# Installation and Instructions MoveMore

This document provides an overview of the installation and possible actions in MoveMore. The minimum Android version for MoveMore is 8.0.

In summary, the aim of the app is to submit every physical activity of your day in it and collect stars. This can either be done by selecting your own performed activity, or by selecting one of our suggestions in the green box. The more activities you enter, the more the system gets to know you and provide you with suggestions. You also have to answer the different questionnaires in the app to qualify for the incentive:

- The pre-test questionnaire at the start of the study
- The weekly questionnaires that will appear every week
- The post-test questionnaire after 8 weeks

The compensation and its dates and conditions (e.g., filling in these questionnaires correctly) are listed on the website (<u>https://movemore.ugent.be/#incentive</u>). You can only qualify for the incentive if you follow these.

You can request to receive an overview of the study when the study and results are finished by mailing <u>ine.coppens@ugent.be</u>. For other questions or remarks, feel free to also send an email.

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In order to answer your questions if you would have any, send your compensation to you or send the results of the study to you if you would be interested, we need to process your email address in function of the follow-up and assistance of the research. Should you decide to participate, your email address is in no way linked to the research data you submitted or will submit during the study in the app. We process your personal data only for this purpose based on your consent to handle your questions and requests in the best possible way and to communicate with you. This consent for email communication may be revoked at any time by reporting this to the main researcher via mail.

When you visit our website (<u>https://movemore.ugent.be/</u> and all other subpages thereof), access logs of your IP address, browser information and time of visit are collected. The access logs are only accessible by the administrator of the website and are only used to verify the functionality and stability of the website. These data will only be kept for the duration of the study, will never be linked to any of your other personal data submitted in this study and will be deleted when the study is finished. We process your personal data for this purpose based on our legitimate interest to provide added security and prevent abuse for our website.

The app is not designed to and does not provide medical advice, professional diagnosis, opinion, treatment or services to you or to any other individual. MoveMore generates a list of suggested physical activities, which the user does not have to execute. This list is a suggestion and not medical or professional advice. Users of MoveMore can always choose to ignore

these suggestions. Do not rely on the generated suggestions in this app to start engaging in the suggested physical activity. Never rely on the suggestions in place of seeking professional medical advice. You must consult a doctor before engaging in physical activity when you failed the medical health screening questions (one or more times 'yes' as the answer), and you cannot use this app in that case. Through the app, Ghent University collects subjective medical information for research purposes only. The submission in this app of your subjective medical information for both physical and mental health is not a substitute for medical or professional care, and you should not use the app in place of a visit, call consultation or the advice of your physician or other healthcare provider. If you believe you have any health problem, or if you have any questions regarding your health or a medical condition, you should promptly consult your physician or other healthcare provider.

# 1. Installation

Open the website (<u>https://movemore.ugent.be/#download</u>) with the download link to the app installation file (movemore1.0.apk) on your smartphone. Click on the link or copy the link and paste it in your browser. It is possible that the file is being downloaded already or that you have to click "Download" in the screen. Your browser or your smartphone might tell you that it cannot check this file for viruses or that the file might hurt your device, but if you select that you trust the file, it should give you the option to download it anyway.

It is possible that your phone does not allow the .apk file to be downloaded and installed. In that case, go to your phone's Settings

- ightarrow Security and Privacy / Security / Biometrics and Security
- $\rightarrow$  More Settings / Device administration (this step not on all devices)
- ightarrow Install apps from external sources / Install unknown apps / Unknown source installations
- ightarrow Select the browser (e.g. Chrome or Firefox) you want to download the APK files from
- $\rightarrow$  Switch "Allow app installs" on.

Your phone might immediately ask you whether you want to install the app. If it does, click on "Install" (1c) and on some smartphones you have the option to select "Package Installer" to do this. If it doesn't ask you to install the app, navigate to your File Explorer / File Manager app (1a) and you should see the folder Downloads and APKs. When you click on either of those folders, the installation file "movemore1.0.apk" should be there (1b). Click on this file, which should open a pop-up (1c). Click on "Install". Now, the app should be installed and visible on your smartphone's home screen (1d).

Every Android smartphone is different so it is definitely possible that your phone needs to go through different steps. If the download and installation of the app does not work, contact Ine via ine.coppens@ugent.be.



#### 2. Four legal documents

Open the newly installed app. You will see a screen containing the **Terms of Use**. Sometimes you have to wait a few seconds before that screens appears, but if you don't see this screen at all, please contact Ine.

