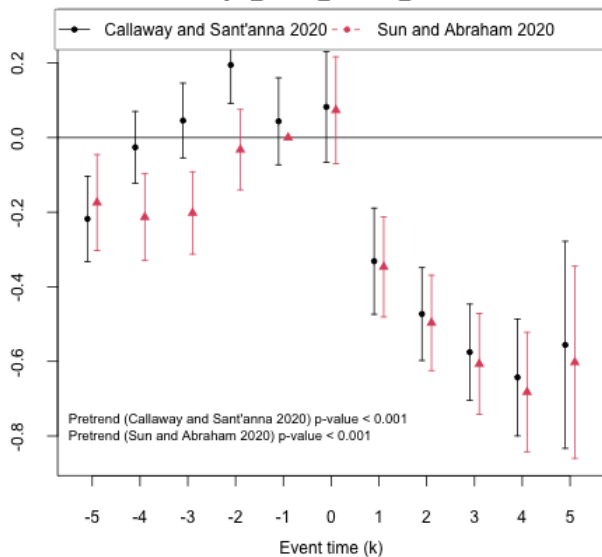
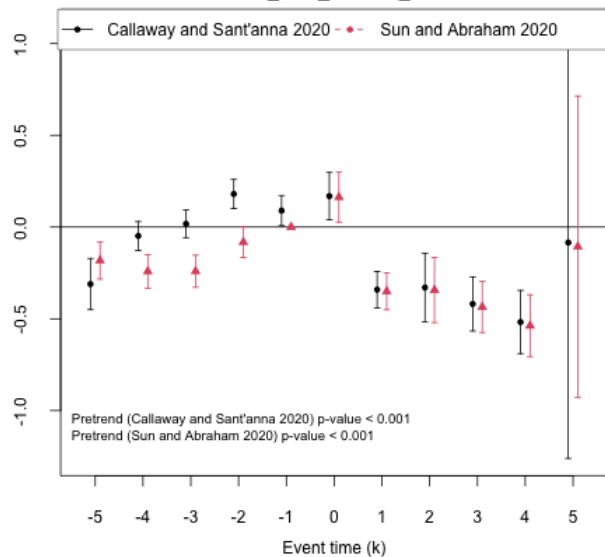


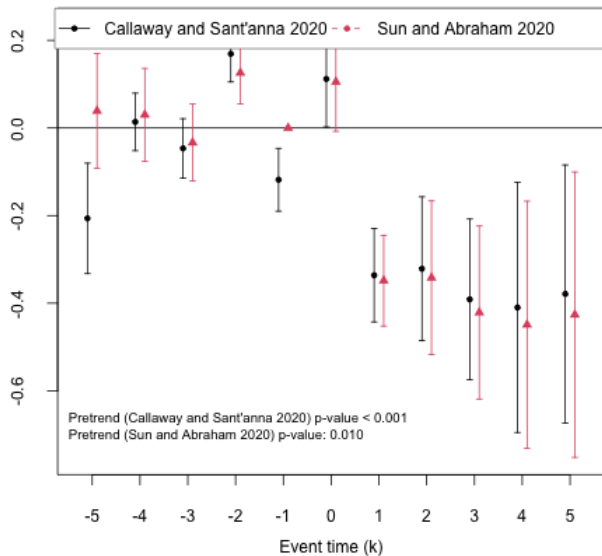
major_minor_release_count



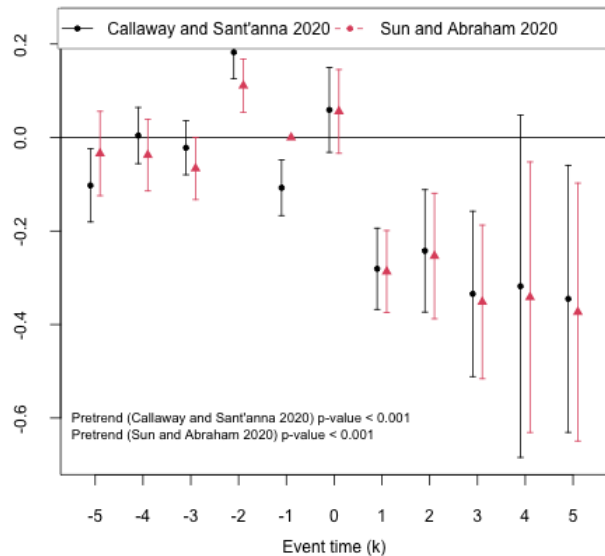
overall_new_release_count



pull_request_merged



pull_request_opened

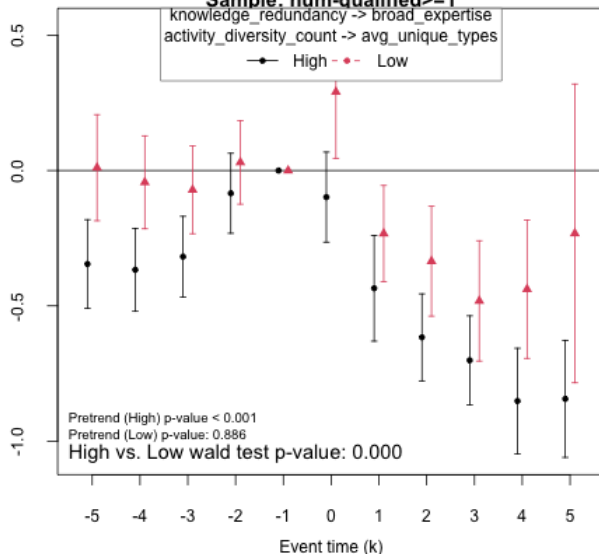


major_minor_release_count rolling5

Sample: num-qualified>=1

knowledge_redundancy -> broad_expertise
activity_diversity_count -> avg_unique_types

—●— High —●— Low

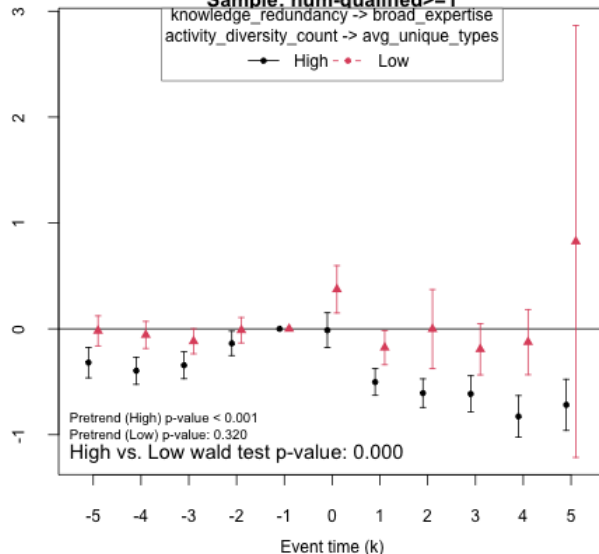


overall_new_release_count rolling5

Sample: num-qualified>=1

knowledge_redundancy -> broad_expertise
activity_diversity_count -> avg_unique_types

—●— High —●— Low

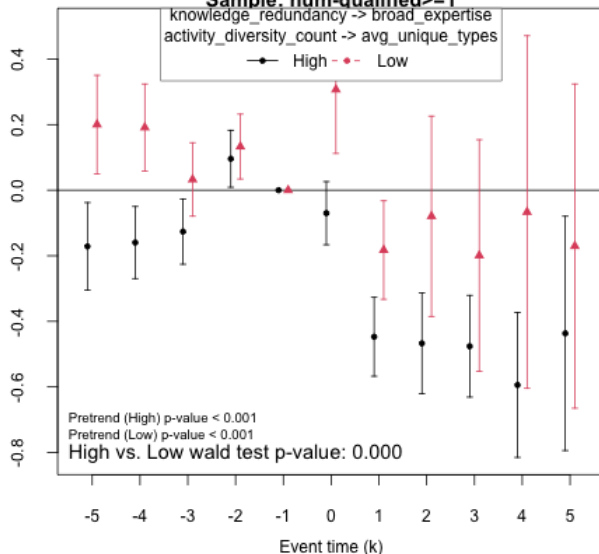


pull_request_merged rolling5

Sample: num-qualified>=1

knowledge_redundancy -> broad_expertise
activity_diversity_count -> avg_unique_types

—●— High —●— Low

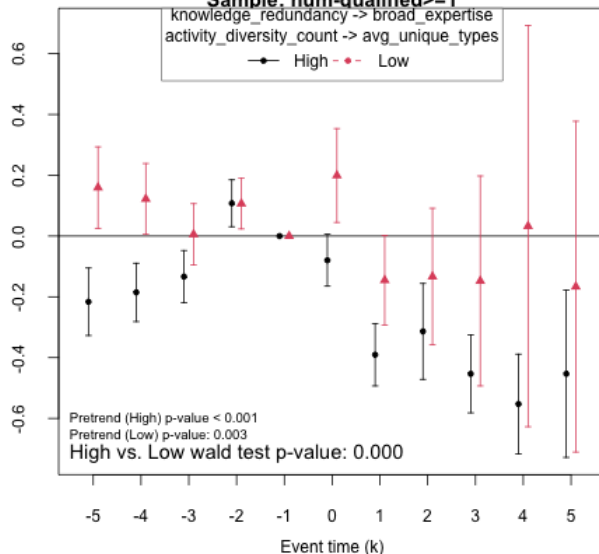


pull_request_opened rolling5

Sample: num-qualified>=1

knowledge_redundancy -> broad_expertise
activity_diversity_count -> avg_unique_types

