My FACTS!
A SERIOUS EDUCATIONAL
GAME REPORT

Background

Infertility is a significant concern today

Infertility, defined as the inability to conceive after 12 months of regular, unprotected intercourse, is a significant global health issue. It affects millions of individuals and couples—emotionally, physically, and financially—and is now more common than many people realise. In recent years, infertility rates have increased across both developed and developing countries. But why is this happening, and why is it such a big issue today?

Changing Lifestyles and Delayed Parenthood

One of the key reasons for the rise in infertility is the trend of delaying parenthood. Many people today choose to start families later in life due to career goals, financial concerns, education, or the search for the right partner. However, fertility naturally declines with age, particularly for women. Female fertility starts to decrease in the late 20s and more sharply after 35. Men also experience a decline in fertility as they age, with reduced sperm quality and increased risks of certain conditions in their children. As more couples wait until their 30s or 40s to conceive, they may face greater difficulty getting pregnant.

Environmental and Lifestyle Factors

Modern lifestyles and environmental changes also play a major role. Smoking, excessive alcohol use, poor diet, obesity, lack of exercise, stress, and exposure to pollutants or endocrine-disrupting chemicals (found in plastics, cosmetics, and cleaning products) have all been linked to reduced fertility in both men and women. In men, these factors can affect sperm production and quality. In women, they can disrupt hormonal balance, ovulation, and the ability of the uterus to support a pregnancy.

The widespread use of recreational drugs and anabolic steroids, especially among younger men, is another growing concern. These substances can significantly impair sperm production and hormonal health, sometimes with lasting effects.

Increase in Sexually Transmitted Infections (STIs)

STIs such as chlamydia and gonorrhea are among the leading preventable causes of infertility. They can lead to pelvic inflammatory disease (PID) in women, which causes scarring and blockages in the fallopian tubes. In men, infections can damage the reproductive tract and reduce sperm function. Because these infections often have no symptoms, they can go undetected for years, silently affecting fertility.

Mental and Emotional Impact

Infertility is not just a medical issue—it deeply affects emotional and mental well-being. Couples experiencing infertility often face anxiety, depression, isolation, and relationship strain. There is still a stigma attached to infertility in many societies, which can make it harder for people to seek help or speak openly about their struggles.

Financial Burden and Inequality in Access to Care

Fertility treatments such as in-vitro fertilisation (IVF), intrauterine insemination (IUI), or hormone therapy can be very effective, but they are also expensive and often not covered by insurance. In many countries, especially low- and middle-income ones, access to fertility care is limited or unavailable. This creates inequality in who can afford or receive help, even though infertility affects people from all backgrounds.

Infertility is not only a personal and emotional challenge—it also has significant economic consequences for individuals, families, and society as a whole. For many people struggling to conceive, the financial burden of diagnosis and treatment can be overwhelming.

Fertility treatments are often expensive and may not be covered by health insurance. A single IVF cycle, for example, can cost thousands of euro, and most couples require more than one attempt. Additional costs may include medications, laboratory tests, specialist consultations, and procedures such as egg or sperm freezing. For some, the high cost makes fertility care completely inaccessible, especially in low- and middle-income countries where public support is limited or nonexistent.

Beyond treatment, infertility can affect work productivity. The emotional and physical stress of infertility, along with frequent medical appointments, can lead to missed workdays, reduced performance, and mental health struggles that further impact income and career development.

On a larger scale, declining fertility rates and widespread infertility can have long-term effects on national economies. Fewer births may lead to an aging population, reduced workforce, and increased pressure on health and pension systems. Societies may also face higher healthcare costs related to untreated reproductive conditions and mental health issues linked to infertility.

Investing in affordable and accessible fertility care, preventive education, and early intervention can reduce these burdens. Supporting reproductive health is not only a matter of individual well-being— it's also a smart economic decision that benefits communities and future generations. By recognising

infertility as a public health issue, governments and healthcare systems can help reduce costs, improve outcomes, and support people on their path to parenthood.

The Need for Greater Awareness

Despite its growing impact, infertility is often misunderstood or not discussed enough. Many people do not realise how common it is, what causes it, or when to seek help. Public education and open conversations can help reduce stigma, encourage earlier medical consultation, and promote healthier lifestyles that support fertility.

Why fertility awareness matters especially for teenagers in Europe

Fertility awareness is often seen as a topic for adults, especially those trying to have children. But in reality, educating teenagers about fertility is just as important—particularly in Europe, where fertility rates are declining, and many people are choosing to start families later in life. Understanding how fertility works from a young age helps teenagers make informed decisions about their bodies, health, and future.

Many teens receive basic sex education focused on avoiding pregnancy and STIs. While this is essential, it often leaves out important information about how fertility changes over time. For example, many young people don't realise that female fertility starts to decline in the late 20s and drops more sharply after age 35. Male fertility also decreases with age, though more gradually. Without this knowledge, people may delay starting a family and face unexpected difficulties later on.