Read the **Terms of Use** by scrolling down the screen and agree by clicking "I agree". Click "Go to next step" and the next screens will show you the **Privacy Policy** and **Cookie Policy** that you have to read before you can go to the next step. The next screen shows you the **Information and Consent Form** and gives you the possibility to give your explicit consent to all the listed items. Read the list carefully and only when you want to give your explicit consent to all the items, you indicate this in the app and the app will grant you access to the rest of the study.

Unfortunately, when you don't agree to the Terms of Use, don't indicate you have read the Privacy and Cookie Policy and don't give your explicit consent to all the listed items, you cannot participate in this study and the app will not grant you access to the study.

You can review these documents at any time through the app, by navigating to the "Information" page. If you would like to receive these or other documents of the study in pdf format, you can always check the website or contact the researchers.

### 3. Starting the study (1 pre-test questionnaire)

The next screen will show the **pre-test questionnaire** (2a, 2b, 2c). Only if you meet the following conditions, you can participate in this study:

- you do not answer "yes" on any of the medical health screening questions (2a)
- you are between 18 and 65 years old (2b)
- you currently do not have enough weekly physical activity
- you are motivated to move more long-term (2b)

Some questions have to be answered using sliders. At the left and right of these sliders, you see the corresponding values at the extreme left and right of the slider. Move the slider to the value that applies to you by either dragging the circle or tapping the circle on your chosen value on the slider. The middle value means you answered neutral.

<text></text>	<text></text>	Please answer the questions below by moving the circle of the slider to the point that best describes you (the middle means neutral). Press Submit at the end of the questionnaire. On a typical WEEKDAY, how much time do you spend (from when you wake up until you go to bed) doing the following? Watching television None 1 5 minutes or less 3 3 nourules 1 hour 2 hours 3 hours 4 hours 5 hours 6 hours or more Playing computer or video games None 1 5 minutes or less
	∃ O ⊲	E O A
Figure 2: Pre-test questionnaire (a)	(b)	(c)

Submit the answers by clicking the blue button at the bottom of the screen after which a pop-up will appear that reminds you to check your answers. Once submitted, they cannot be edited again.<sup>1</sup>

Click again on the blue button to go to the main screen of the app. When opening this for the first time, the app will ask you to allow the permissions for the step count and location collection<sup>2</sup>. After this, you are all set up.

Depending on your Android software version, it is possible that the permission for your step data will not be asked or that collecting step data is not possible. You can check this in the app's info and if this is the case, you don't have to do anything about this.

<sup>&</sup>lt;sup>1</sup> Please refer to the Information and Consent Form for more information:

<sup>&</sup>lt;u>https://movemore.ugent.be/InformationConsentForm.pdf</u>. It is, however, possible to delete all your previously submitted data when you want to exercise your right to be forgotten. This document describes how to do this in the section: Executing your right to be forgotten.

<sup>&</sup>lt;sup>2</sup> When you don't feel comfortable giving permission to your GPS or step count, you can always deny these permissions at this moment or later in your app's settings. The app will work without this information as well. However, the location information is important for the research and sufficient security measures were taken to protect your personal and sensitive information (encryption, pseudonymization, Data Processing Agreements, less accuracy for the location coordinates, the possibility to erase past location points etc.), as explained in the Privacy Policy and in the Information and Consent form that are available in the app and on the website.

# 4. Entering your daily information in the main screen

The aim of this app is to enter every physical activity you performed in the app to collect stars. These activities can be submitted by either entering your own performed activity (by pressing the button "enter own activity" (3a)), or selecting one of the suggested activities from the green box. When now is not a good time for physical activity, you can press the "not now" button to enter your reasons (3a). In this way, the app will learn your preferences even more.

Note that the activity has to be a physical activity that raises your heart rate. Things like cleaning the house or working in the garden also raise your heart rate so can also be entered. If you want to enter your own activity and it is not in the list provided in the app, choose an activity that is closest to yours. For example, if you have been shopping for 2 hours, select "Walking" in the app.