—●— High —●— Low

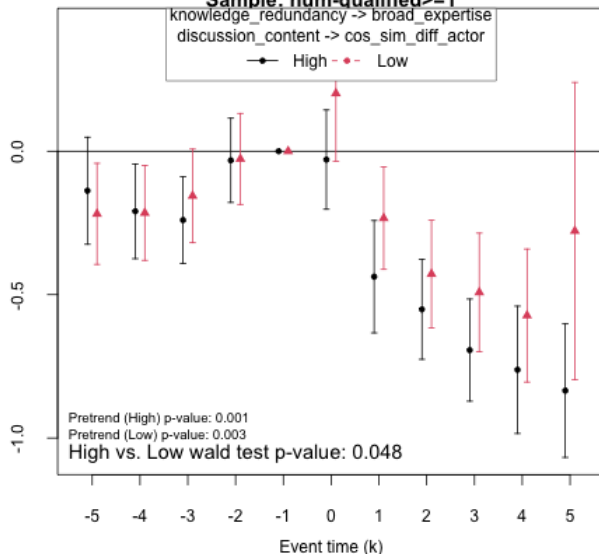


major_minor_release_count rolling5

Sample: num-qualified>=1

knowledge_redundancy->broad_expertise
discussion_content->cos_sim_diff_actor

—●— High —●— Low

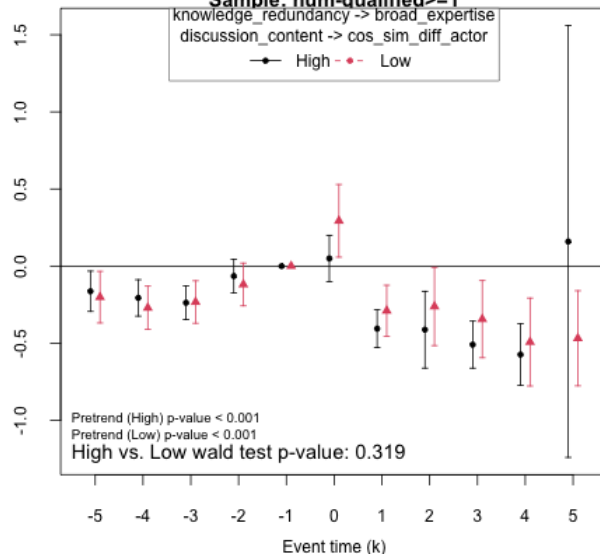


overall_new_release_count rolling5

Sample: num-qualified>=1

knowledge_redundancy->broad_expertise
discussion_content->cos_sim_diff_actor

—●— High —●— Low

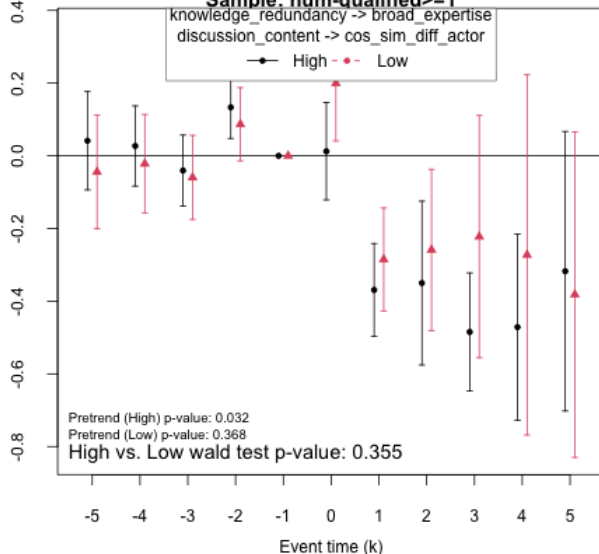


pull_request_merged rolling5

Sample: num-qualified>=1

knowledge_redundancy->broad_expertise
discussion_content->cos_sim_diff_actor

—●— High —●— Low

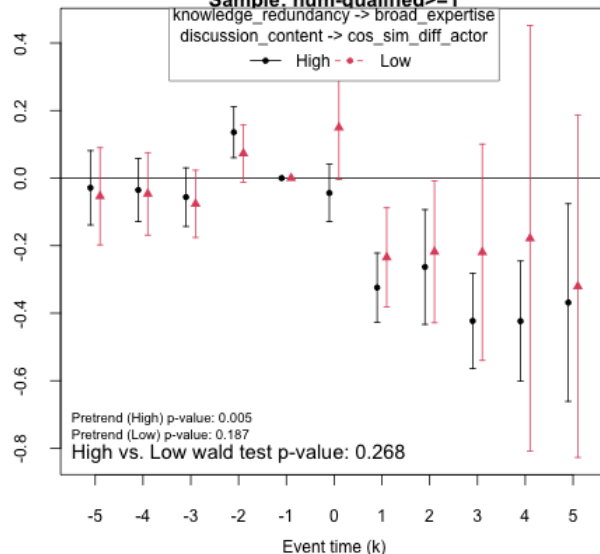


pull_request_opened rolling5

Sample: num-qualified>=1

knowledge_redundancy->broad_expertise
discussion_content->cos_sim_diff_actor

—●— High —●— Low



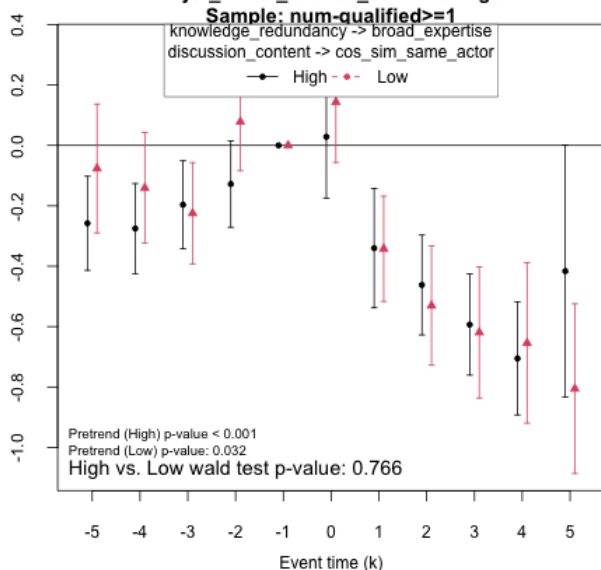
major_minor_release_count rolling5

Sample: num-qualified>=1

knowledge_redundancy-> broad_expertise

discussion_content-> cos_sim_same_actor

—●— High —●— Low



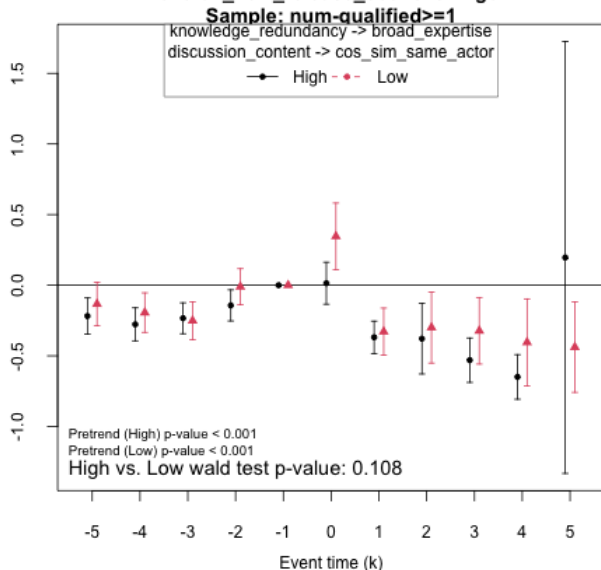
overall_new_release_count rolling5

Sample: num-qualified>=1

knowledge_redundancy-> broad_expertise

discussion_content-> cos_sim_same_actor

—●— High —●— Low



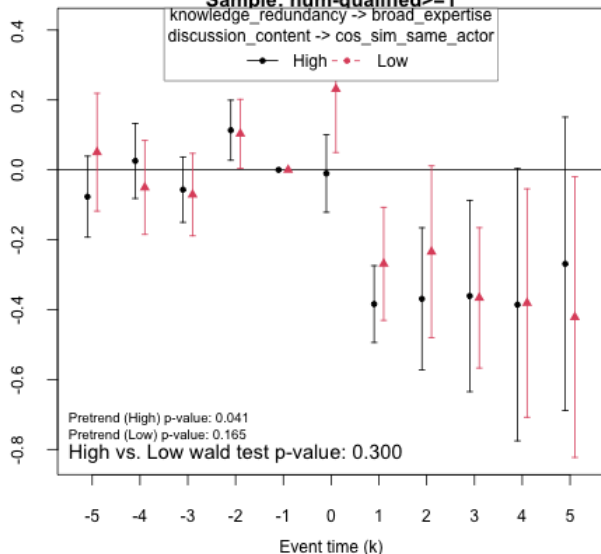
pull_request_merged rolling5

Sample: num-qualified>=1

knowledge_redundancy-> broad_expertise

discussion_content-> cos_sim_same_actor

—●— High —●— Low



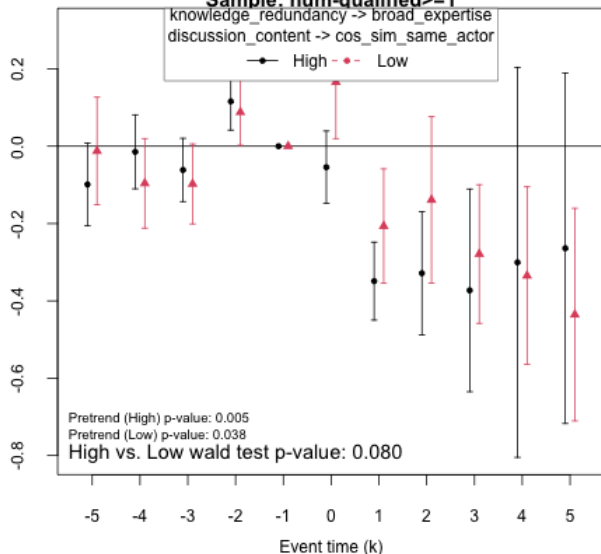
pull_request_opened rolling5

Sample: num-qualified>=1

knowledge_redundancy-> broad_expertise

discussion_content-> cos_sim_same_actor

—●— High —●— Low

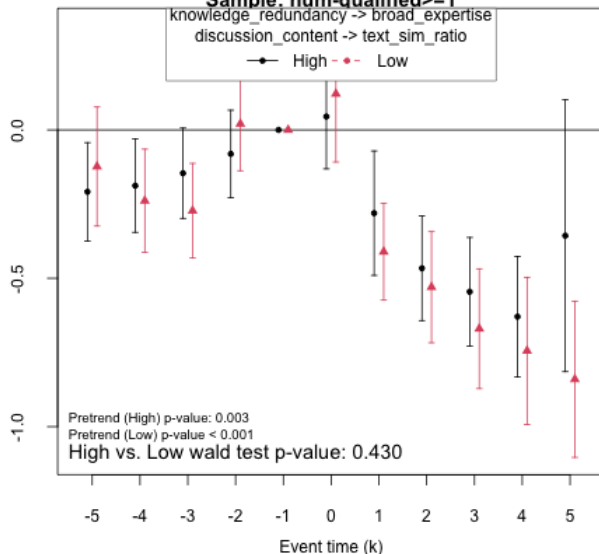


major_minor_release_count rolling5

Sample: num-qualified>=1

knowledge_redundancy -> broad_expertise
discussion_content -> text_sim_ratio

—●— High —●— Low

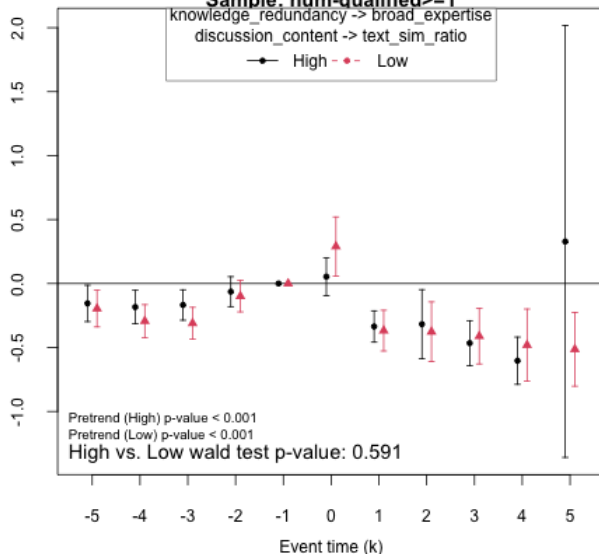


overall_new_release_count rolling5

Sample: num-qualified>=1

knowledge_redundancy -> broad_expertise
discussion_content -> text_sim_ratio

—●— High —●— Low

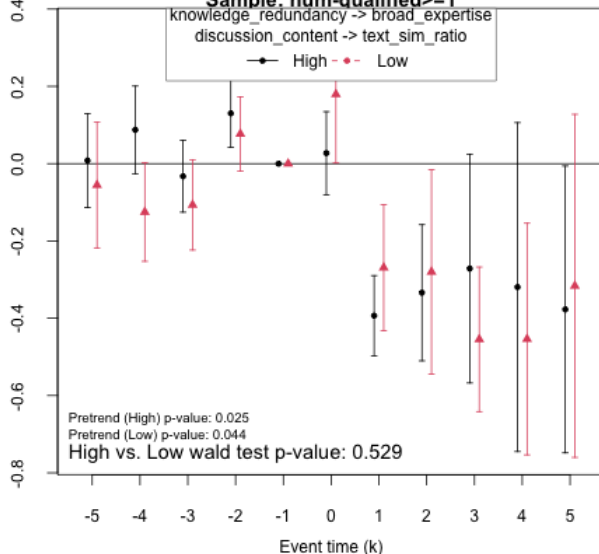


pull_request_merged rolling5

Sample: num-qualified>=1

knowledge_redundancy -> broad_expertise
discussion_content -> text_sim_ratio

—●— High —●— Low

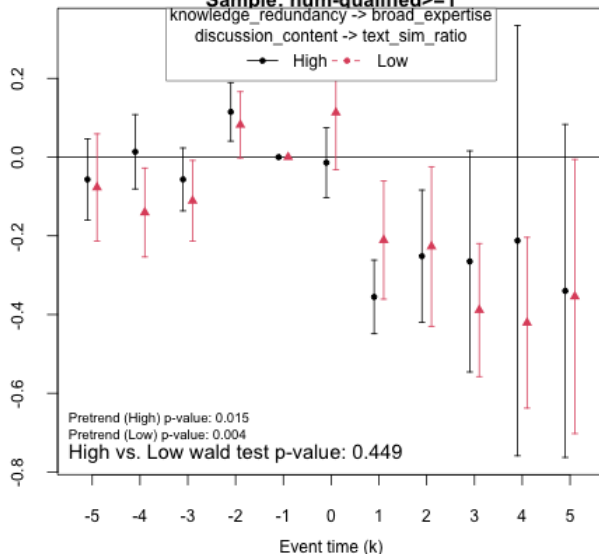


pull_request_opened rolling5

Sample: num-qualified>=1

knowledge_redundancy -> broad_expertise
discussion_content -> text_sim_ratio

—●— High —●— Low

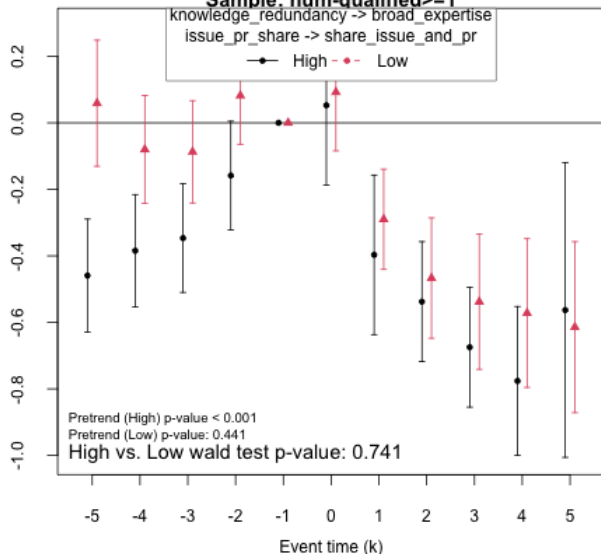


major_minor_release_count_rolling5

Sample: num-qualified>=1

knowledge_redundancy->broad_expertise
issue_pr_share->share_issue_and_pr

—●— High —●— Low

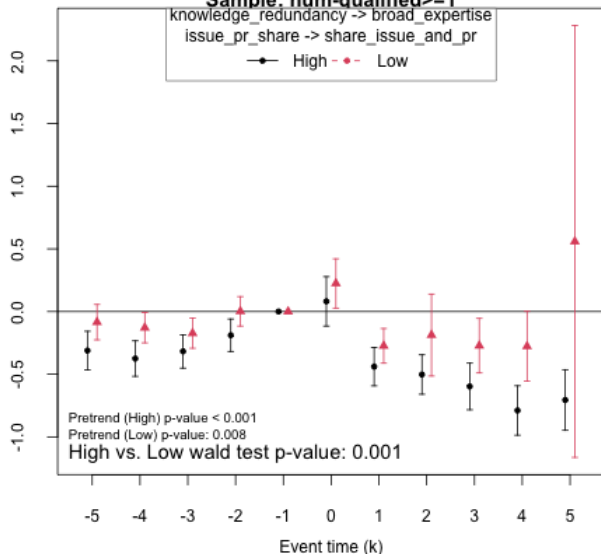


overall_new_release_count_rolling5

Sample: num-qualified>=1

knowledge_redundancy->broad_expertise
issue_pr_share->share_issue_and_pr

—●— High —●— Low

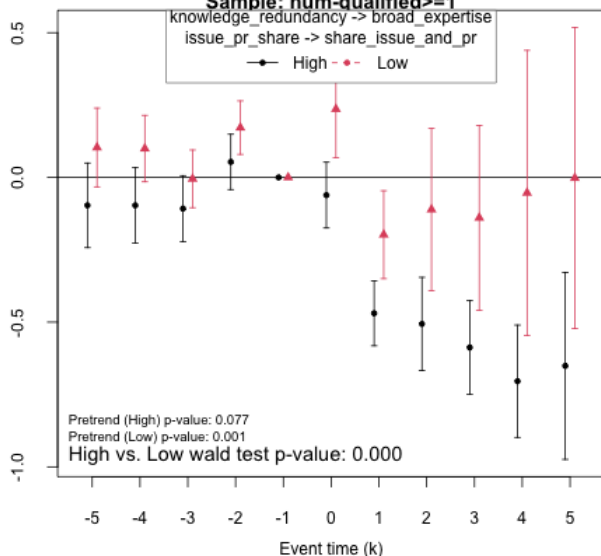


pull_request_merged_rolling5

Sample: num-qualified>=1

knowledge_redundancy->broad_expertise
issue_pr_share->share_issue_and_pr

—●— High —●— Low

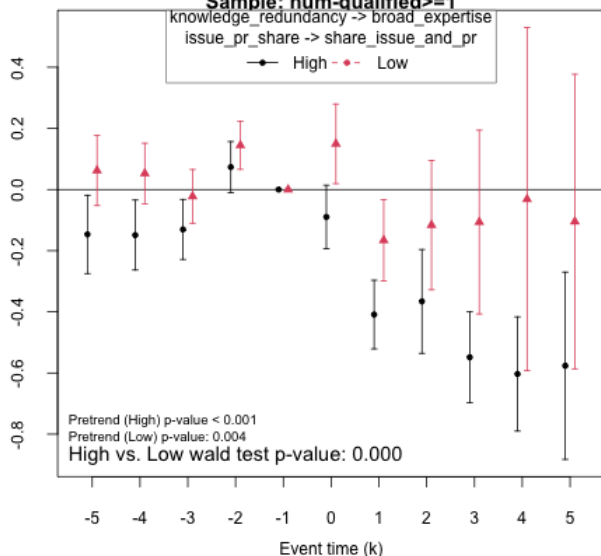


pull_request_opened_rolling5

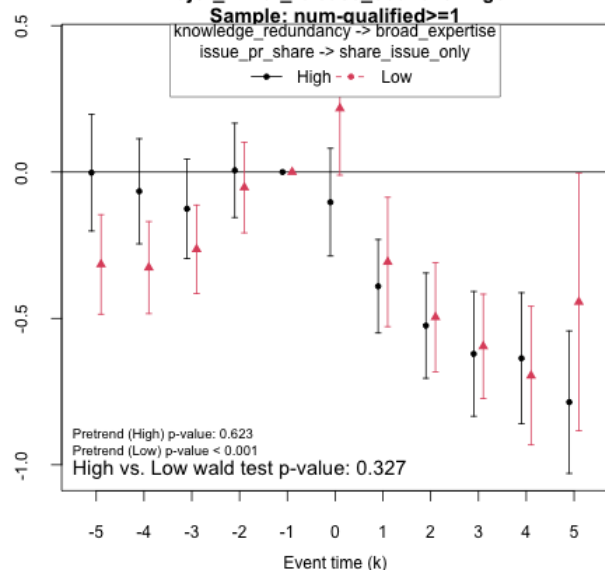
Sample: num-qualified>=1

knowledge_redundancy->broad_expertise
issue_pr_share->share_issue_and_pr

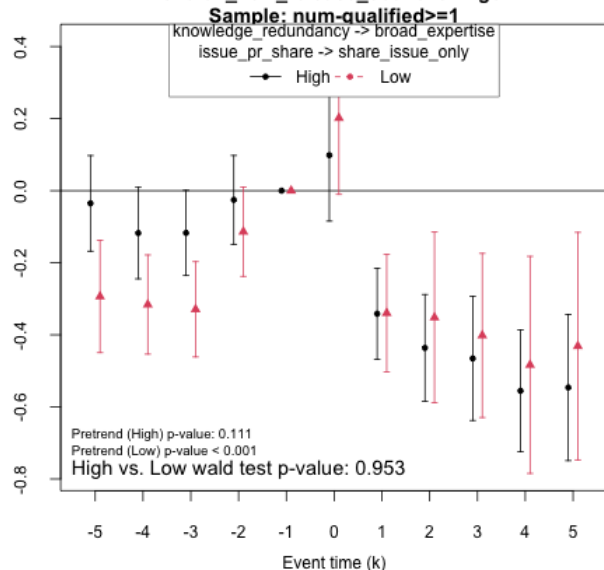
—●— High —●— Low



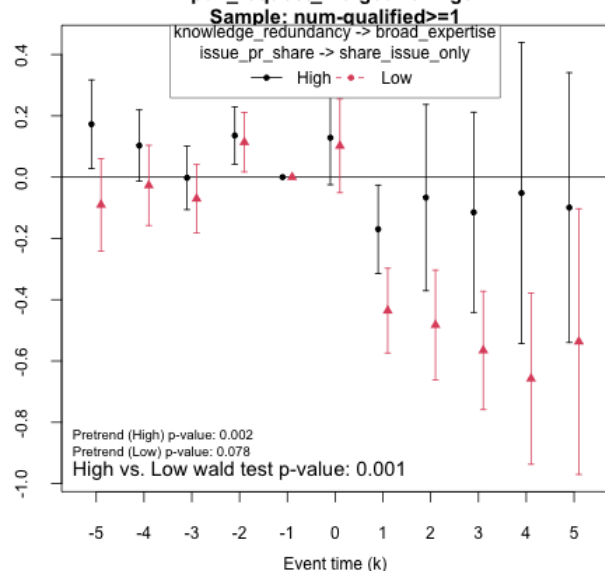
