

The University Library of Southern Denmark is in 2020 partner in the Citizen Science project “A Healthier Southern Denmark”.<sup>[1]</sup> in collaboration with:

[1] <https://www.sdu.dk/en/forskning/forskningsformidling/citizenscience/et+sundere+syddanmark>

- ❖ the Region of Southern Denmark
- ❖ Five region hospitals
- ❖ Two media houses in the region



Five health research projects are selected and the citizens will vote for the allocation for funding to three of the projects by a sms poll.

The 2019 project had a *reach* on tv, websites and social media on 520.228 and about 17.000 voted.

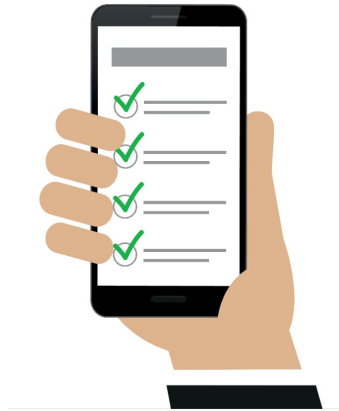


A parallel Citizen Science project was established in 2019, and consisted of 86 high school students (age 16-19) in a **high school panel**.

# Aims and Methods

## Aims for the high school panel:

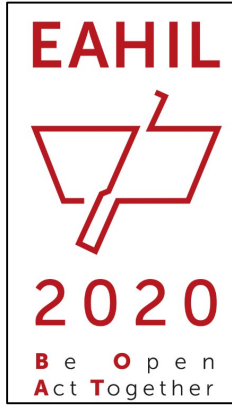
- To engage high school students to participate in Citizen Science health projects.
- To combine Citizen Science in theory and practice and make students contribute as "young fellow researchers".



## Methods:

- Relational competences and network management.
- Presentations on the Danish Health Sector and theory on research design methods for user-involved studies. Informations for students on [2] <https://libguides.sdu.dk/ESS-Gym>
- Introductions on Citizen Science, innovation and source criticism.
- Participation in "Open Research Day" and interviewing the researchers from the main project.
- Students collected data by interviews and questionnaires on citizens and health employees.
- Students produced and presented a **conference poster** on the research projects.
- The high school panel was evaluated by questionnaires and teachers involved interviewed.

# Results



A level of innovation on Citizen Science was achieved by the involving employees from the university library and thus became co-creators in Open Science.

The high school students reach a level of cognition and science literacy and a part of the results from the student's questionnaires are:

- Overall the students became interested in social and health policy issues and citizens involvement in science.
- They found "citizen science improves citizens understanding on science". Point 4,2
- They rated that "citizen science strengthens the health research" Point 4,1
- They found that "citizen science is a beneficial bridge between scientists and citizens" Point 4,5.

(Points from the scale from 1 to 5 -1 low and 5 very high)

The teachers valued the theoretical introductions and the engagement of the students.

# High school students - Winner posters!

## Svangerskabsforgiftning

**ET SUNDERE SYDDANMARK**  
2 MILLIONER - DU BESTEMMER  
Gymnasiepanelet

**Der dør årligt 70.000 gravide på verdensplan**

Hvad er svangerskabsforgiftning?  
Svangerskabsforgiftning kan ramme ALLE gravide kvinder. Sygdommen kan ramme uden varsel, og kan være årsag til svær sygdom og i værste fald medføre døden, for både moderen og barnet.

**Det kan ramme ALLE gravide kvinder!**

**5% af alle gravide får svangerskabsforgiftning**

Hvordan påvirker det den enkelte?  
"Det er en ret traumatisk oplevelse", udtaler Mette, som under første graviditet blev ramt af voldsom svangerskabsforgiftning. "Jeg tænkte meget over det, da jeg skulle have mit andet barn, og jeg var til kontrol hver anden uge, men det gik heldigvis fint".

**Gør det trygt at være gravid!**

Et samarbejde mellem

Kildekilde:  
Litteratur:  
Billede: fra Pindsgården

Informationer:  
[www.212ad.com](http://www.212ad.com)  
[www.212ad.com](http://www.212ad.com)

Region Syddanmark  
tvS SDU TV2/FYN

## ADHD

**ET SUNDERE SYDDANMARK**  
GYMNASIEPANELET

**ADHD SOM SYGDOM**

200.000 i Danmark lider af ADHD

**CITIZEN SCIENCE - PERSONLIG BERETNING: SØNNER MED ADHD**

"Han har haft vanskeligheder på skolen, hvor han enten ikke kunne koncentrere sig eller har været oppe at skændes med elever og lærere!"

"Systemet stresser ikke kun, men på en måde bliver man også svigtet"

"Jeg har hørt lidt om det her REHAB-system, men jeg har forstået det som et meget hurtigere kommunikationssystem. Personligt synes jeg det lyder som en virkelig god idé!"

ADHD-patienter har mange udfordringer:

- Koncentrationsbetryv
- Kan ikke organisere eller planlægge
- Konstant uro
- Problemer med impulsivitet

Dette fører til at ADHD-patienter vil have:

- Dårlig uddannelse og arbejde
- Flere skilsmisser
- Flere ulykker
- Høj risiko for kriminel adfærd
- Høj risiko for at udvikle et misbrug
- Dårligt fysisk og psykisk helbred

ADHD og uddannelse (2009)

Uddannelsestype	Procent
Gennemført folkeskolen	~55%
Startet en ungdomsuddannelse	~15%
Har job	~30%

Behandlingseffekten er kun på 70-90%  
Effekten er aftagende over tid

Hvis vi havde haft mere tid til at arbejde med projektet, ville vi have lavet flere interviews, for at vise hvor stort et problem dette i virkeligheden er

Et samarbejde mellem

**REHAB SOM LØSNING**

- Samarbejde mellem kommune og psykiatrien
- Fælles sag og målsætning
- Stabilit og overkommeligt forløb
- Vigtigt for især ADHD-patienter
- Formålet: Opnå bedre livskvalitet blandt patienterne

Kilder:  
<https://www.212ad.com>  
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Informationer fra Niels Stieberg

Region Syddanmark  
tvS SDU TV2/FYN



# Conclusion and Discussion

The students were acquainted with topics within Open Science, where digitally skilled, gathered knowledge, achieved a level of scientific literacy, collected data, and were able to be critical to all sources.

The project indicated that it's possible for a university library to manage a network with several partners while also focusing on high schools' students learning outcome.

The students managed, to some level, to contribute as fellow researchers and became engaged in citizen science.

Thus, the University Library of Southern Denmark, sees a potential for expanding this kind of citizen science projects.

The high school project will be repeated in a revised and optimized edition in the fall of 2020.