🗮 Menu 👻	🗏 Menu 🔹				
Selected activity: Nothing selected yet. Get inspired by our recommendations below and collect stars.	Selected activity: Do a workout while watching TV: hometrainer workout for 30 minutes				
CLEAR SHOW VIDEOS LOCATIONS	CLEAR SHOW SHOW LOCATIONS				
Start moving more with these recommendations for you:	Start moving more with these recommendations for you:				
Go to a gym and do a workout: stair-treadmill	Do a workout at home: judo workout for 5 minutes				
Stretch your arms while waiting in the supermarket/shops	Replace computer games with playing outside with dog				
Do a workout at home: pilates for 5 minutes	Go to a gym and do a workout: ski machine				
Organize a fun activity with friends/family/ alone: tennis	Have a meeting while walking around				
Do a workout while watching TV: karate workout for 5 minutes	Do a workout while watching TV: hometrainer workout for 30 minutes				
Replace computer games with playing outside with kids/family	Organize a fun activity with friends/family/ alone: climbing				
NOT NOW ENTER OWN ACTIVITY	NOT NOW ENTER OWN ACTIVITY				
SUBMIT	SUBMIT				
Figure 3: The main screen of the app					
(a)	<i>(b)</i>				

When an activity or a reason for no activity is selected, the chosen item will appear in a yellow box at the top of the screen, together with the amount of stars this is worth (3b).

For some selected items, we provide you with a YouTube link or a link to points of interests (POIs) in Google Maps. If available, press the "show videos" button in the yellow box (3b) to go to the corresponding YouTube search page and the "show locations" button (3b) to go to the corresponding Google Maps link, to get inspiration for that activity.

The "submit" button will also become yellow when an item is selected (3b), and you have to press this button to send your selected data to our online database. After pressing "submit", a pop-up where you have to enter your mood and motivation will appear, and you have to make sure to answer these questions as well before your data is sent to our database. Every new day and at every refresh, the app will also show a pop-up where you can enter your mood at that time<sup>3</sup>. To remind you, the app will send you notifications throughout the day, as explained in *Notifications (3-7 times per day for the duration of the study)*.

Always press the "Submit" button at the bottom of the screen to make sure your data will be sent to the database. Also make sure you are connected to the internet.

### 5. Notifications (3-7 times per day for the duration of the study)

The app will send you notifications with suggestions throughout the day. These notifications (4) contain three buttons. Press the "let's do this" button to choose the recommended item. Press "more" to go to the app and see the other recommendations. Press "not now" to go to the app and enter your reasons why now is not a good time for physical activity.



#### 6. Navigating to other pages

The main screen has a drop down menu that allows you to navigate to the Information page, Collected stars page, and the Profile page (5a).

In the Profile page, you can adjust your maximum impact level, the things you want to work on, and you available material at any time (5b). You can review your collected stars of the current week in the Collected stars page. In the Information page, you can select different texts that you might want

<sup>3</sup> We respect your privacy and we won't do anything when you enter negative emotions or symptoms. Because the system was built to be compliant with the GDPR, the system does not know who you are when you enter the sensitive information and can therefore not do anything for you. Please consult help on your own initiative if you are dealing with negative feelings. Know that talking helps and that you can call 24/7 to Tele-onthaal Belgium on 106 or <u>https://www.tele-onthaal.be/</u> and to the suicide hotline on 1813 or <u>https://www.zelfmoord1813.be/</u>. Both organizations can also be reached via (anonymous) chat. The submission of your subjective medical information in this app is not a substitute for medical or professional care, and you should not use the app in place of a visit, call consultation or the advice of your physician or other healthcare provider. Ghent University is not liable or responsible for any advice, course of treatment, diagnosis or any other information, services or product for the subjective medical data you submitted in this app. If you believe you have any health problem, or if you have any questions regarding your health or a medical condition, you should promptly consult your physician or other healthcare provider. Never disregard medical or professional advice, or delay seeking it, because of something you entered in this app. to read again: the Terms of Use, Privacy Policy, Cookie Policy and Information and Consent Form that you read when first opening the app, information about the ethical approval of this study, contact information and links to help sources.

Some screens have this question mark icon  $\bigcirc$  in the right upper corner. When you click on this, a pop-up with more information will be shown.

🗏 Menu 👻	( <b>2</b> )	
Information	Adjust your user profile	
Collected stars	What is your max impact level? Note: this is not the same as your maximum intensity level, but a measurement of how much impact on your joints your body can handle (required) O High induced an activities, including kink impact extintion	
Start moving more with these	such as rope skipping and running that put a high level of impact on your joints	
Do a workout at home: walking on stairs	Medium	
workout for 1 hour and 5 minutes	only include low and medium impact activities, such as step aerobics and workouts	
Use the toilet on a different floor and go by stairs	O Low only include activities with very low impact, such as swimming and yoga	
Get off the elevator 2 or 3 flights before your floor and take the stairs the rest of the way		
Organize a fun activity with friends/family: frisbee	Where do you want to work on?  Sit less at work/school  Drive less with car  Remore active while taking public	
Add an active break to your work day: resistance training for 1 hour		
Visit local markets and walk around	└── transport ◯── Watch less TV	
NOT NOW ENTER OWN ACTIVITY	BACK UPDATE WITHOUT SAVING MY PROFILE	
SUBMIT		
≡ □ ⊲		
Figure 5: 1	The menu	
(a)	(b)	

