Measured variables:

<u>Usage frequency:</u> Will be measured as (a) self-reported daily time spent using social media (hours), and (b) the frequency of checking (i.e., every 15mins, 30mins, 1h, 2h, 3-5h, daily, less than daily). Each usage frequency question will be asked twice. First participants will be asked to answer in regard to their social media behaviour before the COVID-19 virus outbreak. After, the questions will be repeated but participants will be asked to answer in regard to their current social media use (to allow for an estimation of the impact of COVID-19 on social media usage). Participants will also be prompted to use the screen time app on their phone (where possible) to provide more accurate estimates.

<u>Types of accounts:</u> Participants will be asked to select from a list those social media accounts which they have used within the last week including Facebook, Twitter, Instagram, Snapchat and YouTube. There is also the option to specify other social media accounts that are not listed.

<u>Expected 'likes'</u>: Participants are asked to self-report the average number of 'likes' or 'retweets' they would expect to receive on a typical social media post.

<u>Pay-for-likes:</u> Participants are asked whether they would rather receive £1 or double the likes on their next social media post. When participants choose the social media reward the question is repeated with incremental increases in the value of the money reward (i.e., £2, £5, £10, £25, £50, £100).

Social media cue reactivity: Participants will be shown the logos of the social media platforms that they reported using before. Each logo will appear with a red notification icon in the top right corner of the logo, containing the number 1 (see figure 1). For each logo shown, participants will be asked to report the extent to which the image makes them want to check the corresponding social media account. Responses are made using a 5-item Likert-scale. In addition, they will be presented with control logos (e.g., App Store, BBC iPlayer logo) and asked to rate how much these make them want to check the apps. A cue reactivity score will be calculated for each participant by subtracting the average reactivity rating to control logos from the average of the social media logos.

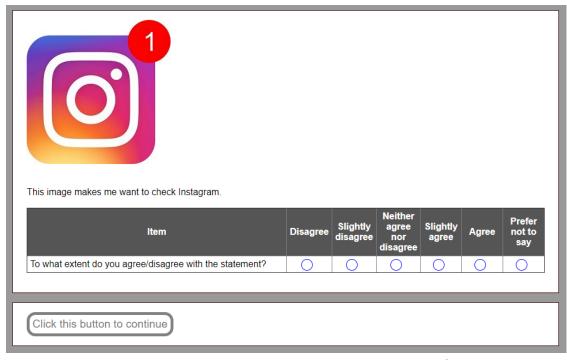


Figure 1. Example cue reactivity question with an Instagram logo and notification icon. Participants indicate how much the image makes them want to check Instagram using the Likert-scale below the image.

<u>Social media disorder scale:</u> A 9-item scale based on the 9 suggested DSM-5 criteria for Internet Gaming Disorder (Van Den Eijnden, Lemmens, & Valkenburg, 2016) will be used to assess problematic social media use in our sample. Each item assesses a different criterion, consisting of: Preoccupation, Tolerance, Withdrawal, Persistence, Displacement, Problem, Deception, Escape, Conflict. Participants respond to each item using a dichotomous yes-no scale.

<u>Wanting vs. Liking:</u> Participants will be asked to respond to 4 statements that assess the extent to which they *like* using social media (e.g., Using social media is an activity that gives me pleasure), and 4 statements that assess the extent to which they experience *wanting* urges to use social media (e.g., When I see my phone, I experience a strong desire to check social media). Participants indicate their agreement with each statement using a 5-item Likert-scale.

<u>Rewards and motivations underlying use:</u> Participants respond to 20 statements presented in a random order that assess 10 categories of reward associated with social media use. Participants indicate their agreement with each statement using a 5-item Likert-scale. Reward domains were first identified in a literature review and validated in pilot study. Each reward domain and associated questions are presented below:

Impression management

- 1. I frequently check social media to see how many likes my posts have received.
- 2. If something I post doesn't get many likes I will delete it.

Social comparison

- 1. I use social media to compare myself to others.
- 2. I evaluate myself based on other people's social media profiles.

Habitual time passing

- 1. I repetitively scroll through social media to pass time.
- 2. I often get stuck in a loop of mindlessly checking social media with no real purpose.

Mood alteration/escapism

- 1. I use social media to take my mind off things or calm myself down.
- 2. If I experience negative emotions, I will distract myself through social media.

Self-expression

- 1. I use social media to provide my update/share my opinion.
- 2. I use social media to express my actual self (who I really am).

