

Package: RCPA4 (via r-universe)

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Type Package

Title Data and Functions for ``An R Companion to Political Analysis,
Fourth Edition"

Version 1.0.0

Description Provides teaching-oriented functions and datasets for ``An R Companion to Political Analysis, Fourth Edition" (forthcoming 2026). Functions produce readable tables and graphics for descriptive statistics, data transformation, confidence intervals, hypothesis testing, comparisons, cross-tabulation, and linear and logistic regression. Sampling weights are supported where appropriate, and analysis functions return reusable results for further examination. The package also includes curated political datasets designed for classroom instruction and independent practice. See Edwards and Pollock (forthcoming 2026)
<https://www.poliscidata.com/textbooks/r_companion_4e.php>.

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URL https://www.poliscidata.com/textbooks/r_companion_4e.php

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anes	<i>ANES 2024 dataset for R Companion to Political Analysis, Fourth Edition</i>
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Description

A student-friendly subset of the 2024 American National Election Study Time Series. Variables were selected and renamed for use in RCPA4 examples. See book Appendix for variable names and descriptions.

Format

A data frame with 5521 rows and 517 variables.

abort_std_abort_self Abortion: self-placement
abortion_scale_self Position on abortion: self-placement
addrss_years_lived Years respondent lived at address
appr_biden_drop Approval of Biden dropping from presidential race
appr_biden_out Approval of Joe Biden dropping out of presidential race
appr_cllgs_unvrsts Approval of how colleges and universities are run
appr_cong_hndl_its Approval of Congress handling its job
appr_dem_new_cand Approval of Democratic party choosing new candidate
appr_dvrsty_eqty_dei Approval of Diversity, Equity, and Inclusion (DEI)
appr_house_incumbent Approval of House incumbent
appr_pres_handle_job Approval of president handling job
appr_pres_hndl_abort Approval of president handling abortion policy
appr_pres_hndl_crime Approval of president handling crime
appr_pres_hndl_econ Approval of president handling economy
appr_pres_hndl_frgn Approval of president handling foreign relations
appr_pres_hndl_immig Approve or disapprove president handling immigration
appr_pres_immunity Approval of Supreme Court decision president immune
appr prtsts_war_gaza Approval of protests against war in Gaza
appr_sup_ct_hndl_its Approval of Supreme Court handling its job
appr_trans_ppl_use Approval of transgender people use bathroom that matches gender identity
appr_vice_pres_hndl Approval of vice president handling job
attn_sxl_hrsmnt_as Attention to sexual harassment as gone too far/not far enough
bdgt_tax_favor_opps Favor or oppose tax on millionaires
bdgt_tax_imp_rdcng Importance of reducing deficit
biz_leaders_decide Whether business leaders should make political decisions
black_atttd_agree Agree/disagree: past slavery & discrimination make it difficult for blacks
black_atttd_agree_2 Agree/disagree: blacks should work their way up without special favors
black_atttd_agree_if Agree/disagree: if blacks tried harder they'd be as well off as whites
black_atttd_agree_t Agree/disagree: blacks have gotten less than they deserve
bttr_worse_if_man Better/worse if man works and woman takes care of home
camp_fnnc_cong_chng Congress change votes because of donation to campaign
camp_fnnc_cong_pas_2 Congress pass laws that benefit contributor individuals
camp_fnnc_cong_pass Congress pass laws that benefit contributor organization
camp_fnnc_lmts_campaign Limits on campaign spending
camp_interest Interest in following campaigns

cares_wins_pres How much respondent cares who wins the presidency
case_id 2024 Time Series Case ID
cell_phone Does respondent personally have a cell phone
child_brght_illgllly Should children brought illegally be sent back or allowed to stay
child_household How many children in HH age 0-17
child_rrng_child_i_2 Which child trait more important: curiosity or good manners
child_rrng_child_i_3 Which child trait more important: obedience or self-reliance
child_rrng_child_i_4 Which child trait more important: considerate or well-behaved
child_rrng_child_imp Which child trait more important: independence or respect
choice_satisfaction Satisfaction with the range of choices in elections
cnern_govt_undrmn Concern that government might undermine the news media
cnsdr_thmslf_fmnst Does respondent consider themselves a feminist or anti-feminist
cntrbt_any_other respondent contribute to any other group that supported or opposed candidates
cntry_bttr_off_if_we Country would be better off if we just stayed home
cntry_feel_irrttd How irritated respondent feels about how things are going in the country
cntry_right_track Are things in the country on right track
conf_2020_winner How confident is respondent about that (winner of 2020 election)
conf_2024_winner How confident is respondent about that (winner of 2024 election)
conf_hunter_biden How confident is respondent about that (Hunter Biden)
conf_jan6_events How confident is respondent about that (events on January 6, 2021)
conf_trump_russia How confident is respondent about that (Trump colluded with Russia)
corruption_change Corruption increased/decreased since Biden became president
corruption_wide How widespread corruption is
court_authority Whether courts can stop the government from acting illegally
covid_democracy Effect of COVID on democracy
covid_infection Personal experience with COVID infection
covid_personal_econ Effect of COVID on respondent's personal finances
covid_unity Effect of COVID on national unity
currnt_unmplymnt_rate What is the current unemployment rate
dem_party_dislike Whether respondent dislikes anything about the Democratic Party
dem_party_like Whether respondent likes anything about the Democratic Party
dem_process_sat Satisfaction with the democratic process
democracy_best Whether democracy is preferable to other forms of government
dhs_wrrd_trrrst_near How worried about terrorist attack in near future
difficult_it_r_vote How difficult was it for respondent to vote
discrim_us_asian Discrimination in the US against Asians
discrim_us_black Discrimination in the US against blacks

discrim_us_christian Discrimination in the US against Christians
discrim_us_hispanic Discrimination in the US against Hispanics
discrim_us_men Discrimination in the US against men
discrim_us_muslim Discrimination in the US against Muslims
discrim_us_white Discrimination in the US against whites
discrim_us_women Discrimination in the US against women
dscrm_us_gay_lsbn Discrimination in the US against Gays and Lesbians
dscrm_us_trans_ppl Discrimination in the US against transgender people
econ_bttr_worse_next Economy better or worse in next 12 months
economic_mobility Economic mobility
economy_past_year State of the economy over the past year
effect_ilgl_immig effect of illegal immigration on crime rate
elctns_make_govt_pay Elections make government pay attention
election_fairness Perceived fairness of elections
eqlty_blf_if_ppl_we If people were treated more fairly we would have fewer problems
eqlty_blf_not_big_if Not a big problem if some have more chance in life
eqlty_blf_scty_shld Society should make sure everyone has equal opportunity
eqlty_blf_we_d_be_if We'd be better off if worried less about equality
experts_decide Whether independent experts should make political decisions
exprnc_many_guns How many guns in household
exprnc_much_money How much money does respondent owe in student loans
family_members_home Family members living with respondent
favor_opps_allwng Favor/oppose allowing felons to vote
favor_opps_bckgrnd Favor/oppose background checks for gun purchases
favor_opps_bldng_mxc Favor or oppose building a wall on border with Mexico
favor_opps_bnnng Favor/oppose banning 'assault-style' rifles
favor_opps_bnnng_k Favor/oppose banning transgender girls from K-12 girls sports
favor_opps_endng Favor or oppose ending birthright citizenship
favor_opps_free Favor/oppose free trade agreements
favor_opps_govt_rdc Favor/oppose government trying to reduce income inequality
favor_opps_inc_rgltn Favor/oppose increased regulation on greenhouse emissions
favor_opps_laws_gay Favor/oppose laws protect gays/lesbians against job discrimination
favor_opps_new_lmts Favor/oppose new limits on imports
favor_opps_prfrntl Favor/oppose preferential hiring/promotion of blacks
favor_opps_prvdng Favor/oppose providing path to citizenship
favor_opps_right_gay Favor/oppose right of gay and lesbian couples to legally marry
favor_opps_rqrng Favor/oppose requiring vaccines in schools

favor_opps_rqrng_id Favor/oppose requiring ID when voting
favor_opps_rstrctng Favor or oppose restricting journalist access
favor_opps_trans_ppl Favor/oppose transgender people serve in military
favor_opps_us_gvng Favor/oppose U.S. giving weapons to help Ukraine fight Russia
favor_opps_us_gvng_2 Favor/oppose U.S. giving military assistance to Israel
favor_opps_us_gvng_3 Favor/oppose U.S. giving humanitarian aid to Palestinians
fed_bdgt_spend_aid Federal Budget Spending: aid to the poor
fed_bdgt_spend_bldng Federal Budget Spending: building and repairing highways
fed_bdgt_spend_brdr Federal Budget Spending: Tightening border security
fed_bdgt_spend_dlng Federal Budget Spending: dealing with crime
fed_bdgt_spend_env Federal Budget Spending: protecting the environment
fed_bdgt_spend_pblc Federal Budget Spending: public schools
fed_bdgt_spend_soc Federal Budget Spending: Social Security
fed_bdgt_spend_wlfr Federal Budget Spending: welfare programs
fed_govt_trts_black Federal government treats blacks or whites better
feel_afraid How afraid respondent feels about the country
feel_angry How angry respondent feels about the country
feel_happy How happy respondent feels about the country
feel_hopeful How hopeful respondent feels about the country
feel_nervous How nervous respondent feels about the country
feel_outraged How outraged respondent feels about the country
feel_proud How proud respondent feels about the country
feel_worried How worried respondent feels about the country
fin_borrowed Has respondent done any of the following - borrowed money to pay bills
fin_cc_debt Has respondent done any of the following - took on credit card debt
fin_cncrn_any_fmly Have any family members or close friends lost jobs in last 12 months
fin_cncrn_likly_able How likely respondent able to make all housing payments in next 12 months
fin_cncrn_wrrd_crrnt How worried is respondent about current financial situation
fin_cut_spend Has respondent done any of the following - cut down spending
fin_next_year Expected personal financial situation one year from now
fin_none Has respondent done any of the following - none of these
fin_past_year Personal financial situation compared with one year ago
fin_postpone Has respondent done any of the following - cancel/postpone major purchase
fin_savings Has respondent done any of the following - dipped into savings
fin_strain_sum Number of financial strain actions reported.
fmly_nghbrs_cwrkrs respondent has family/neighbors/coworkers/friends who are gay, lesbian or bisexual

fmly_nghbrs_cwrkrs_1 respondent has family/neighbors/coworkers/friends who are transgender
frgn_plcy_force Force to solve international problems
ft_asian_americans Warmth rating of Asian-Americans
ft_biden_post Warmth rating of Joe Biden after the election
ft_biden_pre Warmth rating of Joe Biden before the election
ft_big_business Warmth rating of big business
ft_black_lives_mttr Warmth rating of Black Lives Matter
ft_black_people Warmth rating of Black people
ft_christian_fund Warmth rating of Christian fundamentalists
ft_christians Warmth rating of Christians
ft_congress Warmth rating of congress
ft_conservatives Warmth rating of conservatives
ft_dem_party Warmth rating of the Democratic Party
ft_fbi Warmth rating of Federal Bureau of Investigation (FBI)
ft_feminists Warmth rating of feminists
ft_gay_men_lesbians Warmth rating of gay men and lesbians
ft_gretchen_whitmer Warmth rating of Gretchen Whitmer
ft_harris_post Warmth rating of Kamala Harris after the election
ft_harris_pre Warmth rating of Kamala Harris before the election
ft_hispanics Warmth rating of Hispanics
ft_illegal_immigs Warmth rating of illegal immigrants
ft_jews Warmth rating of Jews
ft_josh_shapiro Warmth rating of Josh Shapiro
ft_labor_unions Warmth rating of labor unions
ft_liberals Warmth rating of liberals
ft_maga Warmth rating of Make America Great Again (MAGA)
ft_mark_kelly Warmth rating of Mark Kelly
ft_muslims Warmth rating of Muslims
ft_nra Warmth rating of National Rifle Association (NRA)
ft_plnnd_prnthd Warmth rating of Planned Parenthood
ft_police Warmth rating of police
ft_rep_party Warmth rating of the Republican Party
ft_robert_kennedy_jr Warmth rating of Robert Kennedy, Jr.
ft_roy_cooper Warmth rating of Roy Cooper
ft_rural_americans Warmth rating of rural Americans
ft_sen_dem_cand Warmth rating of Democratic Senate candidate
ft_sen_rep_cand Warmth rating of Republican Senate candidate

ft_trans_people Warmth rating of transgender people
ft_trump_post Warmth rating of Donald Trump after the election
ft_trump_pre Warmth rating of Donald Trump before the election
ft_us_house_cand Warmth rating of US House candidate that respondent voted for
ft_us_supreme_court Warmth rating of US Supreme Court
ft_vance_post Warmth rating of J.D. Vance after the election
ft_vance_pre Warmth rating of J.D. Vance before the election
ft_walz_post Warmth rating of Tim Walz after the election
ft_walz_pre Warmth rating of Tim Walz before the election
ft_white_people Warmth rating of White people
gay_lsbncpls_allwd Should gay/lesbian couples be allowed to adopt children or not
gender_s_gender What is respondent's gender?
gender_s_sex What is respondent's sex?
gnr_cnsdr_thmslf_be Does respondent consider themselves to be transgender
gnr_role_women_c Do women complaining about discrimination cause more problems
gnr_role_women_seek Do women demanding equality seek special favors
gnr_scale_fmnty respondent femininity scale
gnr_scale_mscnty respondent masculinity scale
gnr_sxl_ornttn Sexual orientation of respondent
good_job_house_dist How good a job does House incumbent do in district
govt_4yr_perf Government performance over the last four years
govt_actn_rsnng Government action about rising temperatures
govt_big_intrsts_all Government run by a few big interests or for benefit of all
govt_corrupt_extent How widespread corruption is in government
govt_health_care Government responsibility for health care
govt_more_less_opd Should government do more/less about opioid drug addiction
govt_wsts_tax_money Does government waste much tax money
group_inflnc_much How much influence do Hispanics have in US politics
group_inflnc_much__2 How much influence do blacks have in US politics
group_inflnc_much__3 How much influence do Asians have in US politics
group_inflnc_much_us How much influence do whites have in US politics
group_treatment Whether some groups receive worse treatment than others
gun_ownership_count Number of guns respondent owns
harris_trait_cares Kamala Harris trait: really cares
harris_trait_energy Kamala Harris trait: energetic
harris_trait_honest Kamala Harris trait: honest
harris_trait_know Kamala Harris trait: knowledgeable

harris_trait_lead Kamala Harris trait: strong leadership
has_children Has any children
has_daughters Has one or more daughters
has_sons Has one or more sons
health_health_ins Does respondent have health insurance
hispanic_summary Hispanic ethnicity group
hlpfl_hrmfl_if_pres Helpful/harmful if president did not have to worry about congress/courts
hlth_bnfts_vccntns Health benefits of vaccinations outweigh risks
hlth_cncrnd_lsng_ins respondent concerned about losing health insurance
hlth_cncrnd_pyng respondent concerned about paying for health care
hlth_trbl_cncntrtng Trouble concentrating in past week
house_vote_intent Party of respondent's U.S. House vote intention or preference
house_vote_party Party of respondent's U.S. House vote
house_vote_pref Party of respondent's U.S. House vote or preference
household_landline Is there a working HH landline phone
hshld_union_mmbrr Anyone in HH belong to labor union
hunter_laptop_claim Hunter Biden's laptop showed he made deal with Ukrainian and Chinese businesses
id_dcmnt_valid_non Does respondent have a valid, non-expired passport
id_dcmnt_valid_non_s Does respondent have a valid, non-expired driver's license
immgs_gnrllly_good Are immigrants generally good or bad for America's economy
immig_crime Belief that immigrants increander, sse crime
imp_american_id How important is being American to respondent's identity
imp_elect_asian How important that more Asians get elected to political office
imp_elect_black_ppl How important that more blacks get elected to political office
imp_elect_hispanic How important that more Hispanics get elected to political office
imp_elect_lgbt_ppl How important that more LGBT people get elected to political office
imp_elect_woman_pres How important that a woman be elected president of the US
imp_elect_women How important that more women get elected to political office
imp_immgs_adapt_us How important is it for immigrants to adapt to customs/traditions of the US
imp_issue_abort How important is the following issue: abortion
imp_issue_clim_chng How important is the following issue: climate change
imp_issue_cost_lvng How important is the following issue: cost of living
imp_issue_crime How important is the following issue: crime
imp_issue_gun_policy How important is the following issue: gun policy
imp_issue_illgl How important is the following issue: illegal immigration
imp_issue_pblic_schls How important is the following issue: what is taught in public schools

imp_issue_rcl_ineq How important is the following issue: racial inequality
imp_issue_us_dmcrcy How important is the following issue: US democracy
imp_issue_war_gaza How important is the following issue: War in Gaza
imp_urban_rural_id How important is urban or rural to respondent's identity
imp_white_id How important is being white to respondent's identity
incrs_dcrs_govt_help Increase/decrease government spending to help pay for health care
incrsng_dvrsty_made Increasing diversity made US better/worse place to live
internet_at_home Does respondent use Internet at home
interview_status Pre/Post Interview Completion Status
intrvw_cntxt_stsfd How satisfied is respondent with life
it_be_good_scty_more Would it be good for society to have more or less government regulation
jan6_pro_trump Events on January 6, 2021 were carried out by pro-Trump protestors or FBI agents
job_satisfaction How satisfied or dissatisfied is respondent with current job?
laid_off_last_6 Working now: out of work or laid off in last 6 months
legit_win_2020 Who was the legitimate winner of the 2020 presidential election
legit_win_2024 Was Trump or Harris the legitimate winner of the 2024 presidential election
less_or_more_govt Less or more government
life_exprnc_ever Life experience: has respondent ever been bitten by a shark
life_exprnc_gone_y Life experience: has respondent gone hunting or fishing in past year
life_exprnc_know_smn Life experience: does respondent know someone moved to US from another country
life_exprnc_used_pas Life experience: has respondent used public transportation in past year
like_dem_cand Like-dislike rating of the Democratic presidential candidate
like_dem_party Like-dislike rating of the Democratic Party
like_rep_cand Like-dislike rating of the Republican presidential candidate
like_rep_party Like-dislike rating of the Republican Party
likely_r_vote How likely respondent is to vote
lnkd_fate_white_ppl White respondent: what happens to white people will affect respondent's life
lr_dem_party Left-right placement of the Democratic Party
lr_rep_party Left-right placement of the Republican Party
lr_self Respondent's left-right self-placement
many_days_past_week How many days in past week discussed politics with family or friends
men_econ_crisis Whether men or women are better suited to handle an economic crisis
men_pandemic_lead Whether men or women are better suited to handle a pandemic
mode_post Interview mode after the election
mode_pre Interview mode before the election