major_minor_release_count rolling5



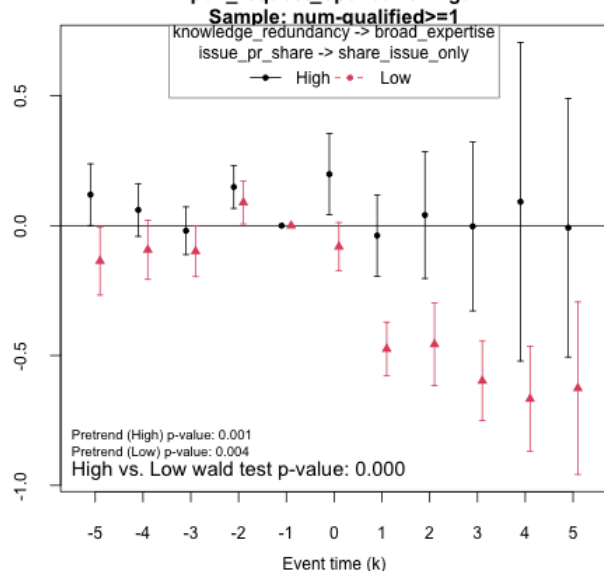
overall_new_release_count rolling5



pull_request_merged rolling5



pull_request_opened rolling5



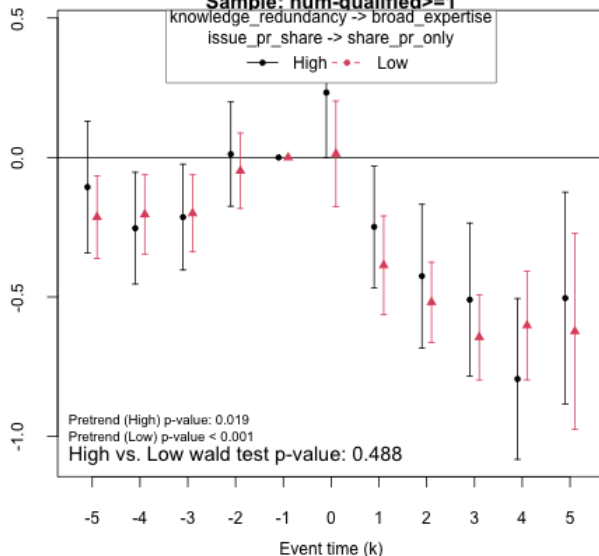
major_minor_release_count rolling5

Sample: num-qualified>=1

knowledge_redundancy->broad_expertise

issue_pr_share -> share_pr_only

—●— High —●— Low



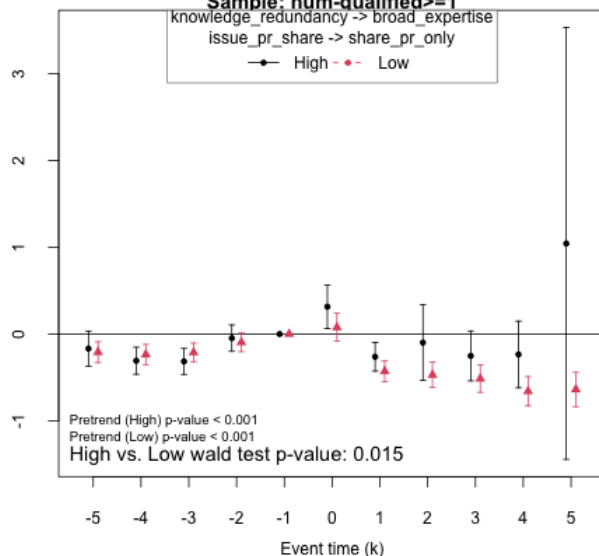
overall_new_release_count rolling5

Sample: num-qualified>=1

knowledge_redundancy->broad_expertise

issue_pr_share -> share_pr_only

—●— High —●— Low



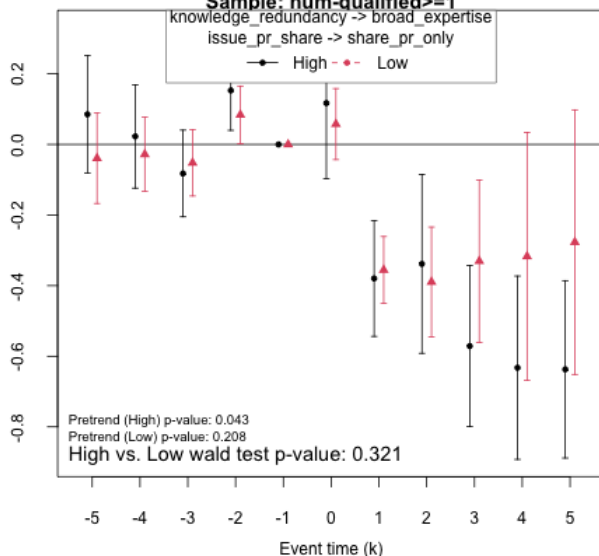
pull_request_merged rolling5

Sample: num-qualified>=1

knowledge_redundancy->broad_expertise

issue_pr_share -> share_pr_only

—●— High —●— Low



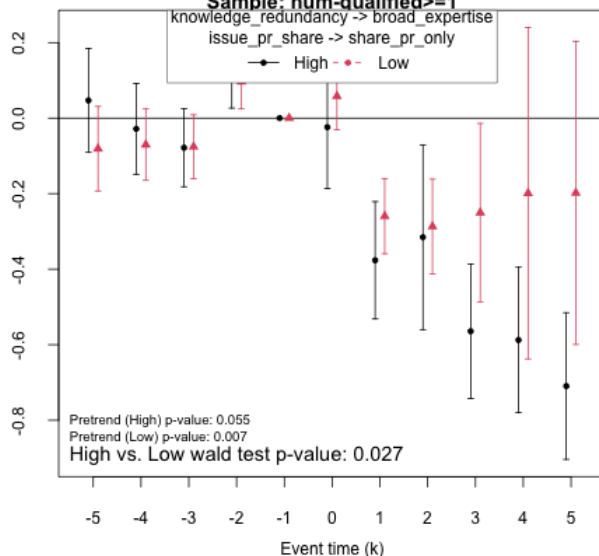
pull_request_opened rolling5

Sample: num-qualified>=1

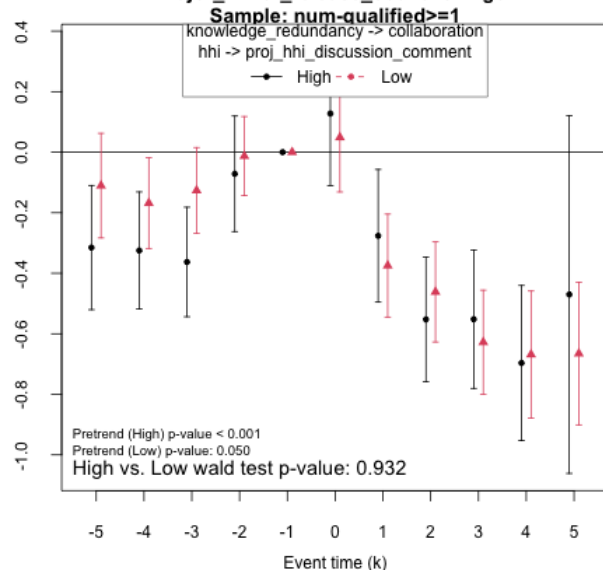
knowledge_redundancy->broad_expertise

issue_pr_share -> share_pr_only

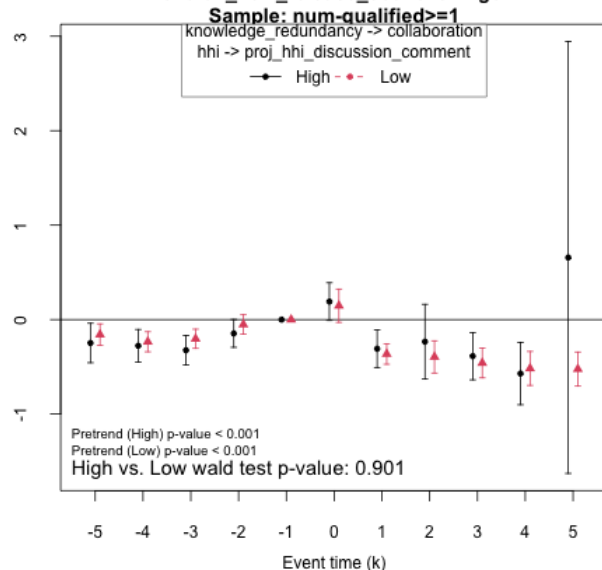
—●— High —●— Low



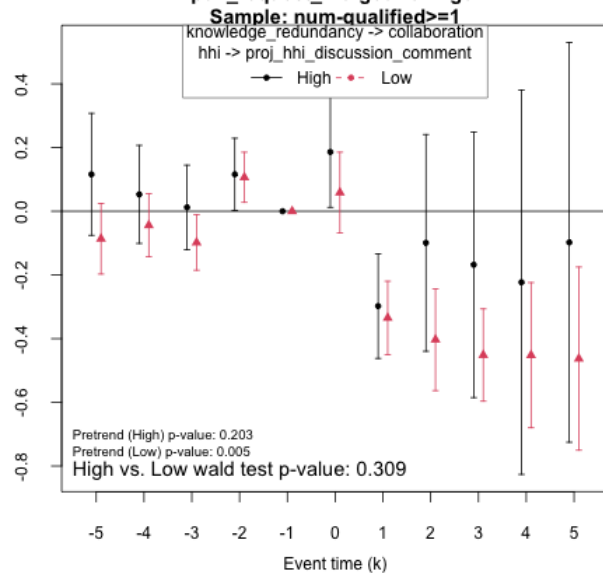
major_minor_release_count rolling5



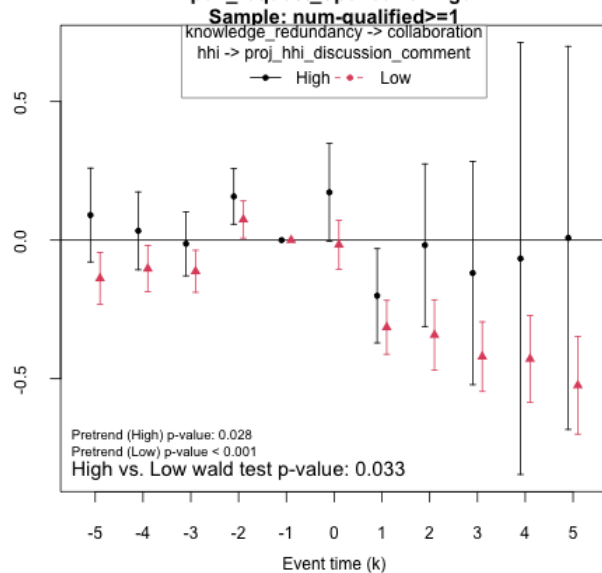
overall_new_release_count rolling5



pull_request_merged rolling5



pull_request_opened rolling5



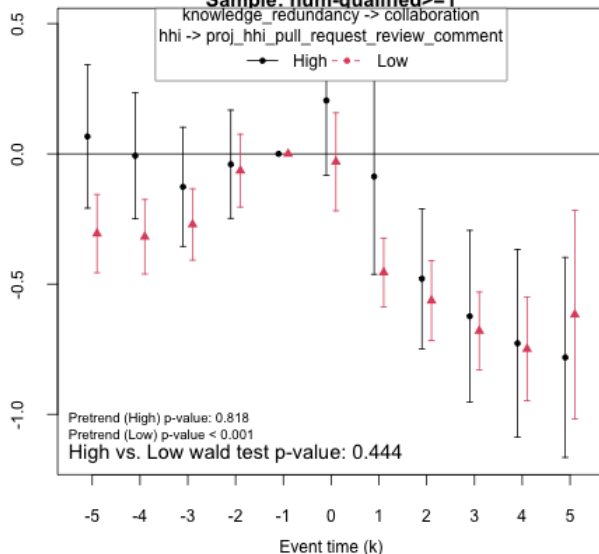
major_minor_release_count_rolling5

Sample: num-qualified>=1

knowledge_redundancy -> collaboration

hhi -> proj_hhi_pull_request_review_comment

—●— High —●— Low



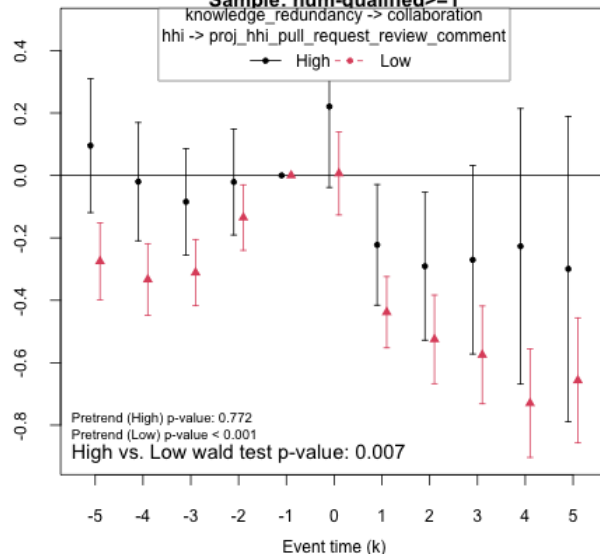
overall_new_release_count_rolling5

Sample: num-qualified>=1

knowledge_redundancy -> collaboration

hhi -> proj_hhi_pull_request_review_comment

—●— High —●— Low



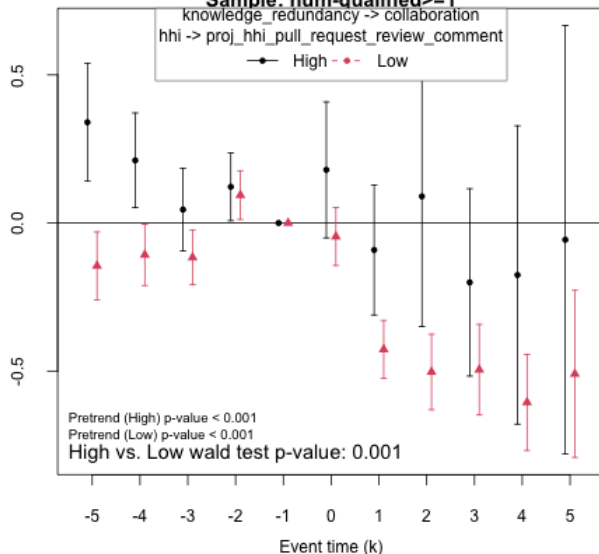
pull_request_merged_rolling5

Sample: num-qualified>=1

knowledge_redundancy -> collaboration

hhi -> proj_hhi_pull_request_review_comment

—●— High —●— Low



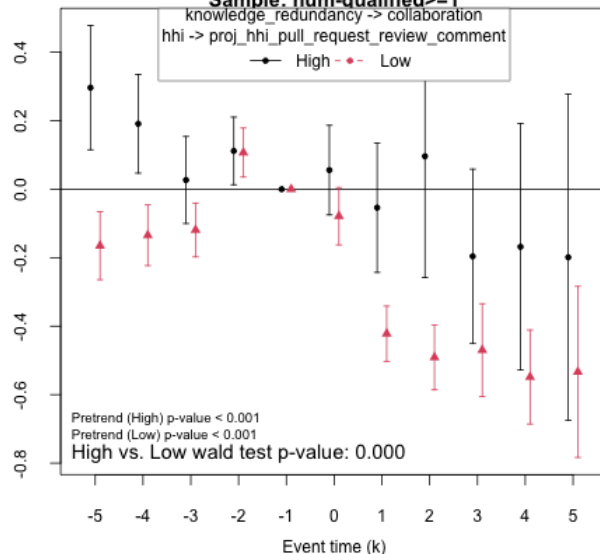
pull_request_opened_rolling5

Sample: num-qualified>=1

knowledge_redundancy -> collaboration

hhi -> proj_hhi_pull_request_review_comment

—●— High —●— Low



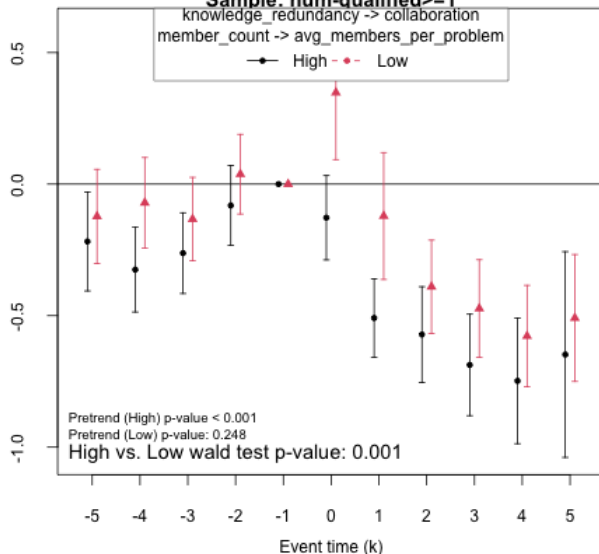
major_minor_release_count_rolling5

Sample: num-qualified>=1

knowledge_redundancy -> collaboration

member_count -> avg_members_per_problem

—●— High —●— Low



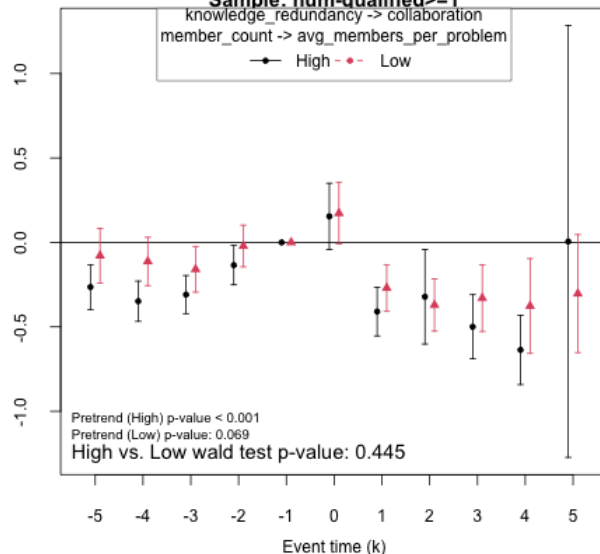
overall_new_release_count_rolling5

Sample: num-qualified>=1

knowledge_redundancy -> collaboration

member_count -> avg_members_per_problem

—●— High —●— Low



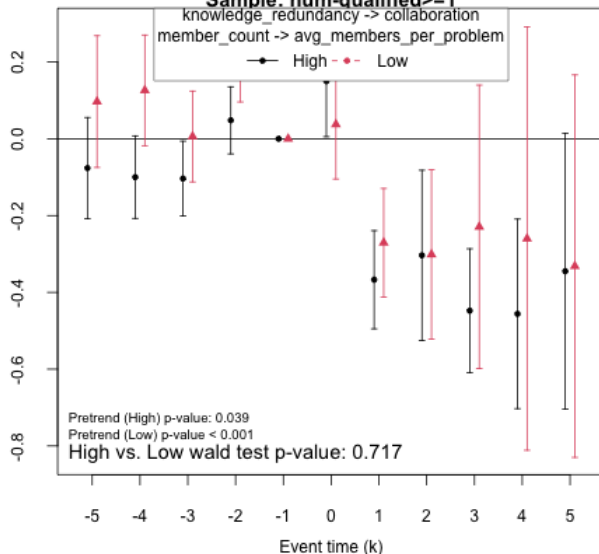
pull_request_merged_rolling5

Sample: num-qualified>=1

knowledge_redundancy -> collaboration

member_count -> avg_members_per_problem

—●— High —●— Low



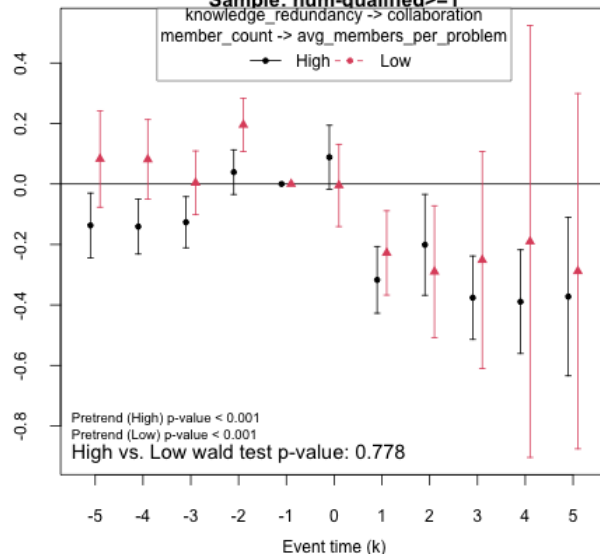
pull_request_opened_rolling5

Sample: num-qualified>=1

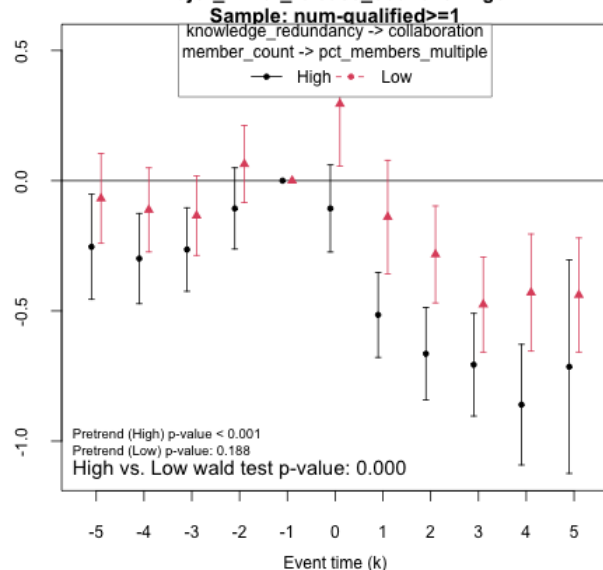
knowledge_redundancy -> collaboration

member_count -> avg_members_per_problem

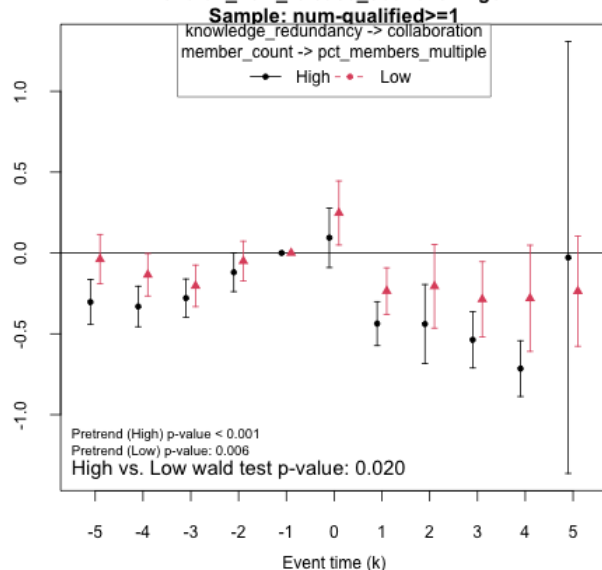
—●— High —●— Low



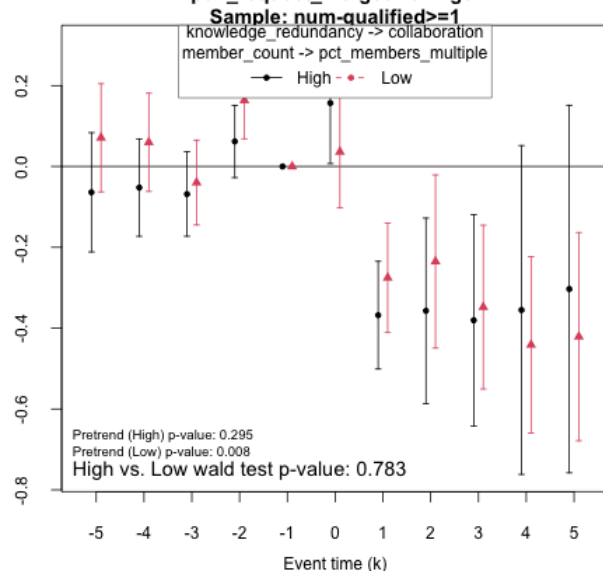
major_minor_release_count rolling5



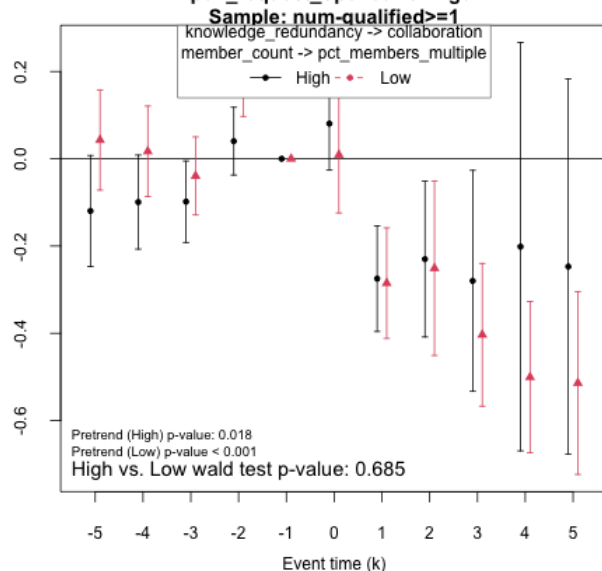
overall_new_release_count rolling5



pull_request_merged rolling5



pull_request_opened rolling5

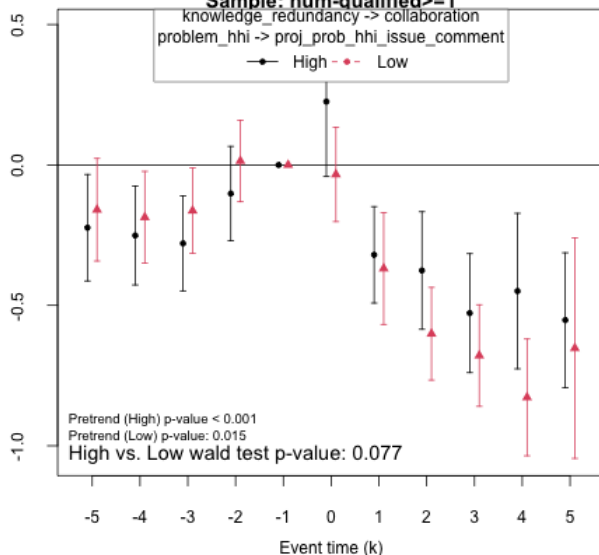


major_minor_release_count_rolling5

Sample: num-qualified>=1