Fertility awareness can also encourage healthier lifestyles. Habits formed during the teenage years— such as smoking, poor diet, drug use, or lack of exercise—can affect fertility years down the line. Educating teens about how these factors impact their reproductive health helps them make choices that protect their future options.

In addition, fertility education helps break down stigma and misinformation. Many teens believe that medical technology, like IVF, can solve all fertility problems. While treatments can help, they are not guaranteed and can be expensive and emotionally challenging. Knowing the limits of fertility treatments helps young people set realistic expectations and plan accordingly.

For teens dealing with medical conditions like PCOS or endometriosis, early awareness is especially important. Early diagnosis and treatment can improve long-term health and preserve fertility.

By including fertility education in school curricula, Europe can empower its youth with the knowledge they need to take control of their reproductive health. Fertility awareness is not just about having children—it's about understanding the body, making informed choices, and supporting long-term well-being.

In conclusion, infertility is a big issue today because of changing social norms, environmental exposures, lifestyle habits, and gaps in access to care. As more people face fertility challenges, it is essential to increase awareness, invest in reproductive health services, and support those affected. Fertility is not just a personal concern—it is a public health matter that deserves attention and compassion.

Content of the game

The game is accessible online from both a hand-held electronic device and a desktop computer. It was designed to be played within five minutes, and the player is encouraged to compare their results to results from the same country and overall.

Game topics and questions

The game consists of questions that are arranged in a variety of environments that are relevant to a teenager's daily life: in the schoolyard; at the party; in the gym; and at the house of the player's brother. The questions addressed four medical topics: fertility, infertility, lifestyle factors, and STIs. A breakdown of environments, topics, and questions is shown in **Table 1**.

Table 1. FActs! game environments, questions, and medical topics.

Environment	Game question	Medical question	Medical topic
School yard	Question 1	Chance of pregnancy per month	Fertility
School yard	Question 2	Female age	Fertility
School yard	Question 2	Male age	Fertility
Party	Question 3	Smoking	Lifestyle factors
Party	Question 3	Alcohol	Lifestyle factors
Party	Question 4	Chlamydia	STIs
Party	Question 4	Gonorrhea	STIs
Party	Question 4	Syphilis	STIs
Gym	Question 5	Obesity	Fertility
Gym	Question 5	Being underweight	Fertility
Gym	Question 6	Exercise	Lifestyle factors
Gym	Question 7	Narcotics	Lifestyle factors
Gym	Question 7	Steroids	Lifestyle factors

Table 1. FActs! game environments, questions, and medical topics.

Environment	Game question	Medical question	Medical topic
Brother's house	Question 8	Infertility - what to do?	Infertility
Brother's house	Question 9	Infertility - how long to wait?	Infertility

Game topic: fertility

Fertility is essential for reproductive health, yet teenagers might be unaware of the key factors that influence the ability to conceive. Helping them understand how their bodies work can help them make informed choices.

One common but commonly overlooked question is about the chance of pregnancy after a single act of unprotected sex. If intercourse takes place during the fertile window—the days leading up to and including ovulation—the chance of pregnancy in a healthy couple is about 25% per cycle. However, it is a common misconception that pregnancy rates in such cases are close to 100%, and as a consequence, many adolescents and adults believe that when trying for a baby, a pregnancy will start right away. This question is key to understanding fertility, and involves understanding of some of the main events leading to a pregnancy: ovulation, implantation and the fertile window.

Age plays a major role in fertility for both women and men. In women, fertility starts to decline in the late 20s and drops more steeply after age 35. By age 40, the monthly chance of pregnancy falls to under 10%, largely due to a decrease in both the number and quality of eggs. Miscarriage risk and the chance of chromosomal abnormalities also increase with maternal age.

Men also experience a decline in fertility, becoming manifest around age 40. As men age, sperm quality may decline, affecting motility (movement) and morphology (shape). This can make it more difficult to achieve pregnancy and may increase the risk of certain genetic conditions in children.

Body weight is another important factor. It has gained much notoriety lately due to life becoming more and more sedentary. Obesity can disrupt hormone levels, affecting ovulation in women and lowering testosterone and sperm quality in men. Being significantly underweight can also interfere with fertility by disrupting the hormonal balance needed for ovulation or sperm production.

This topic is important, and in the game, it is represented by five medical questions, or about 1/3 of game content.

Game topic: lifestyle factors affecting male and female fertility

Many lifestyle factors can either support or harm fertility. These factors are usually modifiable, i.e. a person can choose to support a specific lifestyle or to walk away from it. Understanding how lifestyle choices affect fertility and knowing when to seek help can make a big difference already for teenagers.

Smoking is a health risk for both men and women. In women, it can damage eggs, interfere with ovulation, and increase the risk of miscarriage. In men, smoking can lower sperm count and reduce sperm quality. The chemicals in cigarettes can also cause DNA damage in sperm, which may affect the health of a future baby. Although smoking in teenagers is actively discouraged throughout Europe, regional differences still exist. It is also not entirely known whether teenagers are aware of the reproductive effects of smoking, because most education focuses on other health problems such as lung and stomach cancer.

