

# Research Question 4 Analyses for SANE Training Program Data

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## 1 Purpose

This file is part of a research compendium (Pierce, 2026) associated with a study about a sexual assault nurse examiner training program (Dontje & Campbell, 07/01/2021–06/30/2025). The training program had two major components: didactic training (DT) followed by a clinical skills workshop (CSW). This file contains results from analyses that address RQ4.

## 2 Research Question

- **RQ4.** For the participants who completed DT and those who completed the CSW, to what extent did they find each training component to be useful/helpful?

## 3 Setup

This section documents some setup tasks that are useful to the statistician on the team. Most readers of this document will probably want skip directly to Section 3.4.

### 3.1 Define Global Options

Global R chunk options are defined in the YAML header but local chunk options will over-ride global options. We can temporarily disable an individual chunk by inserting `#| eval: false` on a line at the top of the chunk. The method for creating a `cfsiz` option that controls font size in code chunks and their text output is based on an answer to a question posted on [stackoverflow.com](https://stackoverflow.com).

```
```{r}
#| label: global-options

# Create a custom chunk hook/option for controlling font size in chunk & output.
def.chunk.hook <- knitr::knit_hooks$get("chunk")
knitr::knit_hooks$set(chunk = function(x, options) {
  x <- def.chunk.hook(x, options)
  ifelse(options$cfsiz != "normalsize",
    paste0("\n\\", options$cfsiz, "\n\n", x, "\n\n\\normalsize"),
    x)
})
```

```

### 3.2 Load Packages

R packages usually add new functions to the base R software, allowing you to do more things. Here, we load the specific R packages required for this script to work.

```
```{r}
#| label: load-packages
library(devtools)      # for session_info()
```

```

Loading required package: usethis

```
```{r}
#| label: load-packages
library(here)          # for here(), i_am(), makes code more portable.
```

```

```
here() starts at P:/Consulting/Cases_1600-1799/C1788/SANETPA/scripts
```

```
```{r}
#| label: load-packages
library(rmarkdown)      # for pandoc_version()
library(knitr)          # for kable()
library(dplyr)          # for %>%, filter(), group_by(), mutate(), rename(), etc.
```
```

```
Attaching package: 'dplyr'
```

```
The following objects are masked from 'package:stats':
```

```
filter, lag
```

```
The following objects are masked from 'package:base':
```

```
intersect, setdiff, setequal, union
```

```
```{r}
#| label: load-packages
library(broom)           # for broom()
library(effects)         # for hedges_g()
library(tidyverse)        # for map(), map_dfr(), map_chr(), rowid_to_column(),
```
```

```
-- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
vforcats 1.0.1   vreadr 2.1.6
vggplot2 4.0.2    vstringr 1.6.0
vlubridate 1.9.5   vtibble 3.3.1
vpurrr     1.2.1    vtidyrr 1.3.2
```

```
-- Conflicts ----- tidyverse_conflicts() --
x dplyr::filter() masks stats::filter()
x dplyr::lag()    masks stats::lag()
i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```
```{r}
#| label: load-packages
#|           # for unnest(), etc.
library(haven)          # for as_factor()
library(janitor)         # for adorn_totals()
```
```

```
Attaching package: 'janitor'
```

```
The following objects are masked from 'package:stats':
```

```
chisq.test, fisher.test
```

```
```{r}
#| label: load-packages
library(labelled)        # for get_variable_labels()
options(kableExtra.latex.load_packages = FALSE)
library(kableExtra)       # for kable_styling(), add_header_above(),
```
```

```
Attaching package: 'kableExtra'
```

```
The following object is masked from 'package:dplyr':
```

```
group_rows
```

```
```{r}
#| label: load-packages
#|           # for column_spec(), row_spec() etc.
library(piercer)         # for dc_summary(), file_details(), git_report(),
#|           # which_latex()
library(psych)           # for alpha()
```
```

```

Attaching package: 'psych'

The following objects are masked from 'package:ggplot2':

  %+%, alpha

The following object is masked from 'package:effectsize':

  phi

```{r}
#| label: load-packages
library(quarto)      # for quarto_version()
library(SANETPA)     # for version info
```

```

### 3.3 Declare Path

This next chunk declares the path to this script relative to the project-level root directory. If the file is not in the right location under the project root you'll get a warning message. This helps ensure relative paths are all working as expected. The chunk below uses the `SourceDir` and `SourceFile` parameters set in the YAML header.

```

```{r}
#| label: declare-path

# Declare path to this script relative to the project root directory.
here::i_am(path = paste0(params$SourceDir, params$SourceFile))
```

```

`here()` starts at P:/Consulting/Cases\_1600-1799/C1788/SANETPA

### 3.4 Read Data

We start by reading in the datafile, which contains the following datasets that we need for RQ1 analyses:

- **Applicants**. This is a person-level data file containing one row for every applicant, regardless of eligibility status.,
- **Eligible\_Applicants**. This is a person-level file containing one row for every person who both applied and was eligible for the program. It omits those who were ineligible.

```

```{r}
#| label: load-data
#| eval: true

# Store path to data file.
DataFile <- here("data/Imported_SANETP_Data.RData")

load(file = DataFile)
```

```

Table 1 shows meta-data about the data file we just loaded.

```

```{r}
#| label: tbl-imported-data-file
#| tbl-cap: "Meta-Data About the Data File Loaded"

file_details(DataFile) %>%
  kable(), format = "latex", booktabs = TRUE,
  col.names = c("File Name", "Size", "Last Modified")) %>%
  kable_styling()
```

```

**Table 1: Meta-Data About the Data File Loaded**

| File Name                  | Size | Last Modified       |
|----------------------------|------|---------------------|
| Imported_SANETP_Data.RData | 181K | 2026-02-14 12:56:34 |

### 3.5 Create Subsets of Data

For RQ4, we derive two additional subsets of the `Enrolled_Applicants` data. We create the new scale score variables measuring training satisfaction (`DT_Satisfaction` and `CSW_Satisfaction`) while creating those datasets.

First, we need the subset of `Enrolled_Applicants` that completed the DT component because we need to examine their satisfaction with the first part of the training program. The chunk below creates the `Completed_DT` dataset

```
```{r}
#| label: create-Completed-DT

Completed_DT <- Enrolled_Applicants %>%
  filter(Stage_Reached >= 3) %>%
  rowwise() %>%
  mutate(DT_Satisfaction = mean(c_across(Didactic_Sat_1:Didactic_Sat_7),
                                 na.rm = TRUE)) %>%
  ungroup()
```
```

Second, we need the subset of `Enrolled_Applicants` that completed the CSW training component so we can examine their satisfaction with that second part of the training program. The chunk below creates the `Completed_CSW`.

```
```{r}
#| label: create-Completed-CSW

Completed_CSW <- Enrolled_Applicants %>%
  filter(Stage_Reached == 4) %>%
  rowwise() %>%
  mutate(CSW_Satisfaction = mean(c_across(CSW_Sat_1:CSW_Sat_7),
                                   na.rm = TRUE)) %>%
  ungroup()
```
```

Table 2 shows the shows the sizes of the datasets used in RQ4 analyses.

```
```{r}
#| label: tbl-datasets
#| tbl-cap: "Sizes of the Datasets Used for RQ1"

data.frame(Dataset = c("Enrolled_Applicants", "Completed_DT", "Completed_CSW"),
           N_Rows = c(nrow(Enrolled_Applicants), nrow(Completed_DT),
                      nrow(Completed_CSW)),
           N_Cols = c(ncol(Enrolled_Applicants), ncol(Completed_DT),
                      ncol(Completed_CSW))) %>%
  kable(., format = "latex", booktabs = TRUE,
        col.names = c("Dataset", "N Rows", "N Columns")) %>%
  kable_styling()
```
```

**Table 2: Sizes of the Datasets Used for RQ1**

| Dataset             | N Rows | N Columns |
|---------------------|--------|-----------|
| Enrolled_Applicants | 254    | 154       |
| Completed_DT        | 176    | 155       |
| Completed_CSW       | 159    | 155       |

## 4 Methods

This section describes the data sources, measures, and statistical methods used to answer RQ1.