knowledge_redundancy -> collaboration
problem_hhi -> proj_prob_hhi_issue_comment

—●— High —●— Low

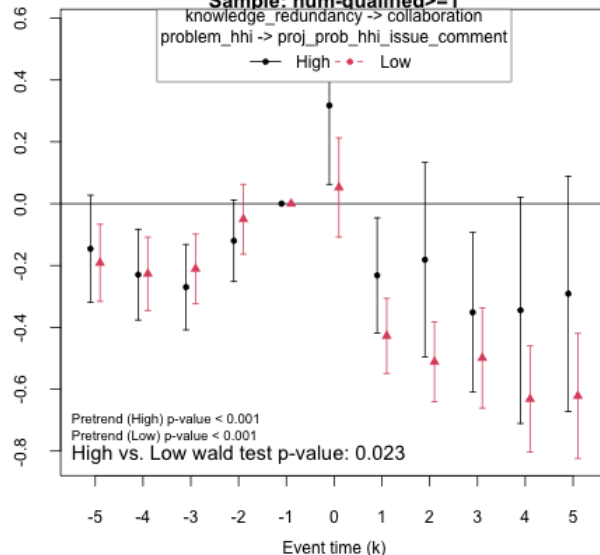


overall_new_release_count_rolling5

Sample: num-qualified>=1

knowledge_redundancy -> collaboration
problem_hhi -> proj_prob_hhi_issue_comment

—●— High —●— Low

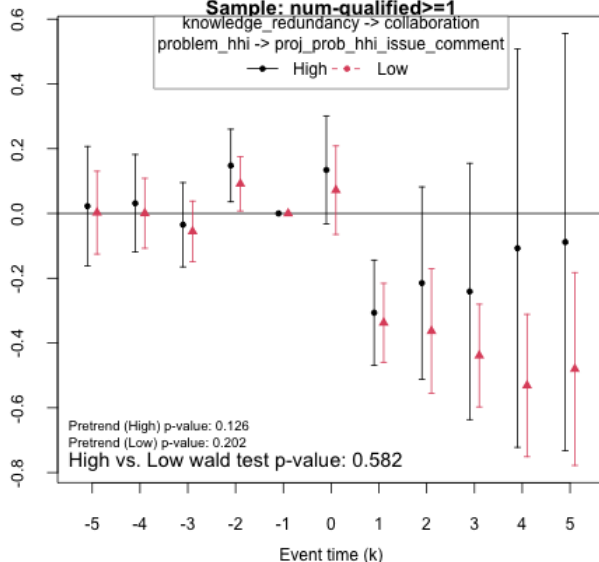


pull_request_merged_rolling5

Sample: num-qualified>=1

knowledge_redundancy -> collaboration
problem_hhi -> proj_prob_hhi_issue_comment

—●— High —●— Low

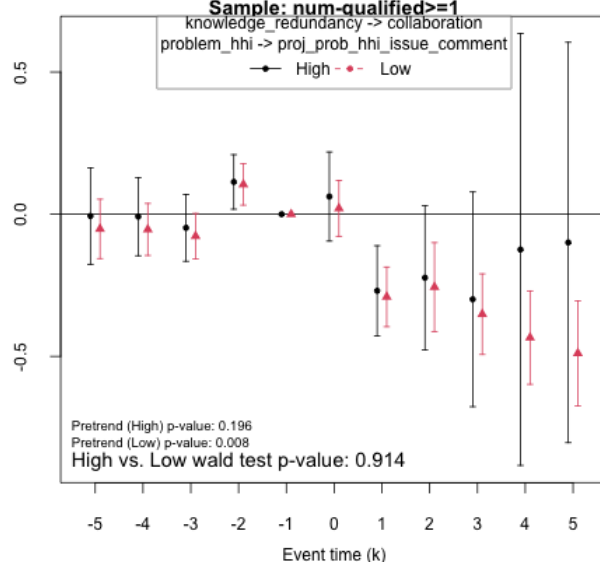


pull_request_opened_rolling5

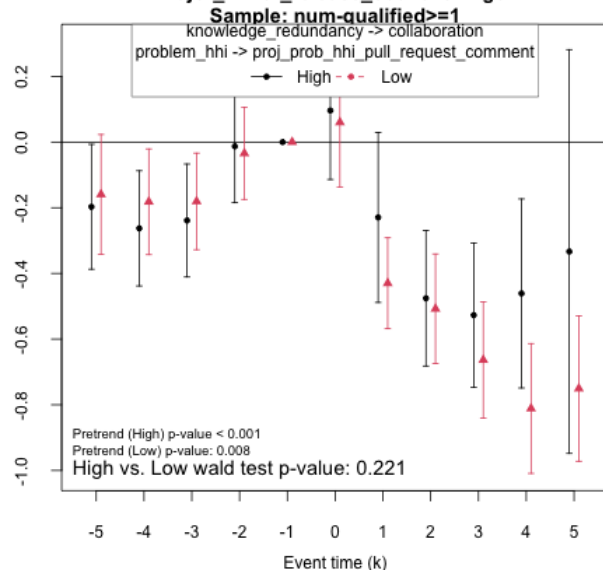
Sample: num-qualified>=1

knowledge_redundancy -> collaboration
problem_hhi -> proj_prob_hhi_issue_comment

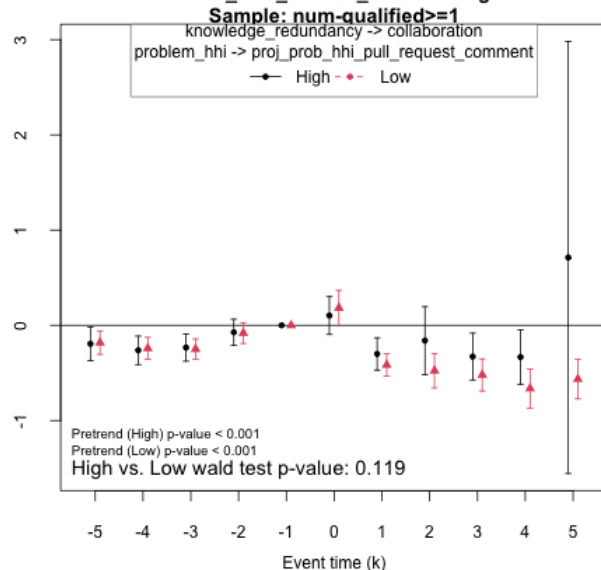
—●— High —●— Low



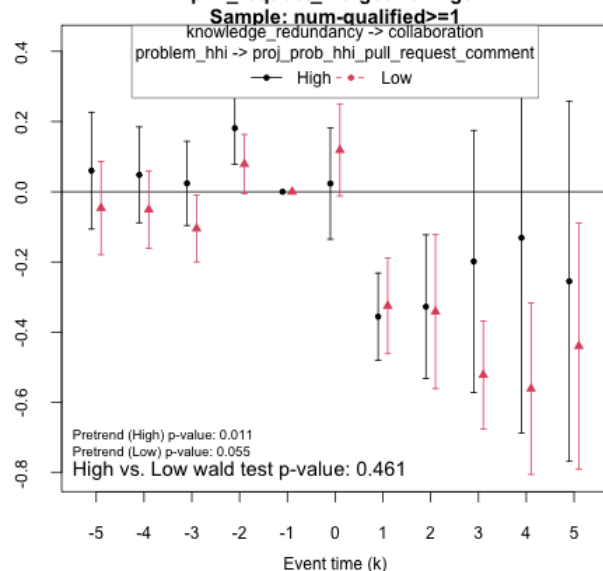
major_minor_release_count rolling5



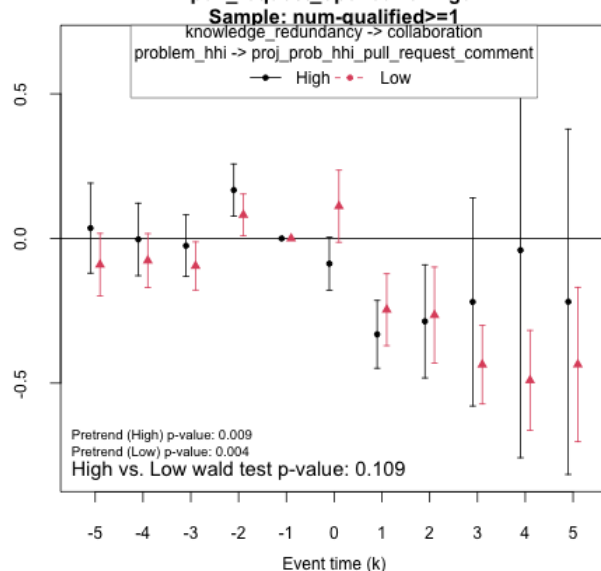
overall_new_release_count rolling5



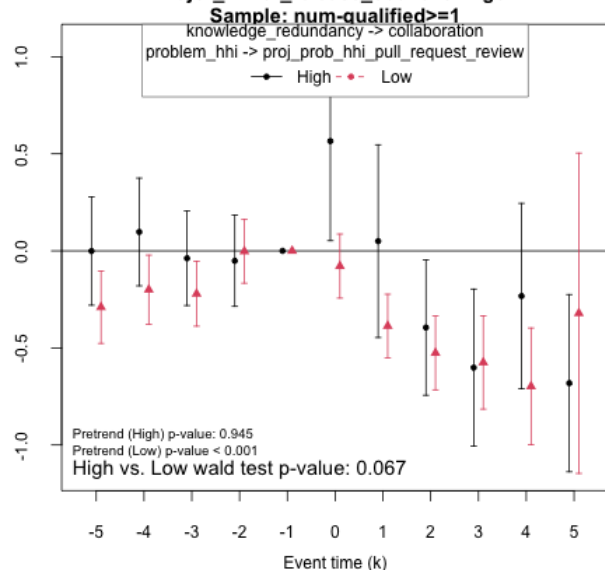
pull_request_merged rolling5



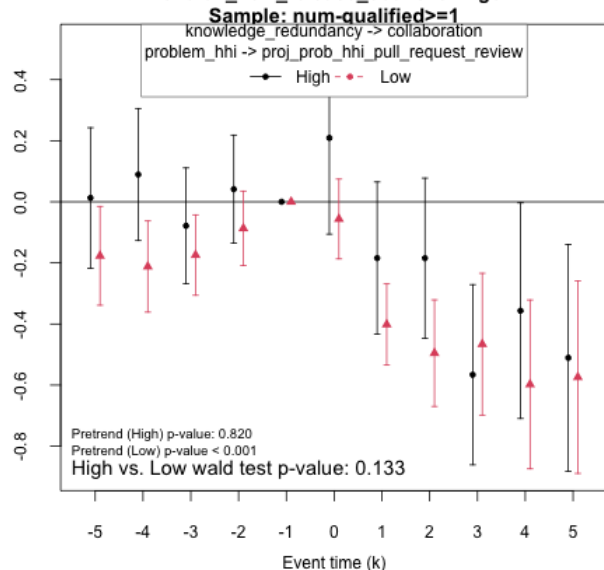
pull_request_opened rolling5



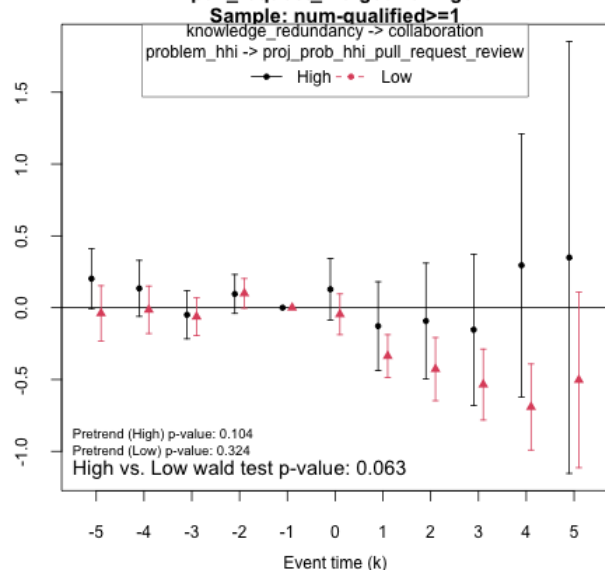
major_minor_release_count rolling5



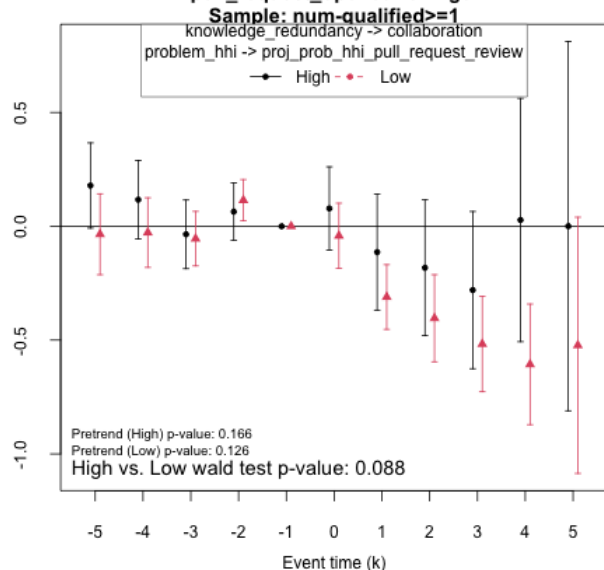
overall_new_release_count rolling5



pull_request_merged rolling5



pull_request_opened rolling5



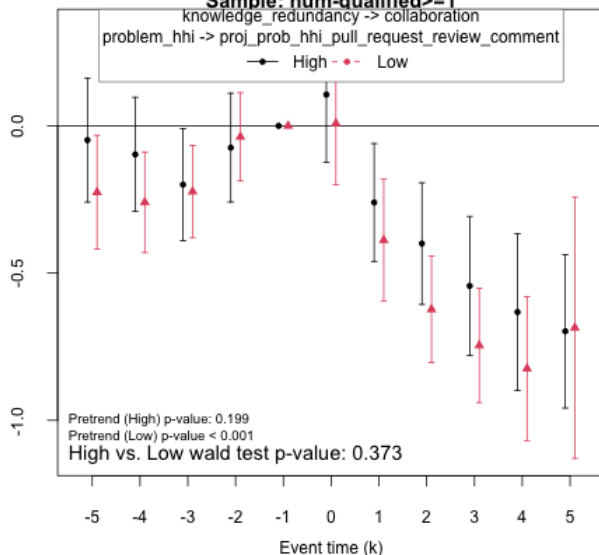
major_minor_release_count_rolling5

Sample: num-qualified>=1

knowledge_redundancy -> collaboration

problem_hhi -> proj_prob_hhi_pull_request_review_comment

—●— High —●— Low



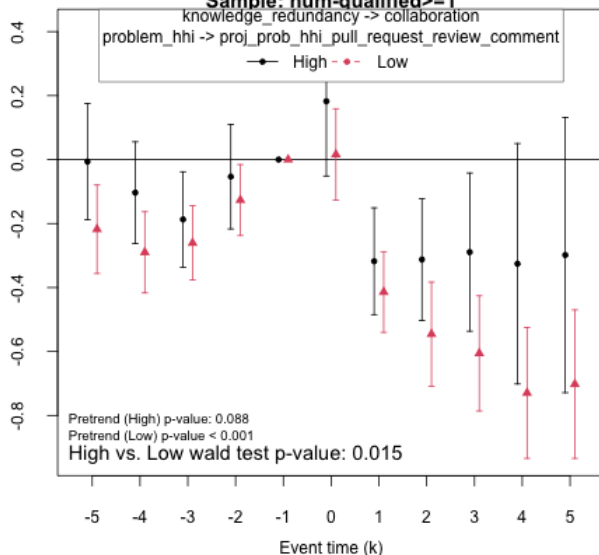
overall_new_release_count_rolling5

Sample: num-qualified>=1

knowledge_redundancy -> collaboration

problem_hhi -> proj_prob_hhi_pull_request_review_comment

—●— High —●— Low



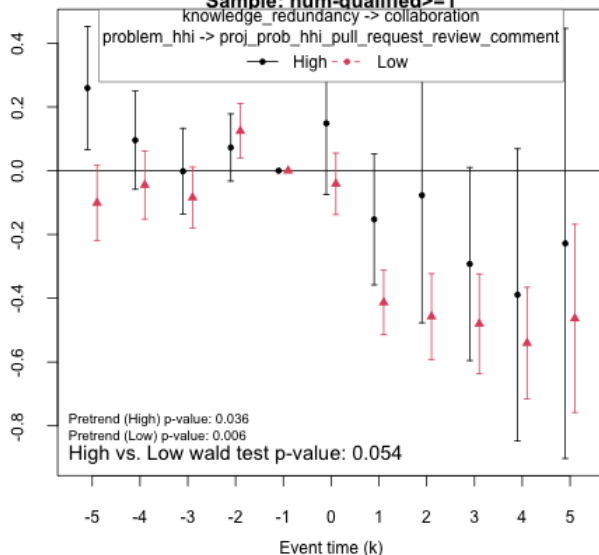
pull_request_merged_rolling5

Sample: num-qualified>=1

knowledge_redundancy -> collaboration

problem_hhi -> proj_prob_hhi_pull_request_review_comment

—●— High —●— Low



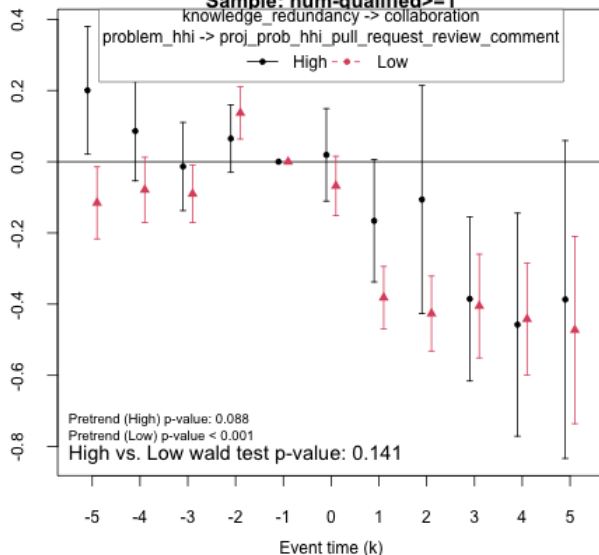
pull_request_opened_rolling5

Sample: num-qualified>=1

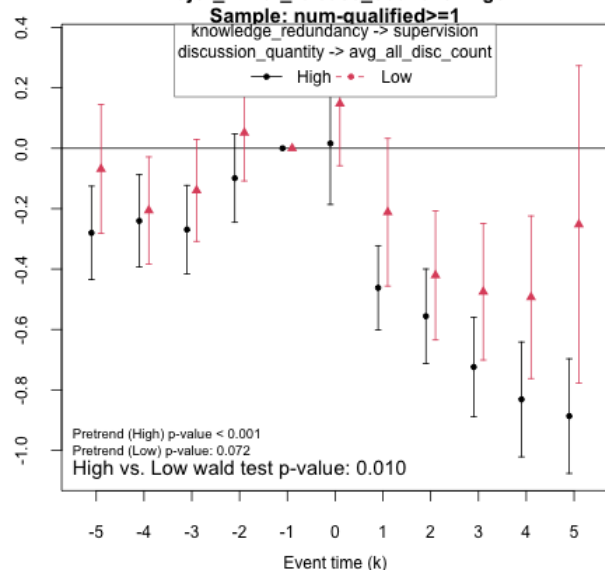
knowledge_redundancy -> collaboration

problem_hhi -> proj_prob_hhi_pull_request_review_comment

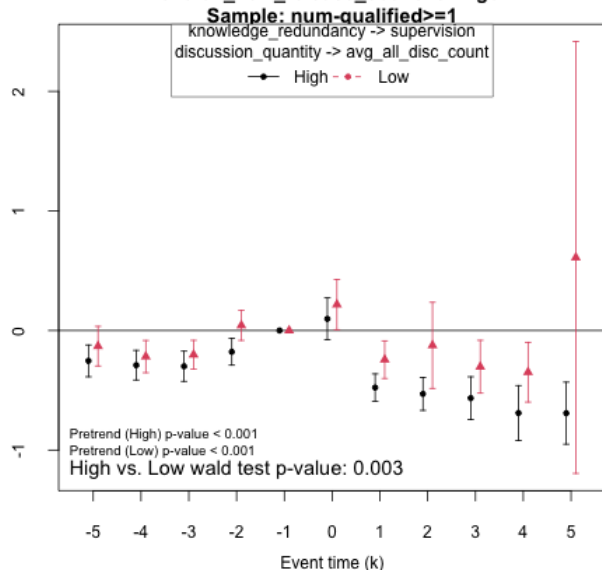
—●— High —●— Low



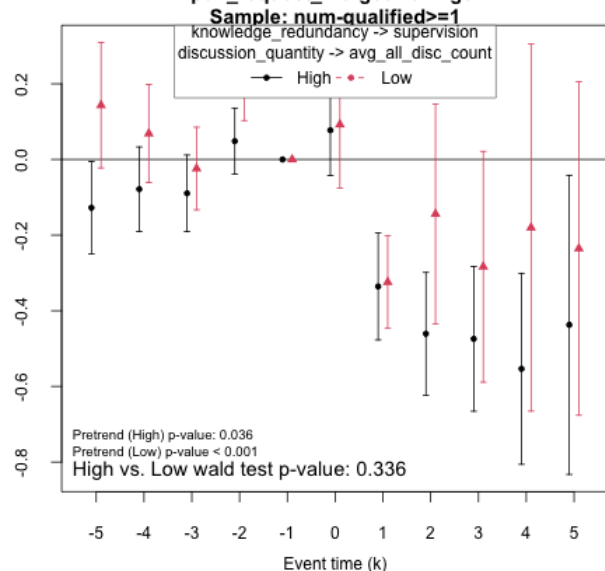
major_minor_release_count rolling5



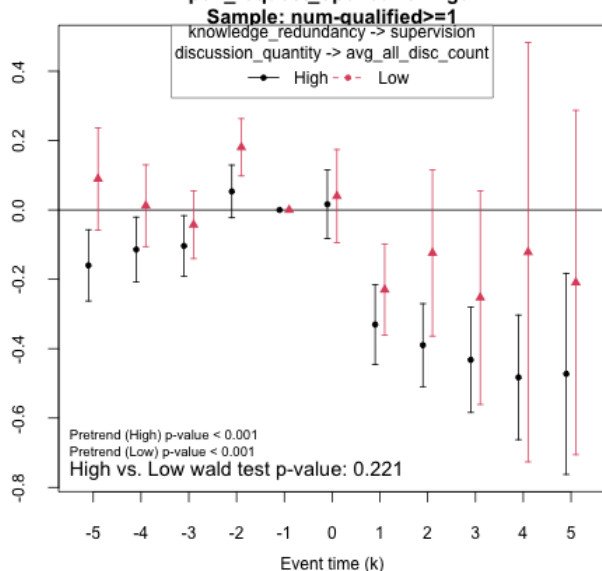
overall_new_release_count rolling5



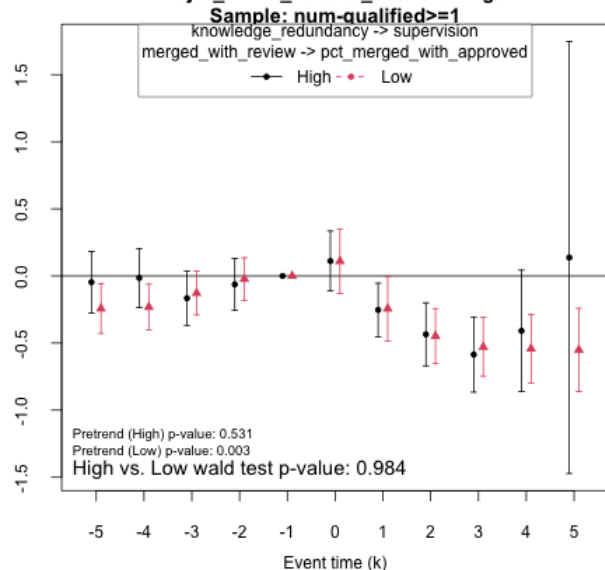
pull_request_merged rolling5



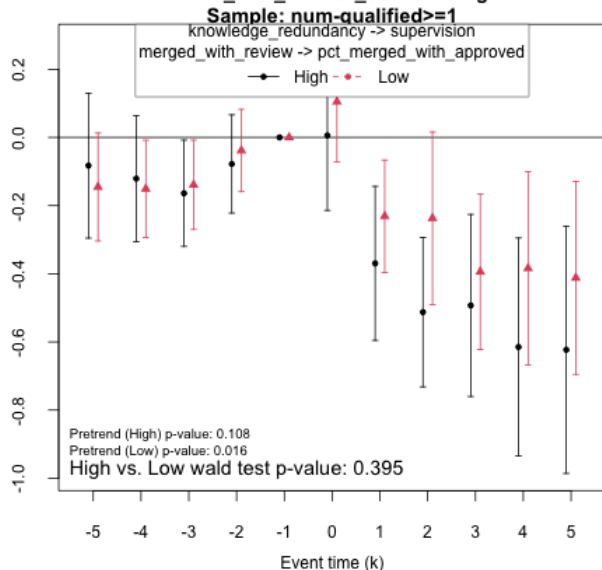
pull_request_opened rolling5



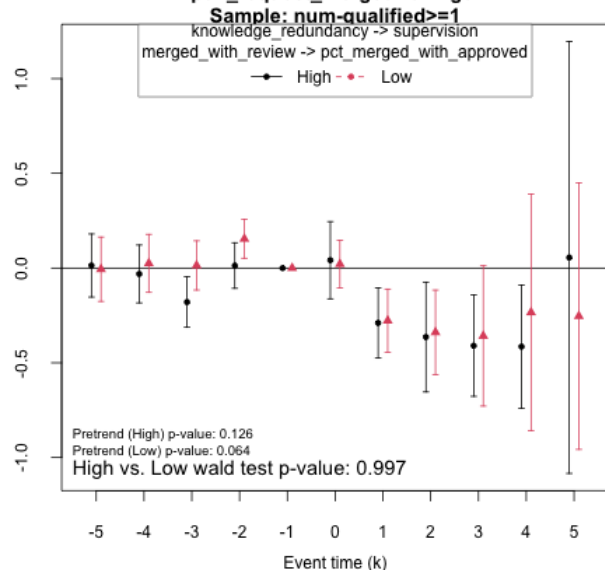
major_minor_release_count rolling5



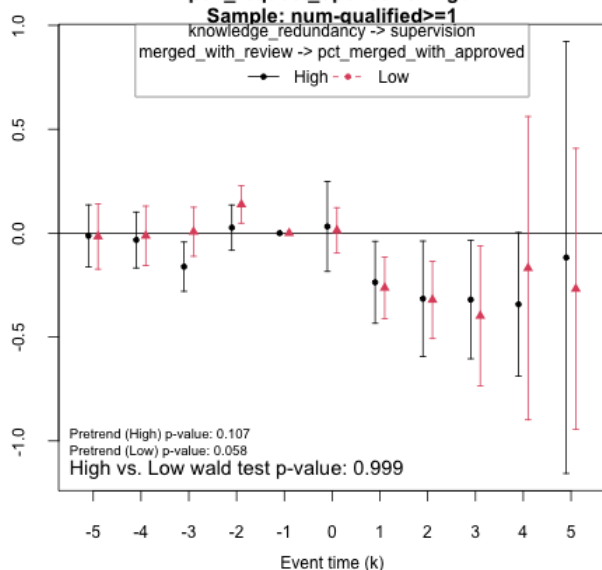
overall_new_release_count rolling5



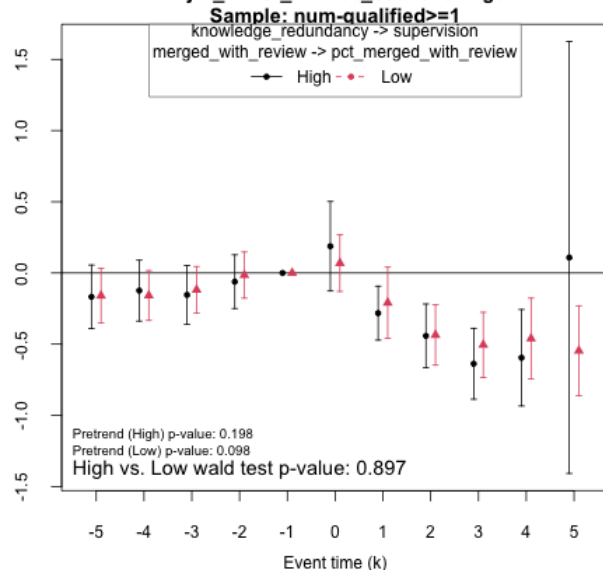
pull_request_merged rolling5



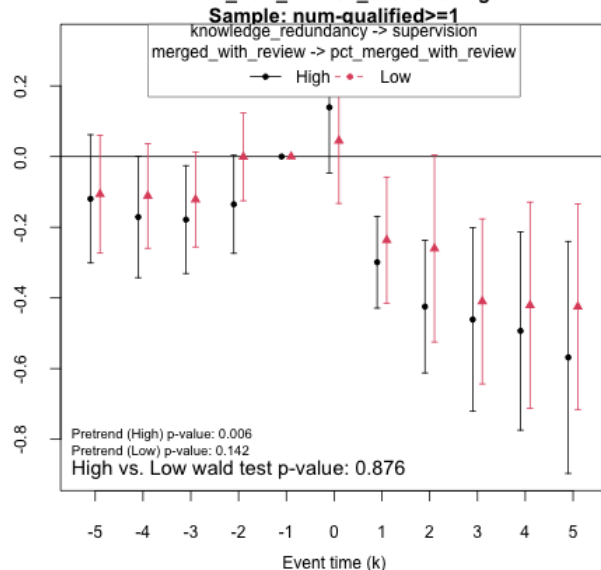
pull_request_opened rolling5



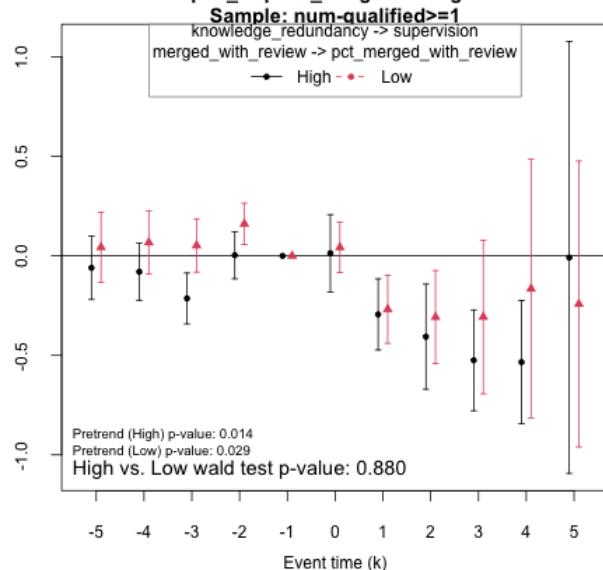
major_minor_release_count rolling5



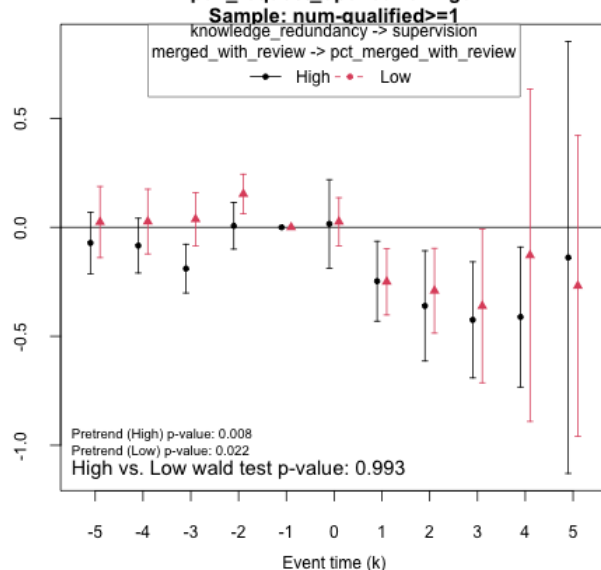
overall_new_release_count rolling5



pull_request_merged rolling5



pull_request_opened rolling5

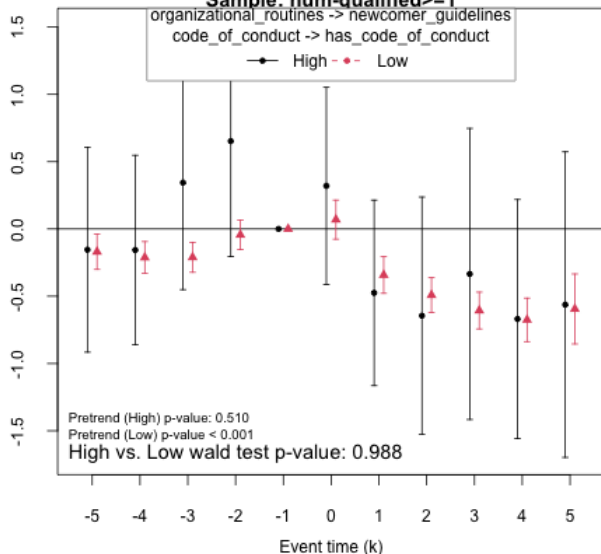


major_minor_release_count_rolling5

Sample: num-qualified>=1

organizational_routines -> newcomer_guidelines
code_of_conduct -> has_code_of_conduct