Fear of missing out

- 1. When I don't use social media I experience 'fear of missing out'.
- 2. I get anxious if I don't check what my friends are doing on social media.

Relationship maintenance

- 1. I use social media to maintain my relationships.
- 2. I regularly interact with people on social media to ensure we remain friends.

Entertainment

- 1. I use social media as a source to find entertaining content (e.g., videos/memes).
- 2. I use social media because I can easily search for content that I like.

Archiving

- 1. I use social media to document my life.
- 2. I frequently post content so that I'm able to look back through my life.

Negative social potency

- 1. I use social media to 'troll' others.
- 2. I regularly provoke arguments on social media.

<u>General sensitivity to reward:</u> Participants respond to 10 questions taken from the SPSRQ-20 (Aluja & Blanch, 2011) that assess general sensitivity to reward (e.g., 'Does the good prospect of obtaining money motivate you strongly to do some things?'). Participants respond to each item using a dichotomous yes-no scale.

<u>Approach-avoidance tendencies:</u> Participants will complete an Online Visual Approach/Avoidance by the Self Task (online-VAAST) with social media and matched control

stimuli. Online versions of this task using PsyToolkit have previously been shown to be a reliable measure of approach/avoidance tendencies and produce effects that are of a similar magnitude to those obtained in lab versions of the task (Aubé, Rougier, Muller, Ric, & Yzerbyt, 2019; Rougier, et al., 2018). In this task participants will be required to move towards or away from social media or control logos using the computer keyboard. Participants are instructed to approach social media logos and avoid control logos in the first block, and vice versa for the second block, while others complete the same blocks in the reversed order. Social media stimuli consist of Facebook, Instagram, Twitter, Snapchat and YouTube logos. Control stimuli consist of 5 iPhone app logos (Maps, Weather, App Store, Books and Photos). A training phase with feedback occurs before the experimental trials in each block. The training phase consists of 10 trials where every stimulus is presented once in a random order (i.e., 5 social media and 5 control stimuli). During each trial an iPhone is displayed on a grey background. Participants press the 'H' key to initiate the trial. A fixation cross is shown in the middle of the screen for a random duration between 800-2000ms at intervals of 100ms. This is followed by the stimulus presentation which remains on screen until a response is made. Participants press the 'Y' key to approach or the 'N' key to avoid, depending on the condition. As a result of the key press the iPhone and social media logo either increase (approach) or decrease (avoid) in size, giving the appearance of movement. An inter-stimulus-interval of 500ms occurs after each response. During the practice trials an error message is displayed after incorrect responses. No feedback is given about the accuracy of responses during the experimental trials. In the experimental phase a total of 40 trials occur in a random order for each block (total of 100 trials, including 2x40 experimental blocks and 2x10 training blocks). See Figure 2 for an example of the trial sequence.

<u>Self-awareness of problematic use:</u> Participants are asked to respond to two statements relating to their own perception of their social media use. "I believe I use social media too much" and "I believe I am addicted to social media". Participants respond to each statement using a dichotomous yes-no scale.

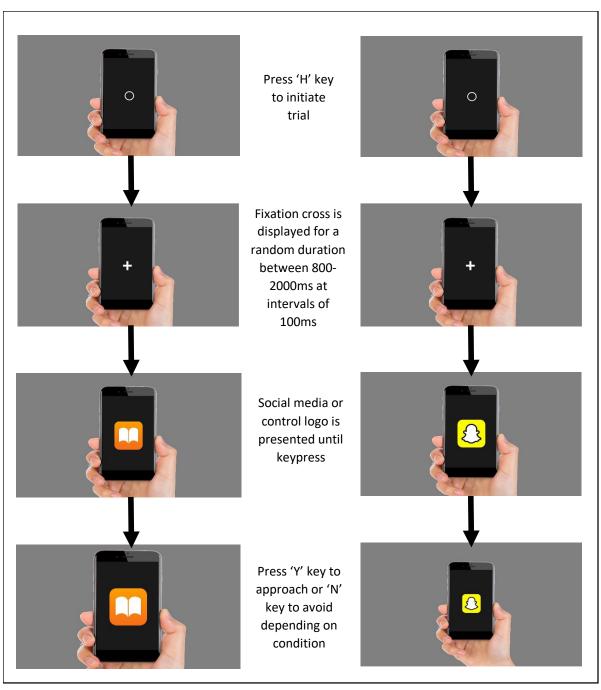


Figure 2. Example of the trial sequence in the online-VAAST with an avoid social media and approach control instruction.