### 4.1 Data Sources

We rely on two different datasets for answering RQ4. The `Completed_DT` dataset has one row per enrolled applicant who completed the DT component of the program ( $N = 176$ ). Meanwhile, the `Completed_CSW` dataset contains one row per enrolled applicant who completed the CSW component of the program ( $N = 159$ ).

### 4.2 Measures

The sections below describe the measures used to answer RQ4.

#### 4.2.1 DT Satisfaction

Satisfaction with the DT component of the program was measured by the set of 7 items shown in Table 3. The response options comprised a 5-point Likert scale with values from 1 (*strongly disagree*) to 5 (*strongly agree*). All items were worded such that higher values indicated greater satisfaction. An overall scale score was obtained by taking the unweighted mean of the non-missing items.

```
```{r}
#| label: tbl-DT-Satisfaction-items
#| tbl-cap: DT Satisfaction Items

# Table footnote
FN <- paste("The response options were on a 5-point Likert scale: 1 (strongly",
            "disagree), 2 (somewhat disagree), 3 (neither agree nor disagree)",
            "4 (somewhat agree), 5 (strongly agree).")

DT_Items <- Completed_DT %>%
  select(starts_with("Didactic_Sat_")) %>%
  get_variable_labels() %>%
  as_tibble() %>%
  pivot_longer(cols = everything(), names_to = "Variable",
               values_to = "Label") %>%
  mutate(Label = str_replace_all(string = Label, pattern = ":I",
                                replacement = ": I"))

DT_Items %>%
  kable(format = "latex", booktabs = TRUE) %>%
  kable_styling(font_size = 9) %>%
  column_spec(column = 2, width = "10cm") %>%
  footnote(kable_input = .., general = FN, footnote_as_chunk = TRUE,
           threeparttable = TRUE)
```

```

**Table 3: DT Satisfaction Items**

| Variable       | Label  |
|----------------|--|
| Didactic_Sat_1 | There was enough time to learn the material.   |
| Didactic_Sat_2 | The topics were covered adequately.  |
| Didactic_Sat_3 | The weekly discussion board helped me understand the material better.  |
| Didactic_Sat_4 | The online training met my expectations.   |
| Didactic_Sat_5 | I learned a considerable amount during the online training.  |
| Didactic_Sat_6 | I am satisfied with the amount I have learned in this course.  |
| Didactic_Sat_7 | Accounting for the materials you learned in this online course, please rate your response to the following question: I have improved knowledge and skills to care for sexual assault patients. |

*Note:* The response options were on a 5-point Likert scale: 1 (*strongly disagree*), 2 (*somewhat disagree*), 3 (*neither agree nor disagree*) 4 (*somewhat agree*), 5 (*strongly agree*).

#### 4.2.2 CSW Satisfaction

Satisfaction with the CSW component of the program was measured by the set of 7 items shown in Table 4. The response options comprised a 5-point Likert scale with values from 1 (*strongly disagree*) to 5 (*strongly agree*). All items were worded such that higher values indicated greater satisfaction. An overall scale score was obtained by taking the unweighted mean of the non-missing items.

```
```{r}
#| label: tbl-CSW-Satisfaction-items
#| tbl-cap: CSW Satisfaction Items

CSW_Items <- Completed_CSW %>%
  select(starts_with("CSW_Sat_")) %>%
  get_variable_labels() %>%
  as_tibble() %>%
  pivot_longer(cols = everything(), names_to = "Variable",
              values_to = "Label") %>%
  mutate(Label = str_replace_all(string = Label, pattern = "_x000D_",
                                replacement = " "))

CSW_Items %>%
  kable(format = "latex", booktabs = TRUE) %>%
  kable_styling(font_size = 9) %>%
  column_spec(column = 2, width = "10cm") %>%
  footnote(kable_input = ., general = FN, footnote_as_chunk = TRUE,
            threeparttable = TRUE)
```

```

**Table 4: CSW Satisfaction Items**

| Variable  | Label  |
|-----------|--|
| CSW_Sat_1 | The pacing of the clinical training was satisfactory.                                |
| CSW_Sat_2 | The clinical concepts were covered adequately.                                       |
| CSW_Sat_3 | There was enough time to ask questions during the clinical training.                 |
| CSW_Sat_4 | There was enough time to practice different components of the medical forensic exam. |
| CSW_Sat_5 | The clinical training met my expectations.   |
| CSW_Sat_6 | I learned a considerable amount during the clinical training.                        |
| CSW_Sat_7 | The clinical training helped me feel more confident as a forensic examiner.          |

*Note:* The response options were on a 5-point Likert scale: 1 (*strongly disagree*), 2 (*somewhat disagree*), 3 (*neither agree nor disagree*) 4 (*somewhat agree*), 5 (*strongly agree*).

## 4.3 Statistical Analyses

For each of the two satisfaction scales, we first examine item-level frequency distributions, then used the psych package for R (Revelle, 2026) to estimate Cronbach's alpha as a measure of reliability for the unweighted scale scores, and then provide descriptive statistics and graphs of the scale score distributions.

# 5 Results

## 5.1 DT Satisfaction

### 5.1.1 Item Distributions

```
```{r}
#| label: tbl-DT-Satisfaction-freqs
#| tbl-cap: Frequency Distributions for DT Satisfaction Items

# Table footnote
FN <- paste("The response options were on a 5-point Likert scale: 1 (strongly",
            "disagree), 2 (somewhat disagree), 3 (neither agree nor disagree)",
            "4 (somewhat agree), 5 (strongly agree).")

