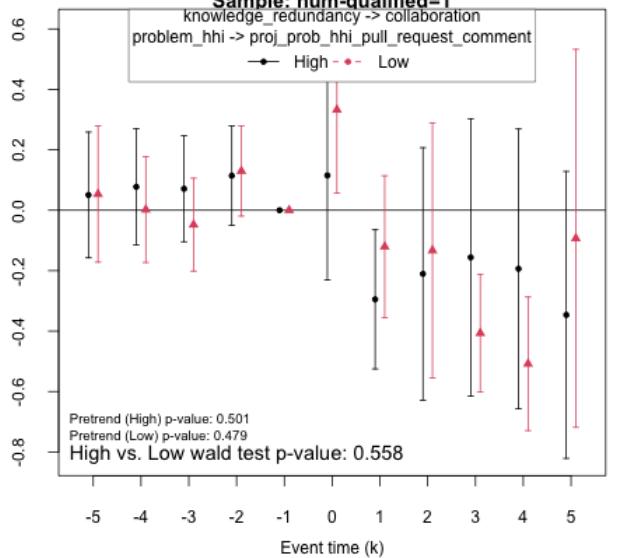


pull_request_merged rolling5

Sample: num-qualified=1

knowledge_redundancy -> collaboration
problem_hhi -> proj_prob_hhi_pull_request_comment

● High ▲ Low

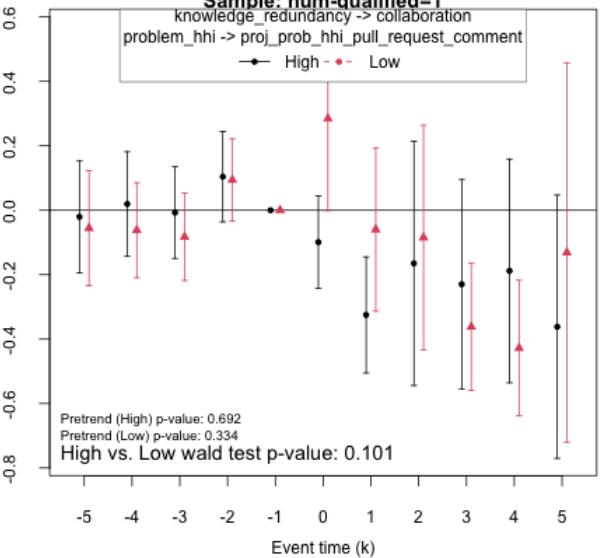


pull_request_opened rolling5

Sample: num-qualified=1

knowledge_redundancy -> collaboration
problem_hhi -> proj_prob_hhi_pull_request_comment

● High ▲ Low

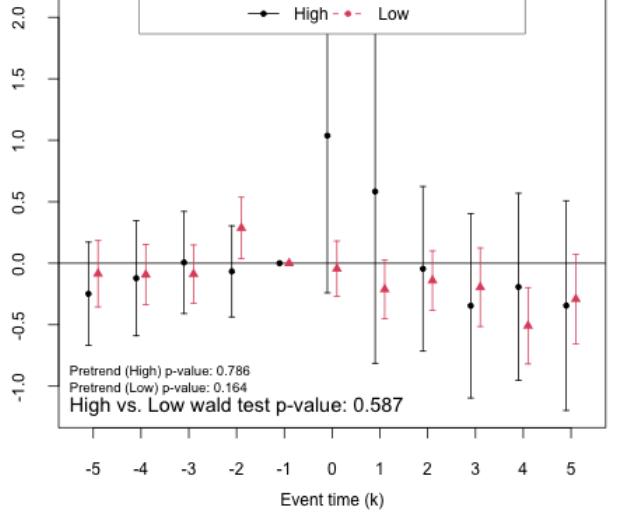


major_minor_release_count rolling5

knowledge_redundancy->collaboration

problem_hhi->proj_prob_hhi_pull_request_review

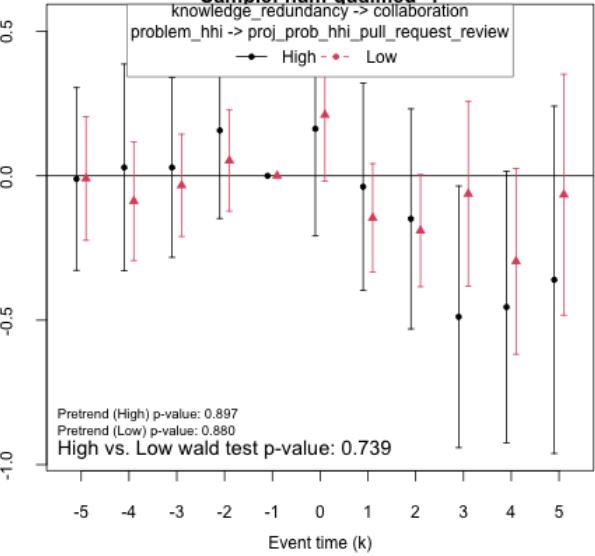
● High -● Low

**overall_new_release_count rolling5**

knowledge_redundancy->collaboration

problem_hhi->proj_prob_hhi_pull_request_review

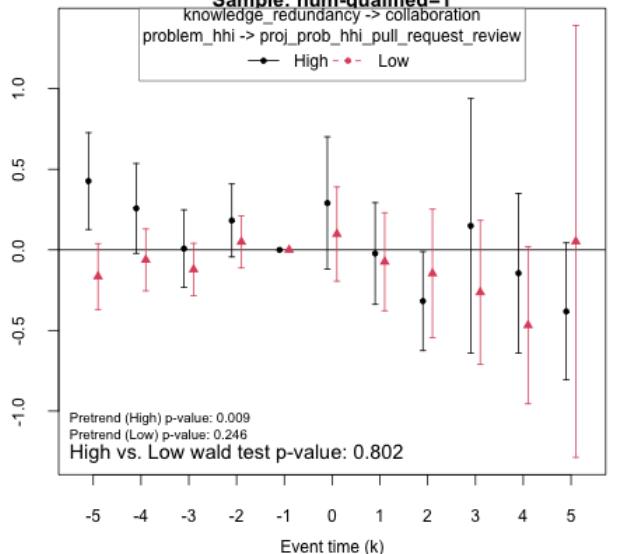
● High -● Low

**pull_request_merged rolling5**

knowledge_redundancy->collaboration

problem_hhi->proj_prob_hhi_pull_request_review

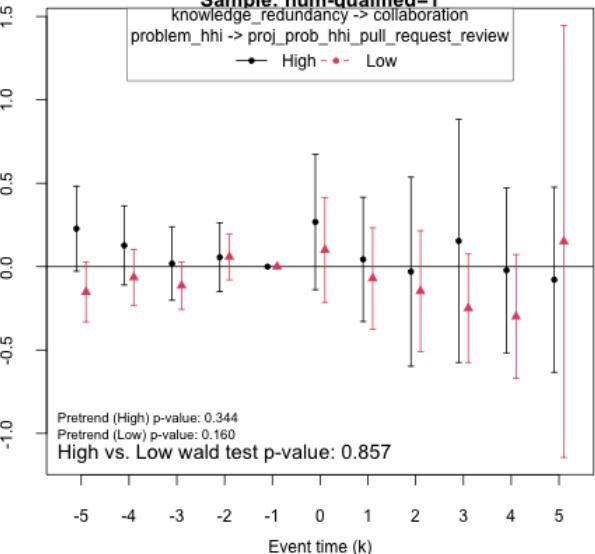
● High -● Low

**pull_request_opened rolling5**

knowledge_redundancy->collaboration

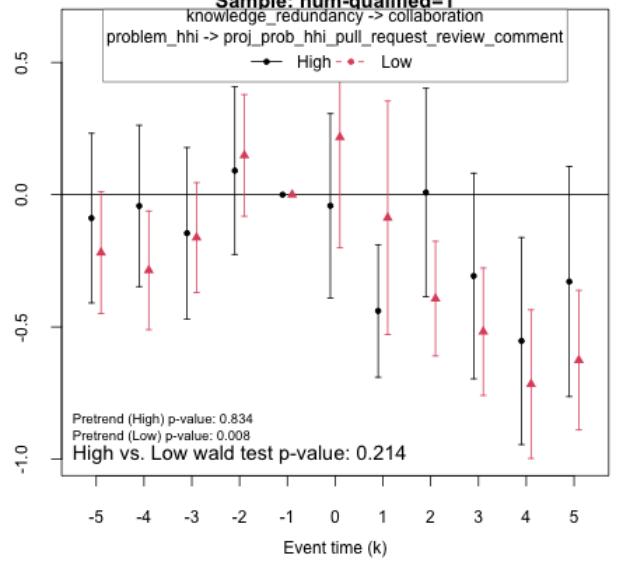
problem_hhi->proj_prob_hhi_pull_request_review

● High -● Low



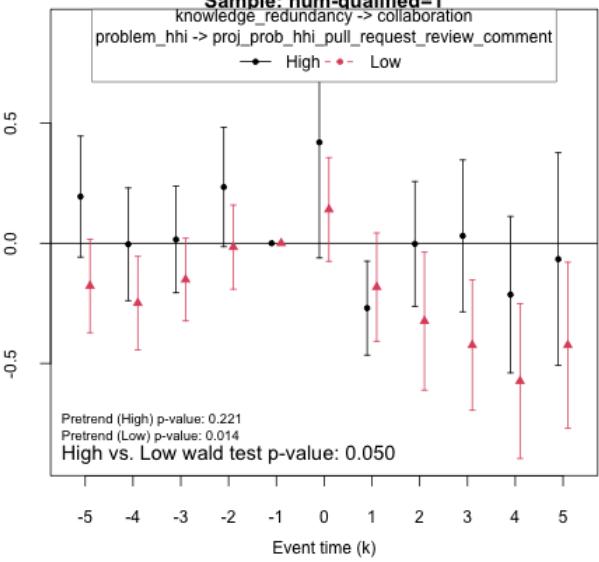
major_minor_release_count rolling5

Sample: num-qualified=1



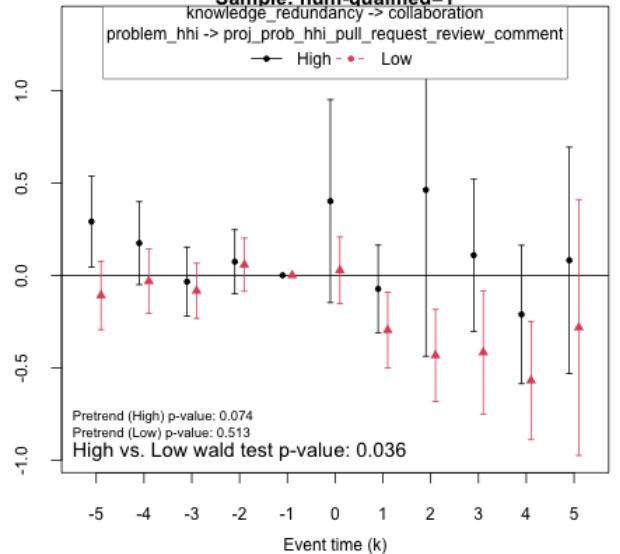
overall_new_release_count rolling5

Sample: num-qualified=1



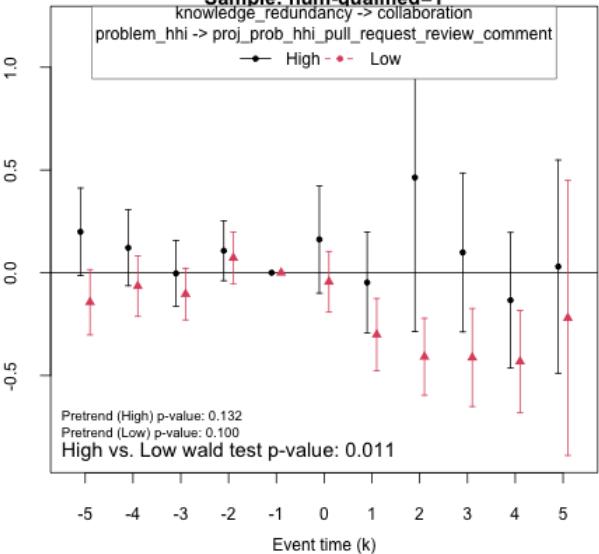
pull_request_merged rolling5

Sample: num-qualified=1



pull_request_opened rolling5

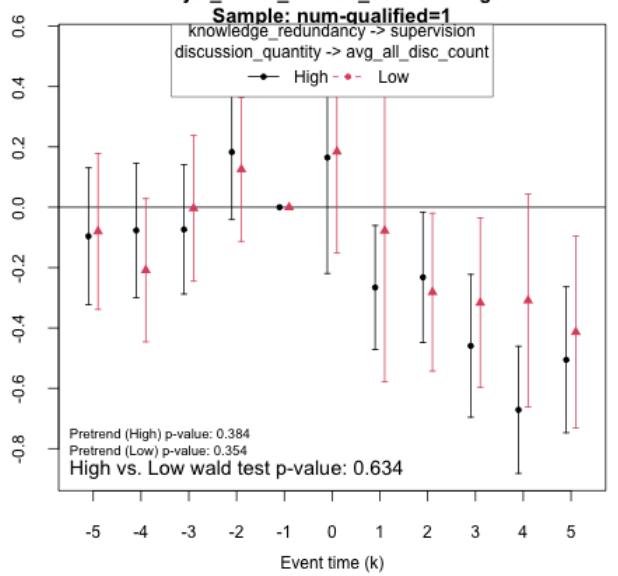
Sample: num-qualified=1



major_minor_release_count rolling5

Sample: num-qualified=1

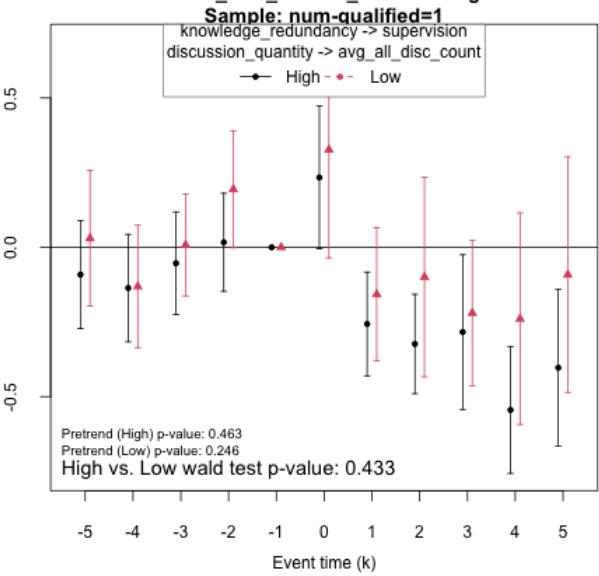
knowledge_redundancy -> supervision
discussion_quantity -> avg_all_disc_count
● High ▲ Low