Alcohol consumption also has a negative effect on fertility. Heavy drinking in women can disrupt hormone balance and menstrual cycles. In men, it may lower testosterone levels, reduce sperm quality, and affect sexual performance. We were unsure whether teenagers would recognise alcohol as a risk factor for infertility, because, again, education focuses mostly on other negative health aspects on alcohol consumption.

Physical exercise plays an important role in overall health and fertility. Regular moderate exercise can improve hormone levels, reduce stress, and support a healthy weight—all of which are beneficial for fertility. However, excessive or intense exercise, especially in women, can lead to irregular periods or stop ovulation altogether. In men, overtraining can also impact testosterone levels and sperm production.

The use of anabolic steroids—synthetic substances similar to the male hormone testosterone—can severely damage fertility. In men, steroids can shut down the body's natural testosterone production, leading to low sperm counts or even complete absence of sperm. Treatment of such imbalance can often targets symptoms and not causes, and can lead to irreversible infertility. Women who use anabolic steroids may experience irregular cycles, masculinisation, and long-term fertility issues. Problems related to anabolic steroid use are seldom discussed in European schools.

Narcotics and recreational drug use, such as cannabis, cocaine, and opioids, can also affect fertility. These substances may disrupt hormone production, impair ovulation or sperm production, and reduce sexual function. Long-term use can make conception more difficult and may also harm the health of a future baby.

The topic of lifestyle factors is large, therefore we included five questions in the game.

Game topic: sexually-transmitted infections (STIs)

STIs can have a serious impact on reproductive health. Among the most concerning when it comes to fertility are *Chlamydia trachomatis* infection (or chlamydia for short), gonorrhoea, and syphilis. These infections often go unnoticed in their early stages but can lead to long-term damage if left untreated—especially to the reproductive organs.

Chlamydia trachomatis infection is one of the most common STIs worldwide. In many cases, it causes no symptoms, especially in women. However, untreated chlamydia can lead to PID, a serious infection of the female reproductive organs. PID can cause permanent damage to the fallopian tubes, uterus, and surrounding tissues, increasing the risk of infertility and ectopic pregnancy (a pregnancy that occurs outside the uterus). In men, chlamydia can infect the epididymis (a tube that stores and carries sperm), potentially leading to pain, swelling, and fertility problems.

Gonorrhoea is another common bacterial STI that, like chlamydia, can cause PID in women if untreated. This can lead to scarring of the fallopian tubes and long-term infertility. In men, gonorrhoea can cause epididymitis, which may reduce sperm quality and fertility. Gonorrhoea may also affect the prostate and urethra, further complicating reproductive health.

Syphilis, while less common than chlamydia and gonorrhoea, can also have serious consequences if not treated. In its early stages, syphilis may cause sores and rashes, but it can progress silently for years. In pregnant women, syphilis can cause miscarriage, stillbirth, or severe infections in newborns. While syphilis does not usually cause direct infertility like chlamydia or gonorrhoea, its complications during pregnancy can affect future reproductive plans.

All three infections are treatable with antibiotics if caught early. Regular STI testing, especially for sexually active individuals under 25 or those with new or multiple partners, is essential. Using condoms correctly and consistently also significantly reduces the risk of transmission.

The topic of STIs is represented by 3 medical questions, or 20% of the game.

Game topic: infertility

Infertility affects many couples and can be emotionally and physically challenging. It's generally defined as the inability to conceive after one year of regular, unprotected intercourse. For women over 35, the time frame shortens to six months, as fertility declines more rapidly with more advanced female age.

Because teenagers playing the FActs! game have typically at least 10 years until they start trying for a baby, we included only the two main questions regarding infertility: what to do and how long to wait. The reason for this is that we wanted teenagers to remember these two essential issues.

It is important to remember that infertility is a medical problem, and that the first step for those facing infertility is usually to consult a fertility doctor (most often this is the general practitioner or gynaecologist). They can conduct basic tests and refer you to a fertility specialist if needed. Fertility specialists include reproductive endocrinologists for women and urologists or andrologists for men. These experts can provide advanced diagnostics and recommend treatments such as medication, lifestyle changes, assisted reproductive technologies (like IVF), or surgery if necessary. Taking that first step to speak with a professional is key to understanding your options and moving forward with confidence.

It's time to seek help if you've been trying to get pregnant unsuccessfully for a year (or six months if over 35). There are cases in which such a waiting time is not necessary, for example in case of irregular periods, a history of pelvic infections or surgery, history of testicular problems, or known other reproductive health issues. However, we decided against including such details into the game. Seeking help early can improve your chances of success, especially as age and other factors may reduce fertility over time.

In summary, there were only two questions in the topic of infertility, but these were quite essential ones.