Completed_DT %>%
  select(starts_with("Didactic_Sat_")) %>%
  pivot_longer(cols = everything(), names_to = "Variable",
               values_to = "Value") %>%
  mutate(Value = addNA(factor(Value, levels = 1:5))) %>%
  group_by(Variable, .drop = FALSE) %>%
  count(Value) %>%
  mutate(pct = 100*n/nrow(Completed_DT)) %>%
  ungroup() %>%
  left_join(., DT_Items, by = join_by(Variable)) %>%
  relocate(Variable, Label) %>%
  kable(format = "latex", booktabs = TRUE, digits = 1,
        col.names = c("Item", "Label", "Value", "n", "%")) %>%
  kable_styling(font_size = 9) %>%
  column_spec(column = 2, width = "10cm") %>%
  collapse_rows(columns = 1:2, valign = "top", latex_hline = "major",
                row_group_label_position = "first", headers_to_remove = 0) %>%
  footnote(kable_input = ., general = FN, footnote_as_chunk = TRUE,
           threeparttable = TRUE)
```

```

**Table 5: Frequency Distributions for DT Satisfaction Items**

| Item           | Label  | Value | n   | %    |
|----------------|--|-------|-----|------|
| Didactic_Sat_1 | There was enough time to learn the material.   | 1     | 0   | 0.0  |
|                |  | 2     | 2   | 1.1  |
|                |  | 3     | 2   | 1.1  |
|                |  | 4     | 44  | 25.0 |
|                |  | 5     | 128 | 72.7 |
|                |  | NA    | 0   | 0.0  |
| Didactic_Sat_2 | The topics were covered adequately.  | 1     | 0   | 0.0  |
|                |  | 2     | 0   | 0.0  |
|                |  | 3     | 2   | 1.1  |
|                |  | 4     | 16  | 9.1  |
|                |  | 5     | 158 | 89.8 |
|                |  | NA    | 0   | 0.0  |
| Didactic_Sat_3 | The weekly discussion board helped me understand the material better.  | 1     | 3   | 1.7  |
|                |  | 2     | 9   | 5.1  |
|                |  | 3     | 24  | 13.6 |
|                |  | 4     | 50  | 28.4 |
|                |  | 5     | 90  | 51.1 |
|                |  | NA    | 0   | 0.0  |
| Didactic_Sat_4 | The online training met my expectations.   | 1     | 0   | 0.0  |
|                |  | 2     | 0   | 0.0  |
|                |  | 3     | 2   | 1.1  |
|                |  | 4     | 28  | 15.9 |
|                |  | 5     | 146 | 83.0 |
|                |  | NA    | 0   | 0.0  |
| Didactic_Sat_5 | I learned a considerable amount during the online training.  | 1     | 0   | 0.0  |
|                |  | 2     | 0   | 0.0  |
|                |  | 3     | 1   | 0.6  |
|                |  | 4     | 5   | 2.8  |
|                |  | 5     | 170 | 96.6 |
|                |  | NA    | 0   | 0.0  |
| Didactic_Sat_6 | I am satisfied with the amount I have learned in this course.  | 1     | 0   | 0.0  |
|                |  | 2     | 0   | 0.0  |
|                |  | 3     | 1   | 0.6  |
|                |  | 4     | 21  | 11.9 |
|                |  | 5     | 154 | 87.5 |
|                |  | NA    | 0   | 0.0  |
| Didactic_Sat_7 | Accounting for the materials you learned in this online course, please rate your response to the following question: I have improved knowledge and skills to care for sexual assault patients. | 1     | 0   | 0.0  |
|                |  | 2     | 0   | 0.0  |
|                |  | 3     | 1   | 0.6  |
|                |  | 4     | 15  | 8.5  |
|                |  | 5     | 159 | 90.3 |
|                |  | NA    | 1   | 0.6  |

*Note:* The response options were on a 5-point Likert scale: 1 (strongly disagree), 2 (somewhat disagree), 3 (neither agree nor disagree) 4 (somewhat agree), 5 (strongly agree).

### 5.1.2 Scale Score Reliability

```
```{r}
#| label: reliability-Barrier-TD-3item

Completed_DT %>%
  select(Didactic_Sat_1, Didactic_Sat_2, Didactic_Sat_3, Didactic_Sat_4,
         Didactic_Sat_5, Didactic_Sat_6, Didactic_Sat_7) %>%
  as.data.frame() %>%
  alpha(x = ., cumulative = TRUE, discrete = TRUE)
```

```

Warning in response.frequencies(x, max = max): response.frequency has been deprecated and replaced with responseFrequency. Please fix your call

```
Reliability analysis
Call: alpha(x = ., cumulative = TRUE, discrete = TRUE)

raw_alpha std.alpha G6(smc) average_r S/N   ase mean   sd median_r
      0.75      0.83      0.83      0.41  5 0.026   33 2.3     0.43

95% confidence boundaries
      lower alpha upper
Feldt    0.69  0.75  0.8
Duhachek 0.70  0.75  0.8

Reliability if an item is dropped:
      raw_alpha std.alpha G6(smc) average_r S/N alpha se var.r med.r
Didactic_Sat_1    0.73      0.84      0.82      0.46 5.2  0.026 0.0071  0.46
Didactic_Sat_2    0.69      0.79      0.79      0.39 3.9  0.031 0.0142  0.38
Didactic_Sat_3    0.79      0.82      0.81      0.43 4.5  0.025 0.0146  0.44
Didactic_Sat_4    0.68      0.79      0.78      0.39 3.8  0.032 0.0138  0.38
Didactic_Sat_5    0.73      0.81      0.79      0.42 4.3  0.028 0.0091  0.43
Didactic_Sat_6    0.71      0.80      0.79      0.40 4.0  0.029 0.0126  0.41
Didactic_Sat_7    0.71      0.80      0.80      0.41 4.1  0.029 0.0173  0.41

Item statistics
      n raw.r std.r r.cor r.drop mean   sd
Didactic_Sat_1 176  0.59  0.56  0.44  0.39  4.7 0.55
Didactic_Sat_2 176  0.75  0.77  0.73  0.66  4.9 0.35
Didactic_Sat_3 176  0.78  0.66  0.57  0.52  4.2 0.98
Didactic_Sat_4 176  0.77  0.78  0.75  0.68  4.8 0.42
Didactic_Sat_5 176  0.55  0.69  0.63  0.50  5.0 0.22
Didactic_Sat_6 176  0.68  0.75  0.71  0.57  4.9 0.35
Didactic_Sat_7 175  0.67  0.73  0.66  0.57  4.9 0.32

Non missing response frequency for each item
      1   2   3   4   5 miss
Didactic_Sat_1 0.00 0.01 0.01 0.25 0.73 0.00
Didactic_Sat_2 0.00 0.00 0.01 0.09 0.90 0.00
Didactic_Sat_3 0.02 0.05 0.14 0.28 0.51 0.00
Didactic_Sat_4 0.00 0.00 0.01 0.16 0.83 0.00
Didactic_Sat_5 0.00 0.00 0.01 0.03 0.97 0.00
Didactic_Sat_6 0.00 0.00 0.01 0.12 0.88 0.00
Didactic_Sat_7 0.00 0.00 0.01 0.09 0.91 0.01
```

### 5.1.3 Scale Score Distribution

```
```{r}
#| label: tbl-DT-Satisfaction
#| tbl-cap: Descriptive Statistics for DT Satisfaction Among Enrolled Applicants
#| Who Completed the DT Component