overall_new_release_count rolling5

Sample: num-qualified=1

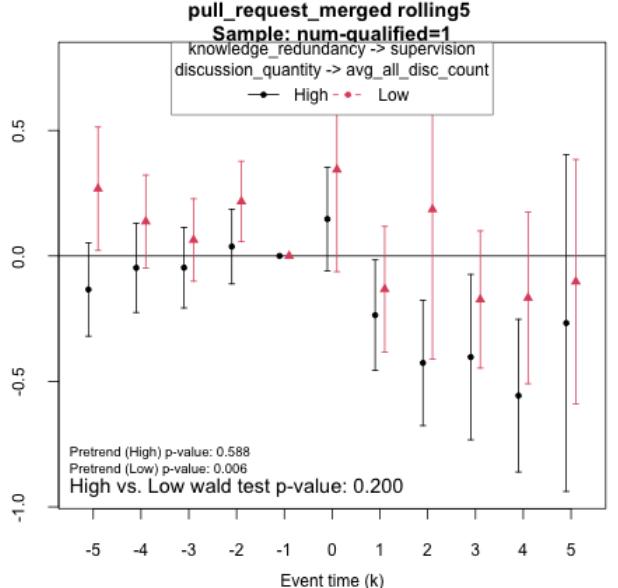
knowledge_redundancy -> supervision
discussion_quantity -> avg_all_disc_count
● High ▲ Low



pull_request_merged rolling5

Sample: num-qualified=1

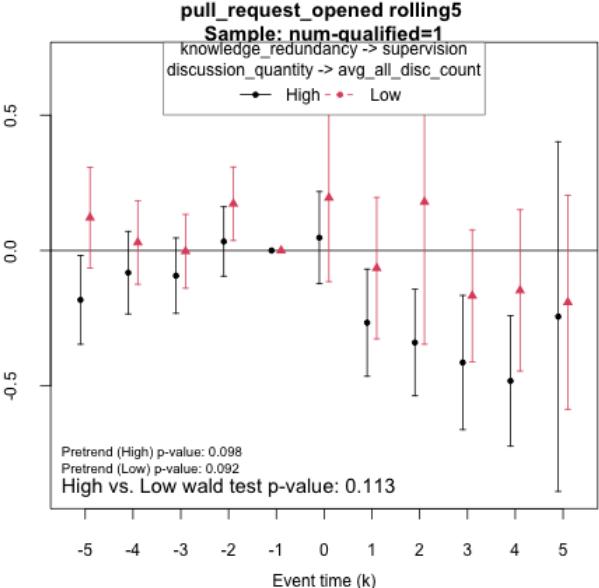
knowledge_redundancy -> supervision
discussion_quantity -> avg_all_disc_count
● High ▲ Low



pull_request_opened rolling5

Sample: num-qualified=1

knowledge_redundancy -> supervision
discussion_quantity -> avg_all_disc_count
● High ▲ Low



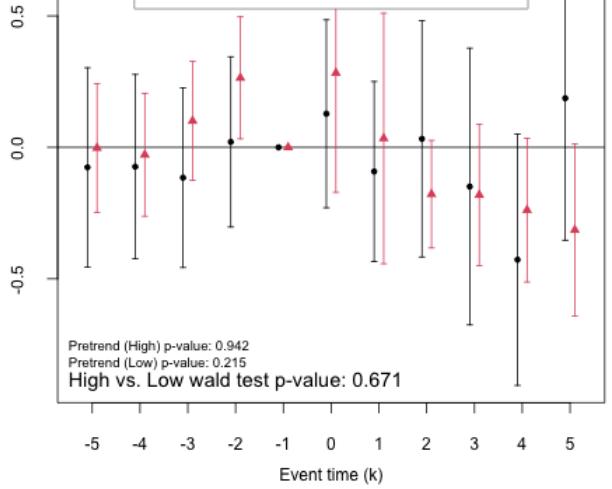
major_minor_release_count rolling5

Sample: num-qualified=1

knowledge_redundancy-> supervision

merged_with_review -> pct_merged_with_approved

● High - ▲ Low



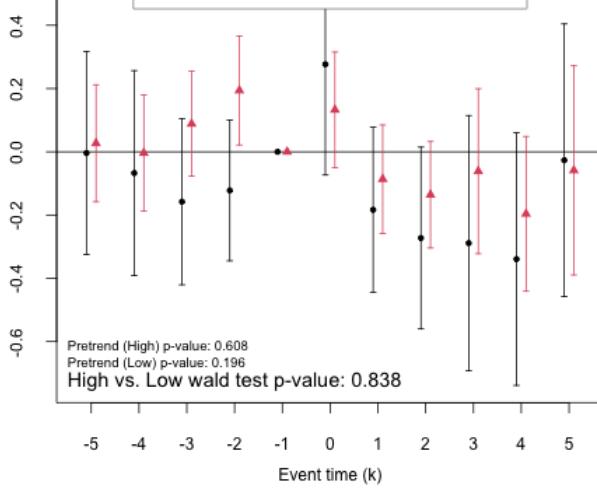
overall_new_release_count rolling5

Sample: num-qualified=1

knowledge_redundancy-> supervision

merged_with_review -> pct_merged_with_approved

● High - ▲ Low



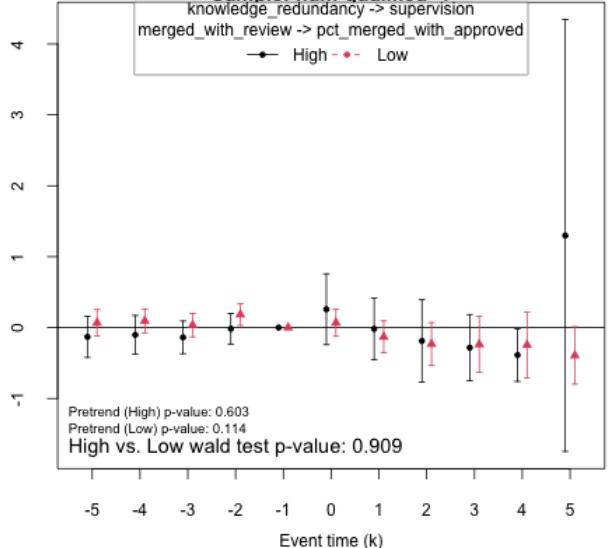
pull_request_merged rolling5

Sample: num-qualified=1

knowledge_redundancy-> supervision

merged_with_review -> pct_merged_with_approved

● High - ▲ Low



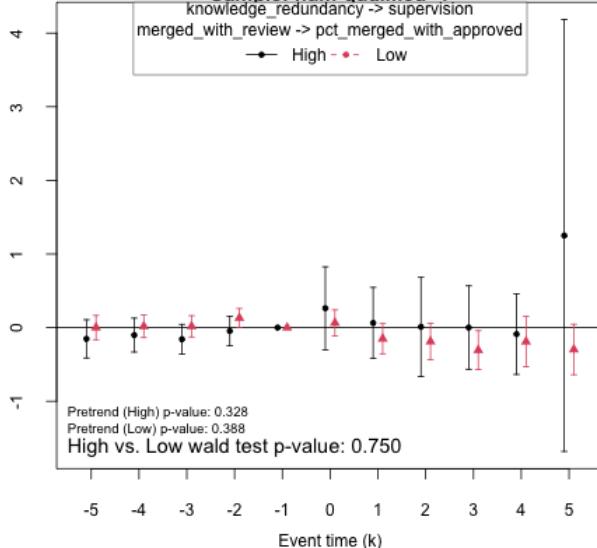
pull_request_opened rolling5

Sample: num-qualified=1

knowledge_redundancy-> supervision

merged_with_review -> pct_merged_with_approved

● High - ▲ Low

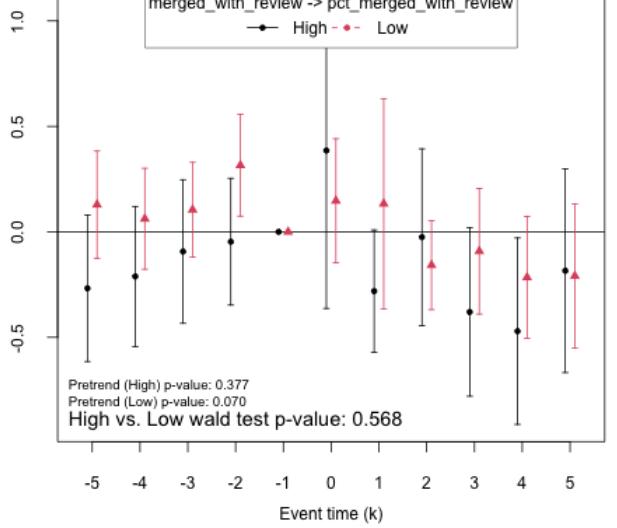


major_minor_release_count rolling5

Sample: num-qualified=1

knowledge_redundancy-> supervision
merged_with_review -> pct_merged_with_review

● High ▲ Low

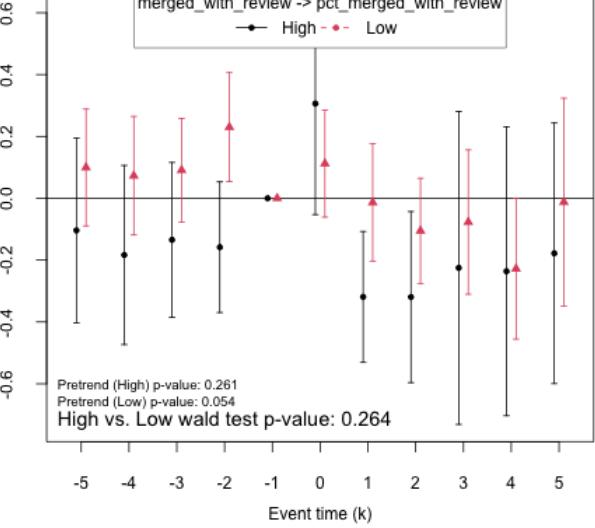


overall_new_release_count rolling5

Sample: num-qualified=1

knowledge_redundancy-> supervision
merged_with_review -> pct_merged_with_review

● High ▲ Low

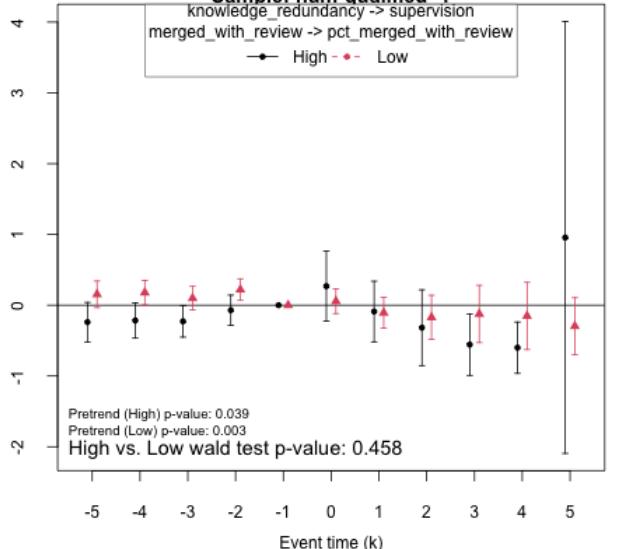


pull_request_merged rolling5

Sample: num-qualified=1

knowledge_redundancy-> supervision
merged_with_review -> pct_merged_with_review

● High ▲ Low

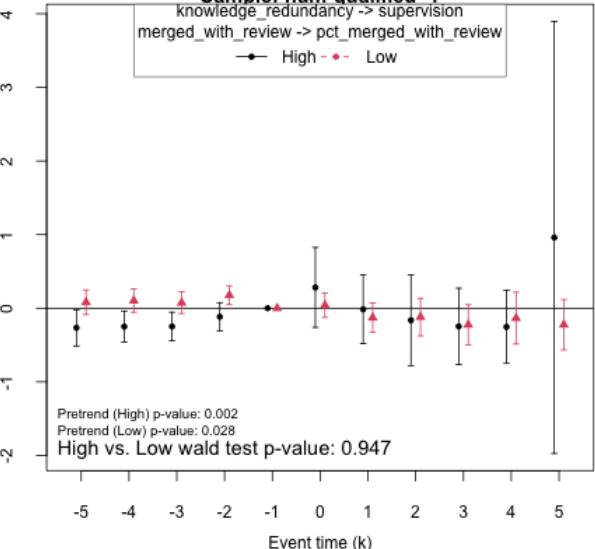


pull_request_opened rolling5

Sample: num-qualified=1

knowledge_redundancy-> supervision
merged_with_review -> pct_merged_with_review

● High ▲ Low

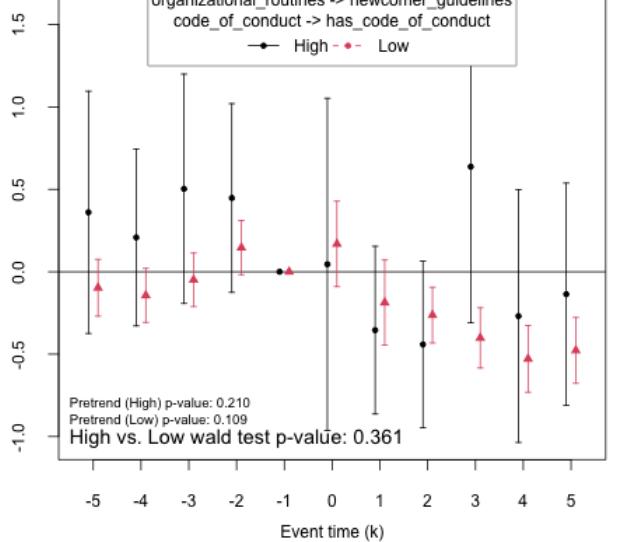


major_minor_release_count rolling5

Sample: num-qualified=1

organizational_routines -> newcomer_guidelines
code_of_conduct -> has_code_of_conduct

● High ● Low

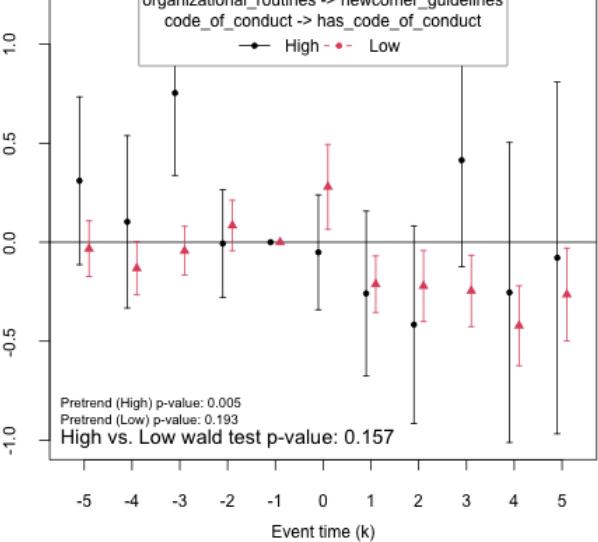


overall_new_release_count rolling5

Sample: num-qualified=1

organizational_routines -> newcomer_guidelines
code_of_conduct -> has_code_of_conduct

