

Trial Description

Title

An intensive longitudinal study on habit formation of hand washing behavior during the COVID-19 pandemic

Trial Acronym

ERNA

URL of the trial

<https://www.ewi-psy.fu-berlin.de/einrichtungen/arbeitsbereiche/gesund/forschung/ERNA-ERfrischend-NAchhaltig.html>

Brief Summary in Lay Language

Habits are behaviours that are carried out automatically, usually without thinking about it. There is consensus in applied research that habits are easily formed when persons link the desired behaviour with daily life situations. These situations could be routines or specific locations. Key to successful habit formation is to repeat the behaviour whenever the situation is encountered (e.g., wash hands before preparing a meal). Initially, this requires a lot of effort and willpower. However, this effort reduces over time and at some point in time, solely encountering the situations is leading to automatic behaviour: A habit was formed.

This online-based daily diary study aims to investigate how hand washing can become a habit in participant-chosen situations. All participants are instructed to embed their hand washing in up to 2 situations of their daily life, in which they did not yet automatically wash their hands (example for a personal situation: “when I arrive at work”). Subsequently, participants are asked to wash their hands whenever their personal situation occurs. To examine how and over how many days hand washing becomes a habit, participants are invited to respond to brief daily questionnaire over 86 days. Moreover, participants receive longer questionnaires at the beginning of the study as well as 25, 50, 75, and 100 days later.

Brief Summary in Scientific Language

Habits are behaviours that are carried out automatically, usually without thinking about it. Previous research found that habits are formed when persons link a desired behaviour with a personally relevant cue such as a routine or a specific location (Lally et al., 2010). Forming action plans or implementation intentions were shown to support this process of habit formation for physical activities (Fleig et al., 2013; Fleig et al., 2017; Keller et al., 2017) or nutrition behaviours (Keller et al., under review). When persons repeat their planned behaviour whenever they encounter their situational cues (Keller et al., under review; Lally et al., 2010), behaviour becomes more automatic (as an indicator of habit formation). However, evidence from intensive longitudinal studies indicates that persons show large variation in their course of habit formation and how fast they form a new habit

(Keller et al., under review; Lally et al., 2010; van der Weiden et al., 2020).

This online-based intensive longitudinal study with healthy adults from the general population aims at investigating habit formation of hand washing in specific situations over a period of 100 days. As a particular focus, this study will examine how the initiation of hand washing ('habit instigation') is automatically triggered by participant-chosen situations (e.g., "when I arrive at work") over time. The sample consists of healthy adults who participate at a baseline assessment and a brief intervention at D0 („D“ = „Day“). Participants are asked to choose up to 2 situational cues from their daily life, for instance, routines or locations, which were not already automatically leading to hand washing, but are suitable for future habit instigation. Subsequently, participants are asked to respond to short daily questionnaires for the following 86 days (D1-D86). Moreover, individuals are followed up at 25 (D25), 50 (D50), 75 (D75), and 100 (D100) 100 days following the intervention. The primary outcome is the automaticity of the initiation of hand washing in response to the participant-chosen situational cues (as an indicator of habit instigation).

Do you plan to share individual participant data with other researchers?

No

Description IPD sharing plan

[---]*

Organizational Data

- DRKS-ID: **DRKS00022067**
- Date of Registration in DRKS: **2020/06/12**
- Date of Registration in Partner Registry or other Primary Registry: [---]*
- Investigator Sponsored/Initiated Trial (IST/IIT): **yes**
- Ethics Approval/Approval of the Ethics Committee: **Approved**
- (leading) Ethics Committee Nr.: **MSB-2020/36 , Ethikkommission der Medical School Berlin**

Secondary IDs

Health condition or Problem studied

- Free text: **NON CLINICAL POPULATION**

Interventions/Observational Groups

- Arm 1: **Positive consequences of hand washing: Information about health-related protective function of hand washing; emphasis on relevance of positive consequences; writing down the most important reason for washing one's hands**
 - **Shaping knowledge: Instruction for effective hand washing**
 - **Action planning and situational cues:**
 - o **Participants are asked to choose up to 2 situational cues of their daily life that did not yet lead to automatic hand washing and in which they would like to form a new hand washing habit**
 - o **Situational cues can refer to anything that can be experienced or observed in daily life such as locations or routines**
 - o **Criteria for the selection of these situations: (a) happens several times a week and (b) with a certain degree of regularity**
 - **Prompt to wash hands whenever the situational cues occur for the following 100 days ('100-days challenge')**
 - **As a reminder aid, prompt to imagine oneself washing the hands in respective situational cues**
 - **Prompt to write down or photograph the situational cues entered into the online tool**

Characteristics

- Study Type: **Interventional**
- Study Type Non-Interventional: [---]*
- Allocation: **Single arm study**
- Blinding: [---]*
- Who is blinded: [---]*
- Control: **Uncontrolled/Single arm**
- Purpose: **Prevention**
- Assignment: **Single (group)**
- Phase: **N/A**
- Off-label use (Zulassungsüberschreitende Anwendung eines Arzneimittels): **N/A**

Primary Outcome

Increases in automaticity of hand washing in participant-chosen situations (up to 86 days following baseline). Automaticity is measured daily across 86 days using the Self-Report Behavioral Automaticity Index (SRBAI; Gardner et al., 2012; Thurn et al., 2014).

Secondary Outcome

Maintenance (D86-D100; in absence of daily measurements) of hypothesized increases in automaticity of hand washing in participant-chosen situations.

Countries of recruitment

- DE **Germany**

Locations of Recruitment

- other **Freie Universität Berlin, Berlin**
- other **Medical School Berlin, Berlin**
- other **Humboldt-Universität zu Berlin, Berlin**
- other **Universität Potsdam, Potsdam**
- other **Fern Universität in Hagen, Hagen**

Recruitment

- Planned/Actual: **Planned**
- (Anticipated or Actual) Date of First Enrollment: **2020/06/25**
- Target Sample Size: **134**
- Monocenter/Multicenter trial: **Multicenter trial**
- National/International: **National**

Inclusion Criteria

- Gender: **Both, male and female**
- Minimum Age: **18 Years**
- Maximum Age: **no maximum age**

Additional Inclusion Criteria

Sufficient comprehension of the German language and ability to understand and complete the questionnaires and the intervention material.

Exclusion criteria

Insufficient comprehension of the German study material, younger than 18

Addresses

- **Primary Sponsor**
MSB Medical School Berlin

Primary Sponsor

MSB Medical School Berlin

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Sources of Monetary or Material Support

■ **Institutional budget, no external funding (budget of sponsor/PI)**

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Status

■ Recruitment Status: **Recruiting planned**

■ Study Closing (LPLV): [---]*

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Trial Publications, Results and other documents

* *This entry means the parameter is not applicable or has not been set.*

*** *This entry means that data is not displayed due to insufficient data privacy clearing.*