# Footnote text.
FN <- paste("N_m", number of missing values; N_o, number of observed values.")

VNames <- c("DT_Satisfaction", "Didactic_Sat_1", "Didactic_Sat_2",
           "Didactic_Sat_3", "Didactic_Sat_4", "Didactic_Sat_5",
           "Didactic_Sat_6", "Didactic_Sat_7")
CNames <- c("Variable", "N", "N_m", "N_o", "Mean", "SD", "Min", "Max")

Completed_DT %>%
  select(ID, DT_Satisfaction, Didactic_Sat_1, Didactic_Sat_2, Didactic_Sat_3,
         Didactic_Sat_4, Didactic_Sat_5, Didactic_Sat_6, Didactic_Sat_7) %>%
  pivot_longer(cols = c(DT_Satisfaction, Didactic_Sat_1, Didactic_Sat_2,
                        Didactic_Sat_3, Didactic_Sat_4, Didactic_Sat_5,
                        Didactic_Sat_6, Didactic_Sat_7),
                names_to = "VarName",
                values_to = "Value") %>%
  mutate(VarName = factor(VarName, levels = VNames), labels = VNames)) %>%
  relocate(ID, VarName) %>%
  group_by(VarName) %>%
  summarise(N = n(),
            N_missing = sum(is.na(Value))),
```

```

N_observed = sum(!is.na(Value)),
Mean = mean(Value, na.rm = TRUE),
SD = sd(Value, na.rm = TRUE),
Min = round(min(Value, na.rm = TRUE), digits = 1),
Max = max(Value, na.rm = TRUE)) %>%
kable(., format = "latex", booktabs = TRUE, digits = 1,
col.names = CNames, row.names = FALSE) %>%
kable_styling() %>%
footnote(kable_input = ., general = FN, footnote_as_chunk = TRUE)
```

```

**Table 6: Descriptive Statistics for DT Satisfaction Among Enrolled Applicants Who Completed the DT Component**

| Variable        | N   | N_m | N_o | Mean | SD  | Min | Max |
|-----------------|-----|-----|-----|------|-----|-----|-----|
| DT_Satisfaction | 176 | 0   | 176 | 4.8  | 0.3 | 3.1 | 5   |
| Didactic_Sat_1  | 176 | 0   | 176 | 4.7  | 0.6 | 2.0 | 5   |
| Didactic_Sat_2  | 176 | 0   | 176 | 4.9  | 0.4 | 3.0 | 5   |
| Didactic_Sat_3  | 176 | 0   | 176 | 4.2  | 1.0 | 1.0 | 5   |
| Didactic_Sat_4  | 176 | 0   | 176 | 4.8  | 0.4 | 3.0 | 5   |
| Didactic_Sat_5  | 176 | 0   | 176 | 5.0  | 0.2 | 3.0 | 5   |
| Didactic_Sat_6  | 176 | 0   | 176 | 4.9  | 0.4 | 3.0 | 5   |
| Didactic_Sat_7  | 176 | 1   | 175 | 4.9  | 0.3 | 3.0 | 5   |

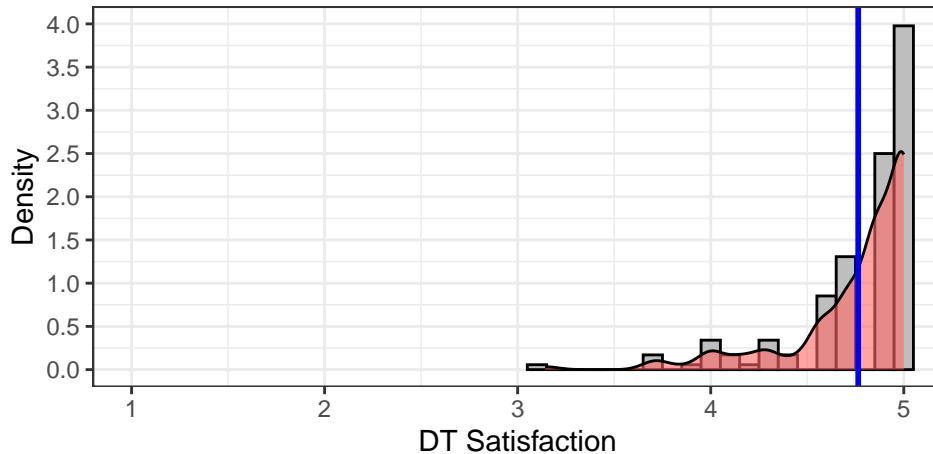
*Note:* N\_m, number of missing values; N\_o, number of observed values.

```

```{r}
#| label: fig-DT-Satisfaction
#| fig-cap: Histogram of DT Satisfaction Among Enrolled Applicants
#| Who Completed the DT Component
#| fig-width: 5
#| fig-height: 2.5
#| warning: false

ggplot(data = Completed_DT, aes(x = DT_Satisfaction)) +
  geom_histogram(aes(y = after_stat(density)), binwidth = 0.1, color = "black",
                 fill = "grey") +
  geom_density(alpha = .6, fill = "#FF6666") +
  geom_vline(aes(xintercept = mean(DT_Satisfaction, na.rm = TRUE)), color = "blue",
             linetype = "solid", linewidth = 1) +
  coord_cartesian(xlim = c(1, 5), ylim = c(0, 4)) +
  scale_x_continuous(breaks = seq(from = 1, to = 5, by = 1)) +
  scale_y_continuous(breaks = seq(from = 0, to = 4, by = 0.5)) +
  theme_bw() +
  labs(x = "DT Satisfaction",
       y = "Density")
```

```



**Figure 1: Histogram of DT Satisfaction Among Enrolled Applicants Who Completed the DT Component**

## 5.2 CSW Satisfaction

### 5.2.1 Item Distributions

```
```{r}
#| label: tbl-CSW-Satisfaction-freqs
#| tbl-cap: Frequency Distributions for CSW Satisfaction Items

# Table footnote
FN <- paste("The response options were on a 5-point Likert scale: 1 (strongly",
            "disagree), 2 (somewhat disagree), 3 (neither agree nor disagree)",
            "4 (somewhat agree), 5 (strongly agree).")

Completed_CSW %>%
  select(starts_with("CSW_Sat_")) %>%
  pivot_longer(cols = everything(), names_to = "Variable",
               values_to = "Value") %>%
  mutate(Value = addNA(factor(Value, levels = 1:5))) %>%
  group_by(Variable, .drop = FALSE) %>%
  count(Value) %>%
  mutate(pct = 100*n/nrow(Completed_CSW)) %>%
  ungroup() %>%
  left_join(., CSW_Items, by = join_by(Variable)) %>%
  relocate(Variable, Label) %>%
  kable(format = "latex", booktabs = TRUE, digits = 1,
        col.names = c("Item", "Label", "Value", "n", "%")) %>%
  kable_styling(font_size = 9) %>%
  column_spec(column = 2, width = "10cm") %>%
  collapse_rows(columns = 1:2, valign = "top", latex_hline = "major",
                row_group_label_position = "first", headers_to_remove = 0) %>%
  footnote(kable_input = ., general = FN, footnote_as_chunk = TRUE,
           threeparttable = TRUE)
```