Scoring of game results

While the game contains nine questions in total, each question may contain more than one subquestions. The total number of questions, respectively replies, is 15. This is why the lowest score is 0 points, the highest is 15 points. For statistical reasons, we converted these points into percentages. Based on Finnish academic grading, we devised the following grading scale **(Table 2)**:

Table 2. Percentage and verbal grades.

Percentage grade	Verbal grade
0% to 50%	Poor
50.01% to 60%	Passable
60.01% to 70%	Fair
70.01% to 80%	Average
80.01% to 90%	Good
90.01% to 100%	Excellent

This grading is used only for analysing data of player groups, not for individual plays, for the simple reason that 15 (the total number of points) cannot be evenly divided by 100%.

As far as scoring of specific question topics, here is a breakdown of points and percentage weight by topic (**Table 3**):

Table 3. Topic and percentage weight of questions.

Topic	Number of questions	Percentage weight of each question
Fertility	5	20 %
Lifestyle factors	5	20 %
STIs	3	33 %
Infertility	2	50 %
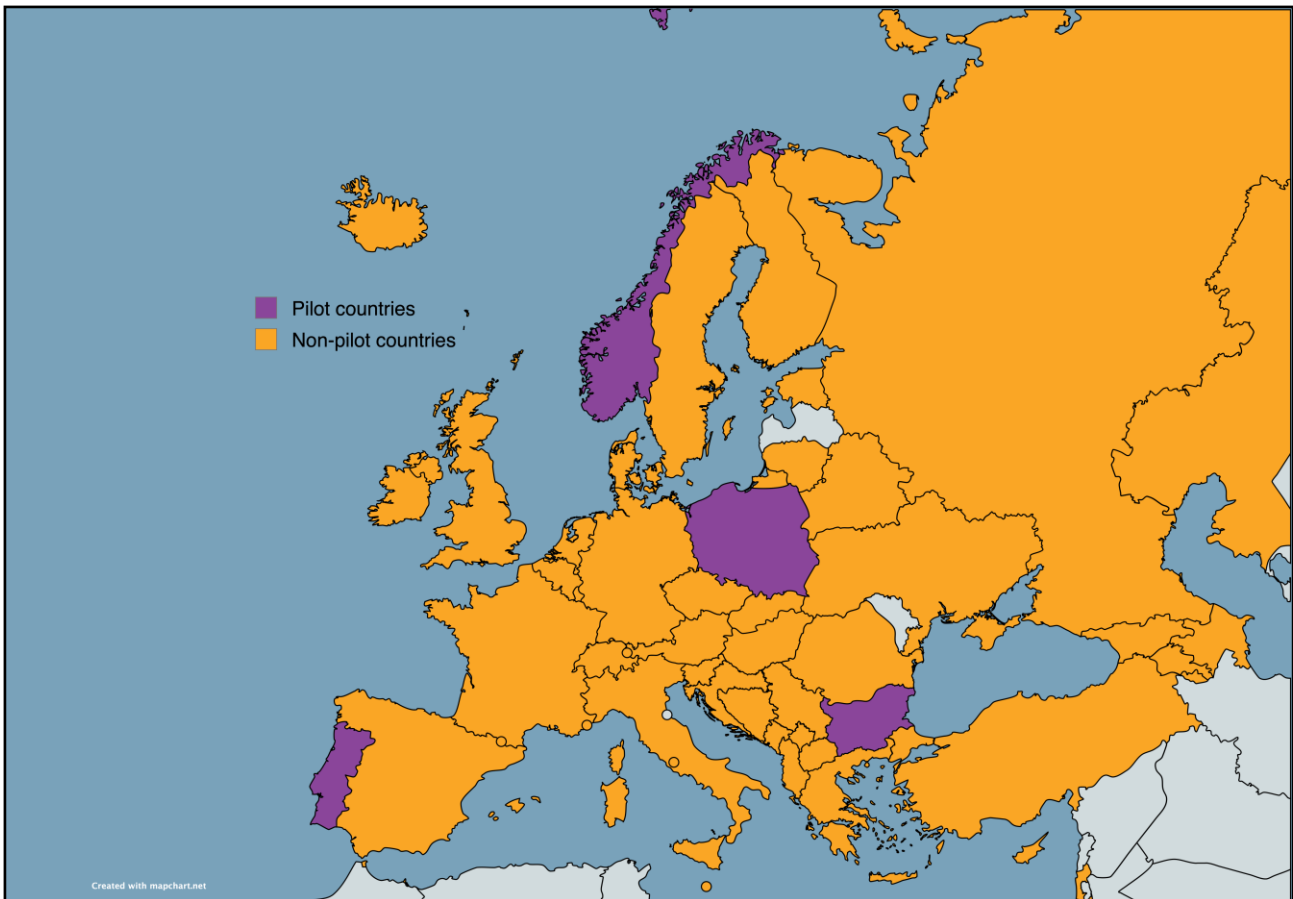
Figure 1

Playing the game

Where was the game played?