—●— High —●— Low

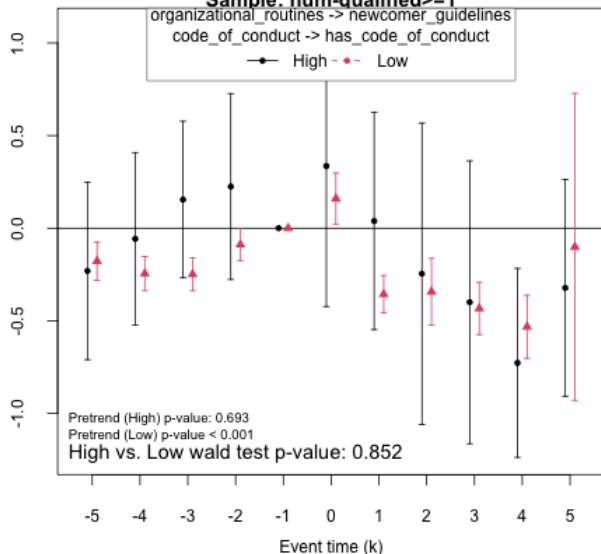


overall_new_release_count_rolling5

Sample: num-qualified>=1

organizational_routines -> newcomer_guidelines
code_of_conduct -> has_code_of_conduct

—●— High —●— Low

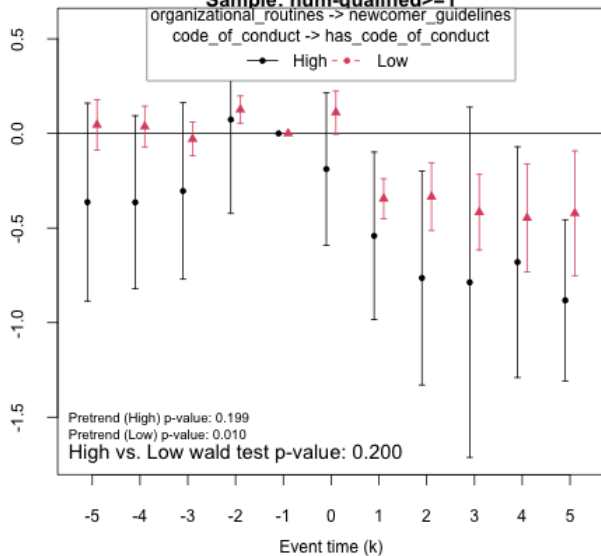


pull_request_merged_rolling5

Sample: num-qualified>=1

organizational_routines -> newcomer_guidelines
code_of_conduct -> has_code_of_conduct

—●— High —●— Low

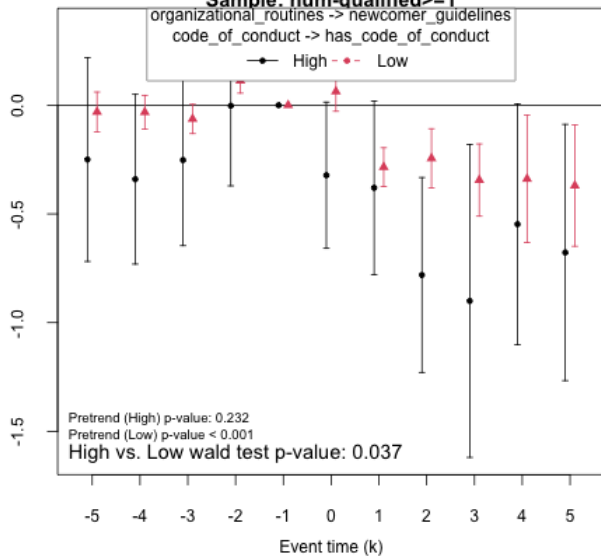


pull_request_opened_rolling5

Sample: num-qualified>=1

organizational_routines -> newcomer_guidelines
code_of_conduct -> has_code_of_conduct

—●— High —●— Low

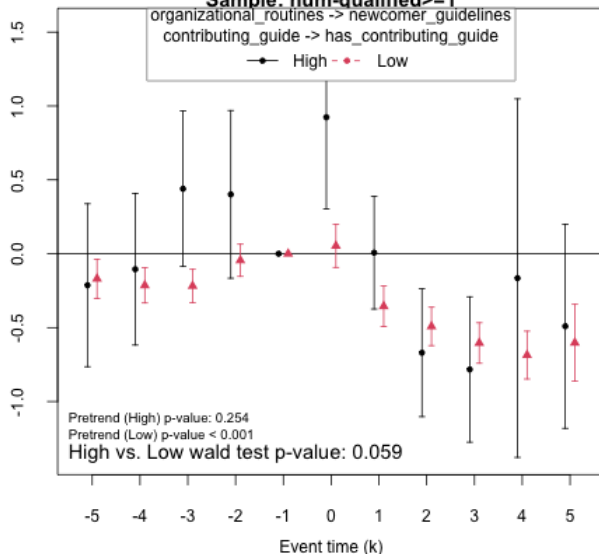


major_minor_release_count rolling5

Sample: num-qualified>=1

organizational_routines -> newcomer_guidelines
contributing_guide -> has_contributing_guide

—●— High —●— Low

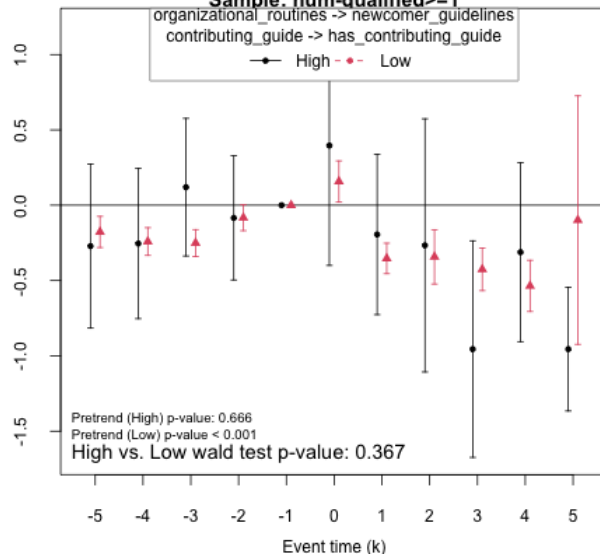


overall_new_release_count rolling5

Sample: num-qualified>=1

organizational_routines -> newcomer_guidelines
contributing_guide -> has_contributing_guide

—●— High —●— Low

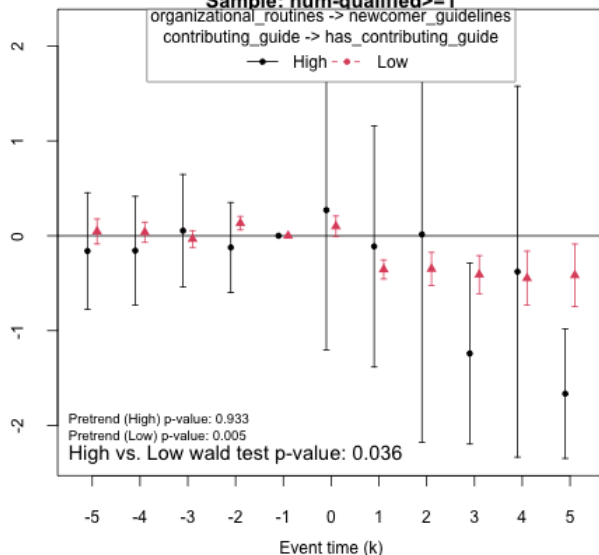


pull_request_merged rolling5

Sample: num-qualified>=1

organizational_routines -> newcomer_guidelines
contributing_guide -> has_contributing_guide

—●— High —●— Low

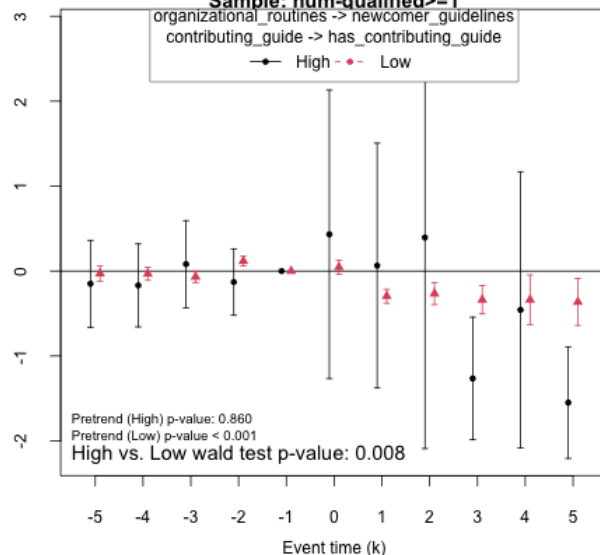


pull_request_opened rolling5

Sample: num-qualified>=1

organizational_routines -> newcomer_guidelines
contributing_guide -> has_contributing_guide

—●— High —●— Low

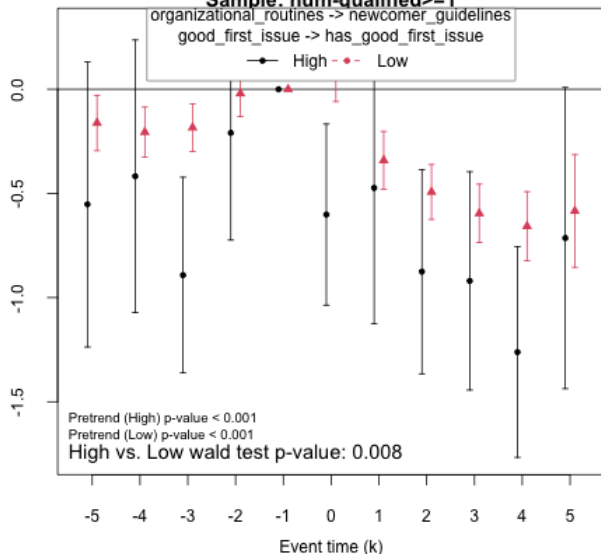


major_minor_release_count rolling5

Sample: num-qualified>=1

organizational_routines -> newcomer_guidelines
good_first_issue -> has_good_first_issue

—●— High —●— Low

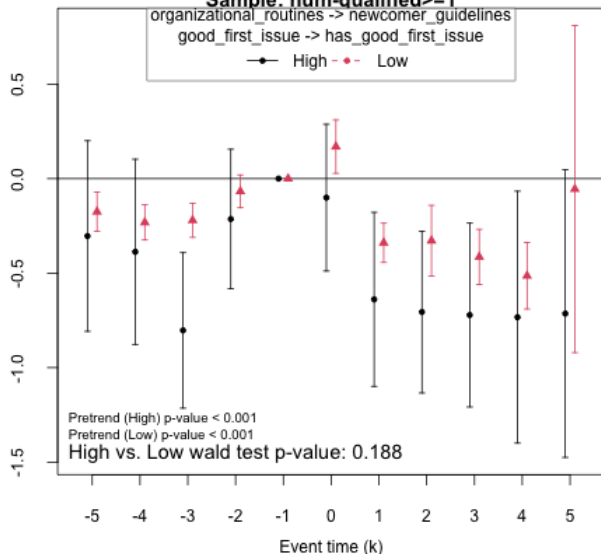


overall_new_release_count rolling5

Sample: num-qualified>=1

organizational_routines -> newcomer_guidelines
good_first_issue -> has_good_first_issue

—●— High —●— Low

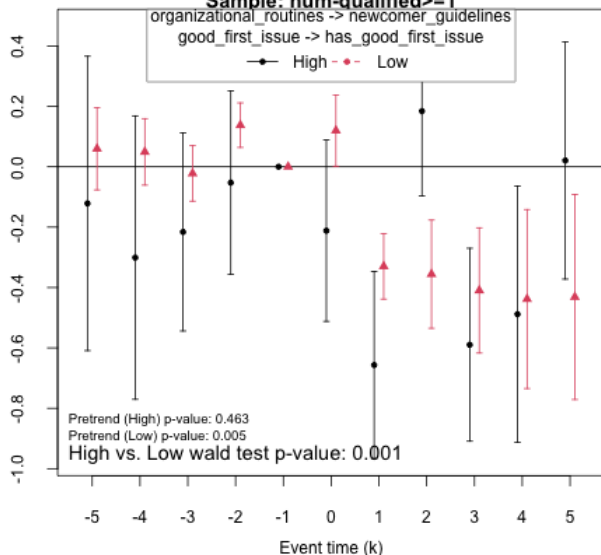


pull_request_merged rolling5

Sample: num-qualified>=1

organizational_routines -> newcomer_guidelines
good_first_issue -> has_good_first_issue

—●— High —●— Low

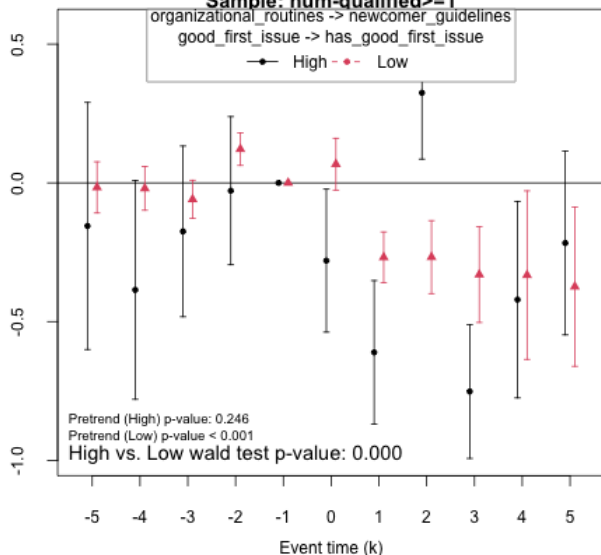


pull_request_opened rolling5

Sample: num-qualified>=1

organizational_routines -> newcomer_guidelines
good_first_issue -> has_good_first_issue

—●— High —●— Low

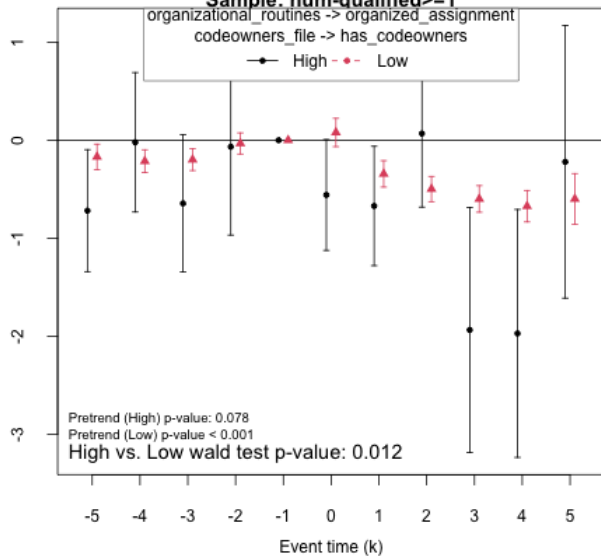


major_minor_release_count rolling5

Sample: num-qualified>=1

organizational_routines -> organized_assignment
codeowners_file -> has_codeowners

—●— High —●— Low

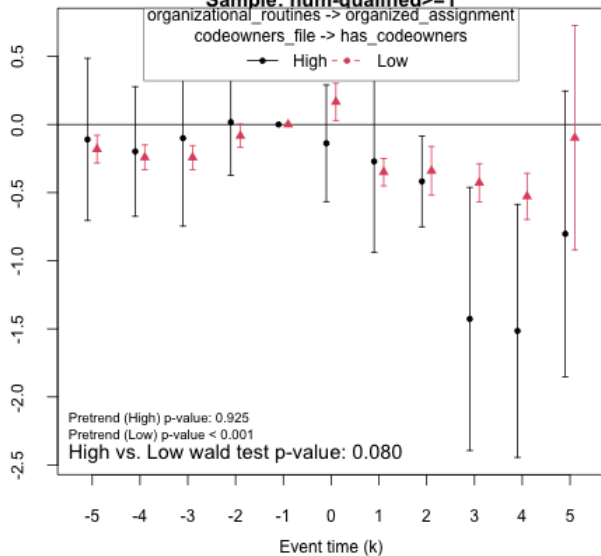


overall_new_release_count rolling5

Sample: num-qualified>=1

organizational_routines -> organized_assignment
codeowners_file -> has_codeowners

—●— High —●— Low

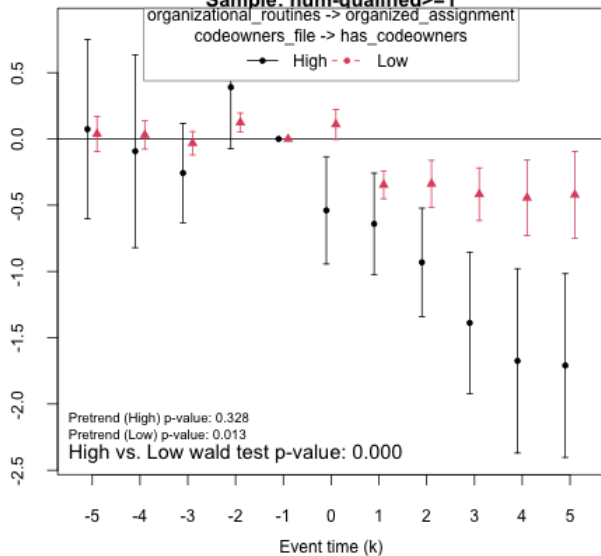


pull_request_merged rolling5

Sample: num-qualified>=1

organizational_routines -> organized_assignment
codeowners_file -> has_codeowners

—●— High —●— Low

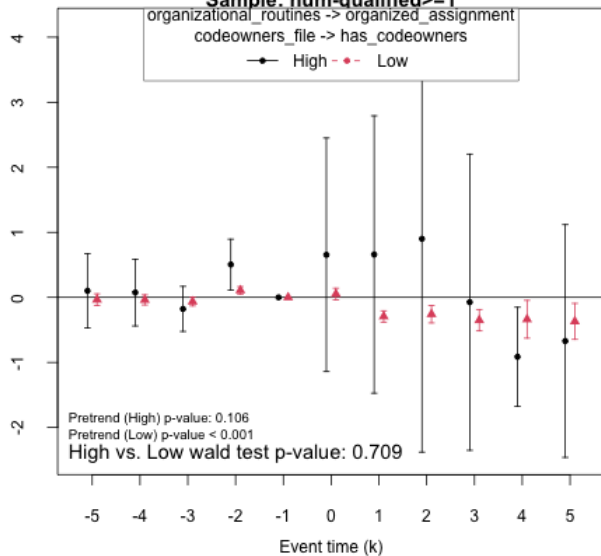


pull_request_opened rolling5

Sample: num-qualified>=1

organizational_routines -> organized_assignment
codeowners_file -> has_codeowners

—●— High —●— Low

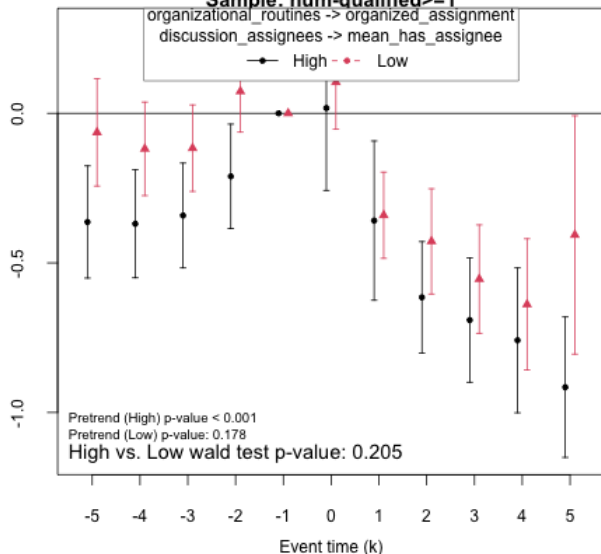


major_minor_release_count rolling5

Sample: num-qualified>=1

organizational_routines -> organized_assignment
discussion_assignees -> mean_has_assignee

—●— High —●— Low

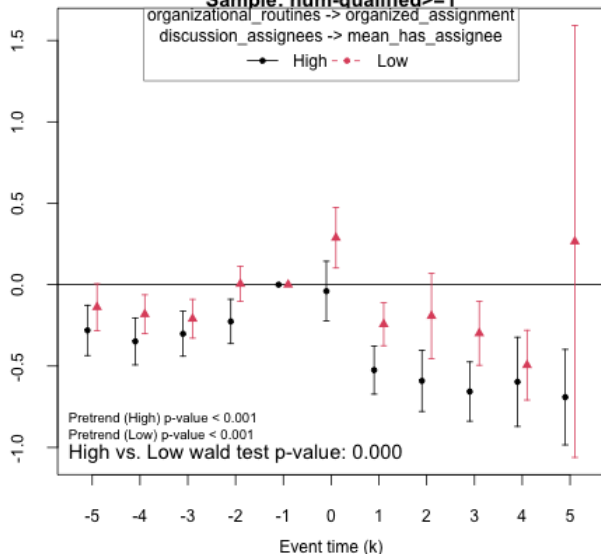


overall_new_release_count rolling5

Sample: num-qualified>=1

organizational_routines -> organized_assignment
discussion_assignees -> mean_has_assignee

—●— High —●— Low

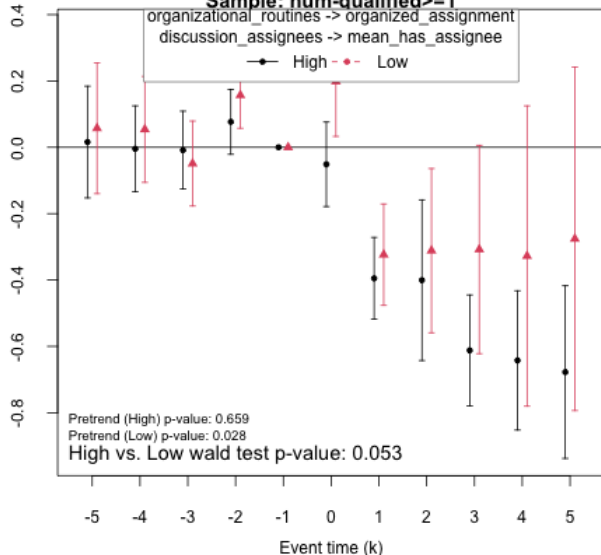


pull_request_merged rolling5

Sample: num-qualified>=1

organizational_routines -> organized_assignment
discussion_assignees -> mean_has_assignee

—●— High —●— Low

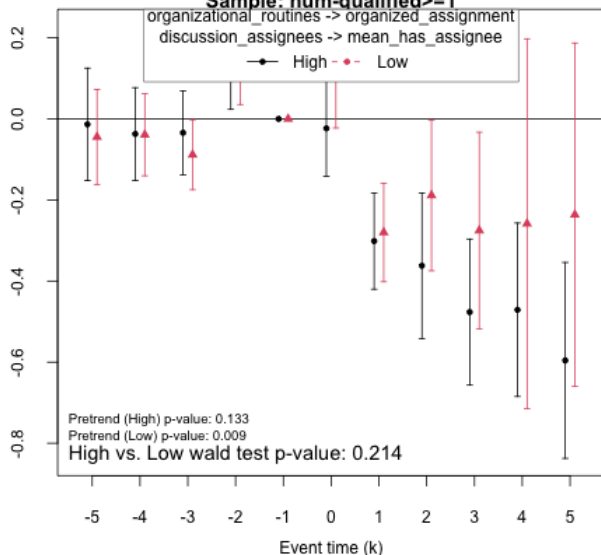


pull_request_opened rolling5

Sample: num-qualified>=1

organizational_routines -> organized_assignment
discussion_assignees -> mean_has_assignee

