A hypothetical study using fake data for instructional purposes only

Methods Report 1: Complete Study Program

Alejandra R Scienceace[1,2,*] Fionn S Researchchamp[3,2]

[1] Awesome University, Shanghai
[2] August Institution, London
[3] Highly Ranked Uni, Montreal

[*] Correspondence: Alejandra R Scienceace <fake_email@fake_institute.com>

```
library(TTU)
```

1 Input parameters

1.1 Reporting parameters

1.1.1 Bibliograhic data

```
# authors_tb <- ready4show::ready4_authors_lup() %>%
#   tibble::add_case(first_nm_chr = "Alejandra",
#                    middle_nm_chr = "Rocio",
#                    last_nm_chr = "Scienceace",
#                    title_chr = "Dr",
#                    qualifications_chr = "MD, PhD",
#                    institute_chr = "Insitute_A, Institute_B",
#                    sequence_int = 1,
#                    is_corresponding_lgl = T,
#                    email_chr = "fake_email@fake_institute.com") %>%
#     tibble::add_case(first_nm_chr = "Fionn",
#                    middle_nm_chr = "Seamus",
#                    last_nm_chr = "Researchchamp",
#                    title_chr = "Prof",
#                    qualifications_chr = "MSc, PhD",
#                    institute_chr = "Insitute_C, Institute_B",
#                    sequence_int = 2,
#                    email_chr = "fake_email@fake_institute.com")
```

```
# institutes_tb <- ready4show::ready4_institutes_lup() %>%
#   tibble::add_case(short_name_chr = "Institute_A", long_name_chr = "Awesome University, Shanghai") %>%
#   tibble::add_case(short_name_chr = "Institute_B", long_name_chr = "August Institution, London") %>%
#   tibble::add_case(short_name_chr = "Institute_C", long_name_chr = "Highly Ranked Uni, Montreal")
```

```
# header_yaml_args_ls <- make_header_yaml_args_ls(authors_tb = authors_tb,
#                                                 institutes_tb = institutes_tb,
#                                                 title_1L_chr = "A hypothetical study using fake data for instructional purposes only",
#                                                 keywords_chr = c("this","is","a","replication","using","fake","data","do", "not","cite")
```

1.1.2 Report formatting

```
# output_format_ls <- make_output_format_ls(manuscript_outp_1L_chr = "Word",
#                                           manuscript_digits_1L_int = 2L,
#                                           supplementary_outp_1L_chr = "PDF",
#                                           supplementary_digits_1L_int = 2L)
```

1.2 Data parameters

1.2.1 Dataset

```
# ds_tb <- youthvars::replication_popl_tb %>%
#             youthvars::transform_raw_ds_for_analysis()
```

1.2.2 Data dictionary

```
# dictionary_tb <- youthvars::make_final_rpln_ds_dict()
```


1.2.3 Dataset metadata

```
# ds_descvs_ls <- make_ds_descvs_ls(candidate_predrs_chr = c("K6","PHQ9"),
#                                   candidate_covar_nms_chr = c("d_age", "SOFAS",
#                                                               "c_p_diag_s",
#                                                               "c_clinical_staging_s"),
#                                   cohort_descv_var_nms_chr = c("d_age",
#                                                                "d_relation_s",
#                                                                "d_studying_working",
#                                                                "c_p_diag_s",
#                                                                "c_clinical_staging_s",
#                                                                "SOFAS"),
#                                   dictionary_tb = dictionary_tb,
#                                   id_var_nm_1L_chr = "fkClientID",
#                                   is_fake_1L_lgl = T,
#                                   msrmnt_date_var_nm_1L_chr = "d_interview_date",
#                                   round_var_nm_1L_chr = "round",
#                                   round_vals_chr = c("Baseline", "Follow-up"),
#                                   maui_item_pfx_1L_chr = "aqol6d_q",
#                                   utl_wtd_var_nm_1L_chr = "aqol6d_total_w",
```

```
#                                     utl_unwtd_var_nm_1L_chr = "aqol6d_total_c")
```