The game was, and is still played in most European countries. You can see this in the coloured map **(Figure 1)**.

We first wanted to conduct targeted dissemination in four pilot countries: Bulgaria, Norway, Poland and Portugal. We chose these countries because they represent a diverse mix of geographic distribution, cultural and economic differences, and in each country there is an active local infertility organisation: **Zachatie (Bulgaria), Ønskebarn (Norway), Our Stork Association (Poland), APFertility (Portugal).** *(Monika, can you create links to the pages of these organisations?)*

Numbers of plays

The inauguration of the FActs! game took place during ESHRE's annual meeting in Copenhagen, Denmark, in early July 2023. **Figure 2** shows how the number of plays increased over time. Recording of results started on 21 August 2023.

We are proud to announce that, as of the beginning of June 2025, the game has been played over 9000 times in 50 countries!

How was the game disseminated?

In pilot countries, dissemination included the following:

- Direct contact with teachers and school headmasters;
- Presentations and demonstrations in schools
- Creating teacher and student ambassadors of the game
- Creating incentive program for teachers implementing the game into school classes
- Promotion at educational events and festivals
- Press-conferences, news articles
- Radio and TV interviews
- Promotion on social media: Facebook, Instagram, TikTok, collaboration with influencers

In non-pilot countries, a mixture of the same energy- and resource-heavy methods was employed. An exception of this is Finland, where the game was presented at the annual Teachers' convention in May 2024, followed by an online dissemination webinar to the members of Liitto Oy, the union of physical education and heath knowledge teachers in March 2025. The teachers liked our game so
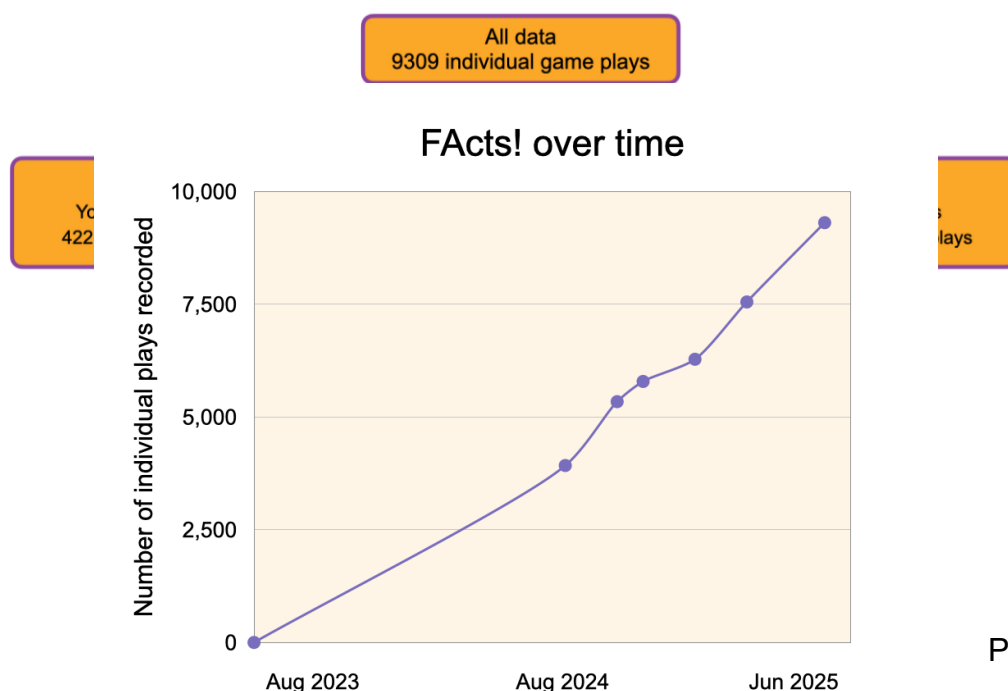
much that they incorporated it in their teaching methods immediately, and feedback shows they enjoy having it as an additional educational tool in class.

Why do we have results from adults and pre-teens if they were not our target group?

We think that the game was liked also by students younger than 15 years. They may have learned about the game from older friends, parents and siblings.

During the dissemination process, many adults tried the game as well. Because these groups formed a sizeable part of the data collected, we are showing their results as well. Most adults who played the game are health education teachers, as well as persons who were involved in game dissemination. In this way, we were able to make a snapshot of fertility awareness in these groups of adults.

Results

How did we analyse the results?

We separated data into three groups:

- Teenagers aged 15-18 years, N=6137 (65.9%), 45 countries
- Adults older than 18 years, N=2750 (29.5%), 50 countries
- Pre-teens younger than 15 years, N=422 (4.5%), 30 countries

We further separated teenagers into two groups:

- Pilot countries, N=3810, four countries (Bulgaria, Norway, Poland and Portugal)
- Non-pilot countries, N=2327, 41 countries

Data are shown in **Figure 3**.

