How to use `mutate()`

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Overview

- How to create a new variable

Step 1: Setup - load libraries

```
1 library(here)
2 library(tidyverse)
```

1. The `here` package helps with finding your files.
2. The `tidyverse` is a set of packages that handles almost everything you need to do with data.

Step 2: Reading in the data

```
1 data_mw <- read_csv(here("PSYC4141/files/week3", "data_bmw3.csv"))
```

1. `read_csv` is a function that reads in data that are stored in a file of the type `.csv`. We need to tell R where the file is and what it is called.

   `<-` is an assignment arrow, telling R that we want to put the data in an object (or dataframe) called `data_mw`

Step 3a: Compute a single score for unintentional mind wandering

```
data_mw <- mutate(
  data_mw,
  unintentional_mw = (BMW3_UN_01 + BMW3_UN_02 + BMW3_UN_03 + BMW3_UN_04) / 4
  )
```

1. `mutate()` is a function that we use to create a new variable.
2. We need to tell R which data to use;
3. What the new variable is called and how it is computed.

Unintentional mind wandering

- BMW3_UN_01: While listening to a presentation, my thoughts start to trail off unintentionally.
- BMW3_UN_02: When watching TV, other things inadvertently cross my mind.
- BMW3_UN_03: I am often absentminded.
- BMW3_UN_04: When I am engaged in an activity, my thoughts wander to other things all by themselves.

Step 3b: Compute a single score for meta-awareness of mind wandering

```
data_mw <- mutate(
  data_mw,
  meta-awareness_mw = (BMW3_ME_01 + BMW3_ME_02 + BMW3_ME_03 + BMW3_ME_04) / 4
  )
```

1. `mutate()` is a function that we use to create a new variable.
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Meta-awareness of mind wandering

- BMW3_ME_01: It takes a very long time for me to notice that my thoughts have wandered off.
- BMW3_ME_02: I quickly catch myself when I am not listening attentively.
- BMW3_ME_03: It takes a while before I realise that I zoned out.
- BMW3_ME_04: I immediately notice when my thoughts are not in the here and now.

Reverse scoring

Answer option	Fully disagree	Somewhat disagree	Neutral	Somewhat agree	Fully agree
Score	0	1	2	3	4

- BMW3_ME_02: I quickly catch myself when I am not listening attentively.
- BMW3_ME_01: It takes a very long time for me to notice that my thoughts have wandered off.

BMW3_ME_01Reverse = 4 - BMW3_ME_01

Step 3c: Compute a single score for intentional mind wandering

```
data_mw <- mutate(
  data_mw,
  intentional_mw = (BMW3_IN_01 + BMW3_IN_02 + BMW3_IN_03 + BMW3_IN_04) / 4
  )
```

1. `mutate()` is a function that we use to create a new variable.
2. We need to tell R which data to use,
3. what the new variable is called and how it is computed.

Intentional mind wandering

- I make my thoughts wander so that time passes faster.
- I deliberately allow my mind to wander to escape the daily grind.
- I distract myself in monotonous situations by letting my thoughts run free.
- I actively use the time during routine tasks to mull over other things in the meanwhile.

Step 4: Save the combined scores to a new datafile

```
1 write_csv(data_bmw3_subscales, here("PSYC4141/files/week1/", "data_b
```

1. We use the `write_csv()` function to create a file. We need to tell R which dataframe to include, where to safe it and what to call the file.