Supplementary File 1. Python script used to collect publicly available Instagram data.

```
#Set up libraries and dependencies for Instagram data gathering.
from instascrape import Profile, scrape_posts, Post
from selenium.webdriver import Chrome
from datetime import datetime
import pandas as pd
import numpy as np
import pickle
from openpyxl.workbook.child import INVALID_TITLE_REGEX
from openpyxl import workbook
import re
from utils import check_valid_username, write_to_excel, get_top_post, create_post_df
from pathlib import Path

cwd = Path.cwd()

#Path for Mac machines.
chrome_driver_path = cwd / 'chromedriver'

#Path for Windows machines.
chrome_driver_path = cwd / 'chromedriver.exe'

#Set up driver path using Chrome.
driver = Chrome(chrome_driver_path)
headers = {
   "user-agent": "Mozilla/5.0 (Linux; Android 6.0; Nexus 5 Build/MRA58N) AppleWebKit/537.36
(KHTML, like Gecko) Chrome/87.0.4280.88 Mobile Safari/537.36 Edg/87.0.664.57",
   "cookie": "sessionid=7320119797%3ASNZXyzR0VduyTA%3A0"
}

#Read in CSV file containing Instagram user account names and rename columns.
users = pd.read_csv("Social_Media_Study_Handles.csv")
users = users.reindex(
   columns=[*users.columns, 'follower_count', 'number_of_posts'])

#Specifying datatype for each column.
users['School'] = users['School'].astype(object)
users['IG Username'] = users['IG Username'].astype(object)
users['follower_count'] = users['follower_count'].astype('Int64')
users['number_of_posts'] = users['number_of_posts'].astype('Int64')

#List of dataframes representing the posts of each program.
users_df = []
```

```
#Iterate through the list of program Instagram names to generate a dataframe containing
number of followers, number of posts, and headers of posts.
for i in range(0, len(users)):
   if (not pd.isnull(users.iloc[i]['IG Username'])):
      #Scrape the profile
      print(users.iloc[i]['IG Username'])
      profile = Profile(users.iloc[i]['IG Username'])
      profile.scrape(headers=headers)

      #Adding profile datapoints to dataframe
      users.at[i, 'follower_count'] = profile.followers
      users.at[i, 'number_of_posts'] = profile.posts

      #Scraping Posts
      posts = profile.get_posts(webdriver=driver, login_first=True, login_pause=30)
      print(len(posts))
      scraped_posts, unscraped = scrape_posts(
         posts, webdriver=driver, silent=False, headers=headers, pause=5)

      #Appending dataframe from account to each user.
      users_df.append(create_post_df(scraped_posts))

   #If the username is not valid, add an empty dataframe.
   else:
      users_df.append(create_post_df([]))

#Export dataframe containing collected Instagram data to Excel file.
write_to_excel(users_df, users)
```