—●— High —●— Low

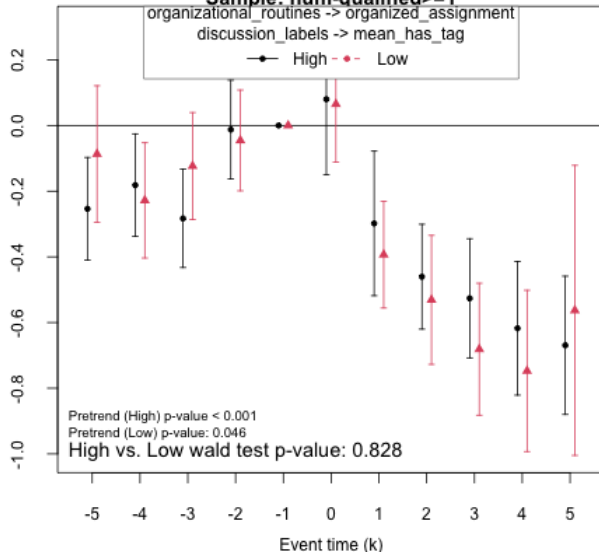


major_minor_release_count_rolling5

Sample: num-qualified>=1

organizational_routines -> organized_assignment
discussion_labels -> mean_has_tag

—●— High —●— Low

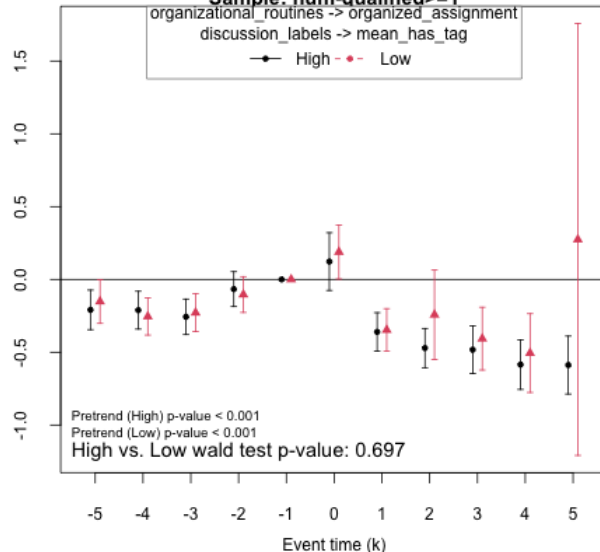


overall_new_release_count_rolling5

Sample: num-qualified>=1

organizational_routines -> organized_assignment
discussion_labels -> mean_has_tag

—●— High —●— Low

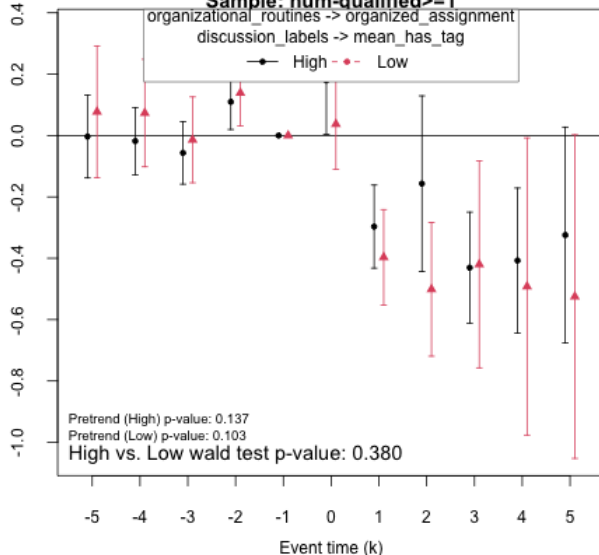


pull_request_merged_rolling5

Sample: num-qualified>=1

organizational_routines -> organized_assignment
discussion_labels -> mean_has_tag

—●— High —●— Low

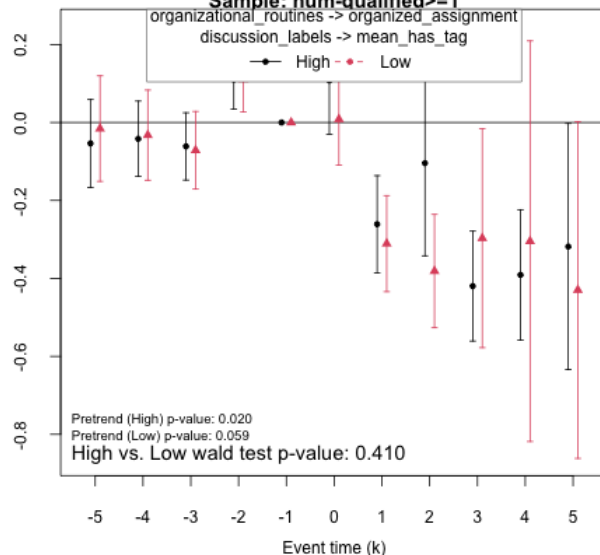


pull_request_opened_rolling5

Sample: num-qualified>=1

organizational_routines -> organized_assignment
discussion_labels -> mean_has_tag

—●— High —●— Low

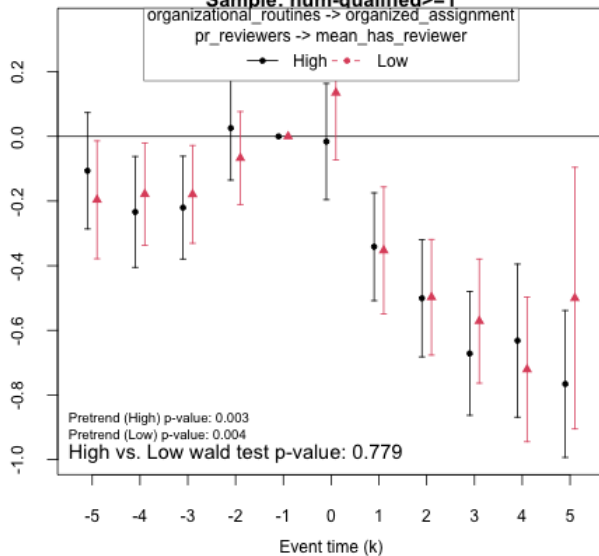


major_minor_release_count rolling5

Sample: num-qualified>=1

organizational_routines -> organized_assignment
pr_reviewers -> mean_has_reviewer

—●— High —●— Low

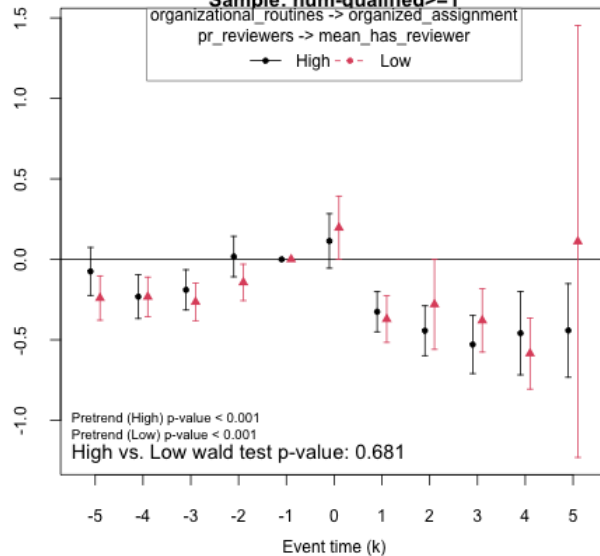


overall_new_release_count rolling5

Sample: num-qualified>=1

organizational_routines -> organized_assignment
pr_reviewers -> mean_has_reviewer

—●— High —●— Low

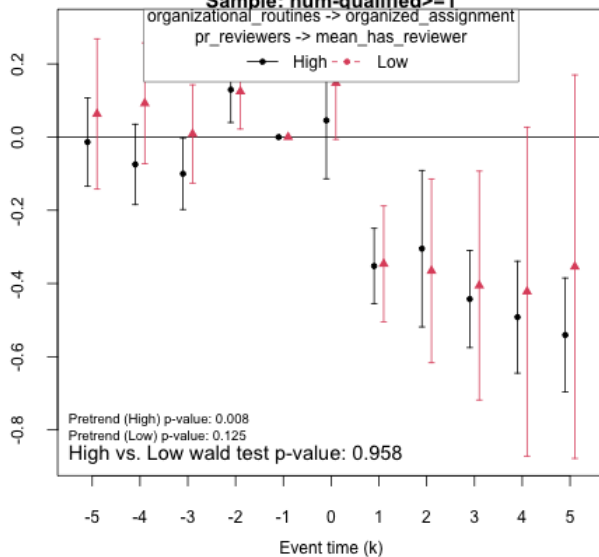


pull_request_merged rolling5

Sample: num-qualified>=1

organizational_routines -> organized_assignment
pr_reviewers -> mean_has_reviewer

—●— High —●— Low

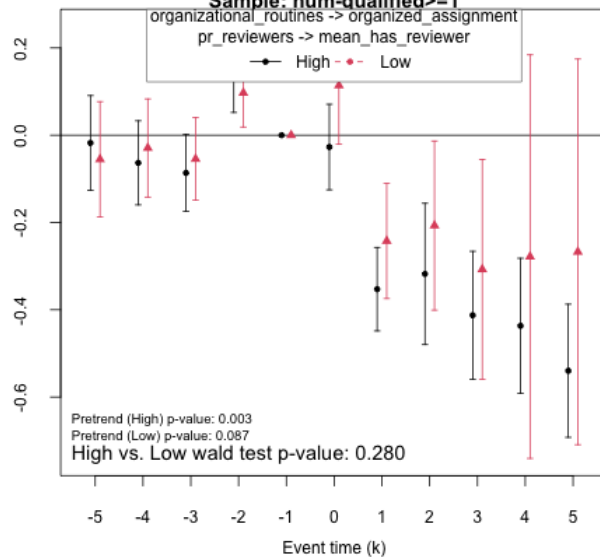


pull_request_opened rolling5

Sample: num-qualified>=1

organizational_routines -> organized_assignment
pr_reviewers -> mean_has_reviewer

—●— High —●— Low

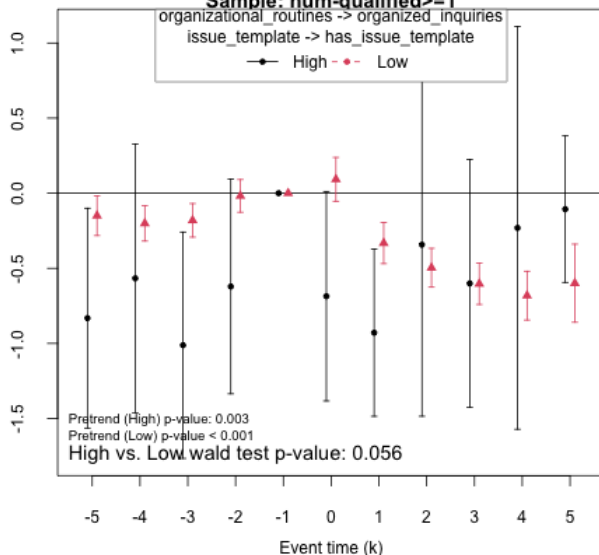


major_minor_release_count rolling5

Sample: num-qualified>=1

organizational_routines -> organized_inquiries
issue_template -> has_issue_template

—●— High —●— Low

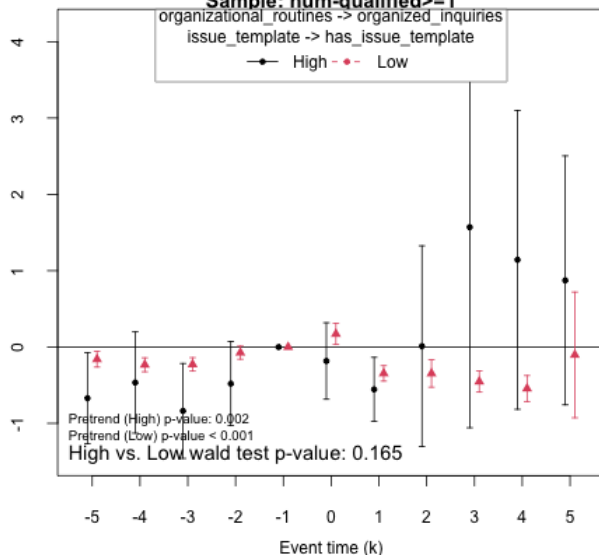


overall_new_release_count rolling5

Sample: num-qualified>=1

organizational_routines -> organized_inquiries
issue_template -> has_issue_template

—●— High —●— Low

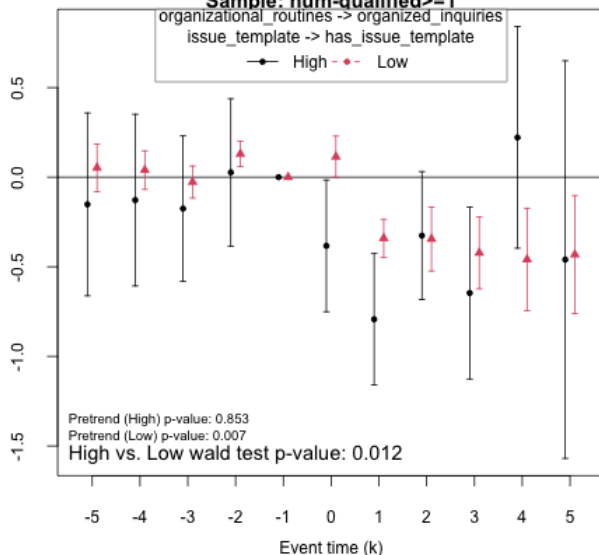


pull_request_merged rolling5

Sample: num-qualified>=1

organizational_routines -> organized_inquiries
issue_template -> has_issue_template

—●— High —●— Low

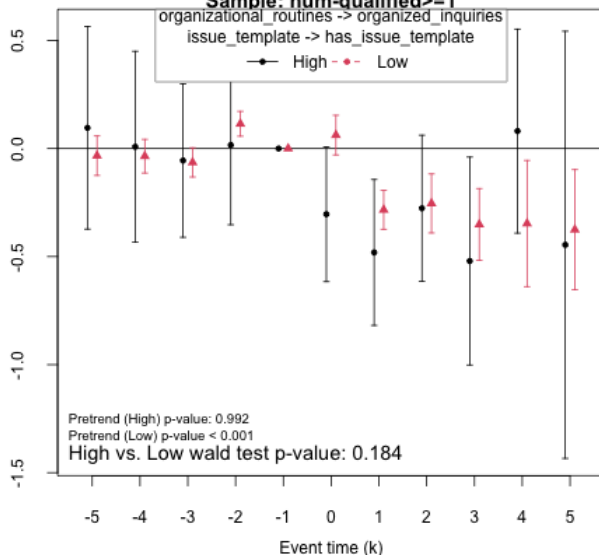


pull_request_opened rolling5

Sample: num-qualified>=1

organizational_routines -> organized_inquiries
issue_template -> has_issue_template

—●— High —●— Low



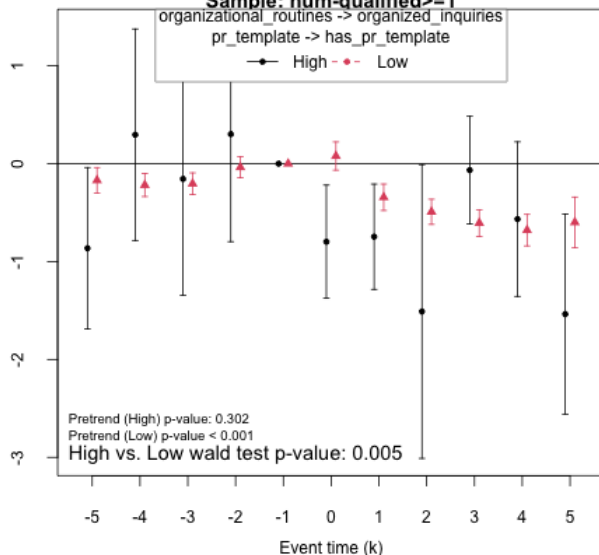
major_minor_release_count rolling5

Sample: num-qualified>=1

organizational_routines -> organized_inquiries

pr_template -> has_pr_template

—●— High —●— Low



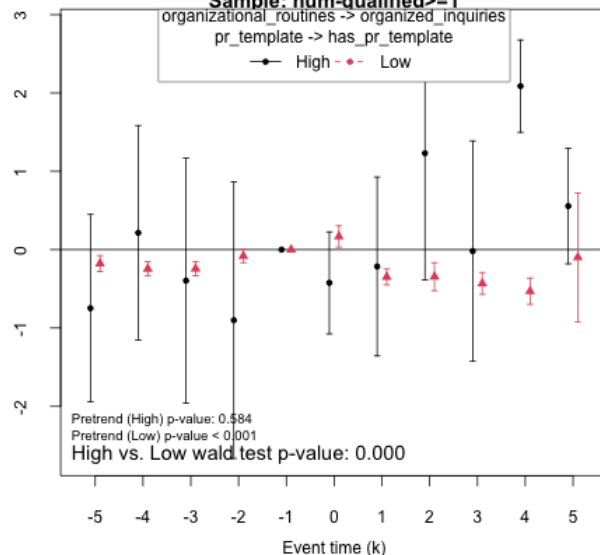
overall_new_release_count rolling5

Sample: num-qualified>=1

organizational_routines -> organized_inquiries

pr_template -> has_pr_template

—●— High —●— Low



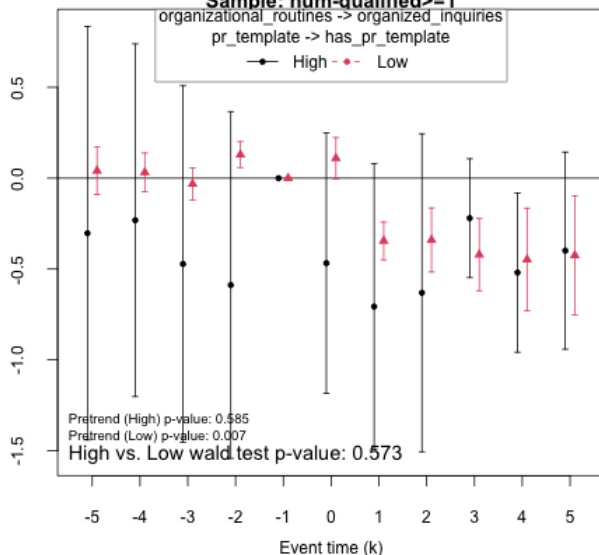
pull_request_merged rolling5

Sample: num-qualified>=1

organizational_routines -> organized_inquiries

pr_template -> has_pr_template

—●— High —●— Low



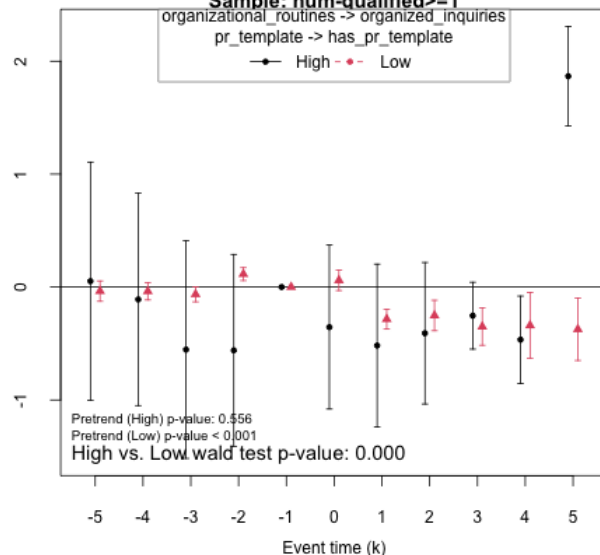
pull_request_opened rolling5

Sample: num-qualified>=1

organizational_routines -> organized_inquiries

pr_template -> has_pr_template

—●— High —●— Low

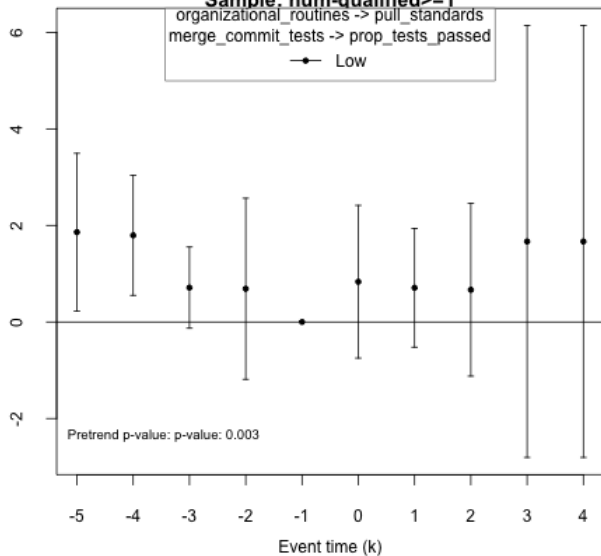


major_minor_release_count rolling5

Sample: num-qualified>=1

organizational_routines -> pull_standards
merge_commit_tests -> prop_tests_passed

● Low

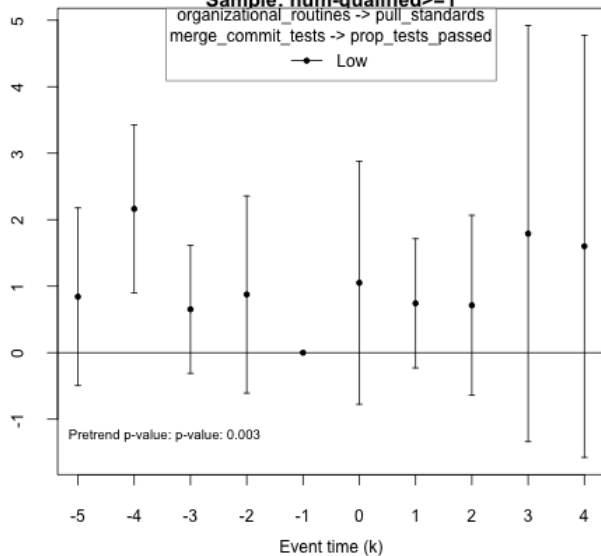


overall_new_release_count rolling5

Sample: num-qualified>=1

organizational_routines -> pull_standards
merge_commit_tests -> prop_tests_passed

● Low

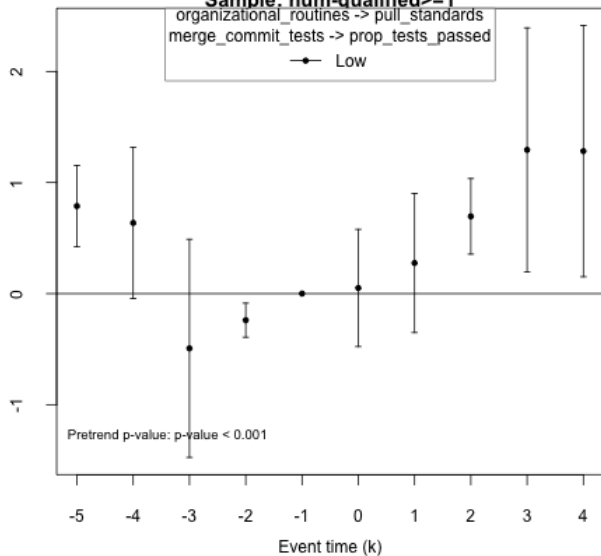


pull_request_merged rolling5

Sample: num-qualified>=1

organizational_routines -> pull_standards
merge_commit_tests -> prop_tests_passed