We compared results from the game in these groups. We also compared results by gender. All data analysed and presented here was collected by 9 June 2025. We took P<0.05 as indicative of statistical significance. We are currently conducting a scientific evaluation of the data that will deal with country results in depth.

Country names are found in **Table 4**.

Table 4. Plays by country and age group.

Country	Teenagers Aged 15-18 years	Adults Older than 18 years	Pre-teens Younger than 15 years
Albania	X	X	X
Andorra	X	X	X

Table 4. Plays by country and age group.

Country	Teenagers Aged 15-18 years	Adults Older than 18 years	Pre-teens Younger than 15 years
Armenia	X	X	X
Austria	X	X	X
Azerbaijan	X	X	X
Belarus	X	X	X
Belgium	X	X	X
Bosnia and Herzegovina	X	X	X
Bulgaria	Pilot country	-	X
Croatia	X	X	X
Czechia	X	X	-
Denmark	X	X	X
Estonia	X	X	-
Finland	X	X	X
France	X	X	X
Georgia	X	X	-
Germany	X	X	X
Greece	X	X	X
Hungary	X	X	X
Iceland	X	X	X
Ireland	X	X	-
Israel	-	X	-
Italy	X	X	X
Kazakhstan	X	X	-
Kosovo	X	X	-
Liechtenstein	-	X	-
Lithuania	X	X	-
Luxembourg	X	X	-
Malta	X	X	X

Table 4. Plays by country and age group.

Country	Teenagers Aged 15-18 years	Adults Older than 18 years	Pre-teens Younger than 15 years
Moldova	X	X	-
Monaco	X	X	-
Montenegro	-	X	-
Netherlands	X	X	-
North Macedonia	X	X	X
Norway	Pilot country	-	X
Poland	Pilot country	-	X
Portugal	Pilot country	-	X
Republic of Cyprus	X	X	X
Romania	X	X	X
Russia	X	X	-
Serbia	X	X	-
Slovakia	-	X	-
Slovenia	X	X	X
Spain	X	X	X
Sweden	X	X	X
Switzerland	-	X	-
Turkey	X	X	-
Ukraine	X	X	-
United Kingdom	X	X	X
Vatican City	X	X	X

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the simple reason that 15 (the total number of points) cannot be evenly divided by 100 (number of percents).

Table 2. Percentage and verbal grades.

Percentage grade	Verbal grade
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60.01% to 70%	Fair
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80.01% to 90%	Good
90.01% to 100%	Excellent

Overall results

The overall scores of teenagers and adults were average. Pre-teens had lower scores and achieved a fair grade. There was a clear statistical difference in the scores of these three groups, with adults having the highest scores **(Table 5)**. The difference in overall scores was expected and confirmed that adults, through their life experience and further eduction, have higher fertility awareness, compared to adolescents.

Table 5. Scores and grades in different age groups.

	Mean overall percentage score	Verbal grade
Pre-teens	64.7 %	Fair
Teenagers	70.4 %	Average
Adults	78.2 %	Average
Overall	72.4 %	Average

Comparison by ANOVA. P<0.001

It was very interesting to perform the comparison of overall results of teenagers in pilot vs. non-pilot countries. We found a significant difference between the overall scores of teenagers from the pilot countries, compared to scores from other European countries **(Table 6)**. However, results were very close, and although the difference reached a significant level, we think that results are very close. It is very possible that a more detailed analysis will not reveal differences between these two groups of results. We think this can be explained by a similarity in dissemination means for the game overall

in all countries. We also think that the fact we have this close results shows that the pilot countries were chosen well as representative of larger Europe.

Table 6. Scores of teenage players.

Teenagers	Mean overall percentage score
Pilot countries	70.8 %
Non-pilot countries	69.7 %

Comparison by T-test. P=0.01

In terms of gender, most players (64.1%) were female **(Table 7)**. This can be explained by the higher percentage of female players in the adult group (76.7%). As most school teachers in Europe are female, and the same can be said about the FActs! dissemination volunteers, this percentage was expected. Among student, there were more female than male players, which can be expected by reproductive issues being more important to females in these age groups.

Table 7. Player gender in different age groups.

Gender	Pre-teens	Teenagers	Adults
Female	59.5 %	58.7 %	76.7 %
Male	32.5 %	36.4 %	17.8 %
Other	3.6 %	2.1 %	1.6 %
Rather not say	4.5 %	2.7 %	4.0 %

Comparison by Chi-square analysis. P<0.001.

Results by topic, teenagers

Results by question topic were remarkably similar in teenagers from pilot vs. non-pilot countries **(Table 8)**. Two comparisons, for lifestyle questions and for STIs, had a significant P value but we think this does not indicate a true difference in awareness levels because the results are so close.

Table 8. Results by health topic, teenage players only.

Question topic	Pilot country	Non-pilot country	P value
Fertility	54.4 %	55.2 %	0.2

Table 8. Results by health topic, teenage players only.