● High ● Low

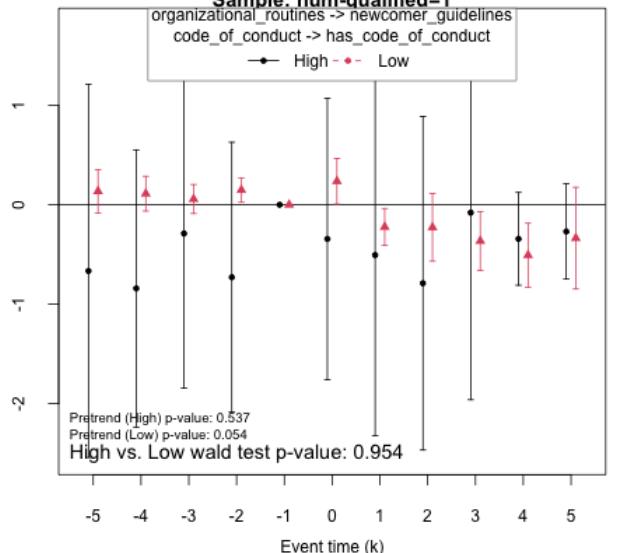


pull_request_merged rolling5

Sample: num-qualified=1

organizational_routines -> newcomer_guidelines
code_of_conduct -> has_code_of_conduct

● High ● Low

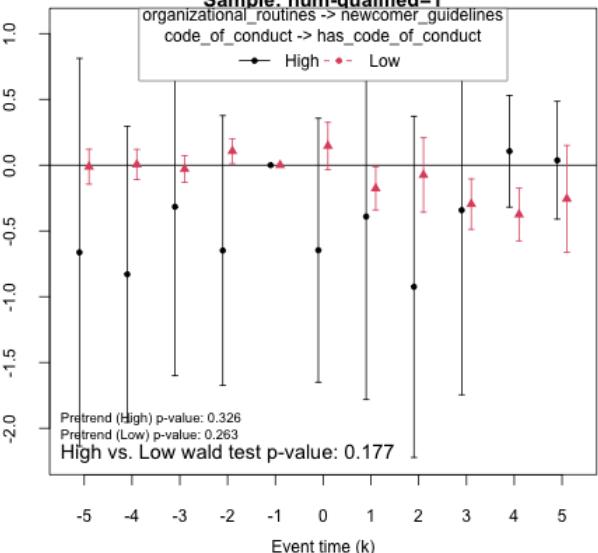


pull_request_opened rolling5

Sample: num-qualified=1

organizational_routines -> newcomer_guidelines
code_of_conduct -> has_code_of_conduct

● High ● Low

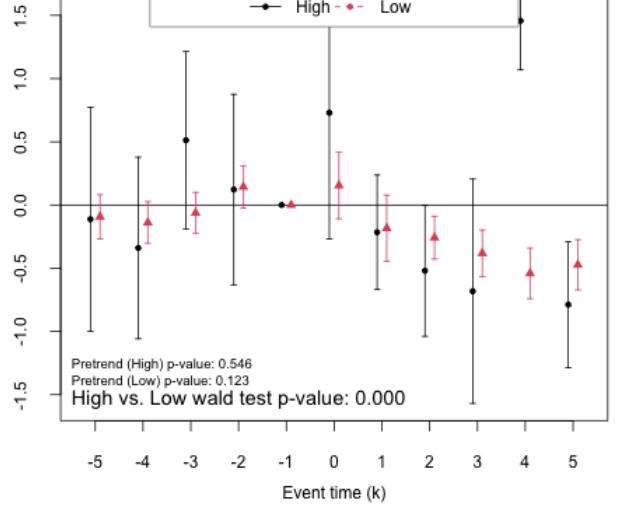


major_minor_release_count rolling5

Sample: num-qualified=1

organizational_routines -> newcomer_guidelines
contributing_guide -> has_contributing_guide

● High ● Low

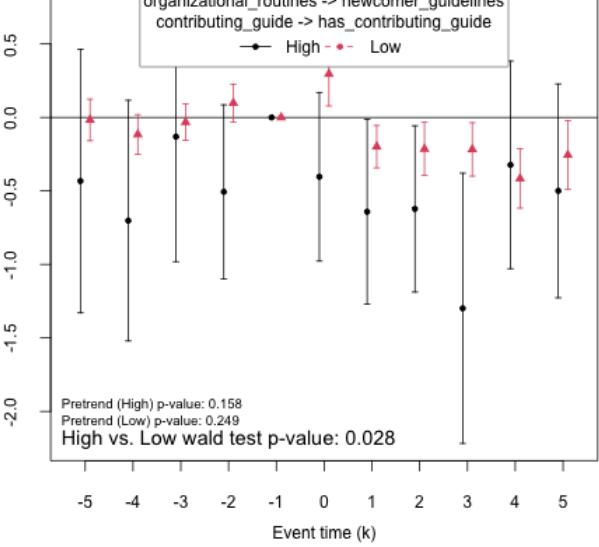


overall_new_release_count rolling5

Sample: num-qualified=1

organizational_routines -> newcomer_guidelines
contributing_guide -> has_contributing_guide

● High ● Low

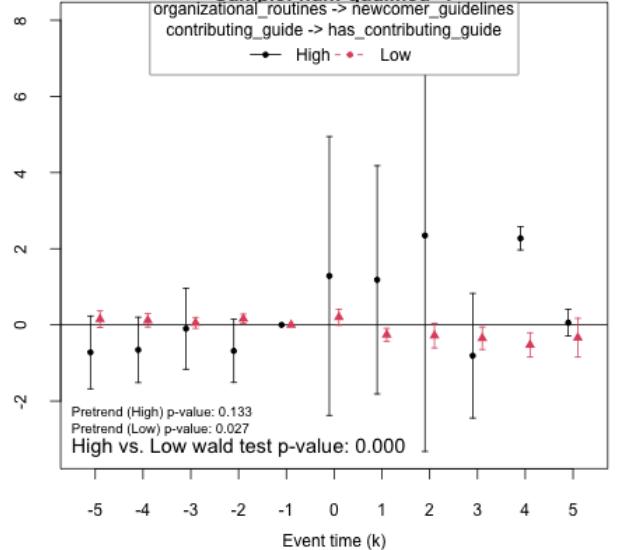


pull_request_merged rolling5

Sample: num-qualified=1

organizational_routines -> newcomer_guidelines
contributing_guide -> has_contributing_guide

● High ● Low

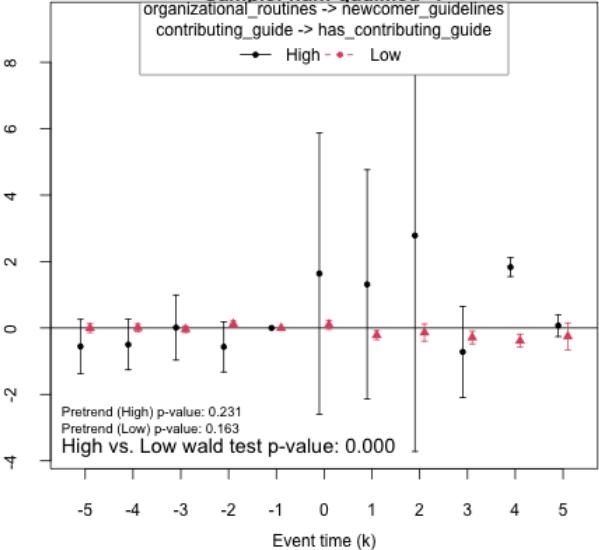


pull_request_opened rolling5

Sample: num-qualified=1

organizational_routines -> newcomer_guidelines
contributing_guide -> has_contributing_guide

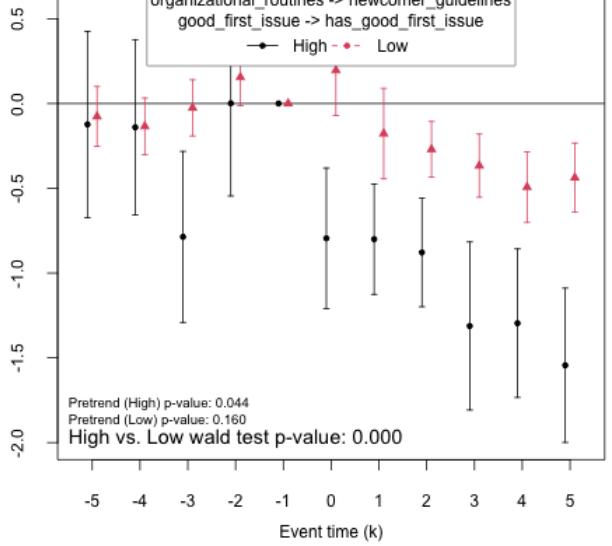
● High ● Low



major_minor_release_count rolling5

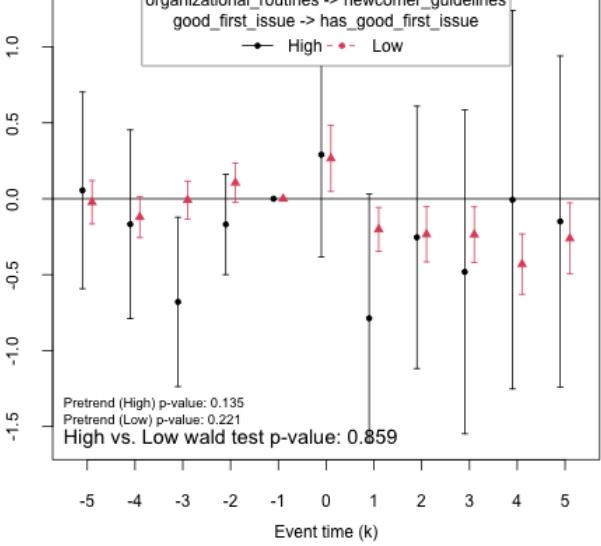
Sample: num-qualified=1

organizational_routines \rightarrow newcomer_guidelines
 $good_first_issue \rightarrow has_good_first_issue$

**overall_new_release_count rolling5**

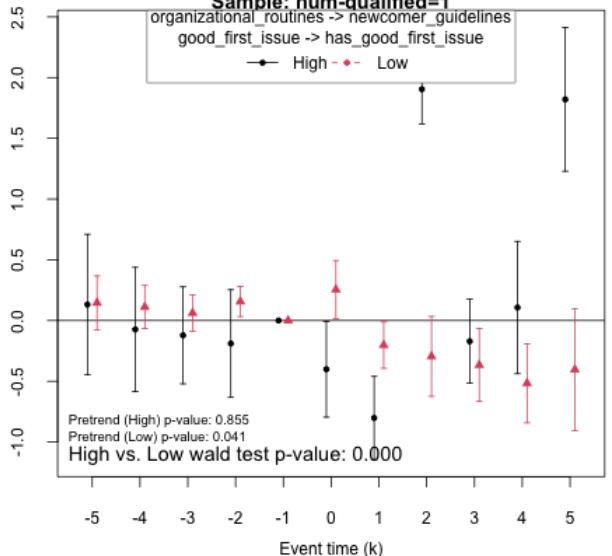
Sample: num-qualified=1

organizational_routines \rightarrow newcomer_guidelines
 $good_first_issue \rightarrow has_good_first_issue$

**pull_request_merged rolling5**

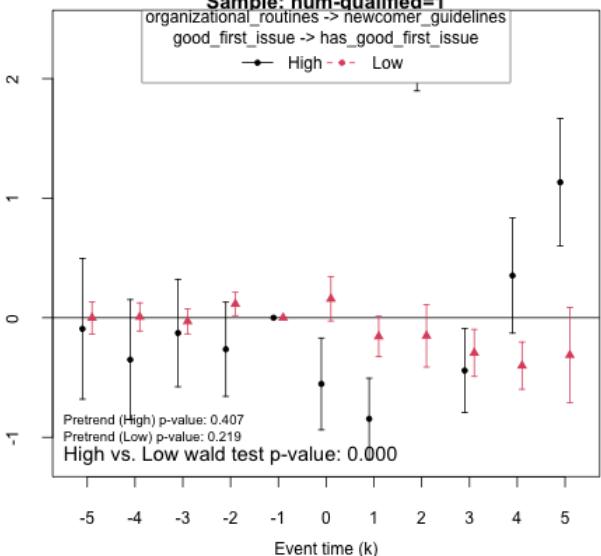
Sample: num-qualified=1

organizational_routines \rightarrow newcomer_guidelines
 $good_first_issue \rightarrow has_good_first_issue$

**pull_request_opened rolling5**

Sample: num-qualified=1

organizational_routines \rightarrow newcomer_guidelines
 $good_first_issue \rightarrow has_good_first_issue$

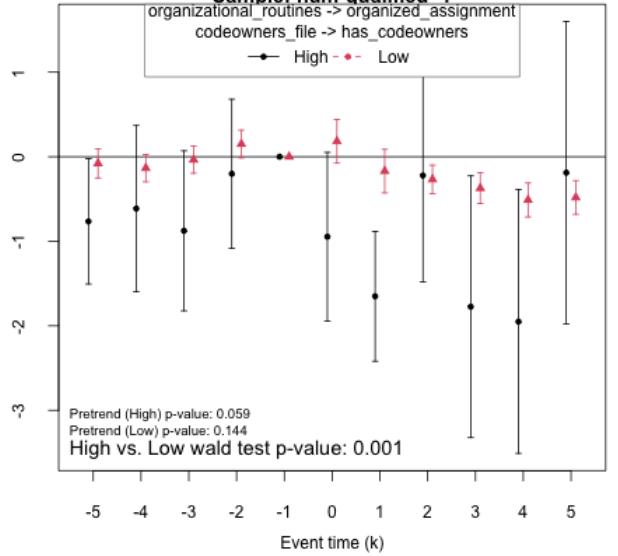


major_minor_release_count rolling5

Sample: num-qualified=1

organizational_routines -> organized_assignment
codeowners_file -> has_codeowners

● High ● Low

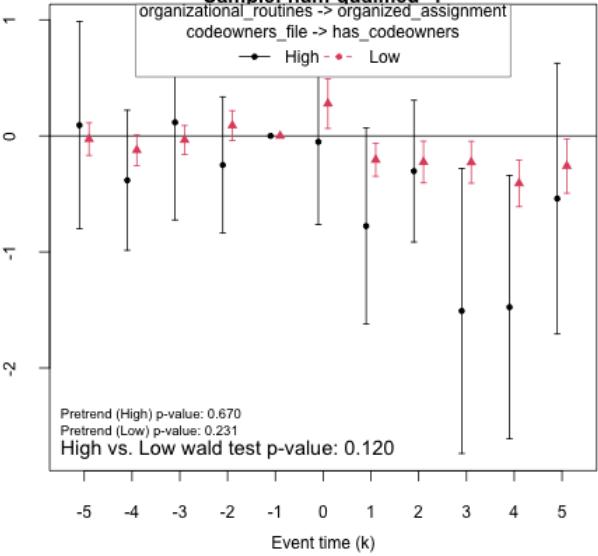


overall_new_release_count rolling5

Sample: num-qualified=1

organizational_routines -> organized_assignment
codeowners_file -> has_codeowners

● High ● Low

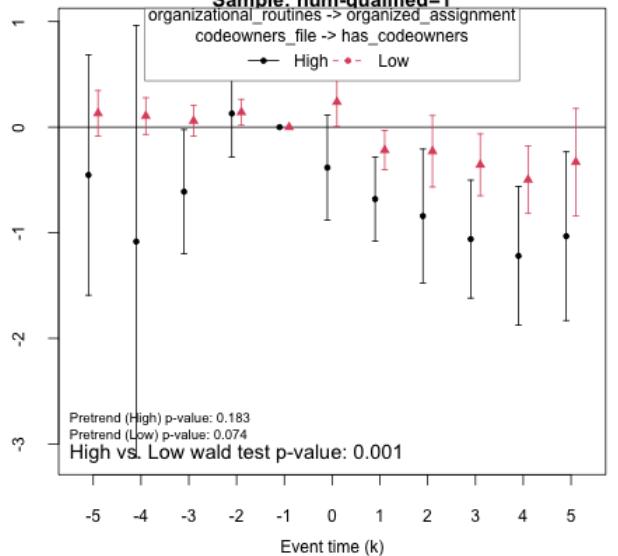


pull_request_merged rolling5

Sample: num-qualified=1

organizational_routines -> organized_assignment
codeowners_file -> has_codeowners