● Low

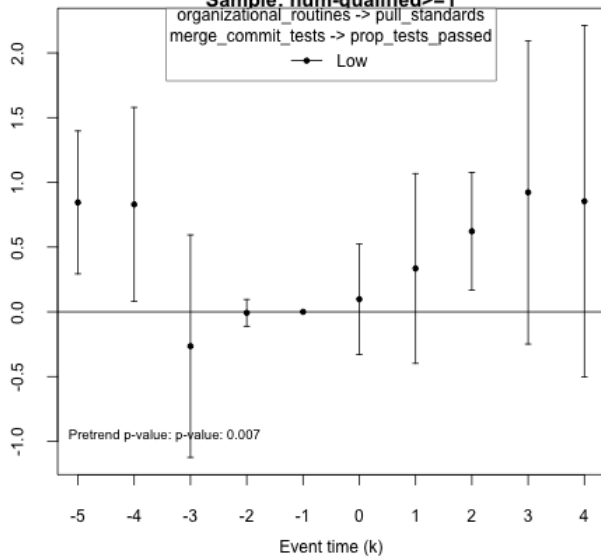


pull_request_opened rolling5

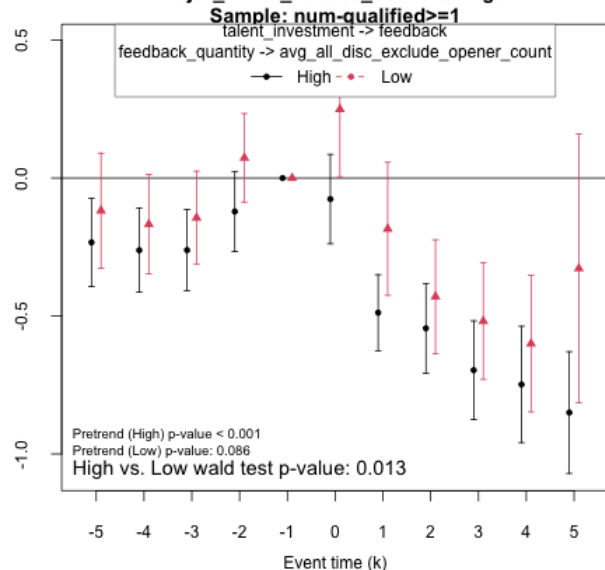
Sample: num-qualified>=1

organizational_routines -> pull_standards
merge_commit_tests -> prop_tests_passed