Question topic	Pilot country	Non-pilot country	P value
Lifestyle	88.8 %	86.4 %	<0.001
STIs	64.3 %	61.9 %	0.004
Infertility	76.4 %	76.6 %	0.5

Comparison by ANOVA.

There were no differences in verbal grades between the two teenage player groups (**Table 9**). Again, we think this shows that the pilot countries were chosen well and represent all of Europe. We also think these results show that European teens have similar fertility awareness levels. Please read further if you want to know why we believe this.

Table 9. Verbal grades, teenage players only.

Question topic	Pilot country	Non-pilot country
Fertility	Passable	Passable
Lifestyle	Good	Good
STIs	Fair	Fair
Infertility	Average	Average

Results by topic, all data

As shown above, percentage scores were lowest in pre-teens, intermediate in teenagers, and were highest in adults. This was also the case when we evaluated all four question topics (**Table 10**). We observed the highest increase, from pre-teens to adults, in the questions on infertility (difference of 20%) and on STIs (difference of 26%). Lifestyle questions had the best scores and fertility questions had lowest scores across all groups.

## Table 10. Scores by question topic in all age groups.

Question topic	Pre-teens	Teenagers	Adults	P value
Fertility	48.7 %	54.7 %	62.3 %	<0.001
Lifestyle	82.1 %	87.9 %	91.9 %	<0.001
STIs	59.3 %	63.4 %	74.7 %	<0.001

Table 10. Scores by question topic in all age groups.

Question topic	Pre-teens	Teenagers	Adults	P value
Infertility	69.6 %	76.1 %	89.0 %	<0.001

Comparison by ANOVA.

In fact, in all groups, levels of fertility awareness were similar in terms of relative knowledge, as shown in **Figure 4**. This test was done with linear progression analysis in GLM for repeated measures.
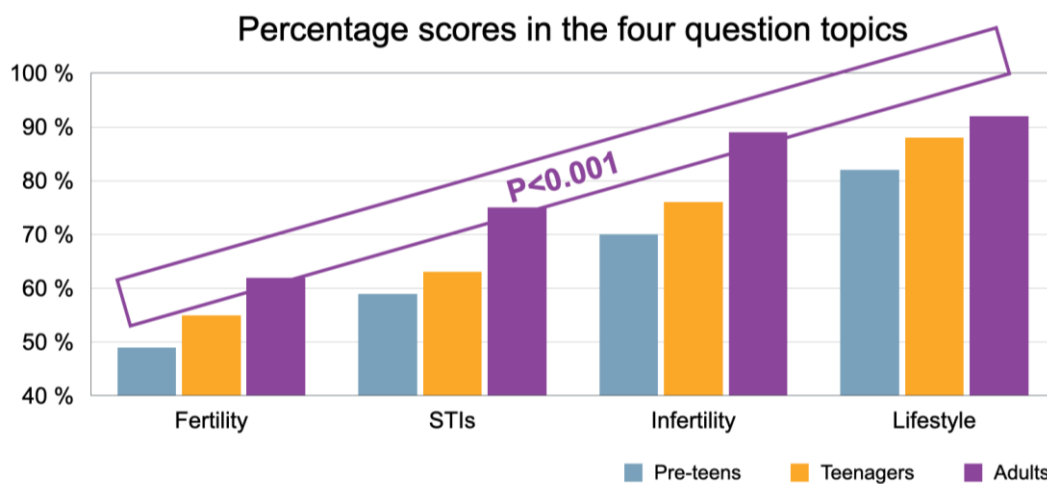
Finally, verbal scores are shown in **Table 11**. In the present results, verbal scores of teenagers and adults had a difference of only one step. For example, in lifestyle questions teenagers scored "Good" while adults scored "Excellent". This is of course explained by the rapid development of a person's values and levels of knowledge during the teenage years and thereafter. What we would like to see through this project is for teenage scores to improve to "Good" on all topics because this will translate into "Excellent" once these teenagers reach their reproductive years. Important topics of improvement are STIs, fertility and infertility.

Table 11. Verbal grades by question topic in all age groups.

Question topic	Pre-teens	Teenagers	Adults
Fertility	Poor	Passable	Fair
Lifestyle	Good	Good	Excellent
STIs	Passable	Fair	Average
Infertility	Fair	Average	Good
Overall	Fair	Average	Average

These results show that fertility awareness is significantly lower among European teenagers compared to adults, and there are several clear reasons why this gap exists. Teenagers are often not taught enough about fertility as part of their education, and many do not see fertility as relevant to their lives—yet.

In most European countries, school sex education focuses mainly on preventing unplanned pregnancy and protecting against STIs. While this is essential, it leaves out important information about how fertility works over time, how it changes with age, and how lifestyle factors—such as smoking, poor diet, drug use, and obesity—can affect future reproductive health. As a result, teenagers may not learn that female fertility starts to decline sharply in the mid-30s or that male fertility also decreases with age.

Adults, especially those trying to start families, are more likely to seek out fertility information and talk to healthcare providers. They are often motivated by personal experiences or challenges with conception. Teenagers, on the other hand, typically see fertility as a distant issue, so they are less likely to seek out accurate information on their own.