### 7. Executing your right to be forgotten

To completely stop the study, withdraw your consent and delete ALL your previously submitted data in the online database, follow the following steps. **This means you stop the study at that moment and all your previous data will be deleted.** 

- 1. Go to the menu in the main screen and press "Information" page (5a)
- 2. Click on the question mark icon (6a)
- 3. Click on "enter code" (6b)
- 4. Enter the code shown in the app (6c) confirm this decision by typing "yes" in the next pop-up
- 5. After this, you have to delete the app from your device to prevent further data collection. You don't have to notify the researchers about this decision.

This will be your option when you want to execute your "right to be forgotten". Don't forget that when you want to perform this action, you have to do this when the app is still installed on your device and before the deadline date communicated on the website. You cannot do this anymore after you have deleted the app from your device. Only do this when you are certain you want to erase all your data.



#### 8. Answering the questionnaires for the compensation

Every week, the **weekly questionnaire** will appear in MoveMore. After answering these questions, you can enter your email address to register for the compensation of that week ( $\leq$ 3 per week, so  $\leq$ 24 for all 8 weeks, but only if you also have answered the post-test questionnaire).

After 8 weeks, the app will show you a pop-up with the **post-test questionnaire**. The title of this popup will inform you that this is the post-test questionnaire (7a). At the end of the pop-up, you can enter your email address to make sure you register to receive the compensation (7b) (€6).

There is no compensation for the pre-test questionnaire, since this is asked at the very start of the study and you only get rewarded for filling in the subsequent questionnaires. However, this pre-test questionnaire is mandatory to be able to start the study.

The reasoning behind our compensation system is that you have to interact with the app and fill in the questionnaires in order to receive money. Therefore, we do not reward you for engaging in more physical activity, but for interacting (correctly) with the app. As such, we will manually check the quality of your app usage every time you submitted a questionnaire:

- We keep track of the interactions with the app (e.g., the amount of times it was opened)
- We check whether or not you submitted the weekly questionnaires on a weekly basis and the post-test questionnaire after 8 weeks
- We check whether you paid full attention when filling in the questionnaires

Please answer these last questions. Press Submit at the end of the questionnaire to send your answers to our research database.	Height (cm) and weight (kg)
On a typical WEEKDAY, how much time do you spend (from when you wake up until you go to bed) doing the following? Watching television None 15 minutes or less 30 minutes 1 hour 2 hours 3 hours 4 hours 5 hours 6 hours or more	Provide us with your email address if you want to receive the compensation. This will be sent separately to our database and will never be linked to the other research data collected in this app (hence why we have to ask this again). You can only qualify for the compensation if you leave your email address here and press submit at the end of this questionnaire to send your answers to our database. Visit moveapp.ugent.be for the conditions of the compensation and our Privacy Policy where we explain how we process your data securely. Type your email address here for the compensation if you give your consent. Leave empty if you do not give your consent. ine.coppens@ugent.be
Playing computer or video games O None O 15 minutes or less	These were the last questions of the post-test questionnaire. After pressing submit, your answers will be sent to the research database and you cannot
= 0 4	

Figure 7: You have to enter your email address to subscribe for the compensation (a) (b)

For practical reasons, your personal balance will be made after the first 8 weeks of the study. This means that we will look how many questionnaires you answered with your email address, and you will be paid the corresponding amount of money after these 8 weeks.

You can delete the app from your device now by going to the app info and pressing "Uninstall", which will stop further data collection and notifications. Remember, if you want to execute your right to be forgotten, do this in the app BEFORE uninstalling the app. This will not be possible anymore once you have deleted the app from your device.

You can only subscribe for the compensations when you enter you email address immediately after filling in the questionnaires, and if you meet the conditions explained on the website <a href="https://movemore.ugent.be/#incentive">https://movemore.ugent.be/#incentive</a>! Your answers to the questionnaires are never connected to your email address or the quality of your interaction with the app, hence why you have to reenter your email address for every questionnaire.

Thank you participating and using MoveMore! Don't hesitate to ask questions: <u>ine.coppens@ugent.be</u>