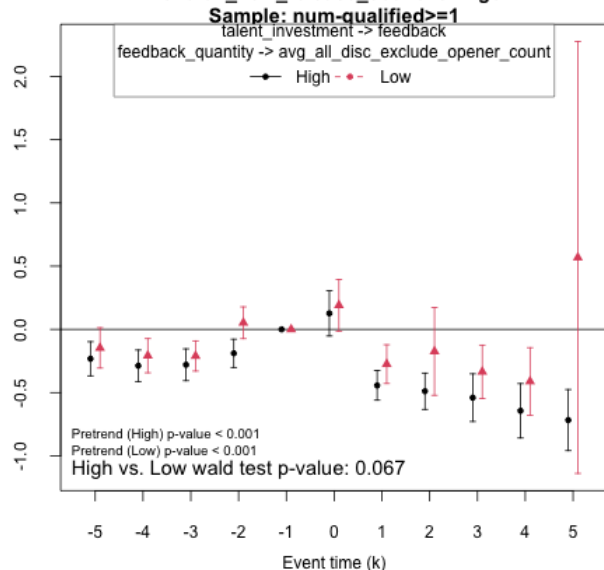
● Low



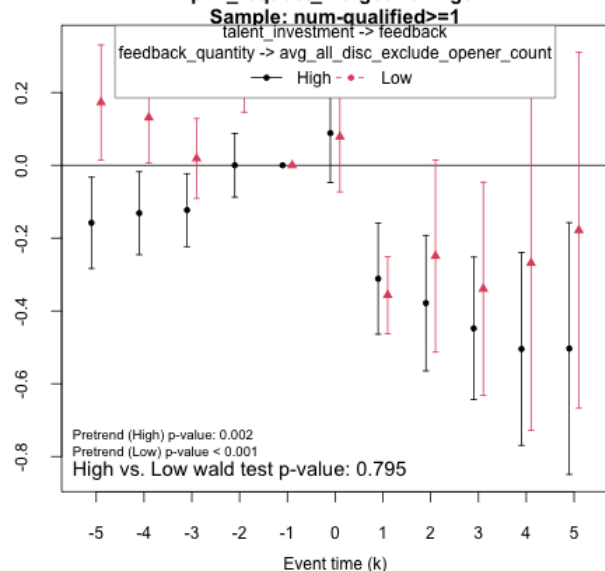
major_minor_release_count rolling5



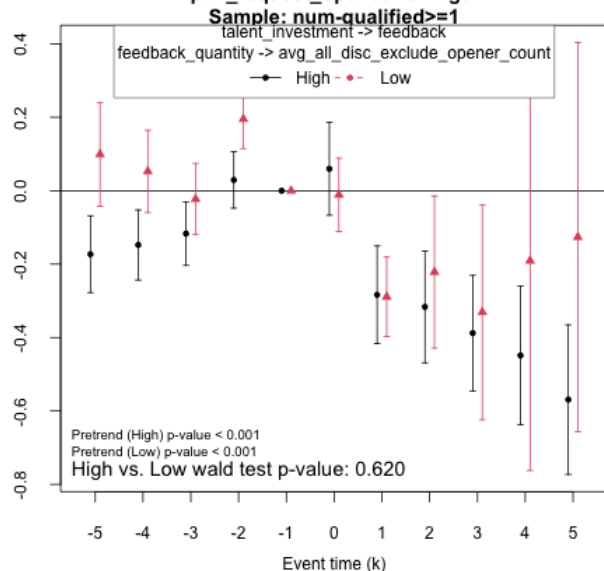
overall_new_release_count rolling5



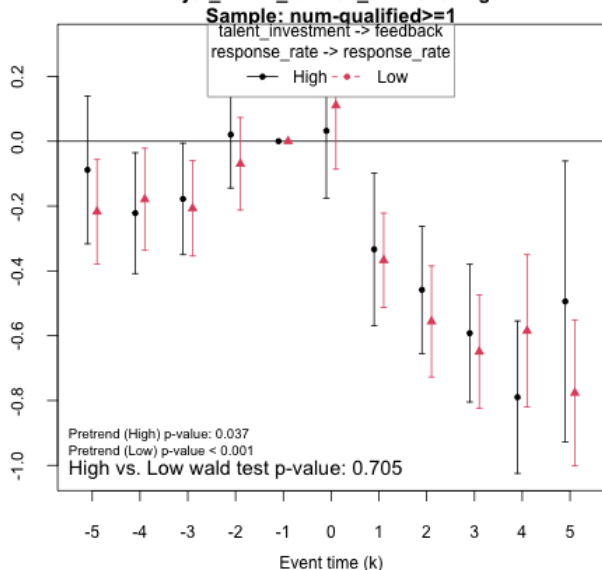
pull_request_merged rolling5



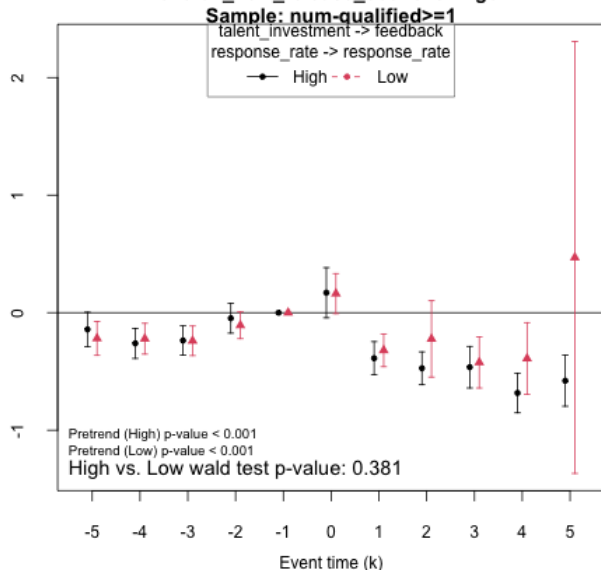
pull_request_opened rolling5



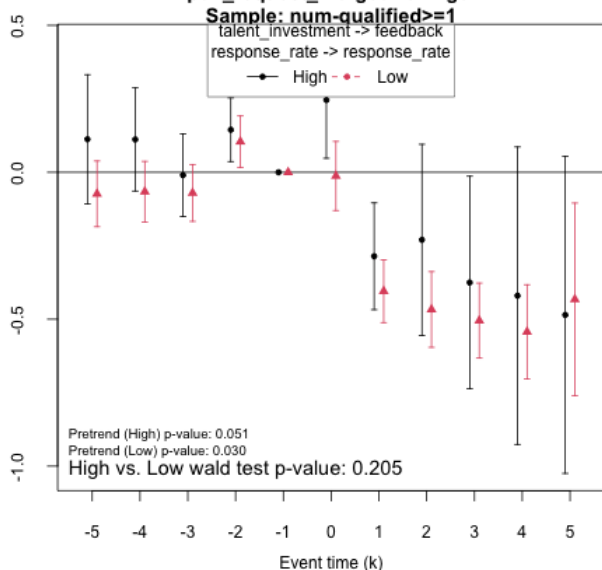
major_minor_release_count rolling5



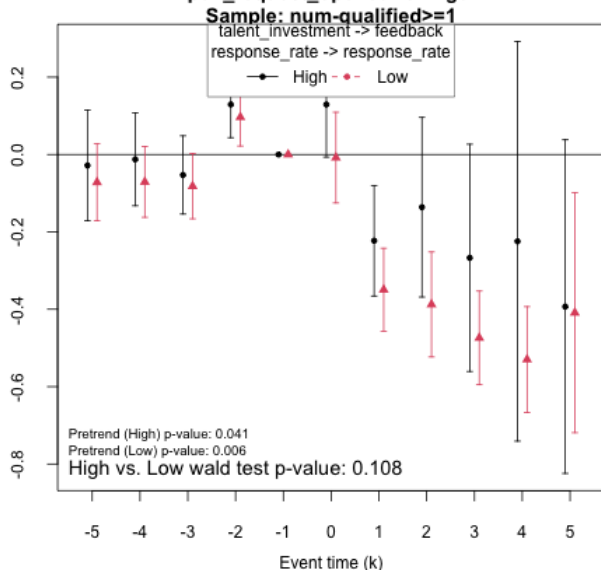
overall_new_release_count rolling5



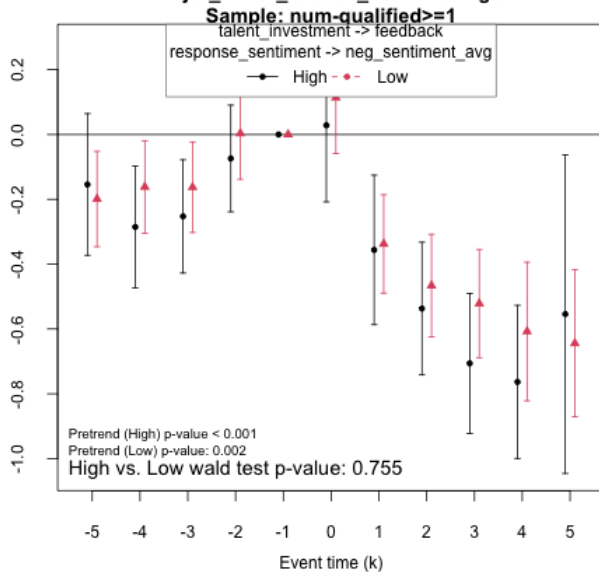
pull_request_merged rolling5



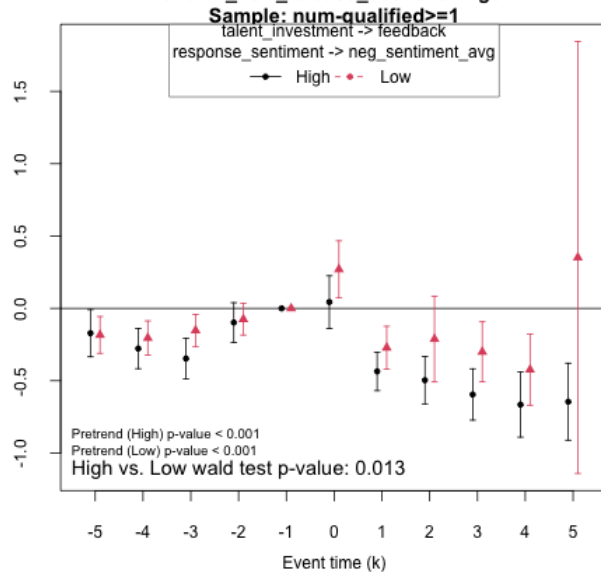
pull_request_opened rolling5



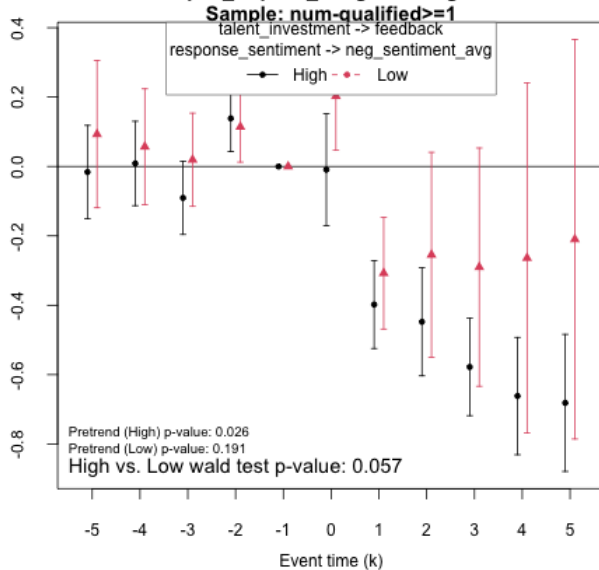
major_minor_release_count rolling5



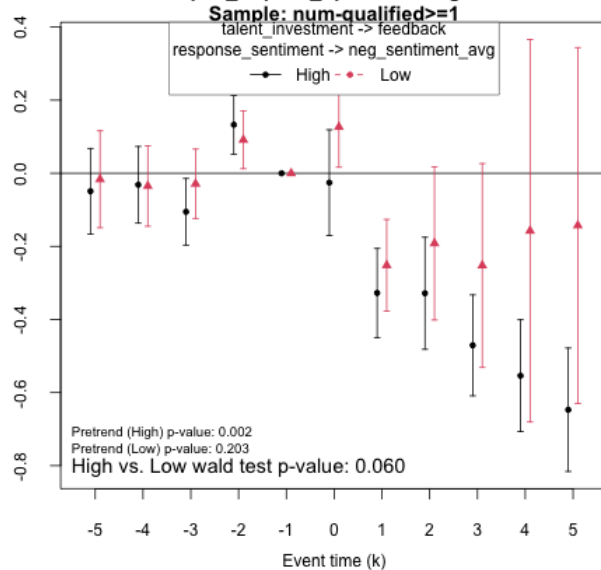
overall_new_release_count rolling5



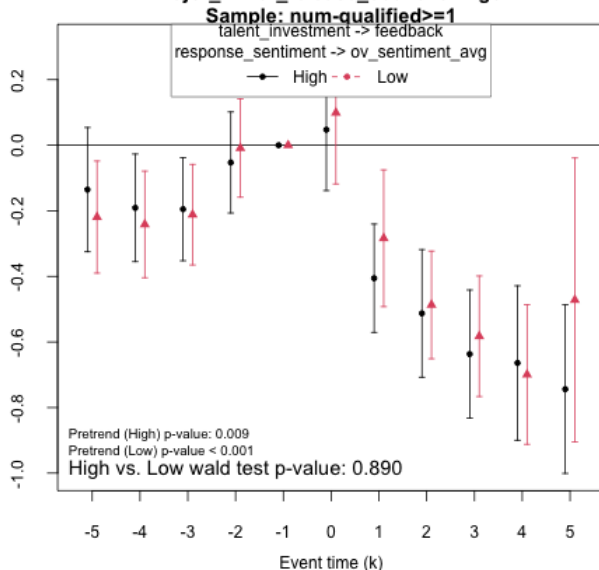
pull_request_merged rolling5



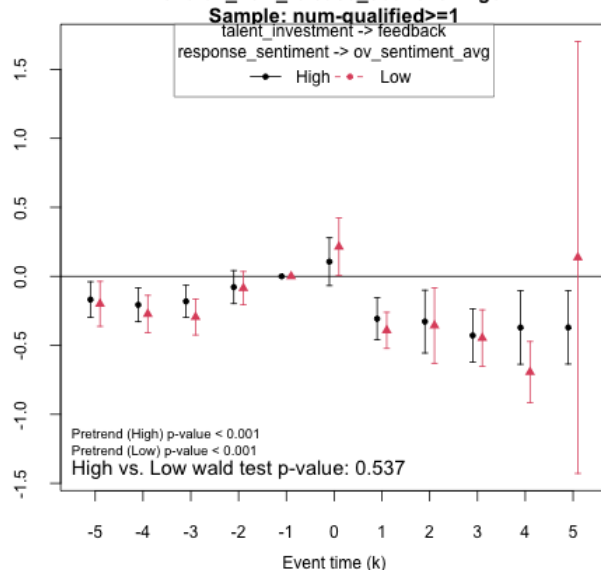
pull_request_opened rolling5



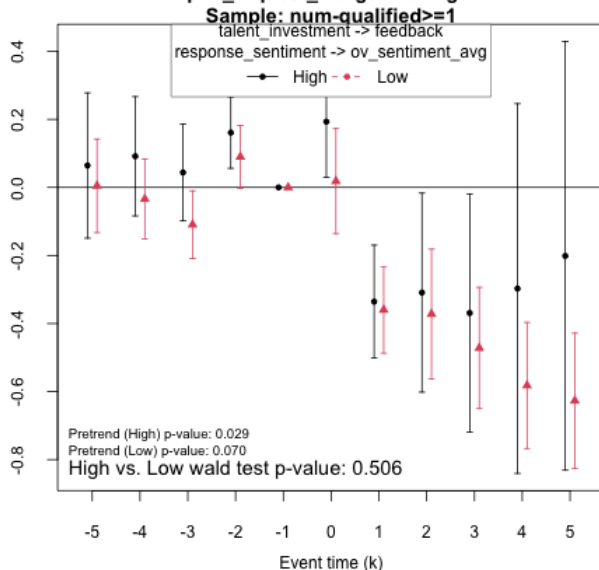
major_minor_release_count rolling5



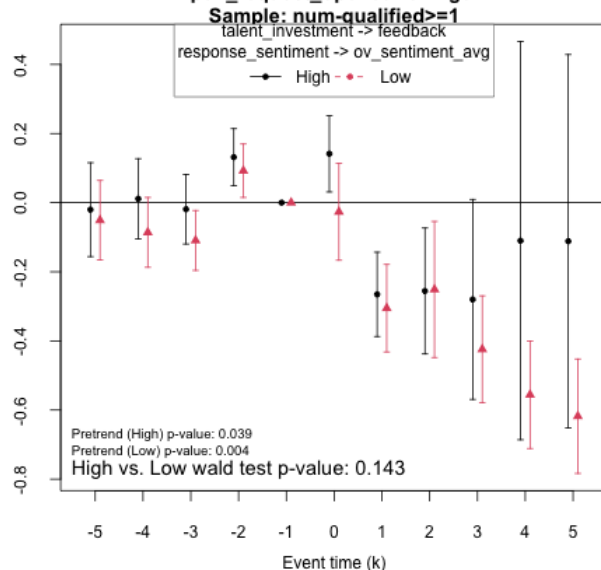
overall_new_release_count rolling5



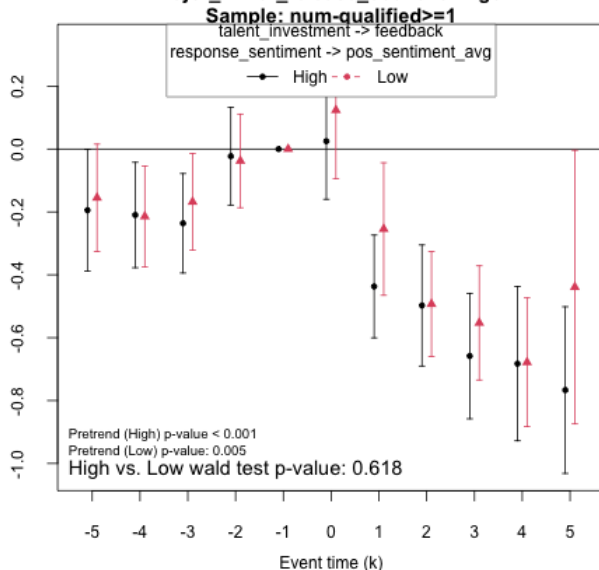
pull_request_merged rolling5



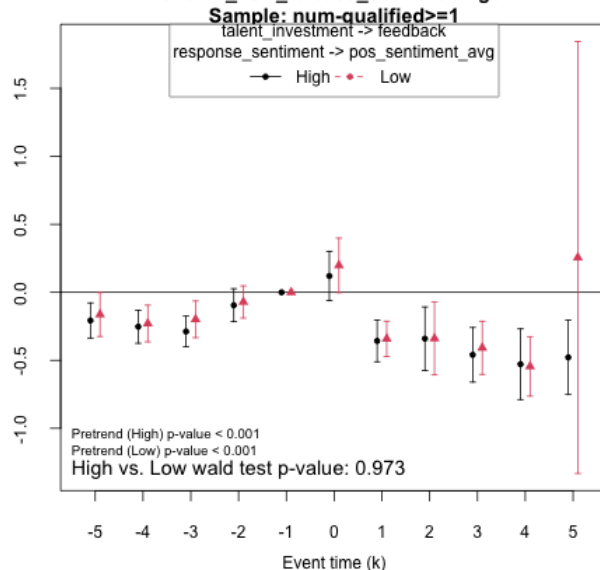
pull_request_opened rolling5



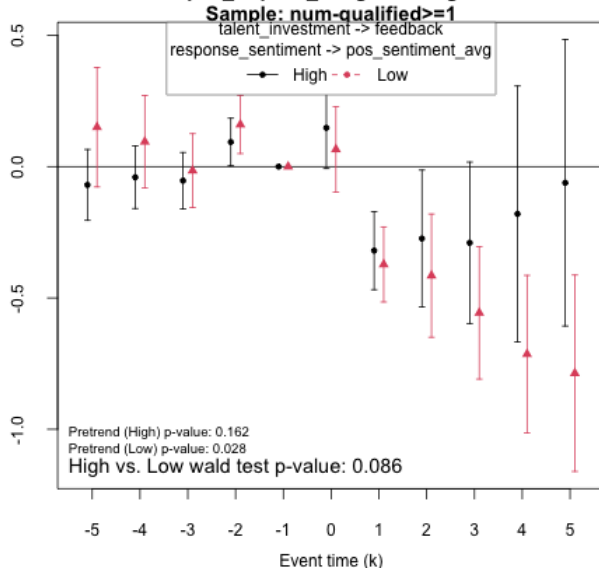
major_minor_release_count rolling5



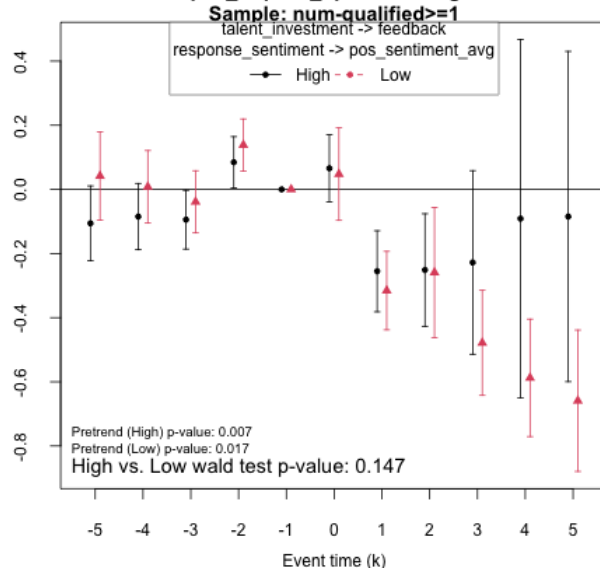
overall_new_release_count rolling5



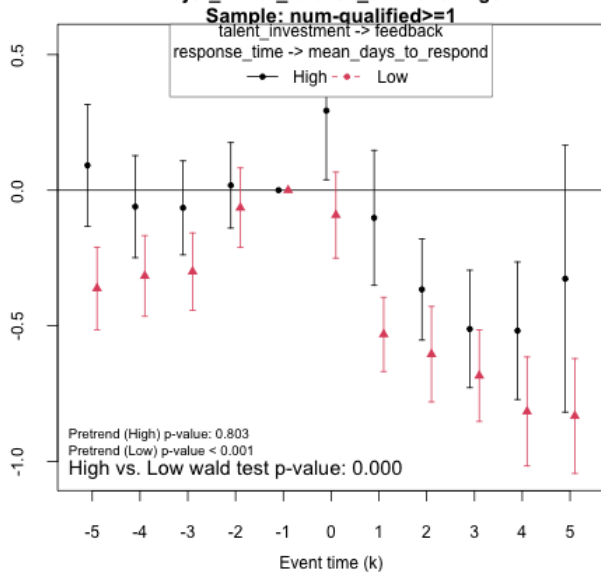
pull_request_merged rolling5



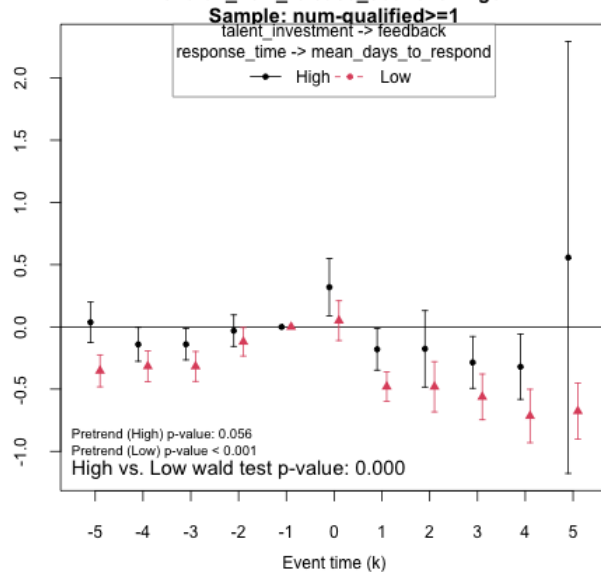
pull_request_opened rolling5



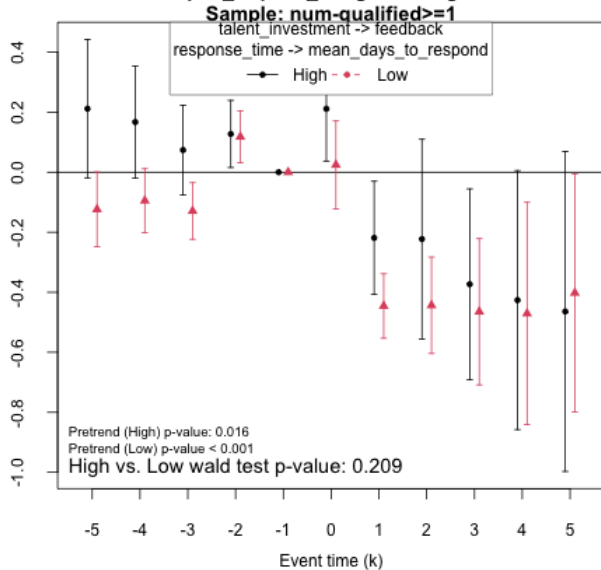
major_minor_release_count rolling5



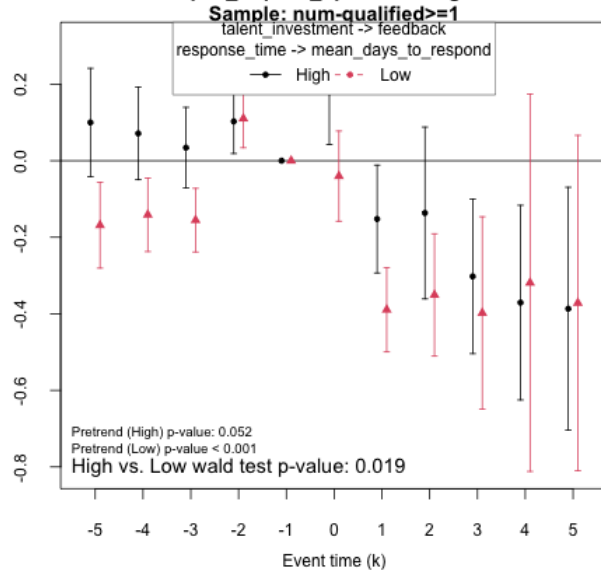
overall_new_release_count rolling5



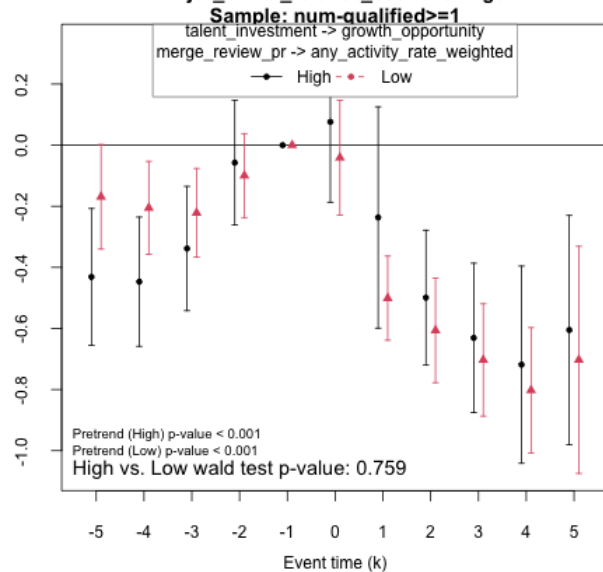
pull_request_merged rolling5



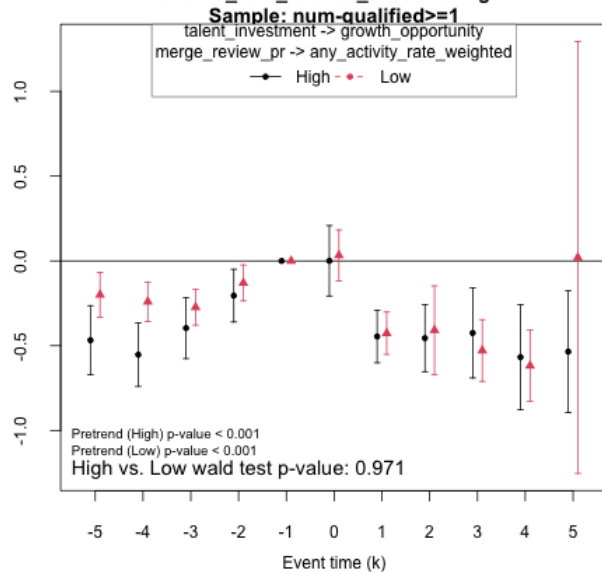
pull_request_opened rolling5



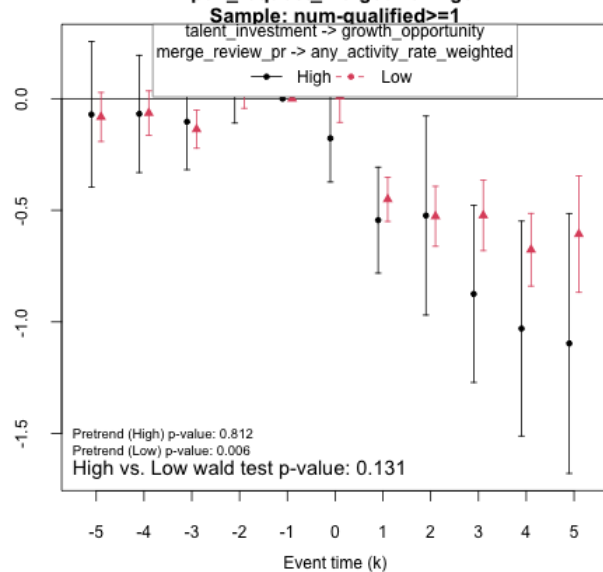
major_minor_release_count rolling5



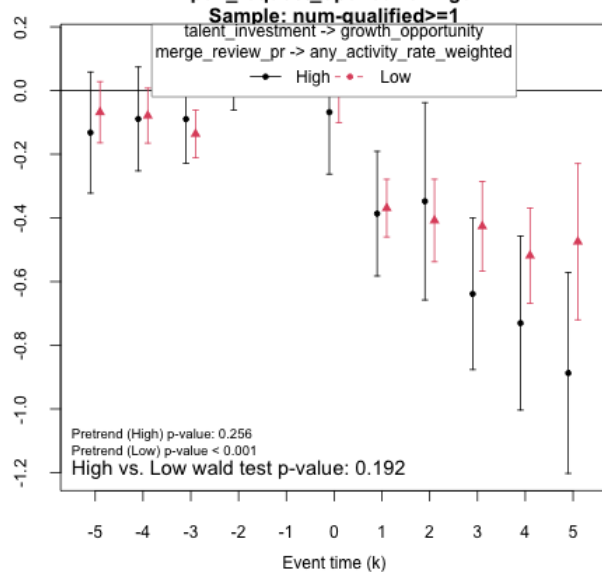
overall_new_release_count rolling5



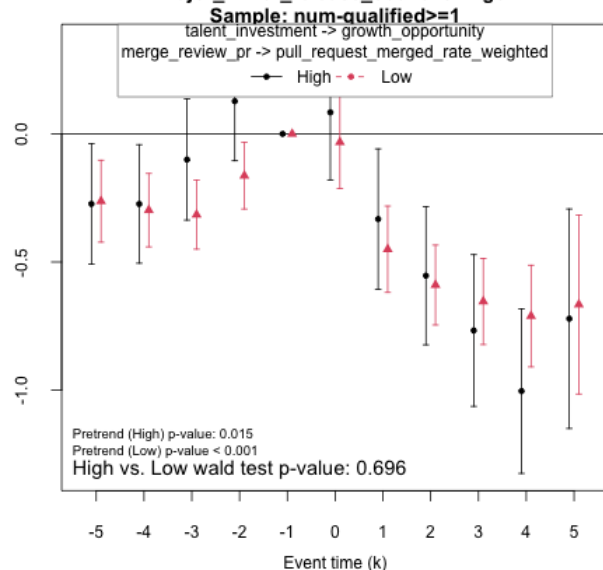
pull_request_merged rolling5



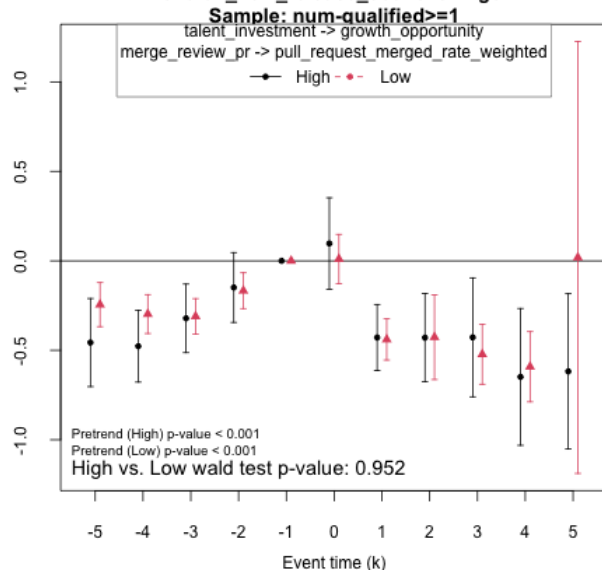
pull_request_opened rolling5



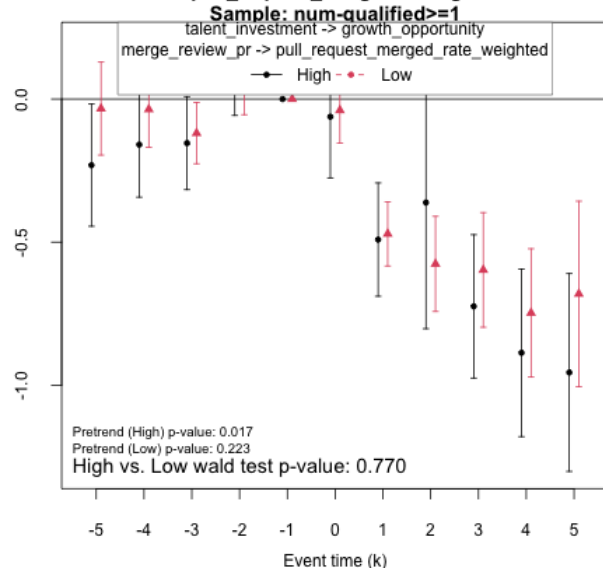
major_minor_release_count rolling5



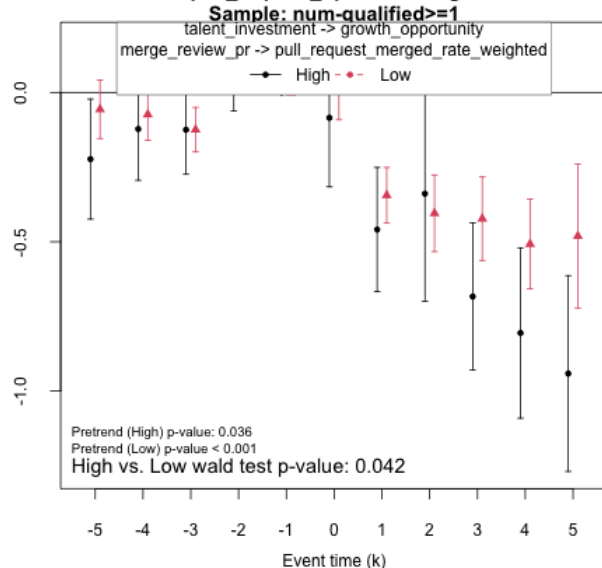
overall_new_release_count rolling5



pull_request_merged rolling5



pull_request_opened rolling5



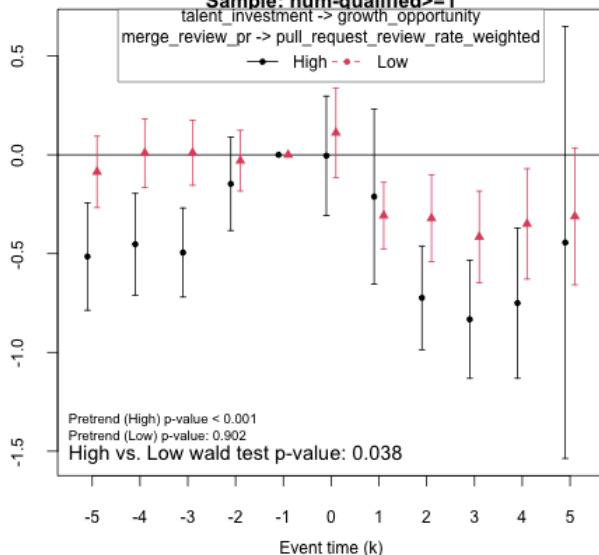
major_minor_release_count rolling5

Sample: num-qualified>=1

talent_investment-> growth_opportunity

merge_review_pr -> pull_request_review_rate_weighted

● High - ● Low



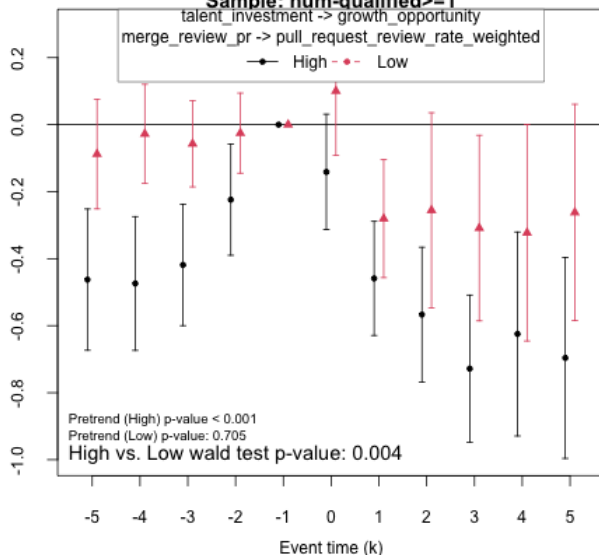
overall_new_release_count rolling5

Sample: num-qualified>=1

talent_investment-> growth_opportunity

merge_review_pr -> pull_request_review_rate_weighted

● High - ● Low



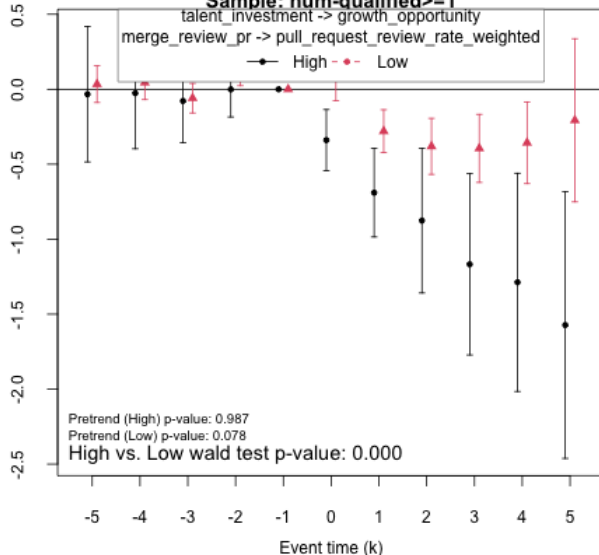
pull_request_merged rolling5

Sample: num-qualified>=1

talent_investment-> growth_opportunity

merge_review_pr -> pull_request_review_rate_weighted

● High - ● Low



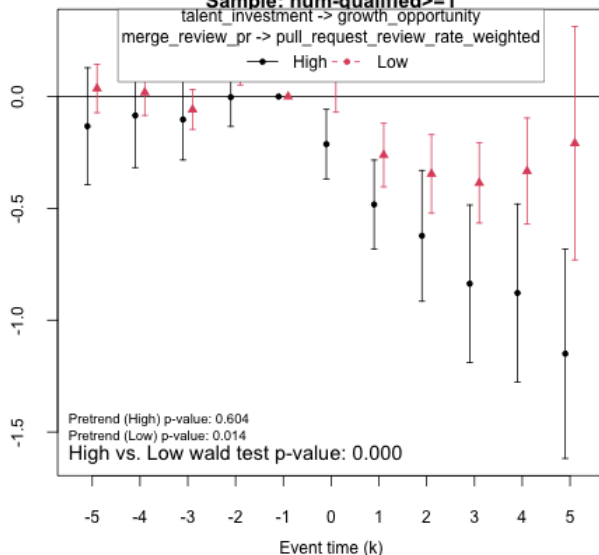
pull_request_opened rolling5

Sample: num-qualified>=1

talent_investment-> growth_opportunity

merge_review_pr -> pull_request_review_rate_weighted

● High - ● Low



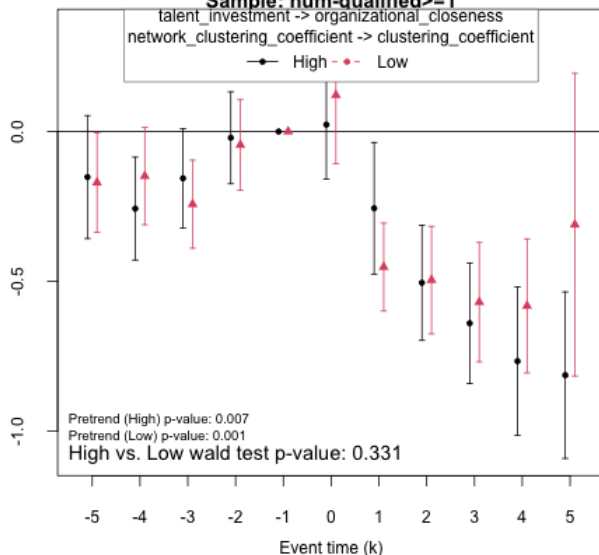
major_minor_release_count rolling5

Sample: num-qualified>=1

talent_investment -> organizational_closeness

network_clustering_coefficient -> clustering_coefficient

—●— High —●— Low



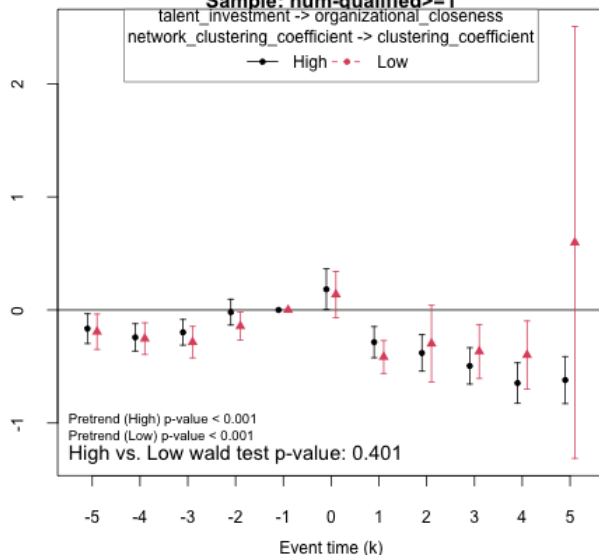
overall_new_release_count rolling5

Sample: num-qualified>=1

talent_investment -> organizational_closeness

network_clustering_coefficient -> clustering_coefficient

—●— High —●— Low



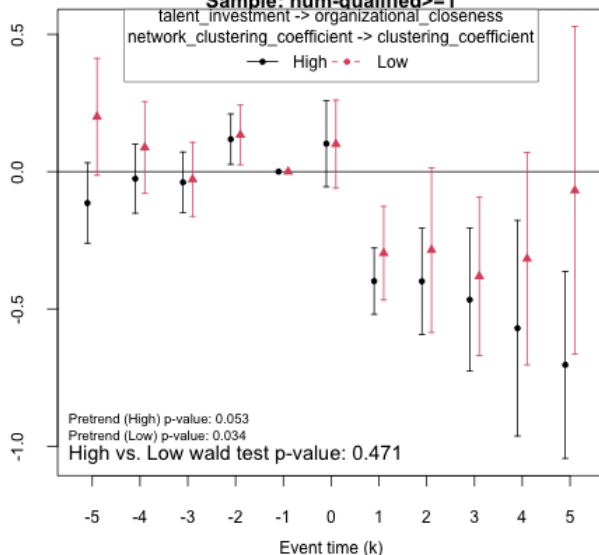
pull_request_merged rolling5

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