mrlyt_blf_fewer_if Fewer problems if there was more emphasis on traditional family values
mrlyt_blf_world_we The world is changing & we should adjust view of moral behavior
mrtl_stts_5_ctgry Marital status (5 category)
much_dscrm_faced_bcs How much discrimination has respondent faced personally because of race/ethnicity
much_lrg_r_incm_gap How much larger is income gap today
much_pol_dffrnccs How much have political differences hurt relationships w/family
much_pol_vlnc_inc How much has political violence increased/decreased compared to 4 yrs ago
natid_born_us Importance of being born in the United States for national identity
natid_speak_english Importance of speaking English for national identity
natl_econ_bttr_worse National economy better or worse in last year
news_newspaper Frequency of reading newspapers
news_online Frequency of visiting online news sites
news_private_tv Frequency of watching news on private television
news_public_tv Frequency of watching news on public television
news_radio Frequency of listening to news on radio
news_social_media Frequency of using social media for news
often_bght_bycttd How often bought or boycotted product/service for social/political reasons
often_plc_offcrs_use How often do police officers use more force than necessary
often_votes_cntd How often are votes counted fairly
party_better_crime Which party would do a better job handling: crime
party_better_economy Which party better: handling nations economy
party_control Preference for one-party or split-party government
party_id Party ID
partyid3 Party ID, 3 categories
past_12_mnth_attnd Has respondent in past 12 months: attend mtg about issue facing community/schools
past_12_mnth_cntctd Has respondent in past 12 months: contacted federal elected official
past_12_mnth_done Has respondent in past 12 months: done any volunteer work
past_12_mnth_given Has respondent in past 12 months: given money to other organization
past_12_mnth_gtn Has respondent in past 12 months: gotten into a political argument with someone
past_12_mnth_jnd Has respondent in past 12 months: joined a protest march, rally, or demonstration
past_12_mnth_pstd Has respondent in past 12 months: posted comment online about political issue
past_12_mnth_sign Has respondent in past 12 months: sign internet or paper petition
plc_exprnc_drng_past During past 12 months, respondent or any family members stopped by police

plc_exprnc_ever_been Has respondent ever been arrested
plc_treat_black_bttr Police treat blacks or whites better
pol_attention Attention to politics and elections
pol_interest Interest in politics
pol_know_many_years How many years in full term for US Senator
pol_know_prgrm_fed On which program does Federal government spend the least
pol_know_pty_most Party with most members in Senate before election
pol_know_pty_most_e Party with most members in House before election
ppl_rural_areas_ge_2 People in rural areas get too much/too little respect
ppl_rural_areas_get People in rural areas get more/less from government
ppl_rural_areas_too People in rural areas have too much/too little influence
pres_covid_perf president's handling of COVID
pres_primary_vote Whether respondent voted in a presidential primary or caucus
pres_two_way_vote Choice if presidential election were only Harris and Trump
pres_vote_2016_rcll Recall of 2016 presidential vote choice
pres_vote_2024 presidential vote in 2024
pres_vote_intent Whether respondent intended to vote for president
pres_vote_intnt_chc For whom does respondent intend to vote for president
pres_vote_party Party of respondent's presidential vote intention or preference
pres_vote_pref presidential vote or preference
pres_vote_strength Strength of presidential vote preference
prfr_gov_offcl_stcks Prefer government official who compromises/sticks to principles
pty_better_abort Which party would do a better job handling: abortion
pty_better_env Which party better: handling environment
pty_better_immig Which party better: handling immigration
pty_bttr_clim_chng Which party would do a better job handling: climate change
pty_bttr_cost_lvng Which party would do a better job handling: cost of living
pty_bttr_illgl_immig Which party would do a better job handling: illegal immigration
pty_bttr_tght_pblc Which party would do a better job handling: what is taught in public schools
pty_contact_r_camp Which party contact respondent about campaign
pty_id_imp Party identity importance
r_5_ctgry_level_educ Respondent 5 Category level of education
r_age_election_day Respondent age on Election Day
r_favor_opps_affrmtv Does respondent favor/oppose affirmative action in universities
r_favor_opps_death respondent favor/oppose death penalty
r_occupn_stts_1 respondent occupation status 1 digit
r_rgstr_vote_first When did respondent register to vote for the first time

r_self_idntfd_race respondent self-identified race/ethnicity
r_side_more_isrls Does respondent side more with Israelis or Palestinians
r_sps_prtnr_5_ctgry Respondent spouse/partner 5 Category level of education
r_sps_prtnr_race respondent spouse or partner race/ethnicity
r_think_they_get Does respondent think they get more or less than their fair share in life
r_usually_vote How does respondent usually vote
r_voted_2024_elctn When respondent voted in 2024 election
r_voted_2024_elctn_2 How respondent voted in 2024 election
race_atttdd_often How often does respondent have concerned feelings for other racial/ethnic groups
race_atttdd_often_2 How often respondent imagines how they would feel before criticizing other groups
race_atttdd_often_smn How often respondent feels protective of someone due to race or ethnicity
race_atttdd_often_try How often does respondent try to understand perspective of other racial/ethnic groups
rcll_2020_pres_vote Recall of last (2020) presidential vote
recall_chief_jus Consolidated office-recall score for U.S. Supreme Court Chief Justice Roberts.
recall_fr_pres Consolidated office-recall score for French president Emmanuel Macron.
recall_ru_pres Consolidated office-recall score for Russian president Vladimir Putin.
recall_sen_lead Consolidated office-recall score for Senate Majority Leader Schumer.
recall_speaker Consolidated office-recall score for Speaker of the House Johnson.
referendums_decide Whether citizen referendums should make political decisions
reg_pty_reg_state Party registration in state of registration (pre nonvoter)
registered_voter Whether respondent is registered to vote
registration_state Voter registration status
religion_detail Detailed religious tradition
religion_major_grp Major religious tradition
rep_party_dislike Whether respondent dislikes anything about the Republican Party
rep_party_like Whether respondent likes anything about the Republican Party
rqr_employrs_offer Require employers to offer paid leave to parents of new children
sample_census_region SAMPLE: Census region
sample_type Sample Type
scale_abort_dem_pres Position on abortion: Democratic presidential candidate
scale_abort_rep_pres Position on abortion: Republican presidential candidate
scale_aid_black_dem Position on government assistance to blacks scale: Democratic presidential candidate
scale_aid_black_rep Position on government assistance to blacks scale: Republican presidential candidate
scale_aid_black_self Position on government assistance to blacks scale: self-placement

scale_defense_self Position on defense spending: self-placement

scale_dfns_dem_pres Position on defense spending: Democratic presidential candidate

scale_dfns_rep_pres Position on defense spending: Republican presidential candidate

scale_env_bsnss_dem Position on environment-business tradeoff: Democratic presidential candidate

scale_env_bsnss_rep Position on environment-business tradeoff: Republican presidential candidate

scale_env_bsnss_self Position on environment-business tradeoff: self-placement

scale_hlth_ins_dem Position on government-private medical insurance scale: Democratic presidential candidate

scale_hlth_ins_rep Position on government-private medical insurance scale: Republican presidential candidate

scale_hlth_ins_self Position on government-private medical insurance scale: self-placement

scale_jobs_incm_dem Position on guaranteed job-income scale: Democratic presidential candidate

scale_jobs_incm_rep Position on guaranteed job-income scale: Republican presidential candidate

scale_jobs_incm_self Position on guaranteed job-income scale: self-placement

scale_lbcn_dem_house Position on liberal-conservative: Democratic House candidate

scale_lbcn_dem_pres Position on liberal-conservative: Democratic presidential candidate

scale_lbcn_rep_house Position on liberal-conservative: Republican House candidate

scale_lbcn_rep_pres Position on liberal-conservative: Republican presidential candidate

scale_libcon_dem_pty Position on liberal-conservative: Democratic party

scale_libcon_rep_pty Position on liberal-conservative: Republican party

scale_libcon_self Position on liberal-conservative self-placement

scale_services_self Position on spending & services: self-placement

scale_svc_dem_pres Position on spending & services: Democratic presidential candidate

scale_svc_rep_pres Position on spending & services: Republican presidential candidate

self_cnsr_need_be Need to be more sensitive talking or people too easily offended

self_cnsr_often_self How often does respondent self censor

senate_vote_intent Party of respondent's U.S. Senate vote intention or preference

shld_mnmm_wage_be Should the minimum wage be raised, kept the same, or lowered

smpl_smpl_lctn_state SAMPLE: Sample location state postal abbreviation

soc_class_dscr_b_soc How would respondent describe social class [EGSS]

soc_med_use_often How often use Facebook

soc_med_use_often_2 How often post political content on Facebook

socmed_facebook Which social media platforms respondent visited - Facebook [mention]

socmed_instagram Which social media platforms respondent visited - Instagram [mention]

socmed_other Which social media platforms respondent visited - Other [mention]

socmed_plat_sum Number of social media platforms visited.
socmed_reddit Which social media platforms respondent visited - Reddit [mention]
socmed_snapchat Which social media platforms respondent visited - SnapChat [mention]
socmed_tiktok Which social media platforms respondent visited - TikTok [mention]
socmed_twitter Which social media platforms respondent visited - Twitter [mention]
socmed_youtube Which social media platforms respondent visited - YouTube [mention]
split_ticket_vote Whether respondent votes a straight or split ticket
sps_prtnr_gndr respondent spouse/partner gender
stereo_black_violent Stereotype: Blacks violent
stereo_white_violent Stereotype: Whites violent
str_asian_amrcns Stereotype: Asian-Americans hardworking
str_asian_amrcns_2 Stereotype: Asian-Americans violent
str_black_hrdwrkng Stereotype: Blacks hardworking
str_hspnc_hrdwrkng Stereotype: Hispanics hardworking
str_hspnc_vlnt Stereotype: Hispanics violent
str_white_hrdwrkng Stereotype: Whites hardworking
strong_leader_good Whether having a strong leader in government is good
talk_frnds_fmly_live Does respondent talk to friends/family who live in other countries about events in that country
threat_china How much is China a threat to the United States
threat_iran How much is Iran a threat to the United States
threat_israel How much is Israel a threat to the United States
threat_japan How much is Japan a threat to the United States
threat_mexico How much is Mexico a threat to the United States
threat_russia How much is Russia a threat to the United States
total_hshld_incm Total (household) income
total_hshld_incm_2 Total (household) income [six category]
trans_sports_ban Support for banning transgender girls from girls' sports
trump_courts_fair Have the courts treated Donald Trump fairly or unfairly
trump_courts_fair2 Courts treated Donald Trump fairly/unfairly
trump_jury_verdict Manhattan jury that found Trump guilty made right/wrong decision
trump_russia_claim Donald Trump's campaign colluded with Russian government in 2016
trump_trait_cares Donald Trump trait: really cares
trump_trait_energy Donald Trump trait: energetic
trump_trait_honest Donald Trump trait: honest
trump_trait_know Donald Trump trait: knowledgeable
trump_trait_lead Donald Trump trait: strong leadership

trust_congress Trust in Congress
trust_courts How often can you trust the court system to do what is right
trust_effccy_no_say Have no say about what government does
trust_effccy_pblic_t Public officials don't care what people think
trust_effccy_pol_too Politics/government too complicated to understand
trust_effccy_well How well does respondent understand important political issues
trust_federal_govt How often trust government in Washington to do what is right
trust_govt Trust in government
trust_judiciary Trust in the judiciary
trust_news_media Trust and confidence in the news media
trust_parties Trust in political parties
trust_people How often can people be trusted
trust_scientists Trust in scientists
trust_soc_media Trust in social media
trust_trad_media Trust in traditional media
understands_issues Agreement that respondent understands important political issues
unmplymnt_bttr_worse Unemployment better or worse in last year
unmplymnt_next_year More or less unemployment in next year
urban_unrest_force Preferred response to urban unrest
us_bttr_worse_than US better or worse than most other countries
us_democracy_scale Rating of how democratic the United States is
uslly_think_self_as Does respondent usually think of self as a rural or urban person
vccn_conf_vccns_au How confident is respondent about that (vaccines cause autism)
vccn_most_scntfc_cau Does most scientific evidence show vaccines cause autism or not
vote_as_duty_choice Voting as duty or choice
vote_makes_diff Whether who people vote for makes a difference
vote_prob_abs Did respondent encounter any problems voting - difficulty obtaining absentee ballot
vote_prob_ballot Did respondent encounter any problems voting - confusion about ballot or machine
vote_prob_id Did respondent encounter any problems voting - concern about identification card
vote_prob_mail Did respondent encounter any problems voting - issue mailing ballot
vote_prob_no_try Did respondent encounter any problems voting - respondent didn't try to vote
vote_prob_none Did respondent encounter any problems voting - none at all
vote_prob_other Did respondent encounter any problems voting - other problem
vote_prob_reg Did respondent encounter any problems voting - registration problem
vote_prob_sum Number of voting problems reported.

vote_prob_transp Did respondent encounter any problems voting - difficulty getting to polling place
vote_prob_wait Did respondent encounter any problems voting - long wait times
vote_prob_weather Did respondent encounter any problems voting - bad weather
vote_prob_work Did respondent encounter any problems voting - work schedule
vote_satisfaction Satisfaction with how people voted in the election
voted_early Whether respondent had already voted early
voted_president_2016 Did respondent vote for president in 2016 election
voter_turnout Voter turnout in 2024
women_blf_agree_dsgr Agree/disagree - women interpret innocent remarks as sexist
women_blf_women_seek Women seek to gain power by getting control over men
women_congress_share Whether the share of women in Congress is too high or too low
women_rep_policy Support for policies to increase women’s representation
work_hours_pay_cut Working now: had reduction in work hrs or pay cut
work_hrsmnt_exprncd Has respondent experienced harassment at work
world_tmprtr_conf_t How confident is respondent about that (world temperatures have risen)
world_tmprtr_world Have world temperatures have risen on average or last 100 years or not
worried_losing_job Working now: worry about losing job in near future
wt Analysis weight for the pre-election survey
wt_post Analysis weight for the post-election survey

Source

American National Election Studies. 2024 Time Series Study Full Release.

boxplotC	<i>Generates box plots to compare interval-level dependent variable’s distribution across categories of independent variable.</i>
----------	---

Description

Generates box plots for visual comparison of interval-level dependent variable’s distribution across categories of independent variable. Includes option for weighting observations, modifying colors, variable widths. Box plot can be used to compare values of interval-level dependent variable by categories of an independent variable (a factor). If iv is omitted, the function creates a single-variable box plot.

Usage

```
boxplotC(dv, iv = NULL, w = NULL, data = NULL, main = NULL,
  xlab = NULL, ylab = NULL, box.col = "gray80", varwidth = TRUE,
  ivlabs = NULL, printC = FALSE, ...)
```

Arguments

<code>dv</code>	Dependent variable, should be in <code>dataset\$var</code> form unless dataset specified in optional data argument.
<code>iv</code>	(Optional) Independent variable, should be in <code>dataset\$var</code> form unless dataset specified in optional data argument. If omitted or set to <code>NULL</code> , <code>boxplotC</code> will create a single-variable box plot of <code>dv</code> .
<code>w</code>	(Optional) Sampling weights of variable, must be numeric; should be in <code>dataset\$weightvar</code> form unless dataset specified in optional data argument.
<code>data</code>	(Optional) Name of dataset that contains <code>dv</code> , <code>iv</code> (and <code>w</code>) variables (optional).
<code>main</code>	(Optional) Supply custom main label for plot; default uses names of <code>dv</code> and <code>iv</code> (or just <code>dv</code> if <code>iv</code> is omitted).
<code>xlab</code>	(Optional) Supply custom x-axis label for plot; default uses name of <code>iv</code> when provided, and blank label when <code>iv</code> is omitted.
<code>ylab</code>	(Optional) Supply y-axis label for plot; default uses name of <code>dv</code> .
<code>box.col</code>	(Optional) The name of color to use for box fills. Default is "gray80". Border color follows <code>bxp</code> defaults unless overridden via ... (e.g., <code>boxcol=</code> or <code>pars=list(boxcol=...)</code>).
<code>varwidth</code>	(Optional) Do you want the widths of boxes to be proportional to number of observations in each group? Default is <code>TRUE</code> ; set <code>varwidth=FALSE</code> for equal-width boxes.
<code>ivlabs</code>	(Optional) A vector of labels for the <code>iv</code> values that are box labels.
<code>printC</code>	(Optional) Do you want to print box plot to .html file in working directory? (Default: <code>FALSE</code>)
<code>...</code>	Additional arguments passed to <code>bxp</code> . You can supply <code>range</code> (or <code>coef</code>) to set whisker length multiplier (default: 1.5). Styling args accepted by <code>bxp</code> (e.g., <code>boxcol</code> , <code>boxfill</code> , <code>outpch</code>) can be supplied either in <code>pars=list(...)</code> or directly in ...

Details

Numeric-looking factor or character labels, such as "10" and "20", are interpreted as their displayed numeric values for the dependent variable.

Value

Invisibly returns the `bxp_input` object used to draw the plot (class "boxplot"), including computed boxplot statistics by group.

Console output

Additional `RCPA4` headings are controlled by the session option `RCPA4.verbose`, which defaults to `TRUE`. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

The `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

RCPA4 Package Tutorial Videos

- [Making Box Plots with RCPA4's boxplotC Function](#) 15:12, shows you how to use the RCPA4 Package's boxplotC function to create box plots that show the relationship between an interval-level dependent variables and a categorical independent variable.
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapter 5.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), pp. 53-55. ISBN-13: 978-1506379616; ISBN-10: 150637961.

Online Resources

- [R Tutorials & Resources for Graphing Relationships and Describing Patterns](#), compiled by Barry C. Edwards
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#), find datasets for your own research and resources to help with political analysis.

Examples

```
library(RCPA4)

# basic usage with variables as vectors
boxplotC(dv=anes$ft_rep_party, iv=anes$partyid3)

# single-variable box plot
boxplotC(dv=anes$ft_rep_party)
```

CImean

Confidence interval of a dataset variable's sample mean in table and figure

Description

Reports the confidence interval of a sample mean in table and plot. Default is 95% CI but use can raise or lower confidence level.

Usage

```
CImean(x, w = NULL, data = NULL, digits = 3, conf = 95,
       pop.sd = NULL, printC = FALSE, plot = TRUE, main = NULL,
       xlab = NULL, xlim = NULL, table = TRUE, ...)
```

Arguments

<code>x</code>	A numeric variable, should be in <code>dataset\$var</code> form unless dataset specified in optional data argument.
<code>w</code>	(Optional) Sampling weights of variable (optional), must be numeric; should be in <code>dataset\$weightvar</code> form unless dataset specified in optional data argument.
<code>data</code>	(Optional) Name of dataset that contains <code>x</code> (and <code>w</code>) variable (optional).
<code>digits</code>	(Optional) Number of decimal places reported in result (defaults to 3).
<code>conf</code>	(Optional) A single number equal to the desired confidence level (i.e. 95, 99, 90, etc.). Default value is 95 percent confidence level.
<code>pop.sd</code>	(Optional) A single number equal to the known population standard deviation of <code>x</code> . This value is rarely know, but if it is, critical values for confidence interval are based on standard normal distribution.
<code>printC</code>	(Optional) Do you want results printed to .html file in your working directory? Default is FALSE. Set to TRUE to print results.
<code>plot</code>	(Optional) Do you want a plot of the confidence interval? Default is TRUE.
<code>main</code>	(Optional) Change the main title of plot. Default title generated from <code>conf</code> , <code>x</code> , and <code>w</code> .
<code>xlab</code>	(Optional) Label for x-axis of confidence interval plot.
<code>xlim</code>	(Optional) Modify x-axis limits of confidence interval plot.
<code>table</code>	(Optional) Do you want the confidence interval table reported? (default: TRUE)
<code>...</code>	(Optional) additional arguments passed to <code>plot</code> function.