```

**Table 7: Frequency Distributions for CSW Satisfaction Items**

| Item      | Label  | Value | n   | %    |
|-----------|--|-------|-----|------|
| CSW_Sat_1 | The pacing of the clinical training was satisfactory.                                | 1     | 0   | 0.0  |
|           |  | 2     | 1   | 0.6  |
|           |  | 3     | 2   | 1.3  |
|           |  | 4     | 22  | 13.8 |
|           |  | 5     | 134 | 84.3 |
|           |  | NA    | 0   | 0.0  |
| CSW_Sat_2 | The clinical concepts were covered adequately.                                       | 1     | 0   | 0.0  |
|           |  | 2     | 0   | 0.0  |
|           |  | 3     | 0   | 0.0  |
|           |  | 4     | 15  | 9.4  |
|           |  | 5     | 144 | 90.6 |
|           |  | NA    | 0   | 0.0  |
| CSW_Sat_3 | There was enough time to ask questions during the clinical training.                 | 1     | 0   | 0.0  |
|           |  | 2     | 1   | 0.6  |
|           |  | 3     | 1   | 0.6  |
|           |  | 4     | 11  | 6.9  |
|           |  | 5     | 146 | 91.8 |
|           |  | NA    | 0   | 0.0  |
| CSW_Sat_4 | There was enough time to practice different components of the medical forensic exam. | 1     | 0   | 0.0  |
|           |  | 2     | 2   | 1.3  |
|           |  | 3     | 0   | 0.0  |
|           |  | 4     | 18  | 11.3 |
|           |  | 5     | 139 | 87.4 |
|           |  | NA    | 0   | 0.0  |
| CSW_Sat_5 | The clinical training met my expectations.   | 1     | 0   | 0.0  |
|           |  | 2     | 0   | 0.0  |
|           |  | 3     | 0   | 0.0  |
|           |  | 4     | 18  | 11.3 |
|           |  | 5     | 141 | 88.7 |
|           |  | NA    | 0   | 0.0  |
| CSW_Sat_6 | I learned a considerable amount during the clinical training.                        | 1     | 0   | 0.0  |
|           |  | 2     | 0   | 0.0  |
|           |  | 3     | 0   | 0.0  |
|           |  | 4     | 3   | 1.9  |
|           |  | 5     | 156 | 98.1 |
|           |  | NA    | 0   | 0.0  |
| CSW_Sat_7 | The clinical training helped me feel more confident as a forensic examiner.          | 1     | 0   | 0.0  |
|           |  | 2     | 0   | 0.0  |
|           |  | 3     | 1   | 0.6  |
|           |  | 4     | 11  | 6.9  |
|           |  | 5     | 147 | 92.5 |
|           |  | NA    | 0   | 0.0  |

*Note:* The response options were on a 5-point Likert scale: 1 (strongly disagree), 2 (somewhat disagree), 3 (neither agree nor disagree) 4 (somewhat agree), 5 (strongly agree).

### 5.2.2 Scale Score Reliability

```
```{r}
#| label: reliability-CSW-Satisfaction

Completed_CSW %>%
  select(CSW_Sat_1, CSW_Sat_2, CSW_Sat_3, CSW_Sat_4, CSW_Sat_5, CSW_Sat_6,
  CSW_Sat_7) %>%
  as.data.frame() %>%
  alpha(x = ., cumulative = TRUE, discrete = TRUE)
```

```

Warning in response.frequencies(x, max = max): response.frequency has been deprecated and replaced with responseFrequency. Please fix your call

```
Reliability analysis
Call: alpha(x = ., cumulative = TRUE, discrete = TRUE)

raw_alpha std.alpha G6(smc) average_r S/N  ase mean sd median_r
 0.78      0.8     0.81      0.37 4.1 0.026   34 1.6    0.37

95% confidence boundaries
      lower alpha upper
Feldt    0.72  0.78  0.83
Duhachek 0.73  0.78  0.83

Reliability if an item is dropped:
  raw_alpha std.alpha G6(smc) average_r S/N alpha se var.r med.r
CSW_Sat_1    0.74      0.78  0.76      0.37 3.5  0.030 0.0048  0.37
CSW_Sat_2    0.73      0.77  0.75      0.35 3.3  0.031 0.0090  0.36
CSW_Sat_3    0.74      0.79  0.79      0.38 3.7  0.029 0.0104  0.39
CSW_Sat_4    0.75      0.78  0.77      0.37 3.5  0.029 0.0109  0.38
CSW_Sat_5    0.74      0.78  0.78      0.37 3.5  0.030 0.0117  0.37
CSW_Sat_6    0.76      0.78  0.77      0.37 3.5  0.028 0.0104  0.36
CSW_Sat_7    0.76      0.79  0.78      0.38 3.7  0.028 0.0063  0.37

Item statistics
  n raw.r std.r r.cor r.drop mean   sd
CSW_Sat_1 159 0.73 0.68 0.63 0.55 4.8 0.46
CSW_Sat_2 159 0.72 0.73 0.69 0.61 4.9 0.29
CSW_Sat_3 159 0.68 0.65 0.56 0.51 4.9 0.38
CSW_Sat_4 159 0.71 0.69 0.62 0.52 4.8 0.45
CSW_Sat_5 159 0.67 0.68 0.60 0.53 4.9 0.32
CSW_Sat_6 159 0.60 0.69 0.62 0.54 5.0 0.14
CSW_Sat_7 159 0.59 0.63 0.55 0.45 4.9 0.30

Non missing response frequency for each item
  2   3   4   5 miss
CSW_Sat_1 0.01 0.01 0.14 0.84 0
CSW_Sat_2 0.00 0.00 0.09 0.91 0
CSW_Sat_3 0.01 0.01 0.07 0.92 0
CSW_Sat_4 0.01 0.00 0.11 0.87 0
CSW_Sat_5 0.00 0.00 0.11 0.89 0
CSW_Sat_6 0.00 0.00 0.02 0.98 0
CSW_Sat_7 0.00 0.01 0.07 0.92 0
```

### 5.2.3 Scale Score Distribution

```
```{r}
#| label: tbl-CSW-Satisfaction
#| tbl-cap: Descriptive Statistics for CSW Satisfaction Among Enrolled Applicants
#| Who Completed the CSW Component

# Footnote text.
FN <- paste("N_m", number of missing values; N_o, number of observed values.")

VNames <- c("CSW_Satisfaction", "CSW_Sat_1", "CSW_Sat_2", "CSW_Sat_3",
           "CSW_Sat_4", "CSW_Sat_5", "CSW_Sat_6", "CSW_Sat_7")
CNames <- c("Variable", "N", "N_m", "N_o", "Mean", "SD", "Min", "Max")

Completed_CSW %>%
  select(ID, CSW_Satisfaction, CSW_Sat_1, CSW_Sat_2, CSW_Sat_3, CSW_Sat_4,
         CSW_Sat_5, CSW_Sat_6, CSW_Sat_7) %>%
  pivot_longer(cols = c(CSW_Satisfaction, CSW_Sat_1, CSW_Sat_2, CSW_Sat_3,
                        CSW_Sat_4, CSW_Sat_5, CSW_Sat_6, CSW_Sat_7),
                names_to = "VarName",
                values_to = "Value") %>%
  mutate(VarName = factor(VarName, levels = VNames, labels = VNames)) %>%
  relocate(ID, VarName) %>%
  group_by(VarName) %>%
  summarise(N = n(),
            N_missing = sum(is.na(Value)),
            N_observed = sum(!is.na(Value)),
            Mean = mean(Value, na.rm = TRUE),
```