● High ● Low

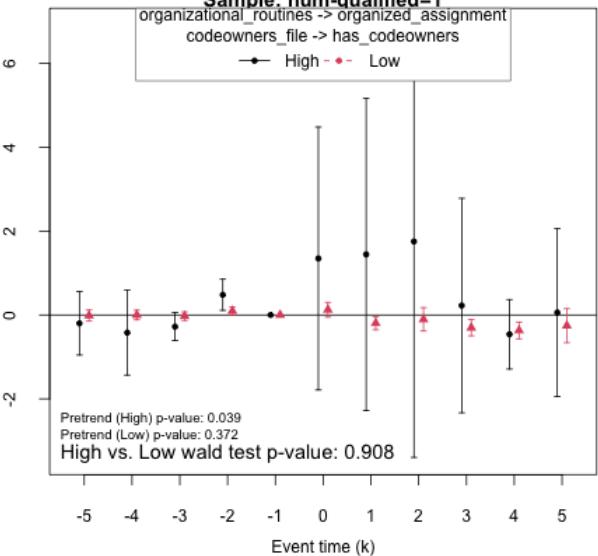


pull_request_opened rolling5

Sample: num-qualified=1

organizational_routines -> organized_assignment
codeowners_file -> has_codeowners

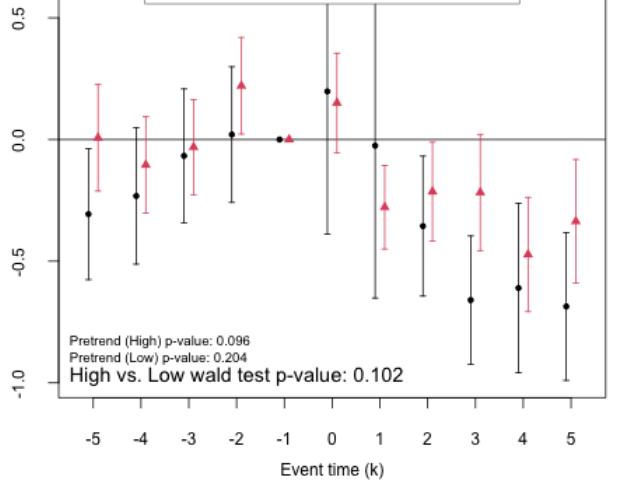
● High ● Low



major_minor_release_count rolling5**Sample: num-qualified=1**

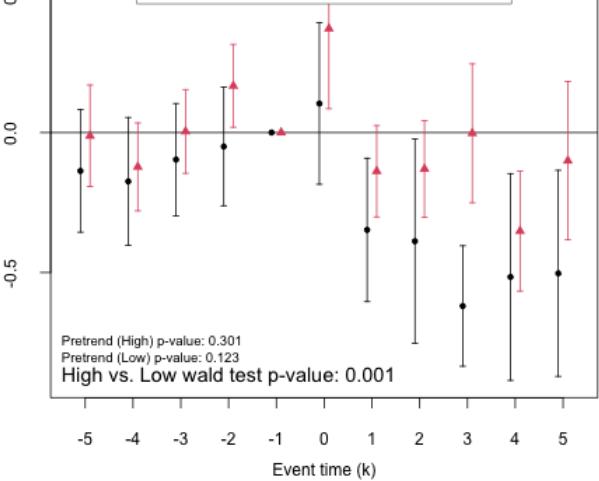
organizational_routines -> organized_assignment
 discussion_assignees -> mean_has_assignee

● High ▲ Low

**overall_new_release_count rolling5****Sample: num-qualified=1**

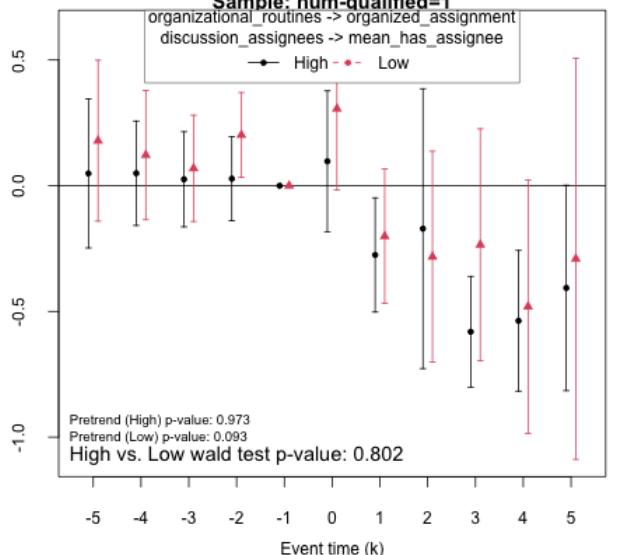
organizational_routines -> organized_assignment
 discussion_assignees -> mean_has_assignee

● High ▲ Low

**pull_request_merged rolling5****Sample: num-qualified=1**

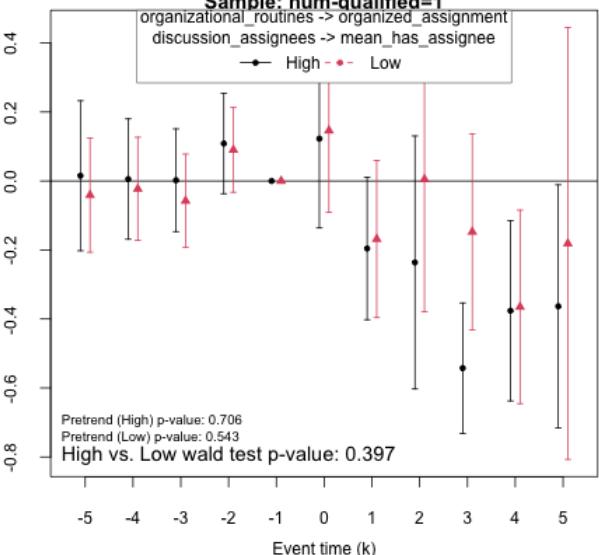
organizational_routines -> organized_assignment
 discussion_assignees -> mean_has_assignee

● High ▲ Low

**pull_request_opened rolling5****Sample: num-qualified=1**

organizational_routines -> organized_assignment
 discussion_assignees -> mean_has_assignee