Value

Returns the confidence interval as a vector of numeric values (the lower and upper bounds).

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to TRUE. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

Thee `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Result tables

The `table` argument controls display of the main result tables separately from headings and informational messages. Set `table = FALSE` to omit those tables from console output and HTML output. See the Value section for the results returned by this function and how to save them for further use. The `printC` argument controls HTML output; `printC = FALSE` does not suppress console tables. Turning off tables does not turn off plots.

RCPA4 Package Tutorial Videos

- [Confidence Intervals for Sample Means with RCPA4's CImean Function](#) 16:16
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapter 8.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), pp. 184-186. ISBN-13: 978-1506379616; ISBN-10: 150637961.

Online Resources

- [R Tutorials & Resources for Foundations of Inference](#), Compiled by Barry C. Edwards
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#): Find datasets for your own research and resources to help with the analysis.

Examples

```
library(RCPA4)

CImean(anes$r_age_election_day)

# using optional w, conf, and data arguments
CImean(x=anes$r_age_election_day, w=anes$wt, conf=90)
CImean(x=r_age_election_day, data=anes, conf=95)
```

CIprop

Confidence intervals of a dataset variable's sample proportions in table and figure

Description

Reports the confidence interval of sample proportions in table and plot. Default is 95% CI but use can raise or lower confidence level.

Usage

```
CIprop(x, w = NULL, data = NULL, digits = 3, conf = 95,
       printC = FALSE, plot = TRUE, main = NULL, xlab = NULL, xlim = NULL,
       table = TRUE, ...)
```

Arguments

<code>x</code>	A nominal or ordinal variable (factor), should be in <code>dataset\$var</code> form unless dataset specified in optional data argument.
<code>w</code>	(Optional) Sampling weights of variable, must be numeric; should be in <code>dataset\$weightvar</code> form unless dataset specified in optional data argument.
<code>data</code>	(Optional) Name of dataset that contains <code>x</code> (and <code>w</code>) variable.
<code>digits</code>	(Optional) Number of decimal places reported in result (defaults to 3).
<code>conf</code>	(Optional) A single number equal to the desired confidence level (i.e. 95, 99, 90, etc.). Default value is 95 percent confidence level.
<code>printC</code>	(Optional) Do you want results printed to .html file in your working directory? Default is FALSE. Set to TRUE to print results.
<code>plot</code>	(Optional) Do you want a plot of the confidence interval? Default is TRUE.
<code>main</code>	(Optional) Change the main title of plot. Default title generated from <code>conf</code> , <code>x</code> , and <code>w</code> .
<code>xlab</code>	(Optional) Label for x-axis of confidence interval plot.
<code>xlim</code>	(Optional) Modify x-axis limits of confidence interval plot.
<code>table</code>	(Optional) Do you want the confidence interval table reported? (default: TRUE)
<code>...</code>	(Optional) Additional arguments passed to plot function.

Value

Returns a data frame that gives the lower bound, point estimate, and upper bounds of each value of `x` variable.

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to TRUE. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

The `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Result tables

The `table` argument controls display of the main result tables separately from headings and informational messages. Set `table = FALSE` to omit those tables from console output and HTML output. See the Value section for the results returned by this function and how to save them for further use. The `printC` argument controls HTML output; `printC = FALSE` does not suppress console tables. Turning off tables does not turn off plots.

RCPA4 Package Tutorial Videos

- [Confidence Intervals for Sample Proportions with RCPA4's CIprop Function](#) 18:29
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapter 8.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), pp. 184-186. ISBN-13: 978-1506379616; ISBN-10: 150637961.

Online Resources

- [R Tutorials & Resources for Foundations of Inference](#), Compiled by Barry C. Edwards
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#): Find datasets for your own research and resources to help with the analysis.

Examples

```
library(RCPA4)

CIprop(anes$life_exprnc_know_smn)

# using optional w and data arguments
CIprop(x=anes$life_exprnc_know_smn, w=anes$wt)
CIprop(x=life_exprnc_know_smn, w=wt, data=anes)
```

compmeansC	<i>Mean comparison analysis function, makes controlled comparisons, generates plots, performs ANOVA</i>
------------	---

Description

Mean comparison analysis, options for weighted observations and control variable. Also supports several plotting options for basic mean comparisons and controlled mean comparisons. Can conduct single and two-factor analysis of variance (ANOVA) to test differences among multiple means.

Usage

```
compmeansC(dv, iv, w = NULL, z = NULL, data = NULL, digits = 2,
  compact = FALSE, ivlabs = NULL, zlabs = NULL, anova = FALSE,
  printC = FALSE, plot = TRUE, main = NULL, xlab = NULL, ylab = NULL,
  ylim = NULL, plot.ci = FALSE, z.palette = "LightGrays",
  legend.title = NULL, table = TRUE)
```

Arguments

<code>dv</code>	Dependent variable, should be in <code>dataset\$var</code> form unless dataset specified in optional data argument.
<code>iv</code>	Independent variable, should be in <code>dataset\$var</code> form unless dataset specified in optional data argument.
<code>w</code>	(Optional) Sampling weights of variable (optional), must be numeric; should be in <code>dataset\$weightvar</code> form unless dataset specified in optional data argument.
<code>z</code>	(Optional) Control variable, must be a factor; should be in <code>dataset\$z</code> form unless dataset specified in optional data argument.
<code>data</code>	(Optional) Name of dataset that contains <code>dv</code> , <code>iv</code> (and <code>w</code>) variables (optional).
<code>digits</code>	(Optional) The number of decimal places reported in result (defaults to 2).
<code>compact</code>	(Optional) Do you want compact version of controlled mean comparison table with N and Std. Dev. values omitted? Default is FALSE. Compact display only available for controlled comparisons.
<code>ivlabs</code>	(Optional) A vector of names for the independent variable's values (to abbreviate the mean comparison table's row labels and <code>iv</code> labels on plots)
<code>zlabs</code>	(Optional) A vector of names for the control variable's values (to abbreviate a controlled mean comparison table's column labels and <code>z</code> variable's labels on plots)
<code>anova</code>	(Optional) Do you want to conduct analysis of variance (ANOVA)? Default is FALSE.
<code>printC</code>	(Optional) Do you want results printed to .html file in your working directory? Default is FALSE. Set to TRUE to print results.
<code>plot</code>	(Optional) Do you want a plot of the means? Default is TRUE (makes a bar plot). Additional options: • "line" to make a line plot • "bar", TRUE, or T for bar plot (default plot) • "points" to show means as points without connecting lines, • FALSE or F to suppress plot.
<code>main</code>	(Optional) Main label for plot, if missing, default main title generated.
<code>xlab</code>	(Optional) x-axis label for plot, if missing, default label generated using <code>iv</code> name.
<code>ylab</code>	(Optional) y-axis label for plot, if missing, default label generated using <code>dv</code> name.
<code>ylim</code>	(Optional) Range of y-axis values on plot.
<code>plot.ci</code>	(Optional) Do you want vertical 95 percent confidence intervals added to line plot of means? Default is FALSE. Only works when <code>plot="line"</code> or <code>plot="points"</code>
<code>z.palette</code>	(Optional) For bar and line charts with control variables (<code>z</code>), the name of HCL color palette to use. Default is "LightGrays". See <code>grDevices::hcl.pals</code> for palette names and more information. Also see https://developer.r-project.org/Blog/public/2019/04/01/hcl-based-color-palettes-in-grdevices/ to view color palettes.
<code>legend.title</code>	(Optional) Customize title of legend on plot used for controlling comparisons.
<code>table</code>	(Optional) Do you want mean comparison table(s) reported? (default: TRUE)

Value

Returns an augmented mean comparison table as a matrix of values. Auxiliary tables are available via `[[` (for example `out[["anova_table"]]` or `out[["controlled_panel_tables"]]`).

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to `TRUE`. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

The `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Result tables

The `table` argument controls display of the main result tables separately from headings and informational messages. Set `table = FALSE` to omit those tables from console output and HTML output. See the Value section for the results returned by this function and how to save them for further use. The `printC` argument controls HTML output; `printC = FALSE` does not suppress console tables. Turning off tables does not turn off plots.

Table and plot requirements

At least one of `table` or `plot` must be enabled. When using `table = FALSE`, keep a valid `plot` enabled.

RCPA4 Package Tutorial Videos

- [Make Mean Comparisons with RCPA4's compmeansC Function](#) 13:20, shows you how to use the RCPA4 Package's `compmeansC` function to compare values of an interval-level dependent variable across categories of an independent variable.
- [Plotting Means with RCPA4's compmeansC Function](#) 20:42
- [Making Controlled Mean Comparisons with RCPA4's compmeansC Function](#) 25:46
- [Analysis of Variance with RCPA4's compmeansC Function](#) 8:58
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapters 4, 5, 7, 10.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), pp.85-97, 150-156. ISBN-13: 978-1506379616; ISBN-10: 150637961.

Online Resources

- [R Tutorials & Resources for Making Comparisons, Graphing Relationships and Describing Patterns, Making Controlled Comparisons, and Chi-Square Test and Analysis of Variance](#), compiled by Barry C. Edwards
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#): Find datasets for your own research and resources to help with the analysis.

Examples

```
library(RCPA4)

compmeansC(dv=anes$ft_rep_party, iv=anes$party_id, plot=FALSE)

# basic usage with a plot
compmeansC(dv=anes$ft_rep_party, iv=anes$party_id, w=anes$wt, plot=TRUE)

# basic usage: data argument used
compmeansC(dv=infant_mortality, iv=region, data=world, plot=FALSE)

# with weights and z variable
compmeansC(dv=anes$ft_rep_party, iv=anes$party_id, w=anes$wt, z=anes$gender_s_sex, plot="line")
compmeansC(
  dv=anes$ft_gay_men_lesbians, iv=anes$gender_s_sex,
  z=anes$partyid3, compact=TRUE, plot=TRUE
)
```

correlateC

Correlation analysis for two or more numeric variables, with options for scatterplots, weighted observations, and inferential statistics.

Description

Given two or more numeric variables, `correlateC` reports Pearson's r , along with inferential statistics (if requested), works with sampling weights. If more than two x variables are supplied, the function calculates Pearson's r values using pairwise complete observations (as opposed to limiting analysis to observations complete on all variables).

Usage

```
correlateC(x, w = NULL, data = NULL, digits = 3, stats = FALSE,
  printC = FALSE, plot = FALSE, jitter = FALSE, table = TRUE, ...)
```

Arguments

x	A list of variables for correlation analysis, variables must be numeric. Should be entered as <code>list(dataset\$var1, dataset\$var2, dataset\$var3 ...)</code> form unless dataset specified in optional data argument.
w	(Optional) Sampling weights variable, must be numeric; should be in <code>dataset\$weightvar</code> form unless dataset specified in optional data argument.
data	(Optional) Name of dataset that contains x (and w) variable (optional).
digits	(Optional) Number of decimal places reported in result (defaults to 3).
stats	(Optional) Do you want the inferential statistics (standard errors, t-statistics, and P-values)? Default is FALSE. Set to TRUE for inferential statistics.
printC	(Optional) Do you want results printed to .html file in your working directory? Default is FALSE. Set to TRUE to print results.
plot	(Optional) Do you want scatterplot(s)? Default is FALSE.
jitter	(Optional) Do you want scatterplot pointed jittered? By default, points jittered when there are more than 500 observations, but you can set this arguments to TRUE/FALSE to override the default.
table	(Optional) Do you want correlation table(s) reported? (default: TRUE)
...	(Optional) Additional arguments passed to the internal weighted correlation helper.

Details

Correlations are computed internally with optional weights and pairwise-complete handling for multivariate input.

Value

Returns the coefficients of correlation among x variables; if `stats=TRUE`, inferential statistics returned in tables as well.

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to TRUE. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

Thee `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Result tables

The `table` argument controls display of the main result tables separately from headings and informational messages. Set `table = FALSE` to omit those tables from console output and HTML output. See the Value section for the results returned by this function and how to save them for further use. The `printC` argument controls HTML output; `printC = FALSE` does not suppress console tables. Turning off tables does not turn off plots.

Table and plot requirements

At least one of table or plot must be enabled. When using `table = FALSE`, keep a valid plot enabled.

RCPA4 Package Tutorial Videos

- [Correlation Analysis with RCPA4's correlateC Function](#) 9:01
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapter 11.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), pp. 240-244. ISBN-13: 978-1506379616; ISBN-10: 150637961.

Online Resources

- [R Tutorials & Resources for Correlation and Bivariate Regression](#), compiled by Barry C. Edwards.
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#): Find datasets for your own research and resources to help with the analysis.

Examples

```
library(RCPA4)

correlateC(x=list(prochoice_percent, stateleg_women), data=states, plot=FALSE)

# with weighted observations and inferential statistics
correlateC(x=list(anes$ft_rep_party, anes$ft_trump_pre, anes$ft_dem_party, anes$ft_biden_pre),
           w=anes$wt, stats=TRUE)
```

crosstabC

Cross-tabulation analysis, option for weighting observations, makes controlled comparisons, generates plots, performs Chi-Square test, measures strength of association

Description

This is a workhorse function for analyzing the relationship between two variables measured at the nominal or ordinal-level (factors). Basic output is a cross-tabulation with column percentages and counts. Options include weighting observations, adding control variable for controlled cross-tabulation, several plotting options, conducting Chi-Square test of independence, and measuring strength of association.

Usage

```
crosstabC(dv, iv, w = NULL, z = NULL, data = NULL, digits = 2,
  compact = FALSE, dvlabs = NULL, ivlabs = NULL, zlabs = NULL,
  chisq = FALSE, lambda = FALSE, somers = FALSE, cramers = FALSE,
  printC = FALSE, plot = TRUE, plot.response = NULL, main = NULL,
  xlab = NULL, ylab = NULL, z.palette = "LightGrays",
  legend.title = NULL, table = TRUE)
```

Arguments

dv	Dependent variable, should be in dataset\$var form unless dataset specified in optional data argument. Should be a nominal or ordinal-level variable.
iv	Independent variable, should be in dataset\$var form unless dataset specified in optional data argument. Should be a nominal or ordinal-level variable.
w	(Optional) Sampling weights of variable, must be numeric; should be in dataset\$weightvar form unless dataset specified in optional data argument.
z	(Optional) Control variable, must be a factor; should be in dataset\$z form unless dataset specified in optional data argument.
data	(Optional) Name of dataset that contains dv, iv (and w) variables.
digits	(Optional) Number of decimal places reported in result (defaults to 2).
compact	(Optional) Do you want compact display of cross-tabulation with row subtotals omitted? Default is FALSE.
dvlabs	(Optional) A vector of names for the dependent variable's values (to abbreviate the cross-tabulation's row labels and dv labels on plots)
ivlabs	(Optional) A vector of names for the independent variable's values (to abbreviate the cross-tabulation's column labels and iv labels on plots)
zlabs	(Optional) A vector of names for the control variable's values (to abbreviate the controlled cross-tabulation's column labels and z variable labels on plots)
chisq	(Optional) Do you want to conduct Chi-Square Test? If z argument specific, Chi-Square Test conducted on dv-iv relationship for each value of z.
lambda	(Optional) Do you want Lambda reported? If z argument specified, Lambda reported for dv-iv relationship for each value of z.
somers	(Optional) Do you want Somers' d reported? If z argument specific, Somers' D reported for dv-iv relationship for each value of z.
cramers	(Optional) Do you want Cramer's V reported? If z argument specific, Cramer's V reported for dv-iv relationship for each value of z.

<code>printC</code>	(Optional) Do you want to print cross-tabulation and plot (if plot is used) to .html file in working directory? (default: FALSE)
<code>plot</code>	(Optional) Do you want a plot of the cross-tabulation? Default is TRUE (and makes a bar plot). Other plot options: • "line" for a line plot, • "mosaic" for a mosaic plot, • "bar", TRUE, or T for a bar plot (default plot) • FALSE or F to suppress plot.
<code>plot.response</code>	(Optional) The dv value to be summarized on plot. To combine and plot multiple dv values, use <code>transformC</code> and create dummy variable to be plotted. Set <code>plot.response="all"</code> to plot all DV values (for uncontrolled comparisons only).
<code>main</code>	(Optional) Main label for plot
<code>xlab</code>	(Optional) x-axis label for plot
<code>ylab</code>	(Optional) y-axis label for plot
<code>z.palette</code>	(Optional) For bar and line plots with control variables (z), the name of HCL color palette to use. Default is "LightGrays". See <code>grDevices::hcl.pals</code> for palette names and more information. Also see https://developer.r-project.org/Blog/public/2019/04/01/hcl-based-color-palettes-in-grdevices/ to view color palettes.
<code>legend.title</code>	(Optional) Title for legend shown if plot used with z argument.
<code>table</code>	(Optional) Do you want cross-tabulation and statistics tables reported? (default: TRUE)

Value

Returns an augmented cross-tabulation matrix. Auxiliary tables are available via `[[` (for example `out[["chisq_table"]]` or `out[["association_table"]]`).

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to TRUE. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

The `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Result tables

The `table` argument controls display of the main result tables separately from headings and informational messages. Set `table = FALSE` to omit those tables from console output and HTML output. See the Value section for the results returned by this function and how to save them for further use. The `printC` argument controls HTML output; `printC = FALSE` does not suppress console tables. Turning off tables does not turn off plots.

Table and plot requirements

At least one of table or plot must be enabled. When using `table = FALSE`, keep a valid plot enabled.

RCPA4 Package Tutorial Videos

- [Create Cross-Tabulations to Make Comparisons with RCPA4's crosstabC Function](#) 13:31
- [Plots for Cross-Tabulations with RCPA4's crosstabC Function](#) 29:51
- [Making Controlled Comparisons with RCPA4's crosstabC Function](#) 28:34
- [Conducting Chi-Square Test and Measuring Strength of Association with RCPA4 Package's crosstabC Function](#) 35:06
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapters 4, 5, 7, 10.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), pp.85-97, 150-156, 215-231. ISBN-13: 978-1506379616; ISBN-10: 150637961.

Online Resources

- [Tutorials & Resources for Making Comparisons, Graphing Relationships and Describing Patterns, Making Controlled Comparisons, and Chi-Square Test and Analysis of Variance](#), compiled by Barry C. Edwards
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#): Find datasets for your own research and resources to help with the analysis.