```

SD = sd(Value, na.rm = TRUE),
Min = round(min(Value, na.rm = TRUE), digits = 1),
Max = max(Value, na.rm = TRUE)) %>%
kable(., format = "latex", booktabs = TRUE, digits = 1,
      col.names = CNames, row.names = FALSE) %>%
kable_styling() %>%
footnote(kable_input = ., general = FN, footnote_as_chunk = TRUE)
...

```

**Table 8: Descriptive Statistics for CSW Satisfaction Among Enrolled Applicants Who Completed the CSW Component**

| Variable         | N   | N_m | N_o | Mean | SD  | Min | Max |
|------------------|-----|-----|-----|------|-----|-----|-----|
| CSW_Satisfaction | 159 | 0   | 159 | 4.9  | 0.2 | 3.7 | 5   |
| CSW_Sat_1        | 159 | 0   | 159 | 4.8  | 0.5 | 2.0 | 5   |
| CSW_Sat_2        | 159 | 0   | 159 | 4.9  | 0.3 | 4.0 | 5   |
| CSW_Sat_3        | 159 | 0   | 159 | 4.9  | 0.4 | 2.0 | 5   |
| CSW_Sat_4        | 159 | 0   | 159 | 4.8  | 0.5 | 2.0 | 5   |
| CSW_Sat_5        | 159 | 0   | 159 | 4.9  | 0.3 | 4.0 | 5   |
| CSW_Sat_6        | 159 | 0   | 159 | 5.0  | 0.1 | 4.0 | 5   |
| CSW_Sat_7        | 159 | 0   | 159 | 4.9  | 0.3 | 3.0 | 5   |

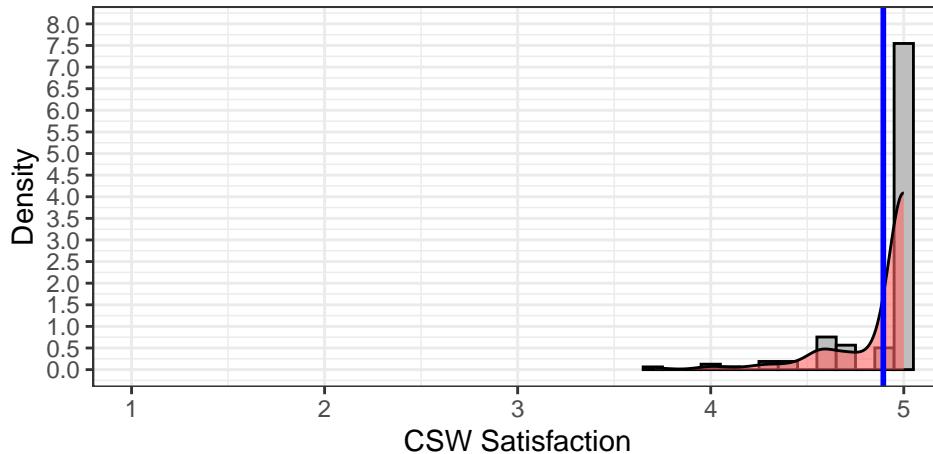
*Note:* N\_m, number of missing values; N\_o, number of observed values.

```

```{r}
#| label: fig-CSW-Satisfaction
#| fig-cap: Histogram of CSW Satisfaction Among Enrolled Applicants
#|           Who Completed the CSW Component
#| fig-width: 5
#| fig-height: 2.5
#| warning: false

ggplot(data = Completed_CSW, aes(x = CSW_Satisfaction)) +
  geom_histogram(aes(y = after_stat(density)), binwidth = 0.1, color = "black",
                 fill = "grey") +
  geom_density(alpha = .6, fill = "#FF6666") +
  geom_vline(aes(xintercept = mean(CSW_Satisfaction, na.rm = TRUE)), color = "blue",
             linetype = "solid", linewidth = 1) +
  coord_cartesian(xlim = c(1, 5), ylim = c(0, 8)) +
  scale_x_continuous(breaks = seq(from = 1, to = 5, by = 1)) +
  scale_y_continuous(breaks = seq(from = 0, to = 8, by = 0.5)) +
  theme_bw() +
  labs(x = "CSW Satisfaction",
       y = "Density")
...

```



**Figure 2: Histogram of CSW Satisfaction Among Enrolled Applicants Who Completed the CSW Component**

## 6 Conclusions

Both the DT and CSW satisfaction scale scores have sufficient reliability Cronbach's alpha of 0.75 and 0.78, respectively. All the items for each scale have reasonable face validity, are moderately and positively correlated with other items, and contribute to improved reliability of the measure.

The item-level frequency distributions show strongly skewed distributions, with responses concentrated in the somewhat agree and strongly agree values, such that item means are nearly all  $> 4.7$ .

Consequently, the scale scores for both DT and CSW satisfaction are also very skewed and concentrated in the upper end of the possible range. Applicants who completed each of these training components were highly satisfied with the training they received.

## 7 References

- Dontje, K., & Campbell, R. (07/01/2021–06/30/2025). *Increasing access, recruitment, and retention of sexual assault nurse examiners in rural michigan* (Grant No. T96HP42059). Health Resources and Services Administration.
- Pierce, S. J. (2026). *SANETPA: Research compendium for a study of sexual assault nurse examiner training program attrition* (Version 1.0.1) [Reproducible Research Materials and Computer Program, R Package, Public Repository]. GitHub. <https://github.com/sjpierce/SANETPA.Zenodo>. <https://doi.org/10.5281/zenodo.18643254>
- Revelle, W. (2026). *psych: Procedures for personality and psychological research* (Version 2.6.1) [Computer Program, R Package]. The Comprehensive R Archive Network. <https://CRAN.R-project.org/package=psych>

## 8 Software Information

This section documents information that is important for reproducibility. Most users will not need to read it. It is primarily here for use by the statistician on the team if we need to troubleshoot reproducibility issues because someone else is unable to get the same results from the same code. Start by checking for differences in package versions.

We used [R](#) as our main computing environment and [Quarto](#) scripts to enhance reproducibility. We used [RStudio](#) as the editor to interface with R and Quarto.

- Software chain: **qmd file > RStudio > Quarto > R > knitr > md file > Pandoc > tex file > TinyTeX > PDF file.**
- Source file: [RQ4\\_Analyses.qmd](#)
- Output file: [RQ4\\_Analyses\\_2026-02-14.pdf](#)
- [Quarto 1.8.27](#) runs `*.qmd` files through [R](#) and [knitr](#) to produce `*.md` markdown files.
- [Pandoc 3.6.3](#) converts markdown files (`*.md`) to other formats, including LaTeX (`*.tex`) and HTML (`*.html`) among others.
- [TinyTeX](#) compiles LaTeX files (`*.tex`) into PDF files. It should be viable to use [MiKTeX](#) or another LaTeX distribution instead.