● High ▲ Low



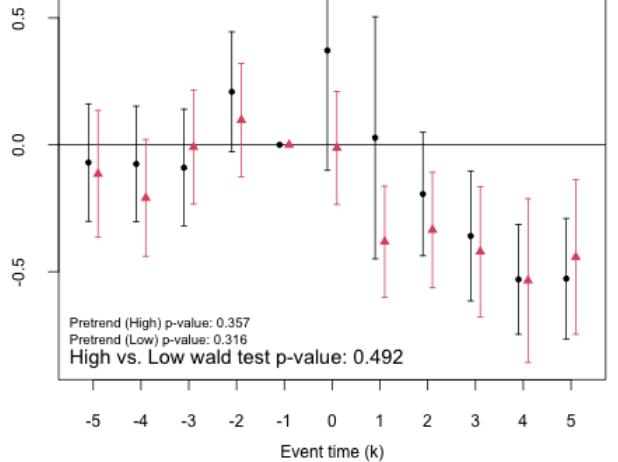
major_minor_release_count rolling5

Sample: num-qualified=1

organizational_routines -> organized_assignment

discussion_labels -> mean_has_tag

● High ▲ Low

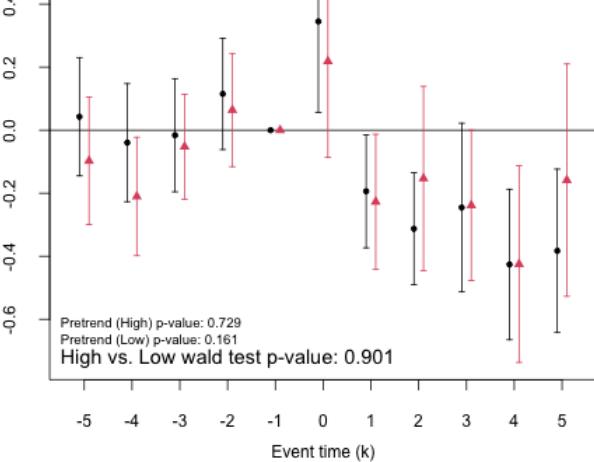
**overall_new_release_count rolling5**

Sample: num-qualified=1

organizational_routines -> organized_assignment

discussion_labels -> mean_has_tag

● High ▲ Low

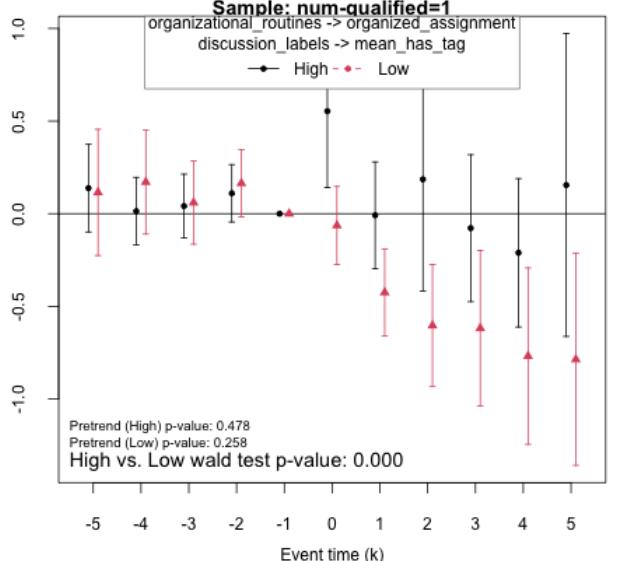
**pull_request_merged rolling5**

Sample: num-qualified=1

organizational_routines -> organized_assignment

discussion_labels -> mean_has_tag

● High ▲ Low

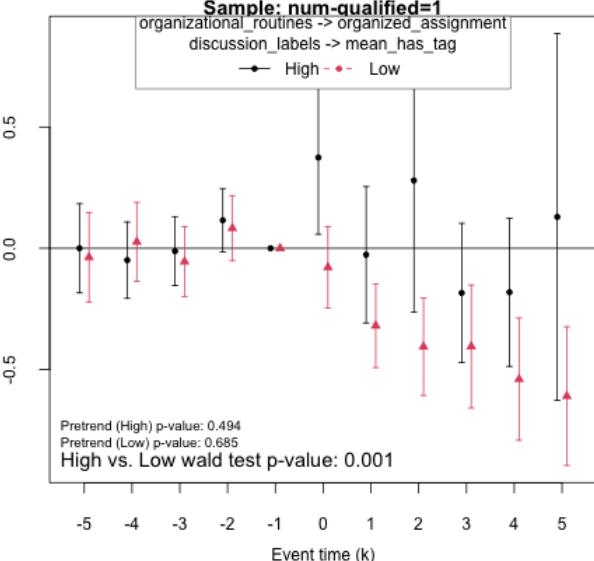
**pull_request_opened rolling5**

Sample: num-qualified=1

organizational_routines -> organized_assignment

discussion_labels -> mean_has_tag

● High ▲ Low

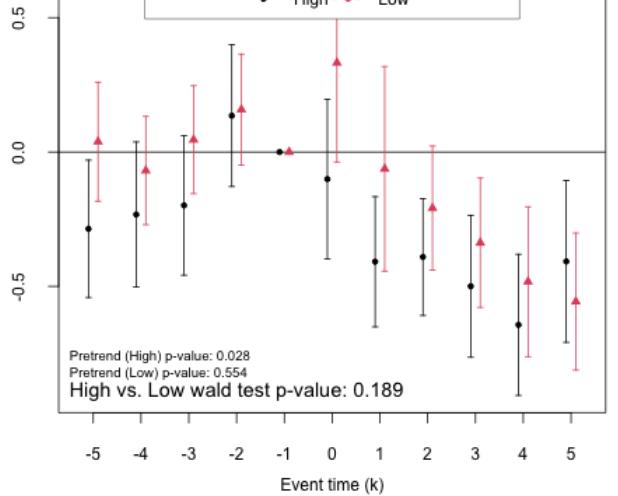


major_minor_release_count rolling5**Sample: num-qualified=1**

organizational_routines -> organized_assignment

pr_reviewers -> mean_has_reviewer

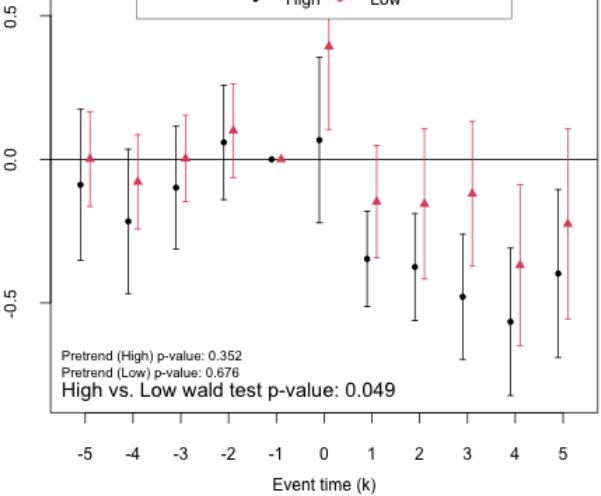
● High - ● Low

**overall_new_release_count rolling5****Sample: num-qualified=1**

organizational_routines -> organized_assignment

pr_reviewers -> mean_has_reviewer

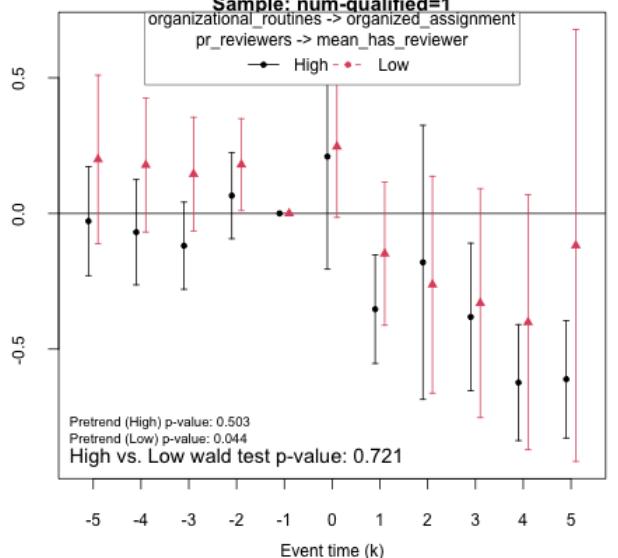
● High - ● Low

**pull_request_merged rolling5****Sample: num-qualified=1**

organizational_routines -> organized_assignment

pr_reviewers -> mean_has_reviewer

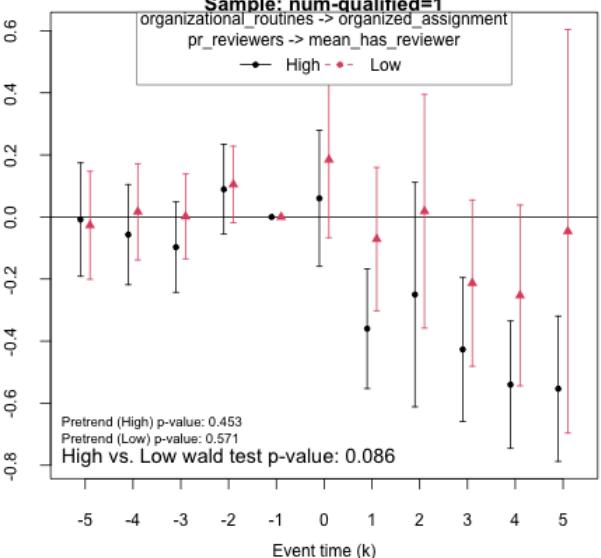
● High - ● Low

**pull_request_opened rolling5****Sample: num-qualified=1**

organizational_routines -> organized_assignment

pr_reviewers -> mean_has_reviewer

● High - ● Low



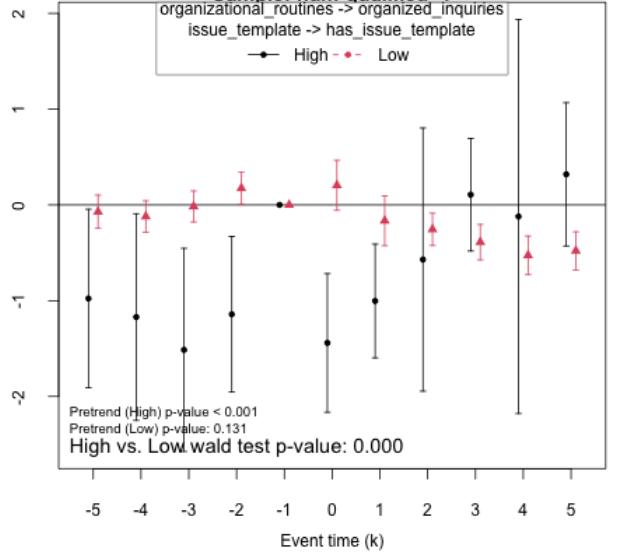
major_minor_release_count rolling5

Sample: num-qualified=1

organizational_routines -> organized_inquiries

issue_template -> has_issue_template

● High - ▲ Low

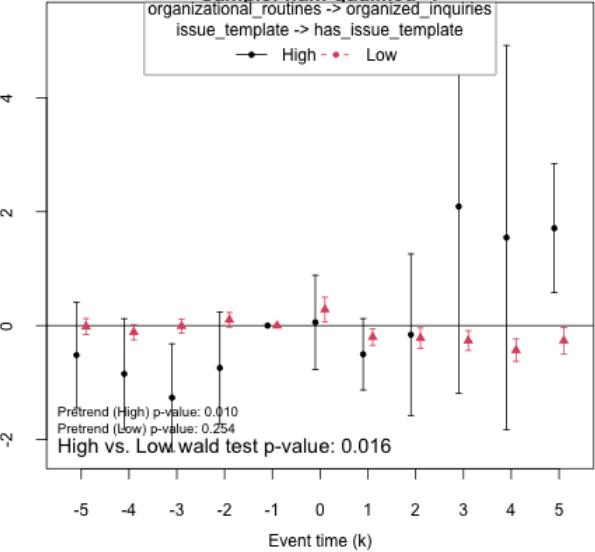
**overall_new_release_count rolling5**

Sample: num-qualified=1

organizational_routines -> organized_inquiries

issue_template -> has_issue_template

● High - ▲ Low

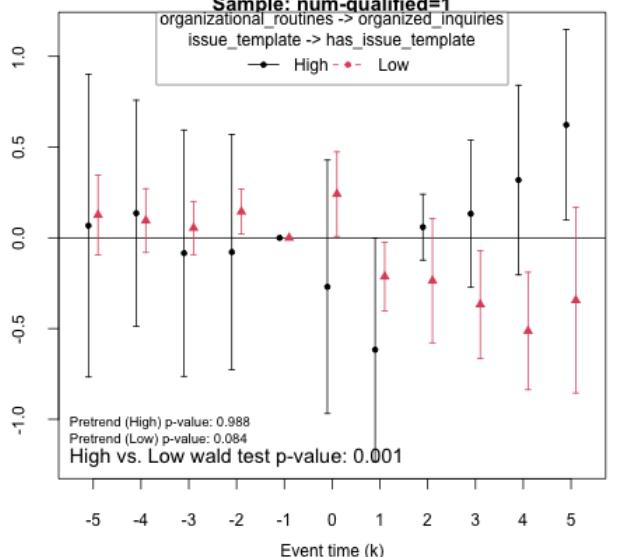
**pull_request_merged rolling5**

Sample: num-qualified=1

organizational_routines -> organized_inquiries

issue_template -> has_issue_template

● High - ▲ Low

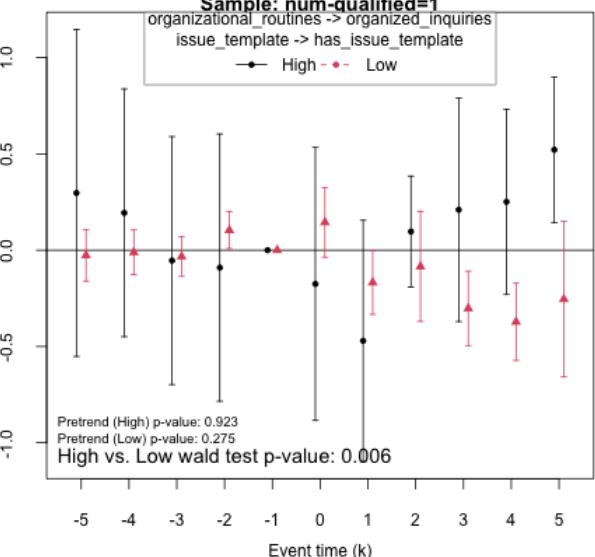
**pull_request_opened rolling5**

Sample: num-qualified=1

organizational_routines -> organized_inquiries

issue_template -> has_issue_template

● High - ▲ Low



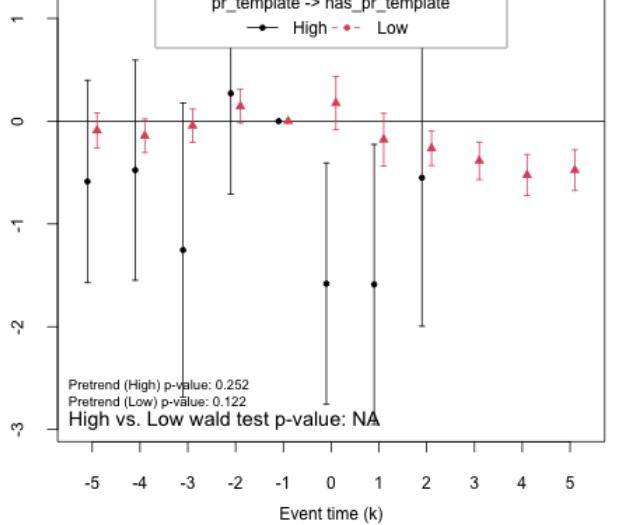
major_minor_release_count rolling5

Sample: num-qualified=1

organizational_routines -> organized_inquiries

pr_template -> has_pr_template

● High - ● Low



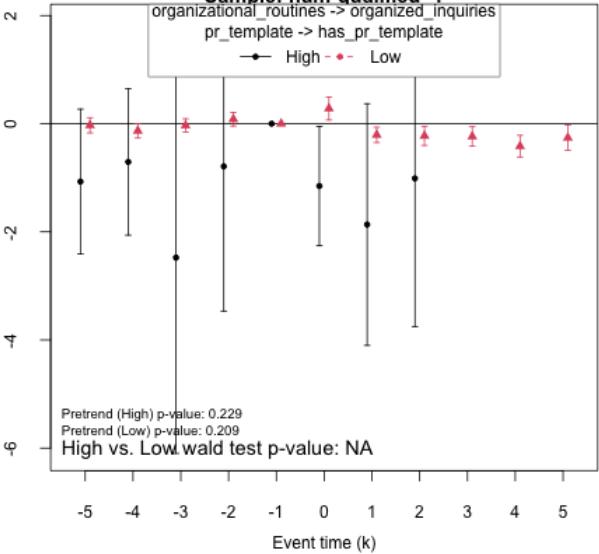
overall_new_release_count rolling5

Sample: num-qualified=1

organizational_routines -> organized_inquiries

pr_template -> has_pr_template

● High - ● Low



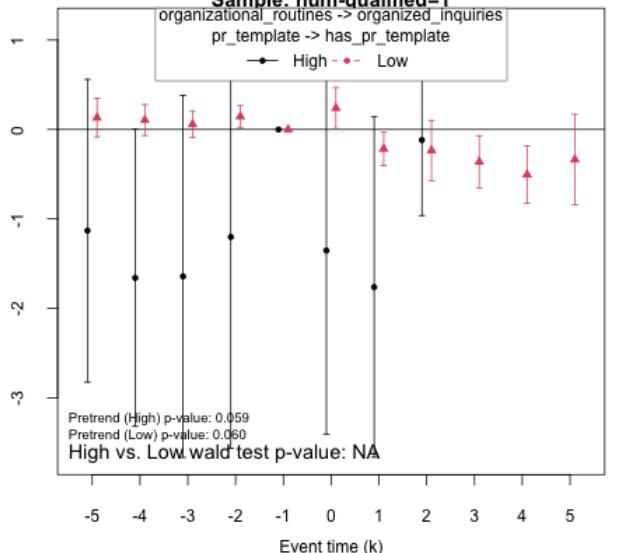
pull_request_merged rolling5

Sample: num-qualified=1

organizational_routines -> organized_inquiries

pr_template -> has_pr_template

● High - ● Low



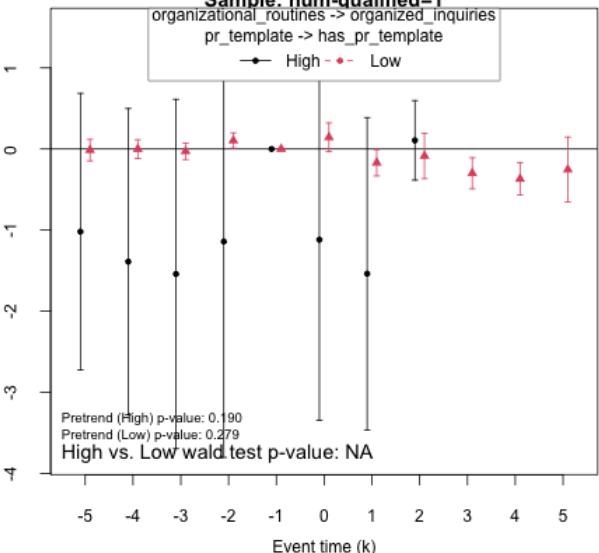
pull_request_opened rolling5

Sample: num-qualified=1

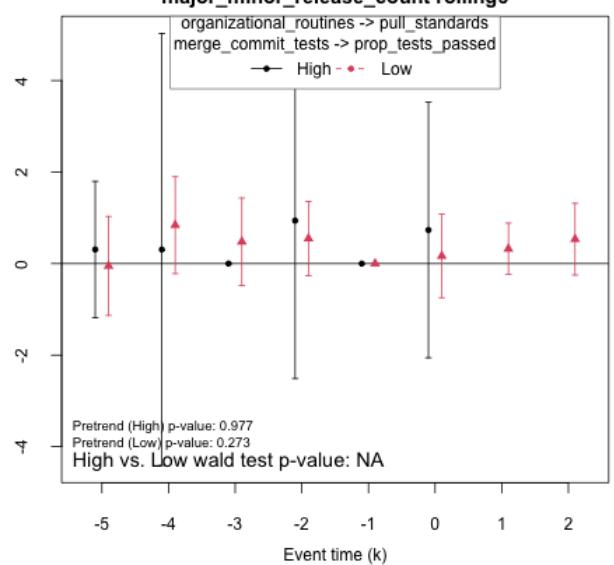
organizational_routines -> organized_inquiries

pr_template -> has_pr_template

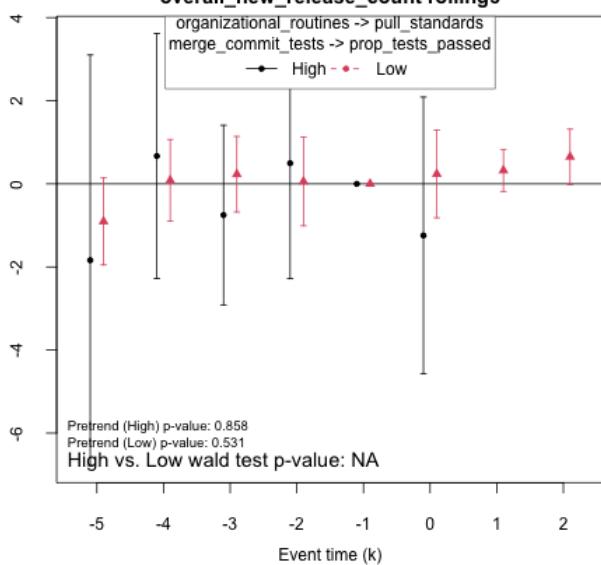
● High - ● Low



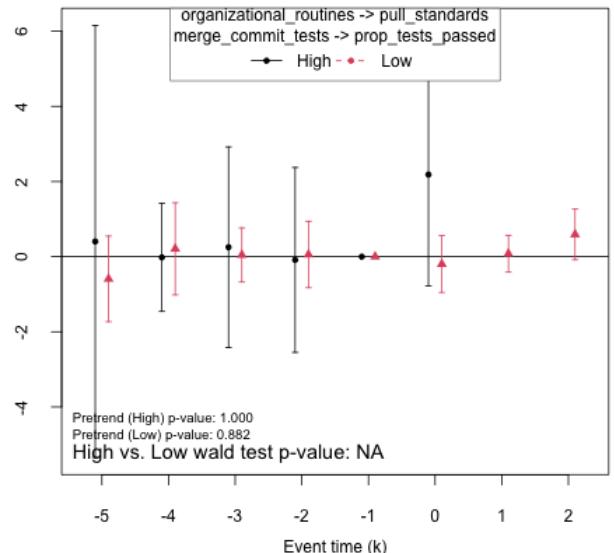
major_minor_release_count rolling5



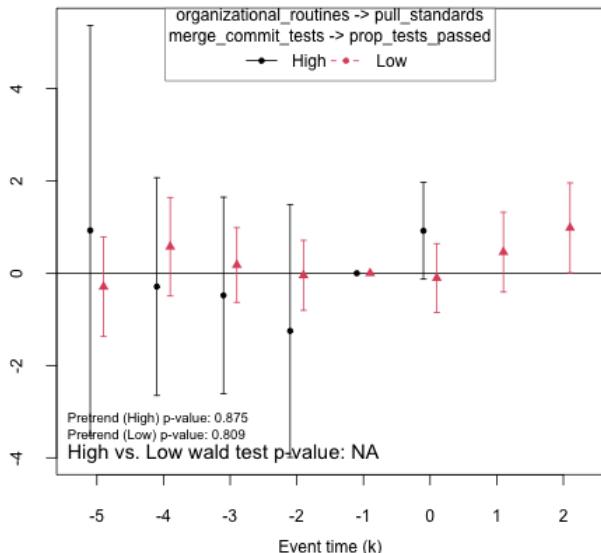
overall_new_release_count rolling5



pull_request_merged rolling5



pull_request_opened rolling5



major_minor_release_count rolling5**Sample: num-qualified=1**talent_investment -> feedback
feedback_quantity -> avg_all_disc_exclude_opener_count