Examples

```
library(RCPA4)

crosstabC(dv=anes$r_favor_opps_death, iv=anes$partyid3)
# with optional w, data, chisq, somers arguments
crosstabC(dv=r_favor_opps_death, iv=partyid3, w=wt, data=anes, chisq=TRUE, somers=TRUE)

# example with optional w, data, z, and plot="line" arguments
crosstabC(dv=r_favor_opps_death, iv=partyid3, w=wt, data=anes, z=gender_s_sex, plot="line")
```

debate	<i>Debate Experiment dataset for R Companion to Political Analysis, Fourth Edition</i>
--------	--

Description

A dataset with variables about students who participated in an experiment. This dataset is used to demonstrate application of R to political analysis. See book Appendix for variable names and descriptions.

Format

A data frame with 171 rows and 14 variables.

obs Unique identification number for each subject

assignment Name of condition subject was assigned to

tv Did subject watch debate on TV?

debinfo Number of correct answers on five-question quiz about the debate

catholic Is subject Catholic?

issues Which candidate do you agree with on policy issues?

integrity Which candidate has more integrity?

leadership Which candidate is the more effective leader?

empathy Which candidate has more empathy?

sophdum Is respondent a sophomore?

won Which candidate won the debate?

pid Self-reported partisan identification

ideology Self-reported political ideology

gender Subject's gender

Source

Jamie Druckman. See Appendix of printed textbook for further information.

describeC	<i>Generates table of descriptive statistics for one or more variables in a dataset</i>
-----------	---

Description

Generates a table of descriptive statistics for variable(s) specified with `x` argument, displaying it by default. Works with variables measures at any level but output varies with level of measurement (e.g. you won't get standard deviation for a nominal variable). Character values are analyzed as categorical factors; the function does not convert variables to numeric or ordered classes, but provides class-specific guidance after reporting results. Option for weighting observations.

Usage

```
describeC(x, w = NULL, data = NULL, digits = 3, printC = FALSE,
          table = TRUE)
```

Arguments

<code>x</code>	A variable or list of variables, should be in <code>dataset\$var</code> form unless dataset specified in optional data argument.
<code>w</code>	(Optional) Sampling weights of variable, must be numeric; should be in <code>dataset\$weightvar</code> form unless dataset specified in optional data argument.
<code>data</code>	(Optional) Name of dataset that contains <code>x</code> (and <code>w</code>) variable.
<code>digits</code>	(Optional) Number of decimal places reported in result (defaults to 3).
<code>printC</code>	(Optional) Do you want to print table of descriptive statistics to .html file in working directory? (default: FALSE)
<code>table</code>	(Optional) Display the descriptive-statistics table? Defaults to TRUE. Set to FALSE to skip the table, its heading, and HTML export, while still returning the results invisibly.

Value

Invisibly returns a table of descriptive statistics, including when `table = FALSE`. Assign the function call to an object to store the results.

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to TRUE. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

Thee `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Result tables

The `table` argument controls display of the main result tables separately from headings and informational messages. Set `table = FALSE` to omit those tables from console output and HTML output. See the `Value` section for the results returned by this function and how to save them for further use. The `printC` argument controls HTML output; `printC = FALSE` does not suppress console tables. Turning off tables does not turn off plots.

Returning results without display

With `table = FALSE`, the table and its heading are omitted and no HTML output is written, even if `printC = TRUE`. Class-specific informational messages can still occur; use `suppressMessages()` to suppress those too.

RCPA4 Package Tutorial Videos

- [Generate Descriptive Statistics with RCPA4 Package's describeC Function](#) 17:40
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapter 2.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), pp. 39-55. ISBN-13: 978-1506379616; ISBN-10: 150637961.

Online Resources

- [Tutorials & Resources for Descriptive Statistics](#), Compiled by Barry C. Edwards
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#): Find datasets for your own research and resources to help with the analysis.

Examples

```
library(RCPA4)

# descriptive statistics for qualitative variables
describeC(x=world$region)

# store results without displaying the table
statistics <- describeC(x=world$infant_mortality, table=FALSE)

# descriptive statistics for numeric variable
describeC(x=world$infant_mortality)

# describe multiple variables in list, with optional w argument
```

```
describeC(x=list(anes$feel_angry, anes$appr_cong_hndl_its), w=anes$wt)
```

freqC	<i>Reports the frequency distribution of dataset variable with table and bar chart</i>
-------	--

Description

Generates a frequency distribution table and bar chart to describe the distribution of variable values. Supports optional case weights. Includes cumulative percents for ordered factors and for numeric variables (treating numeric values as ordered categories), except when x has only two values.

Usage

```
freqC(x, w = NULL, data = NULL, digits = 2, rowlabs = NULL,
      printC = FALSE, plot = TRUE, main = NULL, xlab = NULL, ylab = NULL,
      bar.col = "gray80", ylim = NULL, table = TRUE, ...)
```

Arguments

x	The variable to be analyzed. If dataset not specified with data argument, should be a vector in form dataset\$var.
w	(Optional) Sample weights (must be numeric if used), If dataset not specified with data argument, should be in form dataset\$weighvar
data	(Optional) Name of dataset that contains x (and w) variable.
digits	(Optional) Number of digits to display after decimal point (default=2).
rowlabs	(Optional) Vector specifying custom text for labeling table rows and chart bars. The rowlabs vector must correspond to x variable's levels (if the variable has five levels, rowlabs must be length 5). Useful when default value labels are too long.
printC	(Optional) Do you want to print frequency distribution table and bar chart (if plot is used) to .html file in working directory? (default: FALSE)
plot	(Optional) Do you want a bar chart? (default set to TRUE)
main	(Optional) Main title of bar chart.
xlab	(Optional) The x-axis label of bar chart.
ylab	(Optional) The y-axis label of bar chart.
bar.col	(Optional) The name of color to use for bars. Default is "gray80".
ylim	(Optional) y-axis range for bar chart. If omitted, upper bound is set to the next multiple of 10 above the largest percent in table rows (excluding the Total row).
table	(Optional) Do you want the frequency distribution table reported? (default: TRUE)
...	(Optional) Additional arguments passed to barplot when plot=TRUE.

Value

Invisibly returns a frequency distribution table (data frame) with numeric frequencies and percentages. The `digits` argument controls display formatting, not stored numeric values.

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to `TRUE`. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

The `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Result tables

The `table` argument controls display of the main result tables separately from headings and informational messages. Set `table = FALSE` to omit those tables from console output and HTML output. See the **Value** section for the results returned by this function and how to save them for further use. The `printC` argument controls HTML output; `printC = FALSE` does not suppress console tables. Turning off tables does not turn off plots.

Table and plot requirements

At least one of `table` or `plot` must be enabled. When using `table = FALSE`, keep a valid plot enabled.

RCPA4 Package Tutorial Videos

- [Make Frequency Distribution Tables and Bar Charts with RCPA4 Package's freqC Function](#) 15:33
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapter 2.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), pp. 39-55. ISBN-13: 978-1506379616; ISBN-10: 150637961.

Online Resources

- [R Tutorials & Resources for Descriptive Statistics](#), compiled by Barry C. Edwards
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#): Find datasets for your own research and resources to help with the analysis.

Examples

```
library(RCPA4)

# unordered factors
freqC(x=region, data=world)

# ordered factors
freqC(x=threat_china, w=wt, data=anes)
```

getC

Imports common dataset file types into R environment

Description

If you don't complete file argument, you will be prompted to select one. Supports common dataset file formats, including CSV, Stata, SPSS, native R, and SAS files. It previews imported data and asks you to confirm before returning a data frame. You must assign this returned object to a name to work with it. Native R files with multiple objects are returned as a named list. If getC doesn't support a file type, it suggests another function or package when possible.

Usage

```
getC(file = NULL, confirm = TRUE, ...)
```

Arguments

file	(Optional) Local path or URL of the file you want to load into your R session; if you do not specify a file, you will be prompted to select one.
confirm	(Optional) Do you want to confirm getting file before function results returned? (default: TRUE)
...	(Optional) Additional arguments passed to loading function

Details

A .sas7bdat file contains the SAS dataset. If it has a companion .sas7bcat catalog file, that catalog may supply value labels. Catalogs commonly have the same file name as the data file but a .sas7bcat extension. Provide its path with catalog_file, for example getC("survey.sas7bdat", catalog_file="survey.sas7bcat"). Files compressed with .gz, .bz2, or .xz are supported when their underlying file extension is supported, such as .csv.gz or .dta.gz.

Value

Dataset specified in file argument as a data frame. Native R files containing multiple objects return a named list. You must assign the returned object to a name to work with it.

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to `TRUE`. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

The `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Preview output

Use `confirm = FALSE` to skip the data preview and confirmation prompt. File-selection and other informational messages are controlled separately by `suppressMessages()`. To import a specified file without headings, preview output, or informational messages, set `RCPA4.verbose = FALSE` and use `suppressMessages(getC(file, confirm = FALSE))`.

RCPA4 Package Tutorial Videos

- [Importing Data with RCPA4 Package's getC Function](#), 18:14
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapter 15.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), pp. 321-327. ISBN-13: 978-1506379616; ISBN-10: 150637961.

Online Resources

- [R Tutorials & Resources for Doing Your Own Political Analysis](#), Compiled by Barry C. Edwards
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#): Find datasets for your own research and resources to help with the analysis.

Examples

```
library(RCPA4)

# basic call will prompt user to choose file
if (interactive()) {
  getC()
}
```

gss

*GSS 2024 dataset for R Companion to Political Analysis, Fourth Edition***Description**

A student-friendly subset of the 2024 General Social Survey. This dataset is used to demonstrate application of R to political analysis. See book Appendix for variable names and descriptions.

Format

A data frame with 3309 rows and 365 variables.

id Respondent identification number
abany Abortion allowed for any reason
abdefect Abortion allowed for serious birth defect
abhlth Abortion allowed if woman's health is endangered
abnomore Abortion allowed if married woman wants no more children
abpoor Abortion allowed if woman cannot afford child
abrape Abortion allowed if pregnancy resulted from rape
absingle Abortion allowed if woman is not married
acpttg People are generally accepting
adoptus Immigrants should adopt American culture
adults Number of adults age 18 and older in household
adultsinhh Total adults in household, experimental version
affrmact Favor preferential hiring of Black applicants
afraidof Others act afraid of R
age R's age in years
agekdbrn Age at first child's birth
amancstr Importance of American ancestry
ambetter Belief that America is a better country
ambornin Importance of being born in America
amchrstn Importance of being Christian
amcit Importance of US citizenship
amcitizn Preference for being a US citizen
amfeel Importance of feeling American
amgovt Importance of respecting US laws
amownway America should follow its own interests
amshamed Ashamed of some aspects of America

amtv Preference for American films on television
attend Frequency of attending religious services
babies Number of children under age 6 in household
ballot Ballot assignment
befair People try to take advantage
belikeus Better if others were more like Americans
biasnews Political news coverage is biased
bible View of the Bible
bizmoney Business profits come at expense of workers
born Born in the United States
brneffrt Can become American if born elsewhere
cantrust People can be trusted
cappun Favor or oppose death penalty for murder
childs Number of children
childsinhh Total children in household, experimental version
chldidel Ideal number of children
chnghdocs Policy on changing official documents
citizen US citizen
class Subjective class identification
cohort R's birth cohort year
colath Allow anti-religionist to teach in college
colcom Fire Communist college teacher
colmslm Allow anti-American Muslim cleric to teach
colrac Allow racist to teach in college
compuse Uses a computer
conarmy Confidence in military
conbus Confidence in major companies
conclerg Confidence in organized religion
coneduc Confidence in education system
confed Confidence in executive branch of federal government
confinan Confidence in banks and financial institutions
coninc Family income in constant dollars
conjudge Confidence in US Supreme Court
conlabor Confidence in organized labor
conlegis Confidence in Congress
conmedic Confidence in medical profession
conpow Conflict between ordinary people and elites

conpress Confidence in press
conrinc R's income, inflation adjusted
consci Confidence in scientific community
conscrp Importance of military service
contv Confidence in television
corruptn Perceived corruption in public service
courts Courts too harsh or too lenient
degree Highest degree earned
dem10fut Democracy will work in ten years
dem10pst Democracy worked ten years ago
demtoday Democracy works today
denom Religious denomination
denom16 Denomination raised in at age 16
dipped High school diploma, GED, or equivalent
discaff Belief that whites are hurt by affirmative action
discaffm Men denied job or promotion due to gender discrimination
discaffw Women denied job or promotion due to gender discrimination
disrspect R treated with less courtesy or respect
divlaw Divorce laws too easy or too difficult
divorce Ever divorced or separated
dsndntpay Support for reparations for descendants of enslaved people
dwelown Owns or rents home
earnrs Number of household income earners
econstat Current state of the national economy
educ Years of schooling completed
eqwlth Government should reduce income differences
evwork Ever worked for at least one year
experts Rely on experts versus ordinary people
fair People are fair or take advantage
famgen Number of family generations in household
fear Afraid to walk alone at night
fechld Mother working does not hurt children
fefam Man works and woman cares for home
fehire Hire and promote women equally
fejobaff Preferential hiring of women
feovrwrk Family suffers when women work
fepol Women not suited for politics

fepresch Preschool children suffer if mother works
finalter Change in R's financial situation
finrela Satisfaction with family income
forland Whether foreigners should be allowed to buy land
form Split questionnaire form assignment
fulldem People, not politicians, should decide
fund Religious fundamentalism
getahead How people get ahead in life
god Confidence in existence of God
goodlife Standard of living will improve
granborn Number of grandparents born outside US
grass Favor or oppose legalizing marijuana
gunlaw Favor or oppose gun permits
hapmar Happiness of marriage
happy General happiness
health Self-rated health
helpblk Government should aid Black people
helpful People are helpful or selfish
helpnot Government should do more or less
helpoth Importance for children to help others
helppoor Government should improve living standard of poor
helpsick Government should help pay for medical care
helpusa Support for helping worse off people in America
hhtype1 Household type, condensed
hispanic Hispanic origin
homosex Same-sex relations right or wrong
hompop Total number of people in household
hrs1 Hours R worked last week
hunt R or spouse hunts
hunt1 R's spouse or partner hunts
if16who Vote choice in 2016 counterfactual
if20who Vote choice in 2020 counterfactual
ifwrong People should support their country
immameco Immigrants are good for the economy
immassim Immigrants should assimilate
immcrime Immigrants increase crime
immfate Treatment of undocumented immigrants

immideas1 Immigrants bring new ideas and cultures
immjobs Immigrants take jobs from natives
immwlfare Prefer natives over immigrants for benefits
imports Support for limiting imports into the United States
incgap1 Government responsibility to reduce inequality
income Total family income
indus10 Industry code, 2010 classification
intlincs International companies harm local business
jobfind Could find equally good job
joblose Likely to lose job
kidssol Children's standard of living compared to R
knwpatnt Knows someone seeing mental health professional
leftrght Left-right political self-placement
letdie1 Allow incurable patients to die
letin1 Number of immigrants allowed into the United States
letinasn Support for increasing immigration from Asia
letinhsa Support for increasing immigration from Latin America
libath Allow anti-religious book in library
libcom Allow Communist book in library
libmslm Allow anti-American Muslim cleric book in library
librac Allow racist book in library
life Life exciting or dull
liveblks Neighborhood is half Black
lkelyvot Likelihood of voting in 2024
localnum Number of employees at R's work site
major1 College major
marasian Approve close relative marrying Asian person
marblk Approve close relative marrying Black person
marcohab Cohabitation status
marhisp Approve close relative marrying Hispanic person
marital Current marital status
marsame Same-sex couples' right to marry
martype Marital type classification
marwht Approve close relative marrying White person
meovrwrk Men harm family when focused too much on work
mode Interview mode
nataid Federal spending on foreign aid

natarms Federal spending on military and defense
natchld Federal spending on childcare assistance
natcity Federal spending on solving problems of big cities
natcrime Federal spending on halting rising crime
natdrug Federal spending on dealing with drug addiction
nateduc Federal spending on improving education system
natenrgy Federal spending on developing alternative energy
natenvir Federal spending on protecting the environment
natfare Federal spending on welfare
natheal Federal spending on protecting national health
natrace Federal spending on improving conditions of Black people
natroad Federal spending on highways and bridges
natsci Federal spending on scientific research
natsoc Federal spending on Social Security
natspac Federal spending on space exploration
news Frequency of reading newspaper
noathome Missed family occasion for work
nonurse Unable to care for sick child or relative
norelgsp No religion identification
notsmart R treated as not smart
obey Importance for children to be obedient
obeylaws Importance of always obeying laws
occ10 Census occupation code, 2010 classification
oppsegov Importance of civil disobedience
othlang Speaks language other than English or Spanish
othlang1 Other language spoken, first response
owndecns Each nation should have its own country
owngun Has gun in home
parborn Whether parents were born in United States
parsol Living standard compared to parents
partfull Works full time or part time
partyid Political party affiliation
paytaxes Importance of never evading taxes
phone Has telephone
pillok Birth control for teenagers age 14 to 16
pistol Pistol or revolver in home
polabuse Approve police verbal abuse

polattak Approve police physical attack
poleff11 R has no say in government
poleff18 Government does not care what people think
polescap Approve police preventing escape
polhitok Approve police striking suspect
polintrst Interest in election campaigns
polmurdr Approve police questioning murder suspect
polnews Use media for political news
polopts Importance of citizen participation
poltalk Politicians talk too much
polviews Liberal-conservative self-placement
poorserv R received poorer service in stores or restaurants
popular Importance for children to be popular
pornlaw Pornography laws
posslq Has marital partner
postlife Belief in life after death
pray Frequency of prayer
prayer Bible prayer in public schools
premarsx Sex before marriage
pres16 Presidential vote recall, 2016
pres20 Presidential vote recall, 2020
prestg10 Occupational prestige score, 2010
prestg105plus Occupational prestige score, threshold method, 2010
preteen Number of children age 6 to 12 in household
proudart Pride in American arts and literature
prouddem Pride in how American democracy works
proudeco Pride in American economic achievements
proudhis Pride in American history
proudpol Pride in American political influence worldwide
proudspt Pride in American achievements in sports
racdif1 Black-white inequality due to discrimination
racdif2 Black-white inequality due to inborn ability
racdif3 Black-white inequality due to lack of education
racdif4 Black-white inequality due to lack of effort
racdif5 Black-white inequality due to upbringing
race R's race
raclive Opposite race in neighborhood