### 8.1 Versions

This document was generated using the following computational environment and dependencies:

```
# Check and report whether we used TinyTeX or other LaTeX software.
which_latex()
```

```
is_tinytex = TRUE. We used TeX Live 2025 (TinyTeX) with tlmgr 2025-11-06.
```

```
tlmgr revision 76773 (2025-11-06 20:43:29 +0100)
tlmgr using installation: C:/Users/pierces1/AppData/Roaming/TinyTeX
TeX Live (https://tug.org/texlive) version 2025
```

```
# Get R and R package version numbers in use.
devtools::session_info()
```

```
Warning in system2("quarto", "--V", stdout = TRUE, env = paste0("TMPDIR=", :
running command '"quarto"
TMPDIR=C:/Users/pierces1/AppData/Local/Temp/Rtmp4asuTF/file1510aea3065 -V' had
status 1
```

```
- Session info -----
setting  value
version  R version 4.5.2 (2025-10-31 ucrt)
os       Windows 11 x64 (build 26100)
system   x86_64, mingw32
ui       RTerm
language (EN)
collate English_United States.utf8
ctype    English_United States.utf8
tz       America/New_York
date     2026-02-14
pandoc   3.6.3 @ C:/Program Files/RStudio/resources/app/bin/quarto/bin/tools/ (via rmarkdown)
quarto   NA @ C:\\PROGRA~1\\Quarto\\bin\\quarto.exe

- Packages -----
package    * version date (UTC) lib source
assertthat  0.2.1   2019-03-21 [1] CRAN (R 4.5.0)
backports   1.5.0   2024-05-23 [1] CRAN (R 4.5.0)
bayestestR  0.17.0  2025-08-29 [1] CRAN (R 4.5.1)
broom      * 1.0.12  2026-01-27 [1] CRAN (R 4.5.2)
cachem     1.1.0   2024-05-16 [1] CRAN (R 4.5.0)
```