● High ▲ Low

0.5
0.0
-0.5Pretrend (High) p-value: 0.506
Pretrend (Low) p-value: 0.369
High vs. Low wald test p-value: 0.276-5 -4 -3 -2 -1 0 1 2 3 4 5
Event time (k)**overall_new_release_count rolling5****Sample: num-qualified=1**talent_investment -> feedback
feedback_quantity -> avg_all_disc_exclude_opener_count

● High ▲ Low

0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6Pretrend (High) p-value: 0.494
Pretrend (Low) p-value: 0.244
High vs. Low wald test p-value: 0.635-5 -4 -3 -2 -1 0 1 2 3 4 5
Event time (k)**pull_request_merged rolling5****Sample: num-qualified=1**talent_investment -> feedback
feedback_quantity -> avg_all_disc_exclude_opener_count

● High ▲ Low

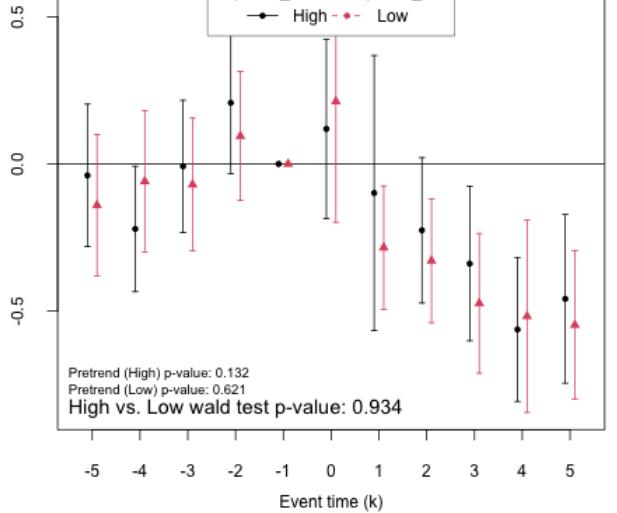
1.0
0.5
0.0
-0.5Pretrend (High) p-value: 0.685
Pretrend (Low) p-value: 0.001
High vs. Low wald test p-value: 0.500-5 -4 -3 -2 -1 0 1 2 3 4 5
Event time (k)**pull_request_opened rolling5****Sample: num-qualified=1**talent_investment -> feedback
feedback_quantity -> avg_all_disc_exclude_opener_count

● High ▲ Low

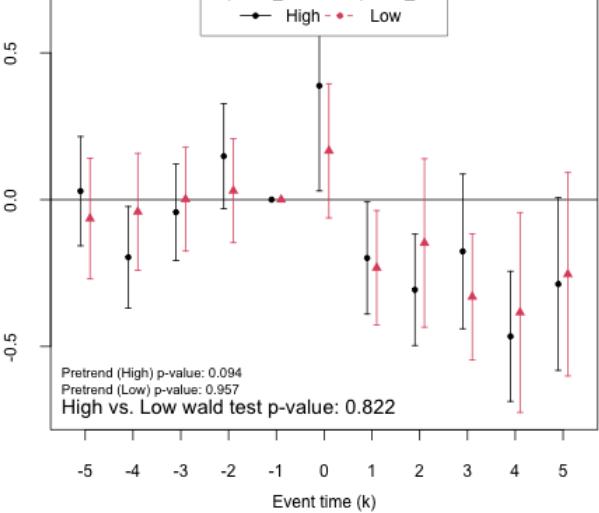
0.5
0.4
0.3
0.2
0.1
0.0
-0.1
-0.2
-0.3
-0.4
-0.5Pretrend (High) p-value: 0.174
Pretrend (Low) p-value: 0.052
High vs. Low wald test p-value: 0.261-5 -4 -3 -2 -1 0 1 2 3 4 5
Event time (k)

major_minor_release_count rolling5**Sample: num-qualified=1**

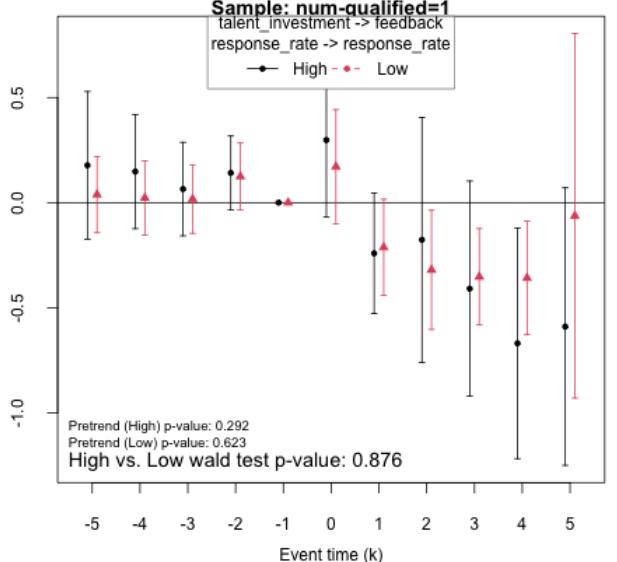
talent_investment -> feedback
 response_rate -> response_rate
 ● High ▲ Low

**overall_new_release_count rolling5****Sample: num-qualified=1**

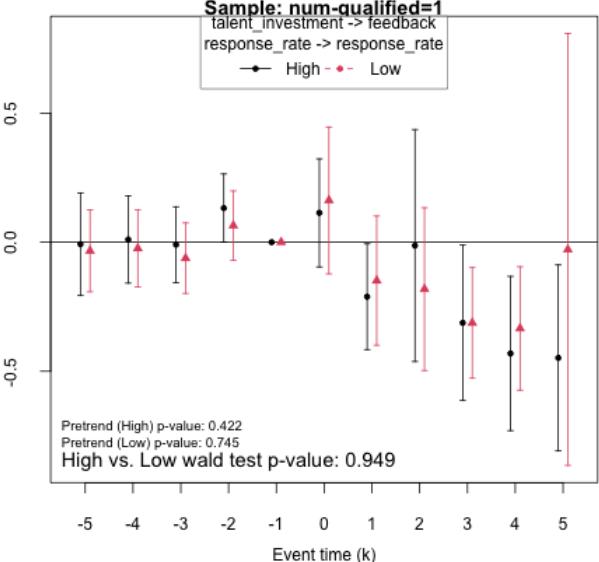
talent_investment -> feedback
 response_rate -> response_rate
 ● High ▲ Low

**pull_request_merged rolling5****Sample: num-qualified=1**

talent_investment -> feedback
 response_rate -> response_rate
 ● High ▲ Low

**pull_request_opened rolling5****Sample: num-qualified=1**

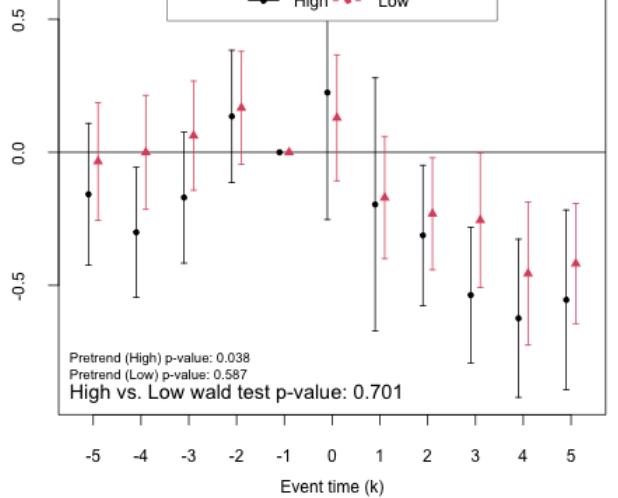
talent_investment -> feedback
 response_rate -> response_rate
 ● High ▲ Low



major_minor_release_count rolling5

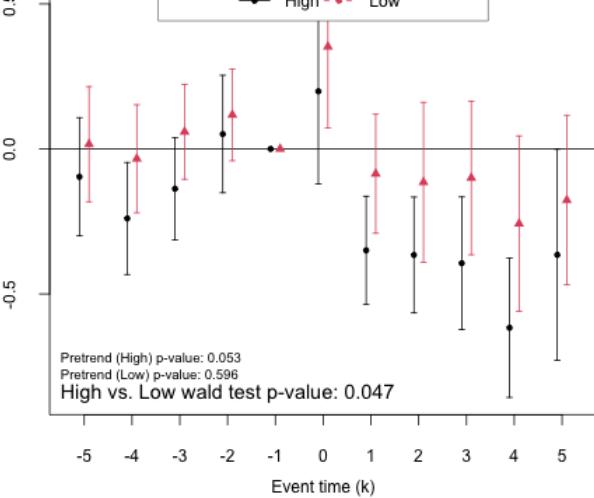
Sample: num-qualified=1

talent_investment -> feedback
 response_sentiment -> neg_sentiment_avg
 ● High ▲ Low

**overall_new_release_count rolling5**

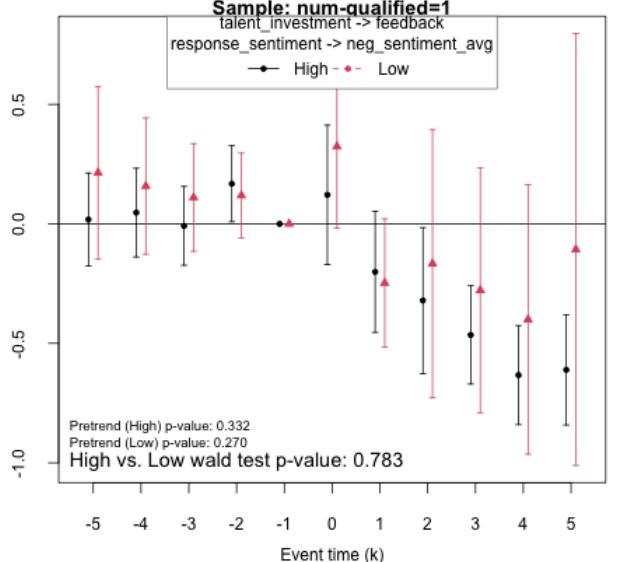
Sample: num-qualified=1

talent_investment -> feedback
 response_sentiment -> neg_sentiment_avg
 ● High ▲ Low

**pull_request_merged rolling5**

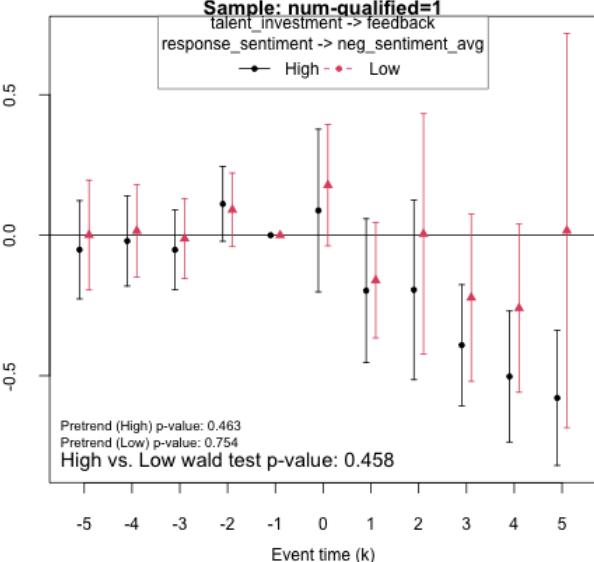
Sample: num-qualified=1

talent_investment -> feedback
 response_sentiment -> neg_sentiment_avg
 ● High ▲ Low

**pull_request_opened rolling5**

Sample: num-qualified=1

talent_investment -> feedback
 response_sentiment -> neg_sentiment_avg
 ● High ▲ Low