racopen Support for open housing law
rank Self-ranking in society
ratechall124 Donald Trump feeling rating
ratechall1ts Challenger one time-series rating
ratechall224 Kamala Harris feeling rating
ratechall2ts Challenger two time-series rating
ratechall324 Nikki Haley feeling rating
ratechall3ts Challenger three time-series rating
ratedemp Democratic Party feeling rating
rateincumb24 Joe Biden feeling rating
rateincumbts Incumbent time-series rating
ratemaga MAGA Republicans feeling rating
raterepp Republican Party feeling rating
realinc Family income in constant dollars
realrinc R's income in constant dollars
reborn Born again experience
refmorwk Would take additional paid work
refpromo Would refuse job promotion
region Region of interview
relactiv Participation in religious activities
relig Religious preference
religinf Religion has too much influence in politics
reliten Strength of religious affiliation
relpersn Self-identified as religious person
reltrad Religious tradition classification
rightsmin Government should protect minority rights
richwork If rich, would continue working
rifle Rifle in home
rincome R's income
rowngun Gun belongs to R
rplace R's relationship to household head
satdemoc Satisfaction with democracy in America
satfin Satisfaction with financial situation
satjob Satisfaction with job
sei10 Occupational socioeconomic index, 2010
sei10educ Percent with some college in R's occupation
sei10inc Percent with high income in R's occupation

servpub Public service serves people
sex R's sex
sexbirth1 Sex assigned at birth
sexeduc Sex education in public schools
sexnow2 Current gender identity
sexornt Self-identified sexual orientation
shotgun Shotgun in home
sibs Number of siblings
smedia Impact of social media exposure
socbar Evening at bar
socfrend Evening with friends
socommun Evening with neighbors
socrel Evening with relatives
solok Importance of adequate standard of living
spaneng Interview conducted in Spanish or English
spanking Favor spanking
spkath Allow anti-religionist to speak
spkcom Allow Communist to speak
spklang How well R speaks other language
spkmslm Allow Muslim cleric preaching hatred to speak
spkrac Allow racist to speak
suicide1 Suicide if incurable disease
suicide2 Suicide if bankrupt
suicide4 Suicide if tired of living
svyenjoy Enjoy taking surveys
tax Federal income tax
teens Number of children age 13 to 17 in household
teensex Teen sex age 14 to 16
thnkself Importance for children to think for themselves
threaten R threatened or harassed
trust People can be trusted
tvhours Hours watching television per day
unemp Unemployed in last ten years
union R or spouse is a labor union member
union1 R's spouse or partner is a labor union member
unrelat Number of unrelated people in household
usmca1 Familiarity with USMCA

usmca2 Belief that United States benefits from USMCA
vetyears Years R served in the armed forces
visitors Number of visitors in household
vote16 Voted in 2016 election
vote20 Voted in 2020 election
voteprob Voting problems in US elections
watchgov Importance of keeping watch on government
weekswrk Weeks R worked last year
whovote24 Presidential vote intention, 2024 pre July 25
whovote24a Presidential vote intention, 2024 post July 25
whovotets Presidential vote intention, time series
widowed Ever widowed
wlthblks Stereotype of Blacks as rich or poor
wlthhsps Stereotype of Hispanics as rich or poor
wlthwhts Stereotype of whites as rich or poor
wordsum Vocabulary test score
workblks Stereotype of Blacks as hard working or lazy
workhard Importance for children to work hard
workhsps Stereotype of Hispanics as hard working or lazy
workless Cut back on work
workwhts Stereotype of whites as hard working or lazy
wrkgovt1 R works for government
wrkgovt2 R works for a private employer
wrkself Self-employed or works for someone else
wrkstat Labor force status
wrkwayup Belief that Blacks can overcome prejudice without favors
wrldgovt International bodies should enforce environmental rules
wtssnrps Post-stratification weight, adjusted
wtssps Post-stratification weight
xmarsex Sex with someone other than spouse
xmovie Watched adult movie last year
xnorcsiz Expanded NORC size code
volunteer_assign Volunteer response assignment
ab_index Number of abortion-access circumstances supported, 0 to 7
suicide_index Number of circumstances where person has right to suicide, 0 to 3
natspend_index Support for national spending index, -17 to +17
social_index Social activity index, 0 to 24

police_force_index Number of circumstances justifying police striking citizen, 0 to 5
discrim_exp_index Discrimination experience index, 0 to 25
con_inst_index Confidence in institutions index, 0 to 26
speech_tol_index Free speech tolerance index, 0 to 12
partyid7 Political party affiliation, 7 categories
partyid3 Political party affiliation, 3 categories

Source

General Social Survey, 2024. See Appendix of printed textbook for further information.

helpC	<i>Interactive helper for RCPA4 documentation, examples, resources, plotting references, and settings</i>
-------	---

Description

Opens an interactive menu with these top-level options:

1. **Show help file for RCPA4 function.** Select a core RCPA4 function and display its help file.
2. **Explore RCPA4 datasets and variables.** Select an RCPA4 dataset, display its help file, and browse its variables.
3. **Show an example.** Select a core RCPA4 function and run its documented example.
4. **Help with plots.** Open color, line-type, and plotting-character references, or check graphics support.
5. **Find data.** Browse datasets in installed packages or open online sources of political data.
6. **Change RCPA4 package settings.** Adjust RCPA4.verbose, RCPA4.slow, and RCPA4.pause_seconds.
7. **Clean working environment.** List workspace objects and show commands users can run themselves to remove one, several, or all non-hidden objects.
8. **Reset graphical parameters.** Close the active graphics device so later plots use default settings.
9. **Browse chapter resources.** Open the supplemental web resources for Getting Started, Chapters 1-15, or Advanced Topics.

Usage

```
helpC(option = NULL)
```

Arguments

option (Optional) A top-level menu choice from 1 to 9 to run first. For example, helpC(5) opens the "Find data" submenu directly.

Value

Invisibly returns NULL.

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to `TRUE`. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

The `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Interactive menu output

The settings menu at `helpC(6)` displays effective session preferences, using package defaults for unset options. Viewing and exiting the menu does not change options. Preferences change only when you select a settings action. The `helpC()` menu and prompts remain visible when `RCPA4.verbose = FALSE`. Result-table controls are documented separately in each analysis function's help page.

Workspace cleanup

Option 7 lists non-hidden objects in the global environment and displays `rm(object_name)`, `rm(obj1_name, obj2_name)`, and `rm(list = ls())` as commands to run at the R console. Replace the placeholder names with your object names. `rm(list = ls())` removes all non-hidden objects in the current environment. The menu itself does not remove or modify any workspace objects.

Loading installed datasets

In option 5, the installed-package dataset browser displays dataset help and a `utils::data()` command to run at the R console. The browser does not load the selected dataset or modify workspace objects. For entries such as `beaver1` (`beavers`), the command uses the dataset name in parentheses.

Examples

```
if(interactive()){
  helpC()
  helpC(5)
}
```

histC

Creates histogram to show distribution of interval (numeric) variable's values

Description

Generates frequency distribution table of binned values and a histogram to describe distribution of variable values.

Usage

```
histC(x, w = NULL, data = NULL, breaks = "Sturges", digits = 2,
      printC = FALSE, plot = TRUE, main = NULL, xlab = NULL,
      ylab = "Frequency", bar.col = "gray80", table = TRUE, ...)
```

Arguments

<code>x</code>	The variable to be analyzed. If dataset not specified with <code>data</code> argument, should be a vector in form <code>dataset\$var</code> .
<code>w</code>	(Optional) Sample weights (must be numeric if used), If dataset not specified with <code>data</code> argument, should be in form <code>dataset\$weighvar</code>
<code>data</code>	(Optional) Name of dataset that contains <code>x</code> (and <code>w</code>) variable.
<code>breaks</code>	(Optional) Specify how to break the <code>x</code> variable into bins. Options include the number of breaks, a vector specifying the breakpoints, or the name of an algorithm that generates breakpoints. Default value is "Sturges" (other algorithms are "Scott" and "FD").
<code>digits</code>	(Optional) Number of digits to display after decimal points (default is 2).
<code>printC</code>	(Optional) Do you want the histogram and binned frequencies table printed to working directory? (default: FALSE)
<code>plot</code>	(Optional) Do you want the histogram graphic? (default: TRUE)
<code>main</code>	(Optional) Customize main title for histogram.
<code>xlab</code>	(Optional) Custom label for x-axis of histogram.
<code>ylab</code>	(Optional) Custom label for y-axis of histogram.
<code>bar.col</code>	(Optional) Color for histogram bars; default is "gray80".
<code>table</code>	(Optional) Do you want the binned frequency table reported? (default: TRUE)
<code>...</code>	(Optional) Additional arguments passed to the internal <code>wtd</code> histogram helper.

Value

A frequency distribution table of binned `x` variable values.

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to TRUE. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

The `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Result tables

The `table` argument controls display of the main result tables separately from headings and informational messages. Set `table = FALSE` to omit those tables from console output and HTML output. See the Value section for the results returned by this function and how to save them for further use. The `printC` argument controls HTML output; `printC = FALSE` does not suppress console tables. Turning off tables does not turn off plots.

Table and plot requirements

At least one of table or plot must be enabled. When using table = FALSE, keep a valid plot enabled.

RCPA4 Package Tutorial Videos

- [Generate Histograms with RCPA4 PACKages's histC Function](#)
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapter 2.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), pp. 39-55. ISBN-13: 978-1506379616; ISBN-10: 150637961.

Online Resources

- [R Tutorials & Resources for Descriptive Statistics](#), Compiled by Barry C. Edwards
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#): Find datasets for your own research and resources to help with the analysis.

Examples

```
library(RCPA4)

histC(x=states$covid_cases_per1000)
```

logregC

Logistic regression analysis with options for weighted observations, odds ratio reports, model fit statistics, and plots of residuals

Description

Logistic regression analysis function with many useful features. Its standard output includes a table of coefficients, table of deviance residuals, and table of estimation information. Options include weighting observations, additional reports on odds ratios, ANOVA, classification table, multiple measures of model fit (including Lambda PRE), and diagnostic plots of residuals.

Usage

```
logregC(formula, w = NULL, data = NULL, digits = 3, orci = FALSE,
  fit.stats = FALSE, anova = FALSE, classify = FALSE, printC = FALSE,
  plot.res = FALSE, table = TRUE, simple.factors = TRUE, ...)
```

Arguments

<code>formula</code>	should be in <code>dataset\$dv ~ dataset\$iv1 + dataset\$iv2</code> unless dataset specified in optional data argument.
<code>w</code>	(Optional) Sampling weights of variable, must be numeric; should be in <code>dataset\$weightvar</code> form unless dataset specified in optional data argument.
<code>data</code>	(Optional) Name of dataset that contains dv, iv (and w) variables.
<code>digits</code>	(Optional) Number of decimal places reported in result (defaults to 3).
<code>orci</code>	(Optional) Do you want table reporting odds ratios for coefficients with confidence intervals? (default: FALSE)
<code>fit.stats</code>	(Optional) Do you want a table of assorted model fit statistics? (default: FALSE)
<code>anova</code>	(Optional) Do you want ANOVA table reported? (default: FALSE)
<code>classify</code>	(Optional) Do you want a classification table (observed vs predicted outcomes)? (default: FALSE)
<code>printC</code>	(Optional) Do you want results printed to .html file in your working directory? Default is FALSE. Set to TRUE to print results.
<code>plot.res</code>	(Optional) Do you want a set of diagnostic plots of model residuals? (default: FALSE)
<code>table</code>	(Optional) Do you want logistic regression result tables reported? (default: TRUE)
<code>simple.factors</code>	(Optional) Treat ordered factors like regular factors in regression models? Default is TRUE. Set to FALSE to use R's current contrast setting for ordered factors.
<code>...</code>	(Optional) Additional arguments passed to <code>glm</code> function (unweighted models) or <code>svyglm</code> function (weighted models).

Value

Returns an augmented glm (unweighted models) or svyglm (weighted models) object. The primary model object is unchanged for standard methods (for example `predict`, `coef`, `summary`), and auxiliary result tables are available via `[[` (for example `fit[["model_fit_table"]]`).

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to TRUE. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

The `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Result tables

The `table` argument controls display of the main result tables separately from headings and informational messages. Set `table = FALSE` to omit those tables from console output and HTML output. See the Value section for the results returned by this function and how to save them for further use.

The `printC` argument controls HTML output; `printC = FALSE` does not suppress console tables. Turning off tables does not turn off plots.

RCPA4 Package Tutorial Videos

- [Logistic Regression Analysis with RCPA4 Package's logregC Function](#) 13:36
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapter 14.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), Chapter 9. ISBN-13: 978-1506379616; ISBN-10: 150637961.

Online Resources

- [R Tutorials & Resources for Logistic Regression](#), compiled by Barry C. Edwards
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#): Find datasets for your own research and resources to help with the analysis.

Examples

```
library(RCPA4)

# basic usage with variable vectors
logregC(states$battleground2020 ~ states$vep20_turnout)

# with post-estimation analysis
logregC(states$battleground2020 ~ states$vep20_turnout, orci=TRUE, fit.stats=TRUE,
        anova=TRUE, classify=TRUE, plot.res=TRUE)

logregC(anes$has_children=="Yes" ~ anes$gender_s_sex + anes$r_age_election_day,
        w=anes$wt)
```

`printC`

Prints table of results to a .html file in local working directory

Description

Prints table or summary of results to a .html file in local working directory. Converting Console format tables to .html tables helps users quickly create publication- and presentation-ready tables. The .html file's name is displayed as Console message. Current date added to Table.Output.html file name to keep output organized. You can print output directly from Companion functions using printC=TRUE argument (where available).

Usage

```
printC(objx, file = NULL)
```

Arguments

objx	A table or data frame. The table must be html-ready, not all Console output is organized in tables. If objx is not a html-ready table, printC will write it as preformatted text to the .html file in the working directory.
file	(Optional) The path/file name for .html output. If not specified, function will output to .html file in your working directory.

Value

Invisibly returns append metadata used by internal block printers. The formatted objx is outputted to a .html file in working directory.

RCPA4 Package Tutorial Videos

- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook Reference

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapter 1.

Examples

```
library(RCPA4)

example.table <- freqC(x=world$vdem_4cat, plot=FALSE)
# running printC will generate a .html file in your working directory

printC(example.table, file=tempfile(fileext = ".html"))
```

random.names	<i>Backward-compatible alias for random_names().</i>
--------------	--

Description

Backward-compatible alias for random_names().

Usage

```
random.names(n)
```

Arguments

n	The number of random surnames to be generated.
---	--

Value

A vector of surnames.

regC	<i>Linear regression analysis (OLS regression), with options for weighted observations, diagnostic tests, and plots of residuals</i>
------	--

Description

Linear regression analysis function with many useful features. Standard output of results includes table of coefficients, table of residuals, and additional model information. Options for weighting observations, analysis of variance (ANOVA), performing post-estimation diagnostic tests, including testing normality of residuals and constant variance, and generating diagnostic plots of residuals.

Usage

```
regC(formula, w = NULL, data = NULL, digits = 3, anova = FALSE,
      norm.test = FALSE, ncv.test = FALSE, linear.test = FALSE,
      reset.test = FALSE, outlier.test = FALSE, vif = FALSE,
      printC = FALSE, plot.res = FALSE, table = TRUE,
      simple.factors = TRUE, ...)
```

Arguments

formula	should be in dataset\$dv ~ dataset\$iv1 + dataset\$iv2 unless dataset specified in optional data argument. If weights are specified using w argument, the formula cannot contain functions or logical statements (all variables in the function must be named in the dataset).
w	(Optional) Sampling weights of variable, must be numeric; should be in dataset\$weightvar form unless dataset specified in optional data argument.

<code>data</code>	(Optional) Name of dataset that contains dv, iv (and w) variables.
<code>digits</code>	(Optional) Number of decimal places reported in result (defaults to 3).
<code>anova</code>	(Optional) Do you want ANOVA table reporting F-test for all predictors? (default: FALSE)
<code>norm.test</code>	(Optional) Test assumption that regression residuals follow normal distribution (default: FALSE)
<code>ncv.test</code>	(Optional) Test assumption that regression residuals have constant variance (default: FALSE)
<code>linear.test</code>	(Optional) Report results of linearity test? (default: FALSE)
<code>reset.test</code>	(Optional) Report results of model specification test? (default: FALSE)
<code>outlier.test</code>	(Optional) Test whether outlier observations have outsized leverage on results (default: FALSE)
<code>vif</code>	(Optional) Report variance inflation factors to assess multicollinearity? (default: FALSE)
<code>printC</code>	(Optional) Do you want to print tables of results (and residuals plots if <code>plot.res=TRUE</code>) to .html file in working directory? (default: FALSE)
<code>plot.res</code>	(Optional)
<code>table</code>	(Optional) Do you want regression result tables reported? (default: TRUE)
<code>simple.factors</code>	(Optional) Treat ordered factors like regular factors in regression models? Default is TRUE. Set to FALSE to use R's current contrast setting for ordered factors.
<code>...</code>	(Optional) Additional arguments passed to lm function (unweighted models) or svyglm function (weighted models).

Value

Returns an augmented `lm` or `svyglm` object. The primary model object is unchanged for standard methods (for example `residuals`, `coef`, `predict`), and auxiliary result tables are available via `[[` (for example `fit[["model_fit_table"]]`).

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to TRUE. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

The `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Result tables

The `table` argument controls display of the main result tables separately from headings and informational messages. Set `table = FALSE` to omit those tables from console output and HTML output. See the Value section for the results returned by this function and how to save them for further use. The `printC` argument controls HTML output; `printC = FALSE` does not suppress console tables. Turning off tables does not turn off plots.

RCPA4 Package Tutorial Videos

- [Bivariate Regression Analysis with RCPA4 Package's regC Function](#) 10:31
- [Multiple Regression Analysis with RCPA4 Package's regC Function](#) 14:55
- [Analyzing Regression Residuals with RCPA4 Package's regC Function](#) 12:41
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapters 11, 12, 13.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), pp. 244-271. ISBN-13: 978-1506379616; ISBN-10: 150637961.

Online Resources

- [R Tutorials & Resources for Correlation and Bivariate Regression, Multiple Regression, and Analyzing Regression Residuals](#), compiled by Barry C. Edwards.
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#): Find datasets for your own research and resources to help with the analysis.

Examples

```
library(RCPA4)

# basic usage
regC(states$vep20_turnout ~ states$hs_or_more)

# with w and data arguments
regC(anes$ft_labor_unions ~ anes$ft_dem_party, w=anes$wt)

# multiple IV with some post-estimation tests
regC(peace_index ~ vdem_edu_score + hdi, data=world, norm.test=TRUE, nc.v.test=TRUE)
```

sampdistC

Plots probability and cumulative density functions (PDFs and CDFs) of sample statistics

Description

Visualize expected sampling distributions for sample statistics. You can plot the probability and cumulative density functions for statistics based on either the normal distribution or a t-distribution. The `sampdistC` function also generates the confidence interval (default 95%) for a sample statistic which is useful for obtaining the CI of a summary statistic (when you're not estimating it from the dataset yourself).