|              |          |            |     |                                   |
|--------------|----------|------------|-----|-----------------------------------|
| cli          | 3.6.5    | 2025-04-23 | [1] | CRAN (R 4.5.0)                    |
| coda         | 0.19-4.1 | 2024-01-31 | [1] | CRAN (R 4.5.0)                    |
| codetools    | 0.2-20   | 2024-03-31 | [1] | CRAN (R 4.5.0)                    |
| datavizizard | 1.3.0    | 2025-10-11 | [1] | CRAN (R 4.5.1)                    |
| devtools     | * 2.4.6  | 2025-10-03 | [1] | CRAN (R 4.5.1)                    |
| digest       | 0.6.39   | 2025-11-19 | [1] | CRAN (R 4.5.2)                    |
| dplyr        | * 1.2.0  | 2026-02-03 | [1] | CRAN (R 4.5.2)                    |
| effectsize   | * 1.0.1  | 2025-05-27 | [1] | CRAN (R 4.5.0)                    |
| ellipsis     | 0.3.2    | 2021-04-29 | [1] | CRAN (R 4.5.0)                    |
| emmeans      | 2.0.1    | 2025-12-16 | [1] | CRAN (R 4.5.2)                    |
| estimability | 1.5.1    | 2024-05-12 | [1] | CRAN (R 4.5.0)                    |
| evaluate     | 1.0.5    | 2025-08-27 | [1] | CRAN (R 4.5.1)                    |
| farver       | 2.1.2    | 2024-05-13 | [1] | CRAN (R 4.5.0)                    |
| fastmap      | 1.2.0    | 2024-05-15 | [1] | CRAN (R 4.5.0)                    |
| forcats      | * 1.0.1  | 2025-09-25 | [1] | CRAN (R 4.5.1)                    |
| fs           | 1.6.6    | 2025-04-12 | [1] | CRAN (R 4.5.0)                    |
| generics     | 0.1.4    | 2025-05-09 | [1] | CRAN (R 4.5.0)                    |
| ggplot2      | * 4.0.2  | 2026-02-03 | [1] | CRAN (R 4.5.2)                    |
| git2r        | 0.36.2   | 2025-03-29 | [1] | CRAN (R 4.5.0)                    |
| glue         | 1.8.0    | 2024-09-30 | [1] | CRAN (R 4.5.0)                    |
| gttable      | 0.3.6    | 2024-10-25 | [1] | CRAN (R 4.5.0)                    |
| haven        | * 2.5.5  | 2025-05-30 | [1] | CRAN (R 4.5.0)                    |
| here         | * 1.0.2  | 2025-09-15 | [1] | CRAN (R 4.5.1)                    |
| hms          | 1.1.4    | 2025-10-17 | [1] | CRAN (R 4.5.1)                    |
| htmltools    | 0.5.9    | 2025-12-04 | [1] | CRAN (R 4.5.2)                    |
| httr         | 1.4.8    | 2026-02-13 | [1] | CRAN (R 4.5.2)                    |
| insight      | 1.4.6    | 2026-02-04 | [1] | CRAN (R 4.5.2)                    |
| janitor      | * 2.2.1  | 2024-12-22 | [1] | CRAN (R 4.5.0)                    |
| jsonlite     | 2.0.0    | 2025-03-27 | [1] | CRAN (R 4.5.0)                    |
| kableExtra   | * 1.4.0  | 2024-01-24 | [1] | CRAN (R 4.5.0)                    |
| knitr        | * 1.51   | 2025-12-20 | [1] | CRAN (R 4.5.2)                    |
| labelled     | * 2.16.0 | 2025-10-22 | [1] | CRAN (R 4.5.1)                    |
| later        | 1.4.5    | 2026-01-08 | [1] | CRAN (R 4.5.2)                    |
| lattice      | 0.22-9   | 2026-02-08 | [1] | CRAN (R 4.5.2)                    |
| lifecycle    | 1.0.5    | 2026-01-08 | [1] | CRAN (R 4.5.2)                    |
| lubridate    | * 1.9.5  | 2026-02-04 | [1] | CRAN (R 4.5.2)                    |
| magrittr     | 2.0.4    | 2025-09-12 | [1] | CRAN (R 4.5.1)                    |
| MASS         | 7.3-65   | 2025-02-28 | [1] | CRAN (R 4.5.0)                    |
| Matrix       | 1.7-4    | 2025-08-28 | [1] | CRAN (R 4.5.1)                    |
| MBESS        | 4.9.42   | 2026-01-08 | [1] | CRAN (R 4.5.2)                    |
| memoise      | 2.0.1    | 2021-11-26 | [1] | CRAN (R 4.5.0)                    |
| mnormt       | 2.1.2    | 2026-01-27 | [1] | CRAN (R 4.5.2)                    |
| multcomp     | 1.4-29   | 2025-10-20 | [1] | CRAN (R 4.5.1)                    |
| mvtnorm      | 1.3-3    | 2025-01-10 | [1] | CRAN (R 4.5.0)                    |
| nime         | 3.1-163  | 2025-03-31 | [1] | CRAN (R 4.5.0)                    |
| otel         | 0.2.0    | 2025-08-29 | [1] | CRAN (R 4.5.1)                    |
| parameters   | 0.28.3   | 2025-11-25 | [1] | CRAN (R 4.5.2)                    |
| pbinomr      | 0.6.0    | 2015-01-23 | [1] | CRAN (R 4.5.0)                    |
| piercer      | * 0.23.0 | 2025-09-07 | [1] | Github (sjpierce@piercer@7e53e10) |
| pillar       | 1.11.1   | 2025-09-17 | [1] | CRAN (R 4.5.1)                    |
| pkgbuild     | 1.4.8    | 2025-05-26 | [1] | CRAN (R 4.5.0)                    |
| pkgconfig    | 2.0.3    | 2019-09-22 | [1] | CRAN (R 4.5.0)                    |
| pkgload      | 1.5.0    | 2026-02-03 | [1] | CRAN (R 4.5.2)                    |
| pROC         | 1.19.0.1 | 2025-07-31 | [1] | CRAN (R 4.5.1)                    |
| processx     | 3.8.6    | 2025-02-21 | [1] | CRAN (R 4.5.0)                    |
| PropCIs      | 0.3-0    | 2018-02-23 | [1] | CRAN (R 4.5.0)                    |
| ps           | 1.9.1    | 2025-04-12 | [1] | CRAN (R 4.5.0)                    |
| psych        | * 2.6.1  | 2026-02-03 | [1] | CRAN (R 4.5.2)                    |
| purrr        | * 1.2.1  | 2026-01-09 | [1] | CRAN (R 4.5.2)                    |
| quarto       | * 1.5.1  | 2025-09-04 | [1] | CRAN (R 4.5.1)                    |
| R6           | 2.6.1    | 2025-02-15 | [1] | CRAN (R 4.5.0)                    |
| RColorBrewer | 1.1-3    | 2022-04-03 | [1] | CRAN (R 4.5.0)                    |
| Rcpp         | 1.1.1    | 2026-01-10 | [1] | CRAN (R 4.5.2)                    |
| readr        | * 2.1.6  | 2025-11-14 | [1] | CRAN (R 4.5.2)                    |
| remotes      | 2.5.0    | 2024-03-17 | [1] | CRAN (R 4.5.0)                    |
| rlang        | 1.1.7    | 2026-01-09 | [1] | CRAN (R 4.5.2)                    |
| rmarkdown    | * 2.30   | 2025-09-28 | [1] | CRAN (R 4.5.1)                    |
| rprojroot    | 2.1.1    | 2025-08-26 | [1] | CRAN (R 4.5.1)                    |
| rstudioapi   | 0.18.0   | 2026-01-16 | [1] | CRAN (R 4.5.2)                    |
| S7           | 0.2.1    | 2025-11-14 | [1] | CRAN (R 4.5.2)                    |
| sandwich     | 3.1-1    | 2024-09-15 | [1] | CRAN (R 4.5.0)                    |
| SANETPA      | * 1.0.1  | 2026-02-14 | [1] | Github (sjpierce@SANETPA@482345e) |
| scales       | 1.4.0    | 2025-04-24 | [1] | CRAN (R 4.5.0)                    |
| sessioninfo  | 1.2.3    | 2025-02-05 | [1] | CRAN (R 4.5.0)                    |
| snakecase    | 0.11.1   | 2023-08-27 | [1] | CRAN (R 4.5.0)                    |
| stringi      | 1.8.7    | 2025-03-27 | [1] | CRAN (R 4.5.0)                    |
| stringr      | * 1.6.0  | 2025-11-04 | [1] | CRAN (R 4.5.2)                    |
| survival     | 3.8-6    | 2026-01-16 | [1] | CRAN (R 4.5.2)                    |
| svglite      | 2.2.2    | 2025-10-21 | [1] | CRAN (R 4.5.1)                    |
| systemfonts  | 1.3.1    | 2025-10-01 | [1] | CRAN (R 4.5.1)                    |
| texreg       | 1.39.5   | 2025-12-22 | [1] | CRAN (R 4.5.2)                    |
| textshaping  | 1.0.4    | 2025-10-10 | [1] | CRAN (R 4.5.1)                    |
| TH.data      | 1.1-5    | 2025-11-17 | [1] | CRAN (R 4.5.2)                    |
| tibble       | * 3.3.1  | 2026-01-11 | [1] | CRAN (R 4.5.2)                    |
| tidyR        | * 1.3.2  | 2025-12-19 | [1] | CRAN (R 4.5.2)                    |
| tidyselect   | 1.2.1    | 2024-03-11 | [1] | CRAN (R 4.5.0)                    |
| tidyverse    | * 2.0.0  | 2023-02-22 | [1] | CRAN (R 4.5.0)                    |
| timechange   | 0.4.0    | 2026-01-29 | [1] | CRAN (R 4.5.2)                    |
| tinytex      | 0.58     | 2025-11-19 | [1] | CRAN (R 4.5.2)                    |
| tzdb         | 0.5.0    | 2025-03-15 | [1] | CRAN (R 4.5.0)                    |
| usethis      | * 3.2.1  | 2025-09-06 | [1] | CRAN (R 4.5.1)                    |
| vctrs        | 0.7.1    | 2026-01-23 | [1] | CRAN (R 4.5.2)                    |

```
viridisLite    0.4.3   2026-02-04 [1] CRAN (R 4.5.2)
withr        3.0.2   2024-10-28 [1] CRAN (R 4.5.0)
xfun         0.56    2026-01-18 [1] CRAN (R 4.5.2)
xml2         1.5.2   2026-01-17 [1] CRAN (R 4.5.2)
xtable       1.8-4    2019-04-21 [1] CRAN (R 4.5.0)
yaml         2.3.12   2025-12-10 [1] CRAN (R 4.5.2)
zoo          1.8-15   2025-12-15 [1] CRAN (R 4.5.2)

[1] C:/Users/pierces1/AppData/Local/R/win-library/4.5
[2] C:/Program Files/R/R-4.5.2/library
* -- Packages attached to the search path.
```

## 8.2 Git Details

The current Git commit details and status are:

```
git_report()
```

```
Local:  main P:/Consulting/Cases_1600-1799/C1788/SANETPA
Remote: main @ origin (https://github.com/sjpierce/SANETPA.git)
Head:   [482345e] 2026-02-14: Update version number.
```

```
Untracked files:
  Untracked: scripts/Production_Run.rmarkdown
  Untracked: scripts/RQ4_Analyses.rmarkdown
  Untracked: scripts/RQ4_Analyses_files/
  Untracked: scripts/output/Campbell_Figure_2_2026-02-14.tif
```

This is useful because it tells us exactly which commit in the Git history we would need to be using to make sure we are running the exact same code. Sometimes another person is not using the most current code, or has changed the code in some way since it was last committed.



Tip

- Untracked files are files located in the repository that Git has not been told to entirely ignore, but have also not been committed into the version history.
- Unstaged changes to files indicate that some of the contents have been modified since the last time the file was committed to Git. In production runs, we want the Git output to not show any unstaged changes to key files!