1.2.4 Candidate predictors metadata

```
# predictors_lup <- make_pt_TTU_predictors_lup(short_name_chr = c(ds_descvs_ls$candidate_predrs_chr, "SOFAS"),
#                                              long_name_chr = c("K6 total score", "PHQ9 total score", "SOFAS total score"),
#                                              min_val_dbl = 0,
#                                              max_val_dbl = c(24,27,100),
#                                              class_chr = "integer",
#                                              increment_dbl = 1,
#                                              class_fn_chr = c("youthvars::youthvars_k6",
#                                                               "youthvars::youthvars_phq9",
#                                                               "youthvars::youthvars_sofas"),
#                                              mdl_scaling_dbl = 0.01,
#                                              covariate_lgl = F) %>%
#   TTU_predictors_lup()
```

1.2.5 Multi-Attribute Utility Instrument (MAUI) parameters

```
# maui_params_ls <- make_maui_params_ls(maui_domains_pfcs_1L_chr = "vD",
#                                       maui_itm_short_nms_chr = c("Household tasks",
#                                                                  "Getting around","Morbility",
#                                                                  "Self care","Enjoy close rels",
#                                                                  "Family rels",
#                                                                  "Community involvement", "Despair",
#                                                                  "Worry", "Sad", "Agitated",
#                                                                  "Energy level","Control",
#                                                                  "Coping","Frequency of pain",
#                                                                  "Degree of pain",
#                                                                  "Pain interference", "Vision",
#                                                                  "Hearing", "Communication"),
#                                       maui_scoring_fn = youthvars::add_adol6d_scores,
#                                       short_and_long_nm = c("AQoL-6D",
#                                                             "Assessment of Quality of Life - Six Dimension"),
#                                       utl_min_val_1L_dbl = 0.03)
```

1.3 Analysis parameters

```
# scndry_anlys_params_ls <- make_scndry_anlys_params(candidate_predrs_chr = c("SOFAS"),
#                                                    prefd_covars_chr = NA_character_)
```

```
# input_params_ls <- make_input_params(ds_tb,
#                                      ds_descvs_ls = ds_descvs_ls,
#                                      dv_ds_nm_and_url_chr = c("fakes",
#                                                               "https://doi.org/10.7910/DVN/D74QMP"),
#                                      header_yaml_args_ls = header_yaml_args_ls,
#                                      maui_params_ls = maui_params_ls,
#                                      output_format_ls = output_format_ls,
#                                      predictors_lup = predictors_lup,
#                                      prefd_covars_chr = "SOFAS",
#                                      prefd_mdl_types_chr = c("OLS_CLL","GLM_GSN_LOG"),
#                                      scndry_anlys_params_ls = scndry_anlys_params_ls)
```

2 Analyse, Report and Share

2.1 Run analysis

```
write_analyses(input_params_ls)
```

2.2 Report results

```
input_params_ls <- write_mdl_smry_rprt(input_params_ls,
                                       use_shareable_mdls_1L_lgl = T)
```

2.3 Share results

```
write_study_outp_ds(input_params_ls)
```

3 Create manuscript

3.1 Create study metadata

```
# input_params_ls <- make_study_descs_ls(input_params_ls = input_params_ls,
#                                        background_1L_chr = "Our study is entirely fictional and has been created to illustrate TTU packa
#                                        coi_1L_chr = "None declared.",
#                                        conclusion_1L_chr = "If this study was real, the results would be interesting.",
#                                        ethics_1L_chr = "The study was reviewed and granted approval by Awesome University's Human Resear
#                                        funding_1L_chr = "The study was funded by Generous Benefactor.",
#                                        sample_desc_1L_chr = "The study sample is fake data that pretends to be young people aged 12 to 2
#                                        time_btwn_bl_and_fup_1L_chr = "three months",
#                                        var_nm_change_lup = tibble::tibble(old_nms_chr = c("PHQ9","GAD7"),
#                                                                           new_nms_chr = c("PHQ-9",
#                                                                                           "GAD-7")))
```

3.2 Render auto-generated first-draft

```
results_ls <- write_manuscript(input_params_ls = input_params_ls)
```


4 Purge dataset copies

```
write_to_delete_ds_copies(path_params_ls$paths_ls)
```