Usage

```
sampdistC(stat, se, t.df = NULL, plot.cdf = FALSE, ci = 95, digits = 3,
  printC = FALSE, table = TRUE)
```

Arguments

<code>stat</code>	A numeric statistic, the point estimate of a parameter based on a sample of observations, like a sample mean or a sample proportion.
<code>se</code>	The standard error of the statistic, must be a positive number.
<code>t.df</code>	(Optional) If critical values for sampling distribution should be based on t-distribution (generally true when statistic is a mean), set <code>t.df</code> to the number of degrees of freedom (typically <code>n-1</code>).
<code>plot.cdf</code>	(Optional) Do you want to plot the cumulative density function? Default = FALSE (for probability density function).
<code>ci</code>	(Optional) Specify desired confidence level for confidence interval as a percentage. Set <code>ci=FALSE</code> to suppress CI table (default: 95)
<code>digits</code>	(Optional) Number of digits after decimal to display in CI table (default: 3)
<code>printC</code>	(Optional) Do you want to sampling distribution plot to .html file in working directory? (default: FALSE)
<code>table</code>	(Optional) Do you want the confidence interval table reported when <code>ci</code> is used? (default: TRUE)

Value

Invisibly returns a data frame (`sampdistC_result`) containing the CI table when `ci` is requested. If `ci=FALSE`, returns an empty CI-shaped data frame and stores `ci_table=NULL` in auxiliary metadata.

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to TRUE. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

The `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Result tables

The `table` argument controls display of the main result tables separately from headings and informational messages. Set `table = FALSE` to omit those tables from console output and HTML output. See the `Value` section for the results returned by this function and how to save them for further use. The `printC` argument controls HTML output; `printC = FALSE` does not suppress console tables. Turning off tables does not turn off plots.

RCPA4 Package Tutorial Videos

- [Viewing Sampling Distributions with RCPA4's sampdistC Function](#) 21:51
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapter 8.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), Chapter 6. ISBN-13: 978-1506379616; ISBN-10: 1506379611.

Online Resources

- [R Tutorials & Resources for Foundations of Inference](#), Compiled by Barry C. Edwards
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#): Find datasets for your own research and resources to help with the analysis.

Examples

```
library(RCPA4)

sampdistC(stat=10, se=1)

# based on normal distributions
sampdistC(stat=10, se=1, plot.cdf=TRUE)

# based on t-distribution with 15 degrees of freedom
sampdistC(stat=8, se=2, t.df=15)
sampdistC(stat=8, se=2, t.df=15, plot.cdf=TRUE)
```

sortC	<i>Sorts dataset observations by user-defined criteria to return case-level information</i>
-------	---

Description

Returns case-level information in order specified by user. You can sort by additional criteria to break ties. Useful for learning about units of analysis and selecting cases for qualitative research designs.

Usage

```
sortC(id, by, data = NULL, thenby = NULL, descending = TRUE,
      limit = NULL, digits = 3, confirm = TRUE, printC = FALSE,
      table = TRUE)
```

Arguments

<code>id</code>	A variable in the dataset (<code>data</code>) that identifies individual cases, typically the name of states, countries, etc.
<code>by</code>	Variable the cases should be sorted by.
<code>data</code>	(Optional) Dataset to be sorted.
<code>thenby</code>	(Optional) Criteria for sorting cases after sorting with the "by" variable. Useful if many cases tied on first criteria.
<code>descending</code>	(Optional) Should the cases be sorted in descending order? By default, set to TRUE. When sorting ordered factors, check that the levels higher numerically correspond to the sort order you have in mind.
<code>limit</code>	(Optional) The number of rows to report. If there are many observations to be sorted, you may want to limit output to 5, 10, etc. rows.
<code>digits</code>	(Optional) Number of decimal places reported in result (default: 3).
<code>confirm</code>	(Optional) If function is going to return long table of results (more than 20 rows), you'll be asked for confirmation (use <code>confirm=F</code> to bypass).
<code>printC</code>	(Optional) Do you want to print table of sorted observations to to .html file in working directory? (default: FALSE)
<code>table</code>	(Optional) Display the sorted-observations table? Defaults to TRUE. Set to FALSE to skip the table, its heading, confirmation prompt, and HTML export, while still returning the results invisibly.

Value

Invisibly returns a data frame of sorted observations, limited to `limit` rows when supplied, including when `table = FALSE`. Assign the function call to an object to store the results.

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to `TRUE`. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

The `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Result tables

The `table` argument controls display of the main result tables separately from headings and informational messages. Set `table = FALSE` to omit those tables from console output and HTML output. See the `Value` section for the results returned by this function and how to save them for further use. The `printC` argument controls HTML output; `printC = FALSE` does not suppress console tables. Turning off tables does not turn off plots.

Returning results without display

With `table = FALSE`, the table and its heading are omitted, the long-table confirmation prompt is skipped, and no HTML output is written, even if `printC = TRUE`. The `limit` argument still controls the number of rows returned. With `table = TRUE`, use `confirm = FALSE` to bypass confirmation for a long table. Informational messages remain controlled separately by `suppressMessages()`.

RCPA4 Package Tutorial Videos

- [Sort and View Case-Level Information with the sortC Function](#) 12:22
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapters 2, 6.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), pp. 122-123. ISBN-13: 978-1506379616; ISBN-10: 150637961.

Online Resources

- [R Tutorials & Resources for Descriptive Statistics](#), compiled by Barry C. Edwards
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#): Find datasets for your own research and resources to help with the analysis.

Examples

```
library(RCPA4)

# basic usage
sortC(id=states$state, by=states$volunteer_hrs_pc, limit=10, confirm=FALSE)

# store sorted results without displaying the table
sorted <- sortC(id=states$state, by=states$volunteer_hrs_pc, table=FALSE)

# options to limit results and sort in ascending order
sortC(id=country, by=gini_index, descending=FALSE, limit=10, data=world)

# sort by and thenby
sortC(id=country, by=vdem_4cat, thenby=gini_index, descending=c(FALSE, FALSE),
      data=world, confirm=FALSE)
sortC(id=country, by=vdem_4cat, thenby=gini_index, descending=c(FALSE, TRUE),
      data=world, confirm=FALSE)
```

states

States dataset for R Companion to Political Analysis, Fourth Edition

Description

A dataset with variables about the 50 states. This dataset is used to demonstrate application of R to political analysis. See book Appendix for variable names and descriptions.

Format

A data frame with 50 rows and 186 variables.

abortion_ban Total abortion ban according to Guttmacher Institute as of July 1, 2026 (1 = yes, 0 = no)

abortion_legal Percentage saying abortion should be legal in all or most cases (PRRI 2025)

abortion_rate Abortion rate per 1,000 women ages 15-44 (2025)

abortlaws_7cat Level of abortion restriction or protection by state (Guttmacher Institute, as of July 1, 2026)

adv_or_more Percentage age 25 or older with a graduate or professional degree (2024 ACS, table B15003)

alcohol Apparent alcohol consumption in gallons of ethanol per resident age 14 or older (2023)

assault_ban_support Percentage supporting a ban on assault-style rifles (CES 2024)

attend_weekly Percentage attending religious services weekly or more (PRRI 2025)

ba_or_more Percentage age 25 or older with at least a bachelor's degree (2024 ACS, table B15003)

ballots24_total Total ballots counted in the 2024 general election (UF Election Lab)

battleground2020 Battleground in 2020? (Cook Political Report)

battleground2024 Presidential battleground state in 2024 (Ballotpedia; 1 = yes, 0 = no)

biden2020 Biden two-party vote percentage in 2020 election

black_percent Percentage Black alone and not Hispanic or Latino (2024 ACS, table B03002)

broadband Percentage of households with a broadband internet subscription of any type (2024 ACS, table B28002)

carfatal Motor-vehicle traffic fatalities per 100,000 population (2024)

carry_easier_support Percentage supporting making concealed carry easier (CES 2024)

cellular_only Percentage of households with only a cellular data internet subscription (2024 ACS, table B28002)

charitable_giving_pc Tax-reported charitable contributions per resident (2022)

christian_dominion Agreement that Christians should exercise dominion over U.S. society (percent; PRRI 2025)

christian_foundations Agreement that America depends on its Christian foundations (percent; PRRI 2025)

christian_identity Percentage agreeing being Christian is an important part of being truly American (PRRI 2025)

christian_laws Percentage agreeing U.S. laws should be based on Christian values (PRRI 2025)

christian_nation Percentage agreeing the U.S. government should declare America a Christian nation (PRRI 2025)

cig_tax State cigarette excise tax per pack (July 1, 2025)

cig_tax_3cat State cigarette excise tax category based on July 1, 2025 KFF rates

cigarettes Packs smoked bimonthly per adult (2003)

climate_policies Number of state climate policies enacted (State Climate Policy Dashboard snapshot, July 10, 2026)

cn_support Percentage classified as Christian nationalism Adherents or Sympathizers (PRRI 2025)

cong119_demshare Democratic percentage of state's 119th Congress delegation at opening (2025)

cook_pvi_scores Cook PVI score (2025; positive = Republican)

corporal_punishment_banned Corporal punishment prohibited in public schools (November 2024; 1 = yes, 0 = no)

corrections_incarc_rate Incarcerated population per 100,000 residents (2024)

corrections_total_rate Population under correctional control per 100,000 residents (2026)

covid_cases_per1000 Cumulative reported COVID-19 cases per 1,000 population through May 10, 2023

covid_deaths_per1000 Cumulative reported COVID-19 deaths per 1,000 population through May 10, 2023

covid_response_max Maximum COVID-19 response stringency index (2020-21)

covid_response_mean Mean COVID-19 response stringency index (2020-21)

covid_vaccinated Percentage completing the original COVID-19 primary vaccination series (May 10, 2023)

crime_rate_burglary Burglary offenses per 100,000 residents (FBI via USAFacts, 2024)

crime_rate_murder Murder and non-negligent manslaughter offenses per 100,000 residents (FBI via USAFacts, 2024)

crime_rate_overall Violent plus property crime offenses per 100,000 residents (FBI via USAFacts, 2024)

crime_rate_property Property crime offenses per 100,000 residents (FBI via USAFacts, 2024)

crime_rate_violent Violent crime offenses per 100,000 residents (FBI via USAFacts, 2024)

deathpen_status Does state retain the death penalty? Current as of 2025. From Death Penalty Information Center

defense_expend Federal defense expenditures per capita (FY2024)

democracy_5cat Five-category MAP Democracy Overall Policy classification (December 1, 2025)

democracy_score MAP Democracy Overall Policy Score (December 1, 2025)

density Population per square mile (2024 ACS B01001; 2020 Census TIGER/Line)

diabetes_death_rate Diabetes death rate per 100,000 population (KFF State Health Facts, 2024)

direct_democracy_tools Number of statewide direct-democracy tools available (2025)

division Census division (9 different regions of country)

drug_death_rate Age-adjusted drug overdose deaths per 100,000 residents (2024)

dv_survivor_protections Employment protections for domestic-violence survivors (0-4; 2024)

earmarks_pcap Federal earmarks per capita (FY2026)

energy_efficiency_score ACEEE state energy-efficiency score (2025)

fairpoor_health Adults reporting fair or poor health (percent; 2024)

felon_ineligible24 People ineligible to vote because of felony rules (2024)

firearm_death_rate Firearm death rate per 100,000 population (KFF State Health Facts, 2024)

foreign_born Percentage born outside the United States (2024 ACS, table B05012)

giffords_grade GIFFORDS gun law strength letter grade (2025)

giffords_rank GIFFORDS gun law strength rank (2025; 1 = strongest laws)

gini Gini index of income inequality (2024 ACS, table B19083)

government_workers Percentage of employed civilians working for local, state, or federal government (2024 ACS)

governor_party Governor's party: D = Democratic or R = Republican (NCSL 2026)

gun_dealers Active firearm dealers per 100,000 residents (March 2026)

gun_deaths_100k Age-adjusted firearm death rate per 100,000 population (2024)

gun_law_strength Everytown Gun Law Strength score (2026)

gun_murders Age-adjusted firearm homicide death rate per 100,000 population (2024)

gun_ownership Estimated percentage of adults living in a household with a firearm (2016)

gunsammo_rank Ammo.com ranking of states for gun owners (2026; 1 = most gun-friendly)

harris2024 Kamala Harris two-party vote percentage in 2024 election

hh_income Median household income in 2024 inflation-adjusted dollars (2024 ACS, table B19013)

hispanic_percent Percentage Hispanic or Latino of any race (2024 ACS, table B03002)

homeless_per_10k People experiencing homelessness per 10,000 residents (January 2024)

homeownership Percentage of occupied housing units that are owner-occupied (2024 ACS, table B25003)

homeschool_percent Percentage of K-12 students homeschooled (2023-24 estimate)

hs_or_more Adults age 25+ with a high school credential (percent; 2024)

income_percapita Per capita income in 2024 inflation-adjusted dollars

infant_mortality Infant deaths per 1,000 live births (KFF State Health Facts, 2023 vital statistics; Vermont 2022)

judge_selection Primary method for selecting justices of the state's court of last resort (2026)

judges_elected State high-court justices selected by contested election (1 = yes)

labor_force_percent Percentage age 16 or older in the labor force (2024 ACS, table B23025)

land_area State land area in square miles (2020 Census TIGER/Line state boundaries)

leg_dem_seats Total Democratic legislative seats across both chambers (NCSL 2026 partisan composition)

leg_other_seats Other-party or nonpartisan legislative seats (2026)

leg_rep_seats Total Republican legislative seats across both chambers (NCSL 2026 partisan composition)

lgbtq_equality_5cat Five-category MAP LGBTQ Equality Overall Policy classification (December 1, 2025)

lgbtq_equality_score MAP LGBTQ Equality Overall Policy Score (December 1, 2025)

lgbtq_nondiscrim Percentage favoring laws protecting LGBTQ people from discrimination (PRRI 2025)

life_expectancy Life expectancy at birth in years (KFF State Health Facts using NCHS state life tables, 2022)

marijuana_legal_status State marijuana legal status (2025-2026)

median_age Median age of the state population (2024 ACS, table B01002)

median_gross_rent Median monthly gross rent in dollars (2024 ACS, table B25064)

median_home_value Median value of owner-occupied housing units in dollars (2024 ACS, table B25077)

medicaid_expansion State adopted ACA Medicaid expansion (1 = adopted, 0 = not adopted; KFF tracker, May 2026)

minimum_wage State minimum wage as of July 1, 2026

ncaj_attorney_access NCAJ Attorney Access Index score (2021)

ncaj_consumer_debt NCAJ Consumer Debt Litigation Index score (2024)

ncaj_disability_access NCAJ Disability Access Index score (2021)

ncaj_fines_fees NCAJ Fines and Fees Index score (2022)

ncaj_justice_index National Center for Access to Justice overall Justice Index score (updated 2024)

ncaj_language_access NCAJ Language Access Index score (2021)

ncaj_self_representation NCAJ Self-Representation Access Index score (2021)

no_internet Percentage of households with no internet access (2024 ACS, table B28002)

noncitizen24 Estimated percentage of the voting-age population that is noncitizen in 2024 (UF Election Lab)

obesity_percent Percentage of adults with BMI of 30 or higher (KFF State Health Facts, 2024 BRFSS; Tennessee 2023)

online_gambling Legal online gambling type (July 2026)

online_gambling_legal Percentage saying online gambling should be legal in all or most cases (PRRI 2025)

opioid_rx_rate Retail opioid prescriptions dispensed per 100 persons (2024)

over64 Percentage of the population age 65 or older (2024 ACS, table B01001)

pop_18_24 Percentage of the population ages 18 through 24 (2024 ACS, table B01001)

pop_18_44 Percentage of the population ages 18 through 44 (2024 ACS, table B01001)

population Total state population (2024 ACS, table B01001)

population_change Percentage increase/decrease in population from 2010 to 2020 (not annualized)

pot_policy Marijuana laws (as of June 2021). From the National Conference of State Legislatures

poverty_rate Percentage below the poverty level in the past 12 months (2024 ACS, table B17001)

preg_uninten_rate Unintended pregnancy rate per 1,000 women 15-44 (2010). From Guttmacher Institute

private_choice_programs Number of private-school-choice program types present (2024; 0-3)

prochoice_percent Adults saying abortion should be legal in all or most cases (percent; 2023-24)

protect_immigrants Protection of immigrants: ILRC immigration-enforcement score (2024)

public_transit Workers commuting by public transportation (percent; 2024)

region Census region (4 categories)

relig_import Adults saying religion is very important in their lives (percent; 2023-24)

religiosity Average Pew religiousness scale score (0-8; 2023-24)

religiosity_3cat Three-category Pew religiousness scale (2023-24)

religious_text_weekly Percentage reading religious texts weekly or more (PRRI 2025)

religious_unaffiliated Percentage religiously unaffiliated: atheist, agnostic, or nothing in particular (PRRI 2025)

rent_burdened Renters spending at least 30% of income on rent (percent; 2024)

renter_percent Percentage of occupied housing units that are renter-occupied (2024 ACS, table B25003)

right_to_work State has a right-to-work law (2026)

same_sex_marriage Percentage favoring legal same-sex marriage (PRRI 2025)

schools_avg_salary Average salary of public school teachers (2016). From the National Education Association

schools_spend Expenditure per student in average daily attendance (2017). From the National Education Association

schools_st_ratio Students enrolled per teacher (2016). From the National Education Association

smokers Age-adjusted percentage of adults who currently smoke cigarettes (2024; Tennessee 2023)

south Southern state?

speak_english_only Percentage age 5 or older speaking only English at home (2024 ACS, table S1601)

special_ed_funding_supports Special-education targeted funding-support index (0-3)

state State name

state_board_fully_elected State board of education fully elected (2026; 1 = yes, 0 = no)

state_control Unified state control: Democrat, Split, or Republican; Nebraska is missing (NCSL 2026)

state_govt_rank U.S. News & World Report 2025 Best States overall rank

state_preK_4yo_pct Percentage of four-year-olds enrolled in state-funded pre-K (2023-24)

state_preK_quality NIEER state pre-K quality standards score (2023-24; 0-10)

state_preK_spending_per_child State pre-K spending per enrolled child (2023-24 dollars)

stateid Two-letter postal abbreviation for state name

stateleg_black Percentage of state legislators identified as Black/African American (NCSL, spring 2023)

stateleg_dem Democratic share of filled state-legislative seats (percent; 2026)

stateleg_dem_margin Democratic seat percentage minus Republican seat percentage (NCSL 2026)

stateleg_hispanic Percentage of state legislators identified as Hispanic/Latino (NCSL, spring 2023)

stateleg_other Other-party share of filled state-legislative seats (percent; 2026)

stateleg_prof_rank Rank of state legislative professionalism based on the 2021 Squire Index

stateleg_prof_score Squire Index of state legislative professionalism (2021)

stateleg_rep Republican share of filled state-legislative seats (percent; 2026)

stateleg_women Percentage of state legislators who are women (NCSL Women in State Legislatures, 2025)

stateleg_women_count Number of women state legislators (NCSL Women in State Legislatures, 2025)

suicide_rate Age-adjusted suicide death rate per 100,000 population (2024)

tax_competitiveness Tax Foundation 2026 State Tax Competitiveness Index score

tax_source Largest source of combined state and local tax collections (FY2023)

teen_birth_rate Teen birth rate per 1,000 females ages 15-19 (2024)

term_limits Does the state currently limit state legislators' terms? (1 = yes, 0 = no; NCSL, 2026)

trump2020 Trump two-party vote percentage in 2020 election

trump2024 Donald Trump two-party vote percentage in 2024 election

turnout24_change20 Percentage-point change in VEP turnout from 2020 to 2024 (UF Election Lab)

turnout24_rank Rank among the 50 states by 2024 VEP turnout; 1 is highest (UF Election Lab)

under18 Percentage of the population under age 18 (2024 ACS, table B01001)

unemployment Percentage of the civilian labor force unemployed (2024 ACS, table B23025)

unified_control One party controls both legislative chambers and the governorship (1 = yes, 0 = no; NCSL 2026)

uninsured Population without health insurance (percent; 2024)

uninsured_0_64 Population ages 0-64 without health insurance (percent; 2024)

unionized Percentage of employed wage and salary workers who were union members (2025)

universal_school_meals Statewide universal free school breakfast and lunch (2025-26; 1 = yes, 0 = no)

unsheltered_homeless_pct Percentage of people experiencing homelessness who were unsheltered (January 2024)

urban Percentage of the state population living in urban areas (2020 Census, table P2)

vap24 Voting-age population in 2024 (UF Election Lab)

vap24_turnout 2024 general-election turnout as a percentage of the voting-age population (UF Election Lab)

vep20_turnout Voting-eligible population turnout (percent; 2020)

vep24 Voting-eligible population in 2024 (UF Election Lab)

vep24_turnout 2024 general-election turnout as a percentage of the voting-eligible population (UF Election Lab)

veteran_percent Percentage of the civilian population age 18 or older who are veterans (2024 ACS, table B21001)

volunteer_hrs_pc Estimated annual formal-volunteer hours per state resident age 16 or older (2023)

volunteer_rate Residents volunteering through an organization (percent; 2023)

voter_id_law Identification-document requirement for in-person voting (NCSL, April 24, 2026)

white_percent Percentage White alone and not Hispanic or Latino (2024 ACS, table B03002)

work_from_home Percentage of workers age 16 or older who usually worked from home (2024 ACS, table B08301)

Source

Data sources vary. See Appendix of printed textbook for further information.

testmeansC

One and two-sample difference of means tests (t-tests) with confidence intervals.