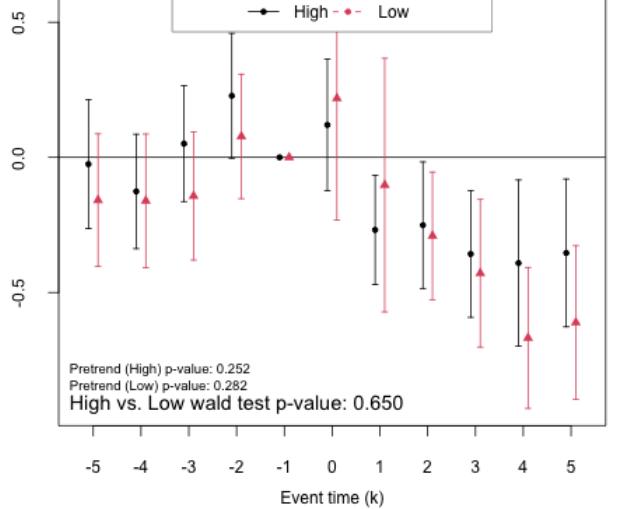
major_minor_release_count rolling5

Sample: num-qualified=1

talent_investment -> feedback

response_sentiment -> ov_sentiment_avg

● High ▲ Low

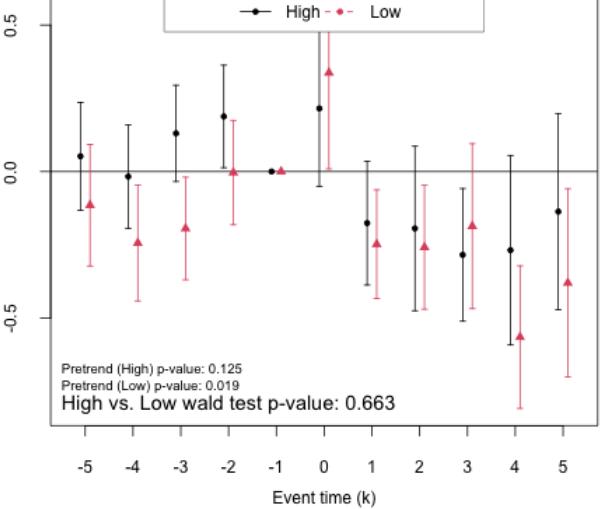
**overall_new_release_count rolling5**

Sample: num-qualified=1

talent_investment -> feedback

response_sentiment -> ov_sentiment_avg

● High ▲ Low

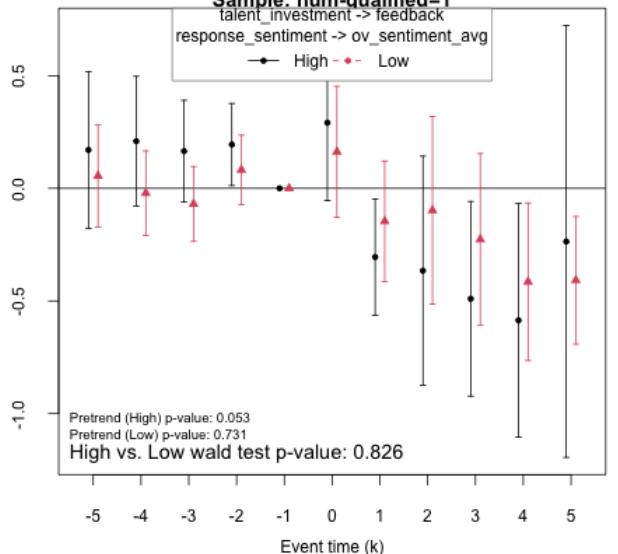
**pull_request_merged rolling5**

Sample: num-qualified=1

talent_investment -> feedback

response_sentiment -> ov_sentiment_avg

● High ▲ Low

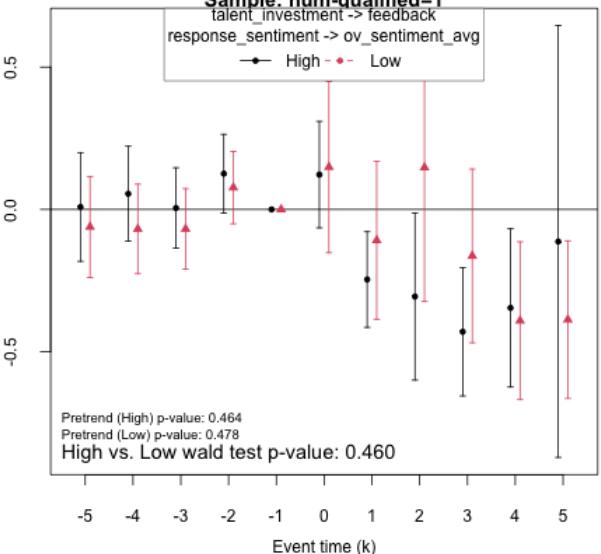
**pull_request_opened rolling5**

Sample: num-qualified=1

talent_investment -> feedback

response_sentiment -> ov_sentiment_avg

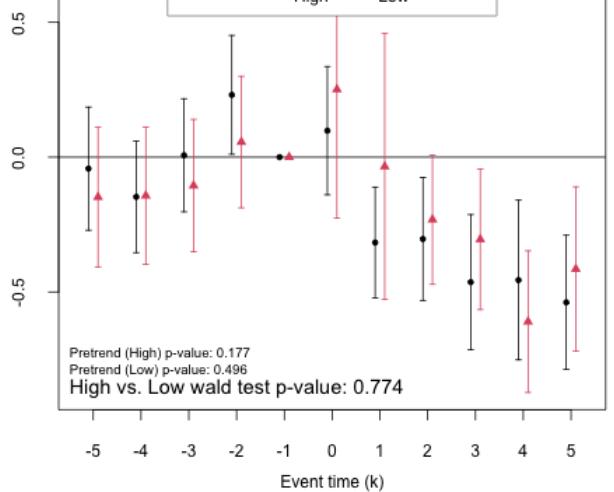
● High ▲ Low



major_minor_release_count rolling5

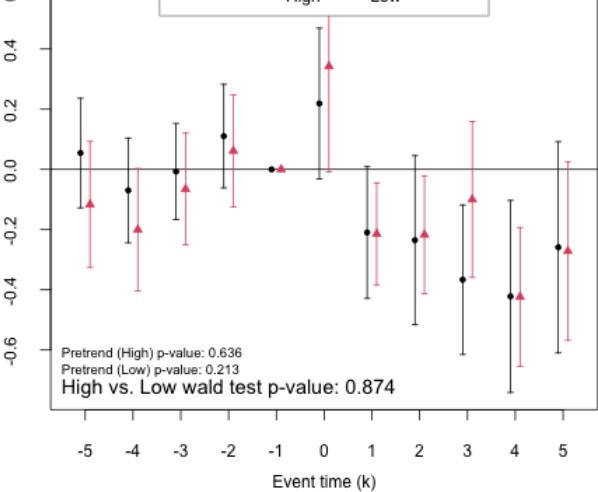
Sample: num-qualified=1

talent_investment -> feedback
 response_sentiment -> pos_sentiment_avg
 ● High ▲ Low

**overall_new_release_count rolling5**

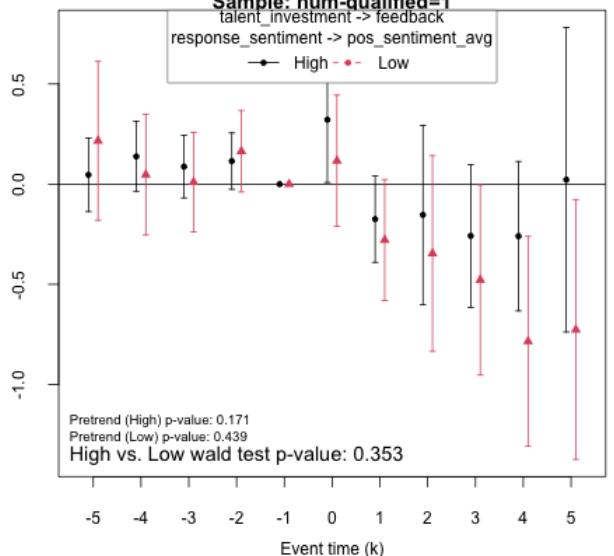
Sample: num-qualified=1

talent_investment -> feedback
 response_sentiment -> pos_sentiment_avg
 ● High ▲ Low

**pull_request_merged rolling5**

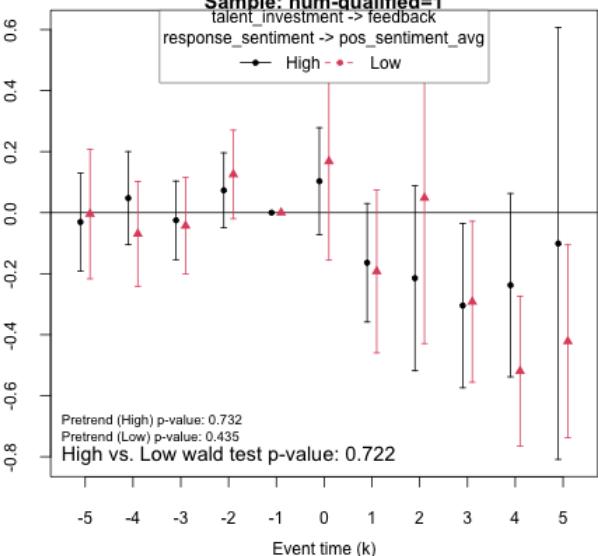
Sample: num-qualified=1

talent_investment -> feedback
 response_sentiment -> pos_sentiment_avg
 ● High ▲ Low

**pull_request_opened rolling5**

Sample: num-qualified=1

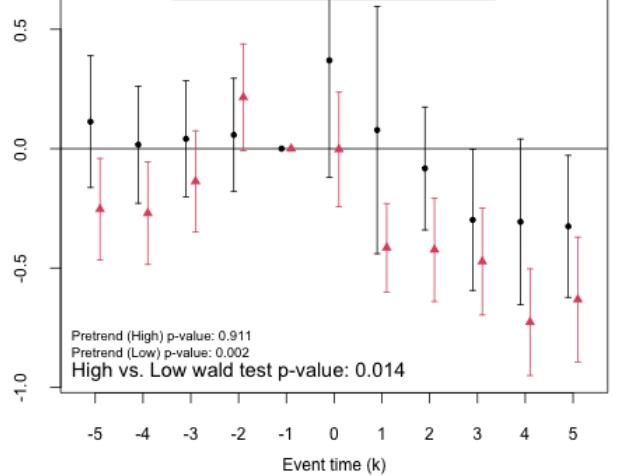
talent_investment -> feedback
 response_sentiment -> pos_sentiment_avg
 ● High ▲ Low



major_minor_release_count rolling5

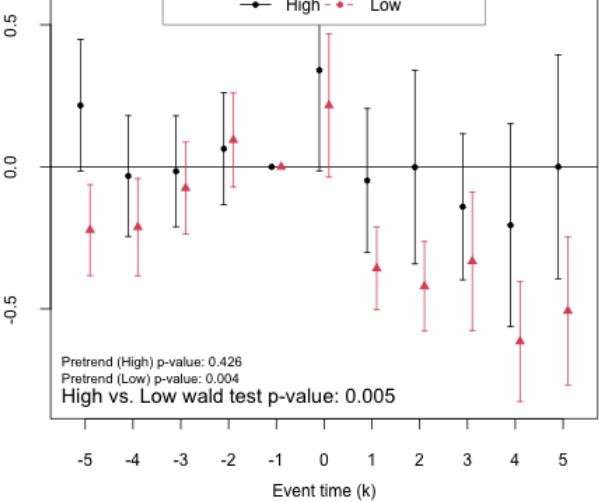
Sample: num-qualified=1

talent_investment -> feedback
 response_time -> mean_days_to_respond
 ● High ▲ Low

**overall_new_release_count rolling5**

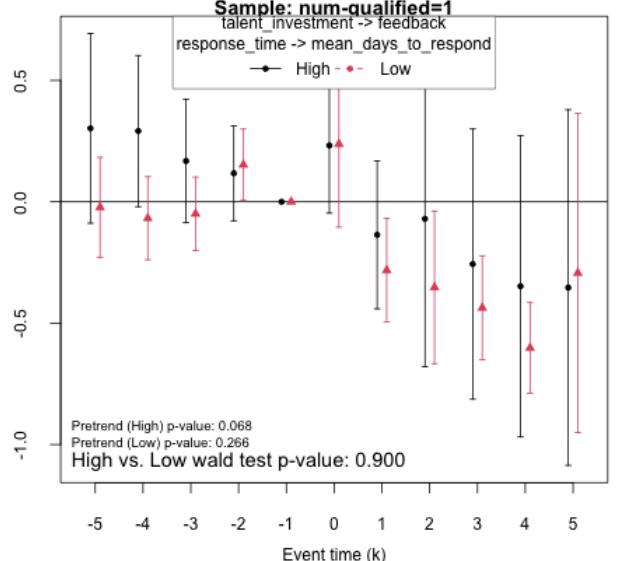
Sample: num-qualified=1

talent_investment -> feedback
 response_time -> mean_days_to_respond
 ● High ▲ Low

**pull_request_merged rolling5**

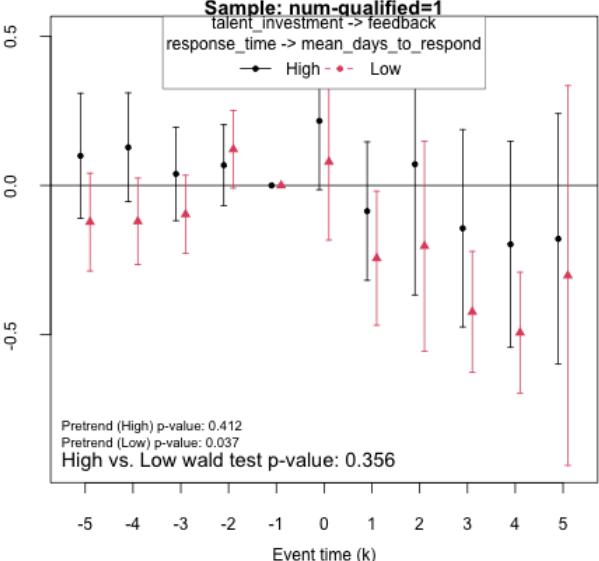
Sample: num-qualified=1

talent_investment -> feedback
 response_time -> mean_days_to_respond
 ● High ▲ Low

**pull_request_opened rolling5**

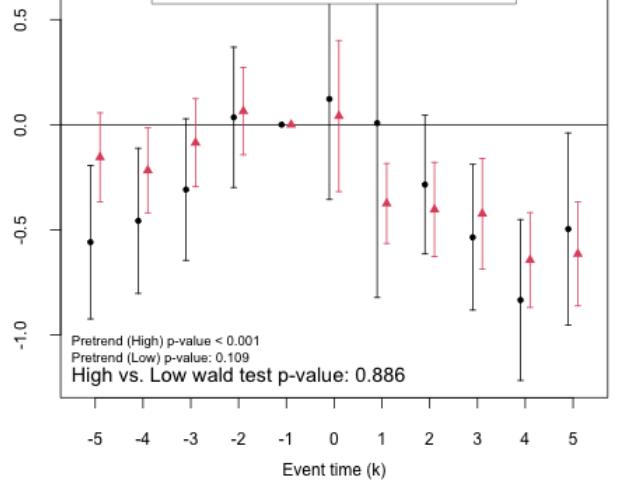
Sample: num-qualified=1

talent_investment -> feedback
 response_time -> mean_days_to_respond
 ● High ▲ Low

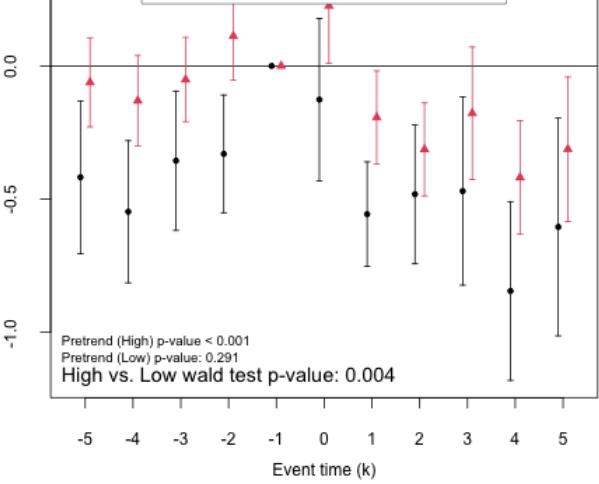


major_minor_release_count rolling5**Sample: num-qualified=1**

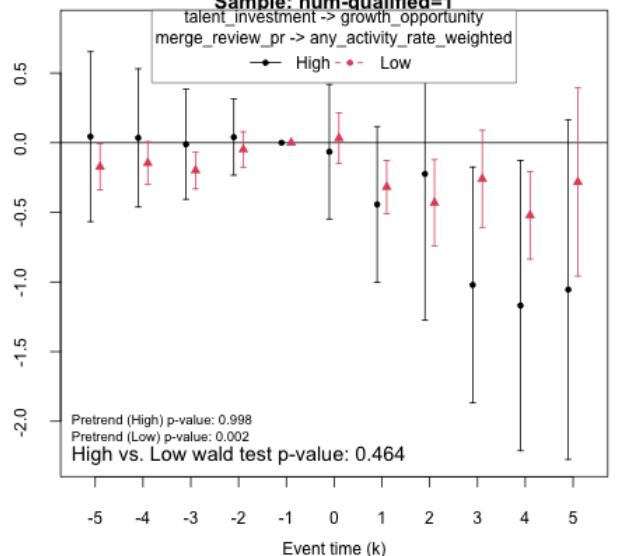
talent_investment->growth_opportunity
 merge_review_pr -> any_activity_rate_weighted
 ● High - ▲ Low