In addition, teenagers often rely on social media and peers for health information, where myths and misinformation about fertility are common. Unlike adults, they may not yet have had meaningful discussions with doctors or seen accurate content in the media about how fertility really works.

This lack of awareness can lead to poor decision-making later in life—such as delaying parenthood without knowing the risks or assuming that fertility treatments can easily solve any problems.

Improving fertility education in schools and encouraging open discussions can help bridge this gap, giving teenagers the knowledge they need to make informed choices about their health and future.

In-depth analysis of teenage fertility awareness results

Table 12 shows results from the replies to each question in the game: percentage scores as well as verbal scores. Here, we have analysed all data from teenage players aged 15-18. We analysed all teenage data together because overall, the results were so close.

Table 12. Scores and grades by individual questions, teenage game players only.

		Percentage score	Verbal grade
Fertility	Chance of pregnancy per month	31.8 %	Poor
	Female age	48.3 %	Poor
	Male age	37.2 %	Poor
	Obesity	82.4 %	Good
	Being underweight	73.9 %	Average
STIs	Chlamydia	64.2 %	Passable

Table 12. Scores and grades by individual questions, teenage game players only.

		Percentage score	Verbal grade
	Gonorrhea	60.9 %	Passable
	Syphilis	65.1 %	Passable
	All three infections	36.1 %	Poor
Infertility	Infertility - what to do?	87.0 %	Good
	Infertility - how long to wait?	65.2 %	Passable
Lifestyle factors	Smoking	93.8 %	Excellent
	Alcohol	93.1 %	Excellent
	Exercise	77.7 %	Average
	Narcotics	95.9 %	Excellent
	Steroids	79.0 %	Average

Results from this analysis show that teenage fertility awareness was excellent regarding fertility effects of smoking, alcohol consumption, and narcotic drugs. These are indeed some of the topics covered by existing health education in Europe, and it is good to see that these lessons were learned.

Fertility awareness in teenagers was however poor in some key areas: effects of female and male age on fertility as well as the average chance of pregnancy in a month with no contraception. While knowledge of the reproductive effects of the most common STIs was passable for each separate STI, the percentage of players who correctly identified all three STIs as being related to infertility was alarmingly low (36.1%).

What do results tell us?

Across Europe, fertility awareness among teenagers tends to be at similar levels. Contrary to adult expectations, these levels were not consistently low. In fact, for the effects of lifestyle factors, teenagers scored truly well in four of the five question! This is a case for educators to take a minute and appreciate the hard work they have done over the years.

However, on the topics of factors that affect fertility, on the effects of STIs and on basic infertility knowledge, results were quite low. One key reason is that sex education across Europe often focuses mainly on preventing pregnancy and STIs, rather than teaching about how fertility works over time. While it is essential to educate teenagers on how to protect themselves, this narrow focus can leave out crucial information about how fertility changes with age, the impact of specific health issues, and the limitations of fertility treatments like IVF.

In many European countries, fertility education is not a formal part of the school curriculum. Even where sex education is mandatory, the quality and depth of information can vary widely. Some schools provide only minimal instruction, while others may lack trained educators or up-to-date materials. As a result, many teenagers finish school without a clear understanding of when fertility peaks, how it declines, or how daily choices can affect reproductive health in the future.

The rise of digital media has also created a false sense of knowledge. Teenagers often turn to the internet and social media for health information, but these sources can be unreliable or misleading. Fertility myths—such as the idea that people can easily conceive at any age thanks to medical technology—are common and rarely corrected.

At the same time, open conversations about fertility are still limited, both at home and in public discussions. Many young people grow up without hearing accurate, science-based information about reproduction from parents, teachers, or doctors.

Despite differences in healthcare access and cultural attitudes, these shared gaps in education and communication lead to similarly low fertility awareness across European countries. This highlights the need for a more unified and comprehensive approach to fertility education in schools and communities.

Improving fertility awareness among teenagers is essential for helping them make informed choices about their health and futures—no matter where in Europe they live.

Conclusions

Results from the game show that through a serious educational game, it is possible to obtain a snapshot of European teenagers and adults alike. Levels of fertility awareness in teenagers are excellent in the areas that are traditionally covered by school education such as the effects of lifestyle factors. However, because education in other areas is missing, much work needs to be done in order to improve knowledge levels and prepare European adolescents better to meet the demands of modern life.

Who wrote this report?

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Is this project over?

The FActs! game is still played by teenagers and adults alike. We are currently spreading the coverage in Europe, and are also planning the next development steps. Stay tuned for more information!

Scientific analyses

We are currently analysing the wealth of data that the game has generated. We have planned two papers: one examining results from teenage players (our target group), and one examining results

from pre-teens, teenagers, and adults. Stay tuned, we will make an announcement when they are published!

We have already written an article on the FActs! project on Human Fertility.

We would like to thank