Description

Conducts one and two-sample difference of means tests (t-tests). Options for weighting observations, known population standard deviation, equal or unequal variances, paired observations. Numeric-looking factor or character labels, such as "10" and "20", are interpreted as their displayed numeric values.

Usage

```
testmeansC(x1, x2, w = NULL, data = NULL, dv, iv, digits = 2,
  var.equal = FALSE, paired = FALSE, pop.sd = FALSE, var.test = FALSE,
  printC = FALSE, conf = 95, plot = TRUE, main = NULL, xlab = NULL,
  xlim = NULL, table = TRUE, ...)
```

Arguments

x1	The first variable to be compared (mean of x1 will be compared to mean of x2). Must be numeric variable. Should be in the form dataset\$var, unless dataset specified with data argument.
x2	The variable (or number) to which x1 is compared. Should be in the form dataset\$var, unless dataset specified with data argument. You can set x2 equal to a number to conduct a one sample means test. For example, to test whether x1 could have population mean of 50, you'd set x2 = 50.
w	(Optional) Weights variable (optional). Should be in the form dataset\$var, unless dataset specified with data argument.
data	(Optional) The dataset that contains x1, x1 and x2, or dv and iv.
dv	The dependent variable. Must be numeric variable. Should be in the form dataset\$var, unless dataset specified with data argument.
iv	The independent variable. Should have two distinct values (like treatment and control). Should be in the form dataset\$var, unless dataset specified with data argument.
digits	(Optional) Number of digits to report after decimal place, optional (default: 2).
var.equal	(Optional) With two-sample tests, do you want to assume equal variances? (default: FALSE)
paired	(Optional) With two-sample tests, are the observations paired? (default: FALSE)
pop.sd	(Optional) If the population standard deviation is known, you can specify it.
var.test	(Optional) If set to TRUE, will test the assumption that two sample variance are equal using an F test. Default is FALSE. The var.test option implemented for both weighted and unweighted analysis. If you are not using sample weights, you can supplement this F test with additional tests such as stats::bartlett.test and car::leveneTest.
printC	(Optional) Do you want results printed to .html file in your working directory? Default is FALSE. Set to TRUE to print results.
conf	(Optional) Desired confidence level, as percentage (default: 95)
plot	(Optional) Do you want a plot of the confidence interval of the difference of means? (default: TRUE)
main	(Optional) Main title for plot of confidence interval of difference
xlab	(Optional) Label for x-axis of plot of confidence interval of difference
xlim	(Optional) A vector (of length 2) specifying the range of the x-axis, useful to zoom in on CI.

table	(Optional) Display result tables, including the optional equal-variance test table? Defaults to TRUE. Set to FALSE to suppress console and HTML tables while still returning the computed results.
...	(Optional) Additional arguments passed to plot function for the CI plot

Value

Invisibly returns a structured list with stable keys: `descriptive_table`, `test_stats_table`, `ci_table`, and `variance_test_table` (NULL when optional analysis is not computed).

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to TRUE. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

The `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Result tables

The `table` argument controls display of the main result tables separately from headings and informational messages. Set `table = FALSE` to omit those tables from console output and HTML output. See the Value section for the results returned by this function and how to save them for further use. The `printC` argument controls HTML output; `printC = FALSE` does not suppress console tables. Turning off tables does not turn off plots.

Equal-variance table

Use `var.test = TRUE` to compute the optional equal-variance test. Its table is displayed only when `table = TRUE`. With `table = FALSE`, the test is still computed and returned in `variance_test_table`, but its table is omitted from console and HTML output. Use `var.test = FALSE` to skip the test.

RCPA4 Package Tutorial Videos

- [Testing Means with RCPA4 Package's testmeansC Function](#) 12:22
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapter 9.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), pp.201-215. ISBN-13: 978-1506379616; ISBN-10: 150637961.

Online Resources

- [R Tutorials & Resources for Hypothesis Tests with One and Two Samples](#), Compiled by Barry C. Edwards
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#), find datasets for your own research and resources to help with the analysis.

Examples

```
library(RCPA4)

# one sample test against hypothesized value
testmeansC(x1=world$literacy, x2=80)

# with x1 and x2
testmeansC(x1=ft_trump_post, x2=ft_vance_post, w=wt, data=anes)

# with paired x1 and x2
testmeansC(x1=anes$ft_trump_post, x2=anes$ft_trump_pre, w=anes$wt, paired=TRUE)

# with dv and iv
testmeansC(dv=anes$ft_big_business, iv=anes$gender_s_sex, w=anes$wt)
```

testpropsC	<i>Tests the difference between two sample proportions, or difference between sample proportion and hypothesized value, with options for weighted observations, confidence intervals</i>
------------	--

Description

Difference of proportions test with optional sample weights. Reports P-value of two-tailed significance test. Currently limited to testing one response from one dataset. If you want to compare x1 from dataset1 and x2 from dataset2, you can create new dataframe to test as `dv ~ iv` where `dv` is vector of x1 and x2 values and `iv` is vector identifying the source (i.e. dataset1 and dataset2). If you want to compare different responses, such as "Yes" value for x1 and "Agree" value for x2, you will need to transform one of the variables so they have comparable response values.

Usage

```
testpropsC(x1, x2, w = NULL, data = NULL, dv, iv, digits = 3,
  response = NULL, printC = FALSE, conf = 95, plot = TRUE,
  main = NULL, xlab = NULL, xlim = NULL, table = TRUE, ...)
```

Arguments

x1	A categorical variable
x2	Value or variable to compare x1 against.
w	(Optional) Weights variable.
data	(Optional) Specify name of dataset (data frame) with x1 and x2 variables (or dv and iv).
dv	Dependent variable
iv	Independent variable, should have only two unique values. For comparison purposes, group1 will be first level of iv and group2 will be the second level of iv. To change order of groups, you can modify levels(iv).
digits	(Optional) Number of digits to report after decimal place, optional (default: 3).
response	(Optional) Identify the response value you wish to compare. If not specified, the function will compare first value of the dv (or x1 variable). If you want to group multiple responses together, use transformC to make dummy variable.
printC	(Optional) Do you want results printed to .html file in your working directory? Default is FALSE. Set to TRUE to print results.
conf	(Optional) Desired confidence level, as percentage (default: 95)
plot	(Optional) Do you want a plot of the confidence interval of the difference of proportions? (default: TRUE)
main	(Optional) Main title for plot of confidence interval of difference
xlab	(Optional) Label for x-axis of plot of confidence interval of difference
xlim	(Optional) A vector (of length 2) specifying the range of the x-axis, useful to zoom in on CI. By default, xlim=c(-1, 1).
table	(Optional) Do you want summary tables reported? (default: TRUE)
...	(Optional) Additional arguments passed to plot function for the CI plot

Value

Invisibly returns a structured list with stable keys: `descriptive_table`, `z_test_table`, and `ci_table` (NULL where optional analysis is not computed).

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to TRUE. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

The `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Result tables

The table argument controls display of the main result tables separately from headings and informational messages. Set `table = FALSE` to omit those tables from console output and HTML output. See the Value section for the results returned by this function and how to save them for further use. The `printC` argument controls HTML output; `printC = FALSE` does not suppress console tables. Turning off tables does not turn off plots.

RCPA4 Package Tutorial Videos

- [Testing Proportions with RCPA4 Package's testpropsC Function](#) 27:33
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapter 9.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), pp.201-215. ISBN-13: 978-1506379616; ISBN-10: 150637961.

Online Resources

- [R Tutorials & Resources for Hypothesis Tests with One and Two Samples](#), Compiled by Barry C. Edwards
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#): Find datasets for your own research and resources to help with the analysis.

Examples

```
library(RCPA4)

# one sample test: x1 variable against hypothesized value (of x2)
testpropsC(x1=anes$favor_opps_bckgrnd, x2=.500, w=anes$wt, response="Favor a great deal",
           xlim=c(0, .2))

# two sample test x1 versus x2
testpropsC(x1=has_sons, x2=has_daughters, w=wt, data=anes,
           response="Yes", xlim=c(-.10, .10))

# test of proportions dv by iv
testpropsC(dv=mrtl_stts_5_ctgry, iv=gender_s_sex, w=wt, data=anes, response="Widowed",
           xlim=c(-.10, 0))
```

transformC	<i>Returns new variables by transforming existing dataset variables (e.g. dummy variables, standardized variables, rank orders)</i>
------------	---

Description

Given a variable `x`, the `transformC` function generates and returns a transformed version of `x`. For example, `transformC` can take a variable `x` and return standardized `x`, or the log of `x`.

Usage

```
transformC(type, x, data = NULL, response = NULL, cutpoints = NULL,
           groups = NULL, confirm = TRUE, ...)
```

Arguments

<code>type</code>	The type of transformation to be made to <code>x</code>. Options include: • "center" • "cut" use <code>cutpoints</code> or <code>groups</code> arguments to control cuts • "dummy" use <code>response</code> argument to identify values of <code>x</code> which should be coded 1 (all other non-missing responses will be coded 0) • "dummy.set" • "ln" • "log10" • "percent.rank" • "rank" • "whole" • "z"
<code>x</code>	The variable to be transformed, a variable that already exists, should be in <code>dataset\$var</code> form unless dataset specified in optional <code>data</code> argument.
<code>data</code>	(Optional) Name of dataset that contains <code>x</code> variable.
<code>response</code>	(Optional) For <code>type="dummy"</code> , <code>response</code> is the value or vector of values to be coded 1.
<code>cutpoints</code>	(Optional) For <code>type="cut"</code> , a vector of values to serve as lower bounds of ranked categories for transformed <code>x</code> variable.
<code>groups</code>	(Optional) For <code>type="cut"</code> , the number of (approximately) same sized groups to create based on <code>x</code> values.
<code>confirm</code>	(Optional) By default, <code>transformC</code> will ask you to confirm you want transformed variable returned (to prevent data loss). Set <code>confirm=FALSE</code> to bypass this check.
<code>...</code>	(Optional) Additional arguments pass to <code>cut2</code> (for <code>type="cut"</code>).

Value

A transformed version of `x` variable, a vector with the same length as `x`, unless `type="dummy.set"` in which case `transformC` returns a `data.frame`.

Console output

Additional RCPA4 headings are controlled by the session option `RCPA4.verbose`, which defaults to `TRUE`. Use `options(RCPA4.verbose = FALSE)` to suppress these headings, or change the setting through `helpC(6)`. The setting applies for the current R session.

The `RCPA4.verbose` option does not suppress result tables, plots, messages, warnings, errors, or interactive prompts. The option `RCPA4.slow = FALSE` disables the package's optional pauses independently of verbosity.

Confirmation output

Use `confirm = FALSE` to return the transformed variable without the confirmation prompt or transformation-results heading. Informational messages about the transformation are controlled separately by `suppressMessages()`.

RCPA4 Package Tutorial Videos

- [Transforming Variables with RCPA4 Package's transformC Function](#) 22:40
- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook References

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapter 3.
- Philip H. Pollock and Barry C. Edwards, *The Essentials of Political Analysis, 6th Edition* (Sage Publications, 2020), pp. 55-64. ISBN-13: 978-1506379616; ISBN-10: 150637961.

Online Resources

- [R Tutorials & Resources for Creating and Transforming Variables](#), Compiled by Barry C. Edwards
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.
- [Political Science Data Web Site](#): Find datasets for your own research and resources to help with the analysis.

Examples

```
library(RCPA4)

# don't use confirm=FALSE until you've tested the function call
transformC("percent.rank", anes$ft_dem_party, confirm=FALSE)
transformC("rank", anes$ft_dem_party, confirm=FALSE)
transformC("whole", runif(min=0,max=100,n=20), confirm=FALSE)
```

`welcomeC`*Welcomes users to RCPA4 and confirms that the package is available*

Description

Welcomes users to RCPA4 package for *An R Companion to Political Analysis, 4th Edition* and provides basic information about using Companion functions and datasets.

Usage

```
welcomeC()
```

Value

No value returned

RCPA4 Package Tutorial Videos

- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook Reference

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapter 1.

Online Resources

- [R Tutorials & Resources for Getting Started with R](#), Compiled by Barry C. Edwards
- [Sage Edge Resources for Political Analysis Series](#), for streaming videos, flashcards, and more student resources for textbooks by Pollock and Edwards, from Sage Publications.

Examples

```
library(RCPA4)

# Welcome message from RCPA4 package.

welcomeC()
```

widgetFactory

An interactive game to practice using R functions.

Description

A fun, interactive game to practice using R functions. Players must execute functions to make widgets per strict specifications to win the game. The Widget Factory needs your help!

Usage

```
widgetFactory()
```

Value

No value returned

RCPA4 Package Tutorial Videos

- [Complete Playlist of RCPA4 Package Tutorial Videos](#), includes video for this function and many more.

Textbook Reference

- Barry C. Edwards and Philip H. Pollock, *An R Companion to Political Analysis, 4th Edition* (Political Science Data, Forthcoming 2026), Chapter 1.

Online Resource

- [Tutorials & Resources for Using R for Data Analysis](#), compiled by Barry C. Edwards

Examples

```
library(RCPA4)

# Play the Widget Factory game
if (interactive()) {
  widgetFactory()
}
```

world

*World dataset for R Companion to Political Analysis, Fourth Edition***Description**

A dataset with variables about countries in the world. This dataset is used to demonstrate application of R to political analysis. See book Appendix for variable names and descriptions.

Format

A data frame with 169 rows and 234 variables.

arda_code Country numerical code. From Association of Religion Data Archives

bribe_judge Proportion of survey respondents from country reporting that they or member of family paid bribe to legal/judicial system in last year. From Global Corruption Barometer

bribe_police Proportion of survey respondents from country reporting that they or member of family paid bribe to police in last year. From Global Corruption Barometer

broadband Broadband subscription per 100 people in 2017. From Our World in Data

business_starts Number of new corporations registered annually. From World Bank's World Development Indicators

cabrv Three-letter abbreviation of country name assigned by International Standards Organization

ccode Numeric country code based on the ISO standard

ciaedex Percent of GDP spent on education (CIA)

ciagdpag Composition of GDP: Agricultural sector (CIA)

ciagdpin Composition of GDP: Industrial sector (CIA)

ciagdpsv Composition of GDP: Service sector (CIA)

civil_war Civil war intensity, 2008

co2_percap Carbon dioxide emissions excluding land-use change and forestry, in metric tonnes of CO₂-equivalent per person, 2024.

co2e_percap Total greenhouse gas emissions excluding land-use change and forestry, in metric tonnes of CO₂-equivalent per person, 2024.

energy_renew_percent Renewable energy consumption as a percentage of total final energy consumption.

ocean_health Ocean Health Index score for waters associated with a coastal country, ranging from 0 to 100.

coastal Whether the country has an ocean or sea coastline.

rainfall_mm Long-term average annual precipitation over the country's land area, in millimeters per year.

forest_percent Forest area as a percentage of total land area.

freshwater_percap Renewable internal freshwater resources per person, in cubic meters per year.