**overall_new_release_count rolling5****Sample: num-qualified=1**

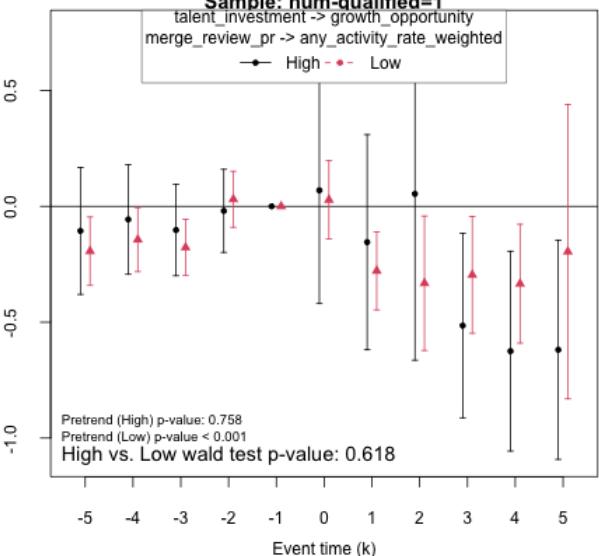
talent_investment->growth_opportunity
 merge_review_pr -> any_activity_rate_weighted
 ● High - ▲ Low

**pull_request_merged rolling5****Sample: num-qualified=1**

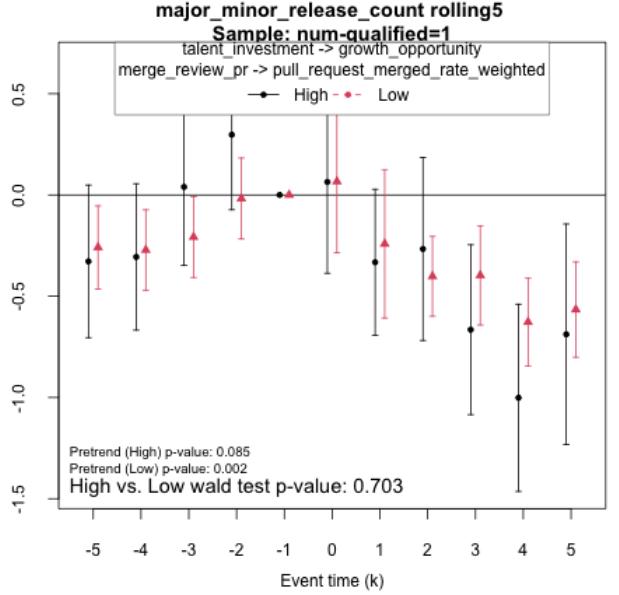
talent_investment->growth_opportunity
 merge_review_pr -> any_activity_rate_weighted
 ● High - ▲ Low

**pull_request_opened rolling5****Sample: num-qualified=1**

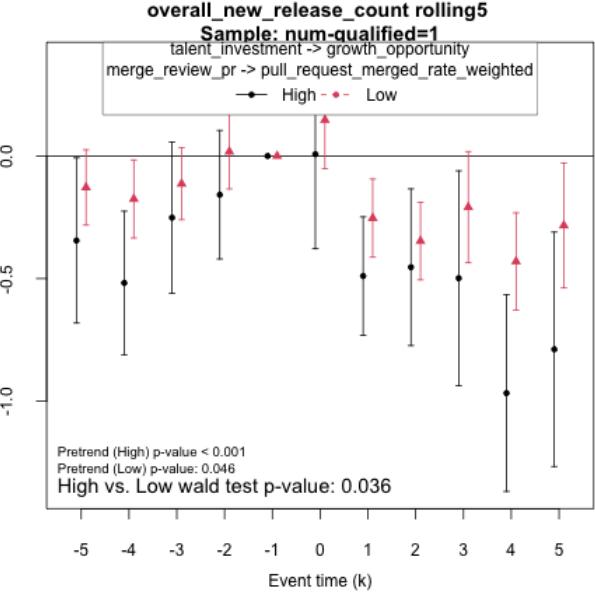
talent_investment->growth_opportunity
 merge_review_pr -> any_activity_rate_weighted
 ● High - ▲ Low



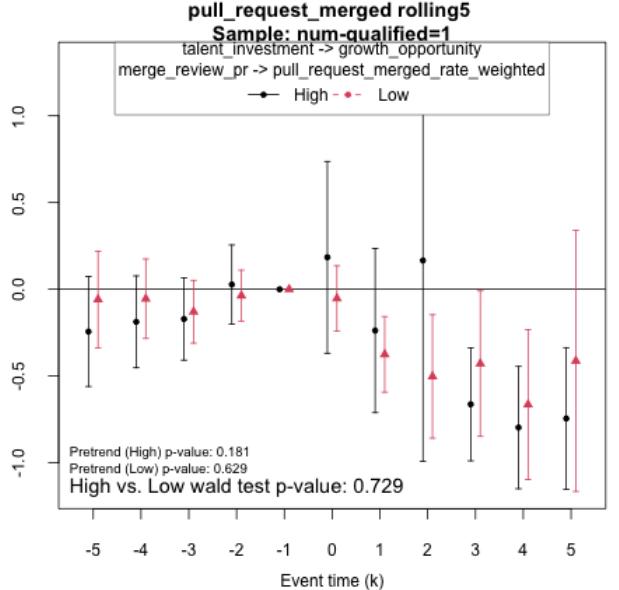
major_minor_release_count rolling5



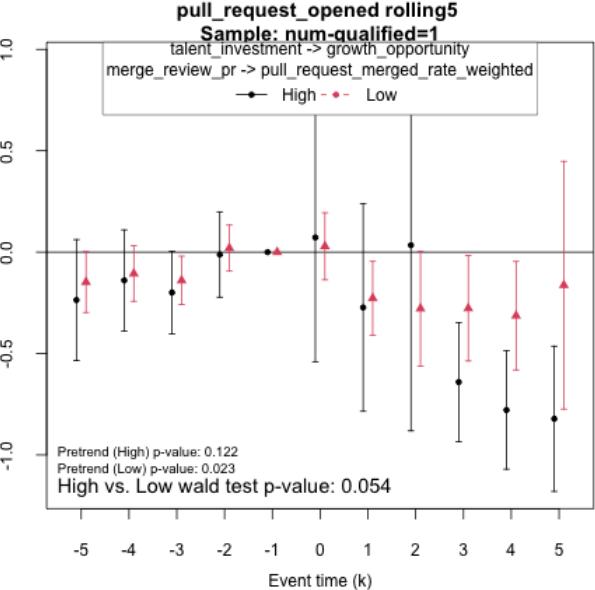
overall_new_release_count rolling5



pull_request_merged rolling5



pull_request_opened rolling5

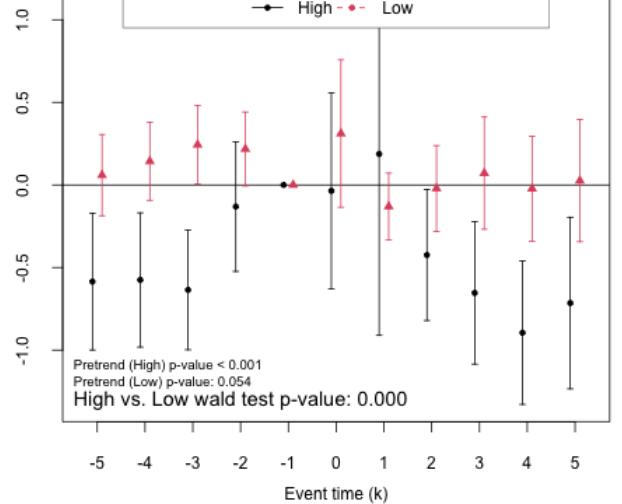


major_minor_release_count rolling5

Sample: num-qualified=1

talent_investment->growth_opportunity
merge_review_pr -> pull_request_review_rate_weighted

● High ▲ Low

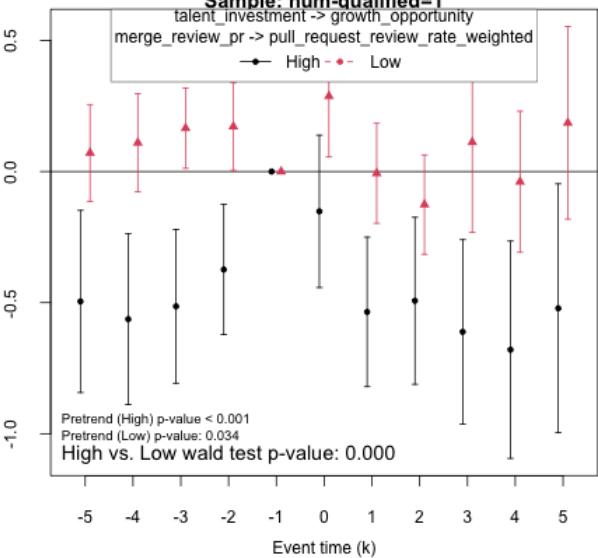


overall_new_release_count rolling5

Sample: num-qualified=1

talent_investment->growth_opportunity
merge_review_pr -> pull_request_review_rate_weighted

● High ▲ Low

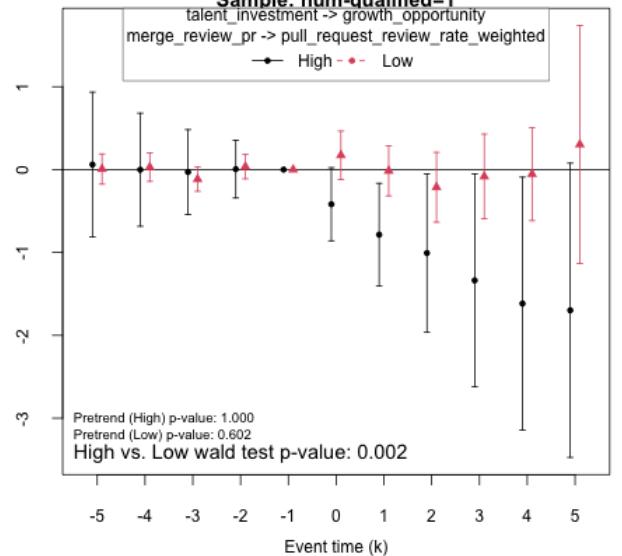


pull_request_merged rolling5

Sample: num-qualified=1

talent_investment->growth_opportunity
merge_review_pr -> pull_request_review_rate_weighted

● High ▲ Low

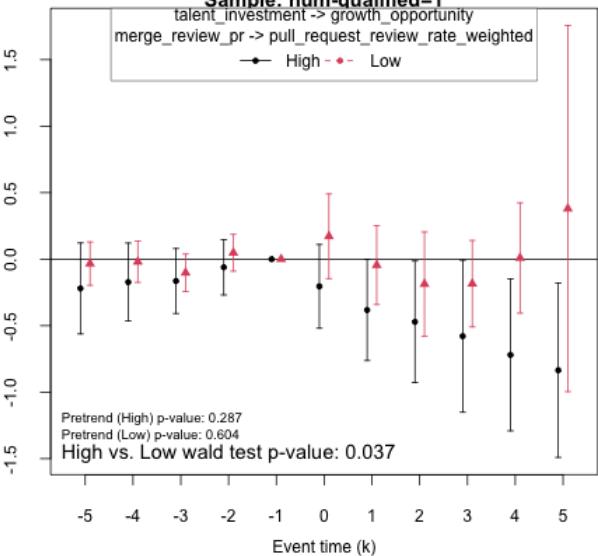


pull_request_opened rolling5

Sample: num-qualified=1

talent_investment->growth_opportunity
merge_review_pr -> pull_request_review_rate_weighted

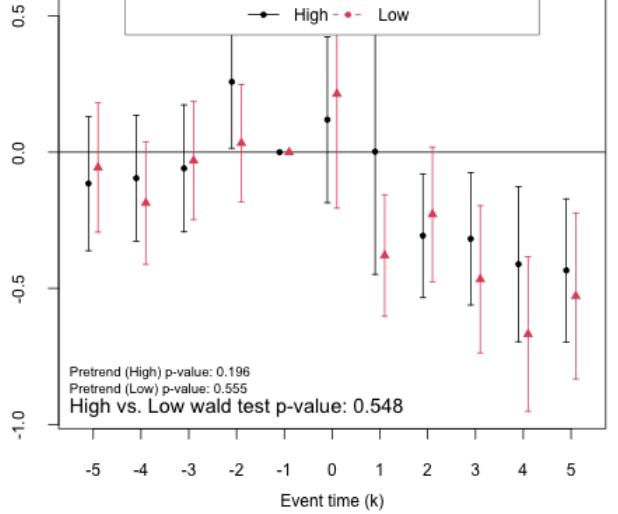
● High ▲ Low



major_minor_release_count rolling5**Sample: num-qualified=1**

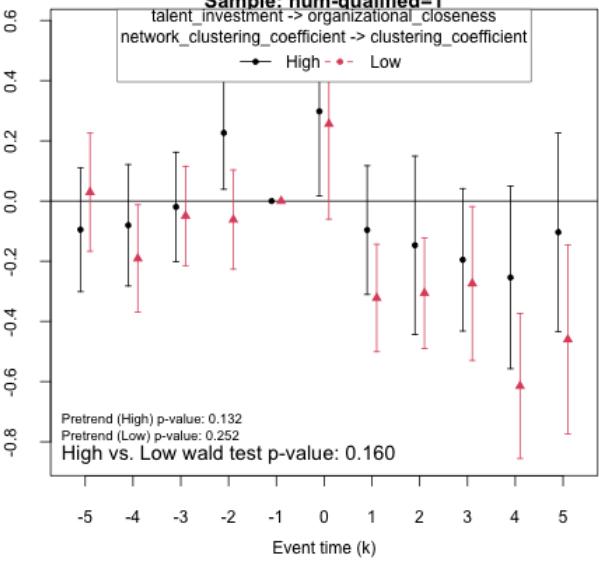
talent_investment -> organizational_closeness
 network_clustering_coefficient -> clustering_coefficient

- High
- Low

**overall_new_release_count rolling5****Sample: num-qualified=1**

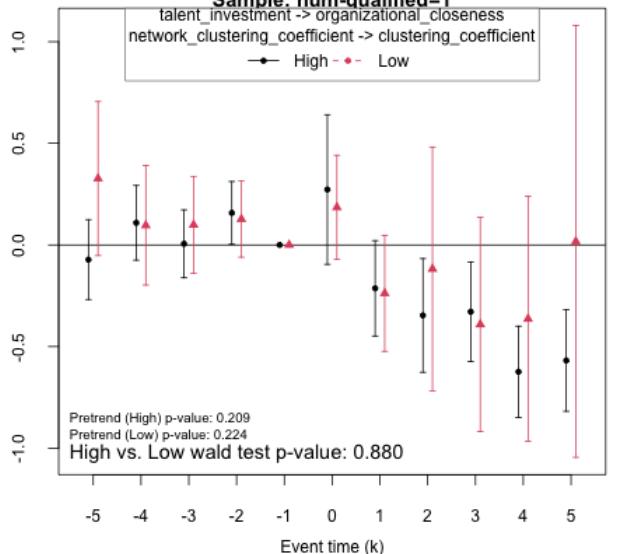
talent_investment -> organizational_closeness
 network_clustering_coefficient -> clustering_coefficient

- High
- Low

**pull_request_merged rolling5****Sample: num-qualified=1**

talent_investment -> organizational_closeness
 network_clustering_coefficient -> clustering_coefficient

- High
- Low

**pull_request_opened rolling5****Sample: num-qualified=1**

talent_investment -> organizational_closeness
 network_clustering_coefficient -> clustering_coefficient

- High
- Low