- unclos_ratified** Whether the country is a party to the United Nations Convention on the Law of the Sea.
- migratory_species_treaty** Whether the country is a party to the Convention on Migratory Species.
- nagoya_protocol** Whether the country is a party to the Nagoya Protocol on access and benefit sharing.
- bbnj_agreement** Whether the country is a party to the BBNJ Agreement on marine biodiversity beyond national jurisdiction.
- colony** Colony of what country? (CIA)
- compulsory_voting** Compulsory voting in national elections in 2025, including whether sanctions are enforced. From V-Dem
- confidence** Confidence in institutions scale (World Values Survey)
- conflict_index** Global Peace Index score for 2026, with higher values indicating less peaceful conditions.
- conflict_internal** Number of internal conflicts between govt and groups in country without intervention from other countries. From UCDP/PRIOD Database
- conflict_internat** Number of internal conflicts between govt and groups in country with intervention from other countries (on one or both sides). From UCDP/PRIOD Database
- corp_tax_rate** Corporate tax rate. From Heritage Foundation's 2021 Index of Economic Freedom
- corrupt_perception** Corruption perception index. From Transparency International
- country** Country or territory name used in the RCPA4 World Dataset
- coup_attempts** Number of attempted coups d'états since 1950. From Jonathan Powell
- coups** Number of successful coups d'états since 1950. From Jonathan Powell
- death_penalty_status** Legal status of death penalty (1 = Abolished, 2 = Abolished Except for Extraordinary Crimes, 3 = Abolished in Practice, 4 = Uses Death Penalty). From Death Penalty Information Center
- debt_percent_gdp** Public debt as a percentage of GDP. From Heritage Foundation's 2021 Index of Economic Freedom
- dem_other** Percentage of other democracies in region
- dem_other5** Percentage of other democracies in region: 5 categories
- district_size3** Average number of members per district. From World Values Survey
- dnpp_3** Effective number of parliamentary parties
- dpi_cemo** Is chief executive a military officer? 0 = no, 1 = yes. From World Bank's Database of Political Institutions
- dpi_system** National political system (0 = Presidential, 1 = Assembly-elected President, 2 = Parliamentary). From World Bank's Database of Political Institutions
- durable** Number of years since the last regime transition as of 2018 (Polity)
- econ_compete** Measure of global economic competitiveness. From World Economic Forum
- econ_freedom** Heritage Foundation rating of overall economic freedom. From 2021 Index of Economic Freedom
- econ_freedom_5cat** Heritage Foundation assessment of overall economic freedom. From 2021 Index of Economic Freedom

- educ_f_avgyrs** Average schooling years, female (25+). From Educational Attainment Dataset by Barro and Lee
- educ_f_none** Percentage of females with no schooling (25+). From Educational Attainment Dataset by Barro and Lee
- educ_m_avgyrs** Average schooling years, male (25+). From Educational Attainment Dataset by Barro and Lee
- educ_m_none** Percentage of males with no schooling (25+). From Educational Attainment Dataset by Barro and Lee
- educ_quality** Average rating of quality of educational system, ranges 1-7 (higher values = better quality). From World Economic Forum
- effectiveness** Government effectiveness scale (Kaufmann, 2002)
- eiudemoc_4cat** Level of democracy in 2020, 4 ordinal categories. From Economist Intelligence Unit
- eiudemoc_bin** Is the country classified by the Economist Intelligence Unit as a full or flawed democracy in 2025?
- eiudemoc_score** Economist Intelligence Unit Democracy Index score for 2025, ranging from 0 to 10; higher values indicate stronger democracy.
- election_integrity** Average of expert evaluation of integrity of country's electoral system. From Electoral Integrity Project
- election_violence_post** Were there riots and protest after election? From National Elections Across Democracy and Autocracy
- election_violence_pre** Were there riots and protest before election? From National Elections Across Democracy and Autocracy
- enpp3_democ** Effective number of parliamentary parties: 3 categories
- enpp3_democ08** Effective number of parliamentary parties. From World Values Survey
- enpp_3** Effective number of parliamentary parties
- eu** EU member state as of June 2021 (yes/no)
- fdi_inflow** Inflow of foreign direct investment (in millions of U.S. dollars). From Heritage Foundation's 2021 Index of Economic Freedom
- fertility** Total fertility rate: average number of births per woman; latest available World Bank value
- fh_democ_3cat** Freedom House rating of democracy, 3 ordinal categories. From 2021 report
- fh_democ_score** Freedom House aggregate political-rights and civil-liberties score for 2025, ranging from 0 to 100; higher values indicate greater freedom.
- fh_internet_3cat** Level of Internet freedom in country, 3 ordinal categories (1 = Not Free, 2 = Partly Free, 3 = Free). From Freedom House, 2021 Report on Internet Freedom
- fh_internet_score** Measure of Internet freedom in country in 2021; combines measures of obstacles to access, limits on content, and violations of user rights. Ranges 0 to 100 (with 100 = most freedom). From Freedom House
- frac_eth** Ethnic factionalization (Alesina et al., 2003)
- frac_eth2** Ethnic factionalization, divided into High and Low categories
- frac_eth3** Level of ethnic fractionalization: 3 categories (Low, Medium, High)

- frac_lang** Language factionalization (Alesina et al., 2003)
- frac_relig** Religious factionalization (Alesina et al., 2003)
- gas_production** In millions of barrels of oil equivalent. From Michael Ross's Oil and Gas Data, 1932-2014
- gdp_growth** Annual economic growth rate, 5-year average. From Heritage Foundation's 2021 Index of Economic Freedom
- gdp_percap** GDP per capita at purchasing power parity in constant 2021 international dollars; latest available World Bank value in July 2026 download
- gdp_percap_5cat** GDP per capita at purchasing power parity, July 2026 World Bank download, grouped into five ordered RCPA categories
- gender_equal3** Gender empowerment measure, 3 categories. From World Values Survey
- gender_inequality** UNDP Gender Inequality Index (0 = least inequality, 1 = greatest inequality), 2023
- gini_index** GINI index (of income inequality). Most recent estimates from CIA World Factbook (as of June 2021)
- global_social** Social globalization measured by personal contacts of citizens, information flows, and cultural proximity. From KOF Index of Globalization
- govt_help_cap** Capacity of state to provide for needy citizens. From Fund for Peace, Fragile States Index
- govt_integrity** Rating of government integrity. From Heritage Foundation's 2021 Index of Economic Freedom
- govt_per_gdp** Government spending (all types) as a percentage of GDP
- govt_quality** Measure of the quality of government. From International Country Risk Guide of Political Risk Group
- gri** Government Restrictions Index based on 20 indicators of ways that governments restrict religion, including through coercion and force. From Pew Research Center on Global Restrictions of Religion Report, 2016 data
- grp_name** Name of the religion preferred by the government in 2015 (based on multidimensional measure of government favoritism)
- grp_score** Measure of Government Religious Preference in 2015, how strongly government favors one religion over others
- happiness** Measure of how happy citizens are. From World Happiness Report
- hdi** Human development index (HDI) value (as of June 10, 2021). Human development dimensions include having long and healthy lives, being knowledgeable, and enjoying a decent standard of living. From UNDP Human Development Report
- hiv_percent** Percentage of adults ages 15-49 living with HIV.
- homicide_rate** Number of intentional homicides per 100,000 persons. From UNODC Global Study on Homicide 2013 (where 2012 data missing from report, last reported year used, typically 2011)
- hospital_beds** Hospital beds per 1,000 people.
- human_flight** Measure of human flight and brain drain from country. From Fund for Peace, Fragile States Index

- icc_treaty_ratified** Whether the country is currently a state party to the Rome Statute of the International Criminal Court (Yes/No)
- immigrants_percent** International migrant stock as a percentage of population; latest available World Bank value
- imprisonment_rate** Number incarcerated per 100,000 persons. From World Prison Brief
- income_tax_rate** Income tax rate. From Heritage Foundation's 2021 Index of Economic Freedom
- indep_judiciary** Does country have an independent judiciary? (1 = yes). From Political Constraints Index Dataset
- indy** Year of independence (CIA)
- infant_mortality** Infant deaths before age one per 1,000 live births.
- inflation** Annual inflation rate. From Heritage Foundation's 2021 Index of Economic Freedom
- internet_users** Percentage of population that uses the Internet (as of 2020 or 2021)
- judicial_effectiveness** Rating of effectiveness of country's judiciary. From Heritage Foundation's 2021 Index of Economic Freedom
- judicial_indep_wef** Average rating of judicial independence, ranges 1-7. From World Economic Forum
- laws_protect_prop** Property rights index in 2025, ranging from 0 (low) to 1 (high). From V-Dem
- legal_origin** Legal origin of commercial code of country (1 = English Common Law, 2 = French Commercial Code, 3 = Socialist/Communist Laws, 4 = German Commercial Code, 5 = Scandinavian Commercial Code). From LaPorta, Lopez de-Silanes, Shleifer, and Vishny (1998)
- legal_quality** Measure of quality of country's legal institutions. From the Institutional Quality Dataset
- life_expectancy** Life expectancy at birth, total years; latest available World Bank value
- lifeex_f** Life expectancy at birth among females, total years; latest available World Bank value
- lifeex_m** Life expectancy at birth among males, total years; latest available World Bank value
- literacy** Literacy rate (CIA)
- media_access_cand** Does country provide free or subsidized media access for political candidates? (1 = yes) From Institute for Democracy and Electoral Assistance
- media_access_parties** Does country provide free or subsidized media access for political parties? (1 = yes). From Institute for Democracy and Electoral Assistance
- median_age** Median age in 2025 from UN World Population Prospects medium projection via Our World in Data
- migration_net** Net migration, immigrants minus emigrants; latest available World Bank value
- muslim** Are Muslims the predominant religious group?
- oecd** OECD member state as of June, 2021? (yes/no)
- oil** Oil production, in barrels per day (CIA) CIAOIL_P
- oil_production** In metric tons. From Michael Ross's Oil and Gas Data, 1932-2014
- organized_crime** Average rating of the impact of organized crime on the economy, ranges 1-7 (lower values = more impact). From World Economic Forum
- peace_5cat** State of peace in country, 5 ordinal categories. From Visions of Humanity's Global Peace Index 2021 Report

- peace_index** Reversed Global Peace Index score for 2026, with higher values indicating greater peacefulness.
- pmat12_3** Post-materialism, 3 categories (World Values Survey)
- pol_terror_scale_ai** Political terror scale. Ordinal scale from 1-5 of how much government terrorizes country's citizens, with 1 corresponding to very little oppression by government. From Amnesty International
- pol_terror_scale_hrw** Political terror scale. Ordinal scale from 1 to 5 of how much government terrorizes country's citizens, with 1 corresponding to very little oppression by government. From Human Rights Watch
- polity_score** Polity5 combined democracy-autocracy score for 2018, ranging from -10 for strongly autocratic regimes to +10 for strongly democratic regimes. This is a historical measure; Polity5 has not been updated beyond 2018. Source: Center for Systemic Peace.
- pop_0_14** Percentage of population ages 0-14; latest available World Bank value
- pop_15_64** Percentage of population ages 15-64; latest available World Bank value
- pop_65_older** Percentage of population ages 65 and older; latest available World Bank value
- pop_growth** Annual population growth percentage; latest available World Bank value
- pop_urban** Percentage of population living in urban areas; latest available World Bank value
- population** Total population; latest available World Bank value
- population_3cat** Total population grouped into three ordered RCPA categories using the latest available World Bank value
- population_density** Population density, people per square kilometer of land area; latest available World Bank value
- poverty** Percentage of the population below the poverty line
- pr_sys** Proportional representation electoral system? From the Institute for Democracy and Electoral Assistance
- press_freedom_fh** Measure of freedom of the country's press. Based on Freedom House Freedom of the Press Report 2015, fit to 0-10 range
- press_freedom_rsf** Measure of freedom of the country's press. From Reporters Sans Frontiers
- protact3** Protest activity (World Values Survey)
- refugees_from** Refugees under UNHCR mandate by country or territory of origin; latest available World Bank value
- refugees_impact** Measure of impact of population displacement on country. From Fund for Peace, Fragile States Index
- refugees_in** Refugees under UNHCR mandate by country or territory of asylum; latest available World Bank value
- regime_type3** Regime type. From Cheibub's Democracy Dictatorship dataset
- region** Region name
- regionun** United Nations region
- religion** Largest religion by proportion (UN)
- reserved_seats** Does country reserve seats in national legislature for any group (e.g., women or young people)? From Inter-parliamentary Union

- rights_assn** Freedom of assembly and association, ordinal scale 0-2. From CIRI Human Rights Data Project
- rights_dommov** Freedom of domestic movement, ordinal scale 0-2. From CIRI Human Rights Data Project
- rights_formov** Freedom of foreign travel and emigration in 2025, recoded into three ordered categories. From V-Dem
- rights_injud** High-court independence in 2025, recoded into three ordered categories. From V-Dem
- rights_law_index** Measure of violations of human right and rule of law. From Fund for Peace, Fragile States Index
- rights_relfree** Freedom of religion in 2025, recoded into three ordered categories. From V-Dem
- rights_speech** Freedom of speech, ordinal scale 0-2. From CIRI Human Rights Data Project
- rights_treaties** Number of international human rights treaties ratified (out of 16 possible). From UNHRC
- rights_wecon** Women's economic rights, ordinal scale 0-2. From CIRI Human Rights Data Project
- rights_wopol** Women's political rights, ordinal scale 0-2. From CIRI Human Rights Data Project
- rights_worker** Women's social rights, ordinal scale 0-2. From CIRI Human Rights Data Project
- schools_internet** Average rating of internet availability in schools, ranges 1-7 (higher values = more extensive). From World Economic Forum
- self_employed** Percentage of labor force that is self-employed. From World Bank's World Development Indicators
- sexratio** Sex ratio at birth, male births per 100 female births; latest available World Bank value
- shi** Social Hostilities Index based on 13 indicators of ways in which private individuals and social groups infringe upon religious beliefs and practices. From Pew Research Center on Global Restrictions of Religion Report, 2016 data
- soldiers_percent** Percentage of labor force in the military. From World Bank's World Development Indicators
- soldiers_total** Total number of people in the military. From World Bank's World Development Indicators
- spendeduc** Public expenditure on education as a percentage of GDP (UN)
- spendhealth** Domestic general government health expenditure as a percentage of GDP.
- spendmil_wdi** Military expenditure as a percentage of GDP; latest available World Bank/SIPRI value
- tariff_rate** Tariff rate on imports. From Heritage Foundation's 2021 Index of Economic Freedom
- taxes_percent_gdp** Taxes (all forms) as a percentage of gross domestic product. From Heritage Foundation's 2021 Index of Economic Freedom
- terror_index_voh** Measure of the impact of terrorism on the country. From Visions of Humanity
- trade_percent_gdp** Exports plus imports of goods and services as a percentage of GDP; latest available World Bank value
- typerel** Predominant religion

unemployment Percentage of labor force that is unemployed (available/seeking employment but not employed). From CIA World Factbook (most recent estimates available as of June 2021)

unexp_rd Public expenditure on research and development as a percentage of GDP (UN)

unfempf Ratio of female-to-male formal employment rates

unin_inc Inequality-adjusted income index (2010, UN)

unineduc Inequality-adjusted education index (2010)

unions Union density

unjourn Number of verified cases of journalists imprisoned in 2009 (UN)

unlit Adult literacy rate (percentage of population age 15 or older) (UN)

unmobcov Percentage of the population covered by a mobile phone network (2008, UN)

unmort_f Adult mortality rate among females, per 1,000 female adults; latest available World Bank value

unmort_m Adult mortality rate among males, per 1,000 male adults; latest available World Bank value

unnewsp Daily newspapers per thousand people (2004, UN)

unnoncom Age-standardized deaths from noncommunicable diseases per 100,000 people.

unpop30 Projected 2030 population in millions, UN medium scenario via Our World in Data

unremitp Per capita remittance inflows in U.S. dollars (2008)

unremitt Remittance inflows as a percentage of GDP (2008)

unsati Overall life satisfaction, most recent measure during 2006-2009 (0-10, higher means more satisfied) (UN)

unsatif Overall life satisfaction among females, most recent measure during 2006-2009 (UN)

unsatjob Percentage of employed who are satisfied with their job (UN)

unsatliv Percentage who are satisfied with their standard of living (UN)

unsec Percentage of the population ages 25 and older with at least secondary education (UN)

vdem_2cat Democracy or autocracy in 2025, derived from V-Dem's Regimes of the World classification

vdem_4cat Regime type in 2025, ordered from liberal democracy to closed autocracy. From V-Dem

vdem_edi_score Electoral Democracy Index in 2025, ranging from 0 (low) to 1 (high). From V-Dem

vdem_ldi_score Liberal Democracy Index in 2025, ranging from 0 (low) to 1 (high). From V-Dem

vi_rel3 Percent saying religion very important, 3 categories

violence_cost Economic cost of violence on national economy. Measured as a percentage of GDP. From Visions of Humanity

votevap10s Turnout of voting age population: average of both presidential and parliamentary elections in 2010s. From the Institute for Democracy and Electoral Assistance

womenleg Women as a percentage of the lower or unicameral legislative chamber in 2025. From V-Dem

womyear Year women first enfranchised. From Inter-parliamentary Union

- womyear2** Women's suffrage. From Inter-parliamentary Union
- youngleg** Percentage of lower house of legislature aged 40 years or younger, as of June 2021. From the Inter-parliamentary Union
- vdem_participatory_score** Participatory Democracy Index in 2025, ranging from 0 (low) to 1 (high). From V-Dem
- vdem_deliberative_score** Deliberative Democracy Index in 2025, ranging from 0 (low) to 1 (high). From V-Dem
- vdem_egalitarian_score** Egalitarian Democracy Index in 2025, ranging from 0 (low) to 1 (high). From V-Dem
- vdem_judicial_constraints** Judicial constraints on the executive in 2025, ranging from 0 (low) to 1 (high). From V-Dem
- vdem_rule_of_law** Rule of Law Index in 2025, ranging from 0 (low) to 1 (high). From V-Dem
- vdem_access_justice** Secure and effective access to justice in 2025, ranging from 0 (low) to 1 (high). From V-Dem
- vdem_political_corruption** Political Corruption Index in 2025, ranging from 0 (less corruption) to 1 (more corruption). From V-Dem
- vdem_freedom_expression** Freedom of expression and alternative information in 2025, ranging from 0 (low) to 1 (high). From V-Dem
- vdem_civil_society** Civil Society Participation Index in 2025, ranging from 0 (low) to 1 (high). From V-Dem
- vdem_women_empowerment** Women's Political Empowerment Index in 2025, ranging from 0 (low) to 1 (high). From V-Dem
- vdem_civil_liberties** Civil Liberties Index in 2025, ranging from 0 (low) to 1 (high). From V-Dem
- vdem_physical_integrity** Physical Integrity Index in 2025, ranging from 0 (low) to 1 (high). From V-Dem
- vdem_highcourt_independence** V-Dem model estimate of high-court independence in 2025; higher values indicate greater independence
- vdem_property_rights** Property Rights Index in 2025, ranging from 0 (low) to 1 (high). From V-Dem
- vdem_freedom_religion** V-Dem model estimate of freedom of religion in 2025; higher values indicate greater freedom
- vdem_freedom_domestic_movement** Freedom of domestic movement and residence in 2025, ranging from 0 (low) to 1 (high). From V-Dem
- vdem_freedom_foreign_movement** V-Dem model estimate of freedom of foreign travel and emigration in 2025; higher values indicate greater freedom
- vdem_freedom_association** Freedom of association for political parties and civil-society organizations in 2025, ranging from 0 (low) to 1 (high). From V-Dem
- vdem_education_equality** V-Dem model estimate of equality in access to high-quality basic education in 2025; higher values indicate greater equality
- vdem_health_equality** V-Dem model estimate of equality in access to high-quality basic health care in 2025; higher values indicate greater equality

vdem_gender_quota National gender quota for the lower or unicameral legislative chamber in 2025. From V-Dem

vdem_social_consensus V-Dem model estimate of social consensus on major political issues in 2025; higher values indicate less polarization

maternal_mortality Maternal deaths per 100,000 live births.

tb_incidence Estimated new and recurrent tuberculosis cases per 100,000 people.

adult_obesity Percentage of adults age 18 and older with a body mass index of 30 or higher, age-standardized.

dpt_immunization Percentage of children ages 12-23 months receiving three doses of DPT vaccine.

out_of_pocket_health Household out-of-pocket spending as a percentage of current health expenditure.

uhc_service_index Universal Health Coverage service coverage index, ranging from 0 to 100; higher values indicate broader essential-service coverage.

Source

Data sources vary. See Appendix of printed textbook for further information.

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