How can design for well-being lower the taboo of menstruation in India

graduation project by Petra Salaric

chair: dr. ir. J.C. Diehl
mentor: prof. dr. ir. Pieter Desmet

TU Delft + Delft Global Initiative
Faculty of Industrial Engineering
Msc Design for Interaction
APPENDIX 1

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This document contains the agreements made between student and supervisory team about the student's IDE Master Graduation Project. This document can also include the involvement of an external organisation, however, it does not cover any legal employment relationship that the student and the client (might) agree upon. Next to that, this document facilitates the required procedural checks. In this document:

- The student defines the team, what he/she is going to do/deliver and how that will come about.
- SSC E&SA (Shared Service Center, Education & Student Affairs) reports on the student's registration and study progress.
- IDE's Board of Examiners confirms if the student is allowed to start the Graduation Project.

**STUDENT DATA & MASTER PROGRAMME**

Save this form according the format "IDE Master Graduation Project Brief_familyname_firstname_studentnumber_dd-mm-yyyy".
Complete all blue parts of the form and include the approved Project Brief in your Graduation Report as Appendix 1!

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- **initials** PS
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Your master programme (only select the options that apply to you):
- **IDE master(s)**
  - IPD
  - DI
  - SPD
- **2nd non-IDE master**
- **individual programme**
- **honours programme**
- **specialisation / annotation**
  - Honours Programme Master
  - Medisign
  - Tech. in Sustainable Design
  - Entrepreneurship

**SUPERVISORY TEAM**

Fill in the required data for the supervisory team members. Please check the instructions on the right!

- **chair** dr.ir. J.C. Diehl
  - dept. / section: IDE/DFS
- **mentor** dr.ir. Pieter Desmet
  - dept. / section: ID/DA
- **2nd mentor** Bhuvana Balaji
  - organisation: Sukh babel
  - city: Bangalore
  - country: India

**comments (optional)**

Chair should request the IDE Board of Examiners for approval of a non-IDE mentor, including a motivation letter and c.v.

Second mentor only applies in case the assignment is hosted by an external organisation.

Ensure a heterogeneous team. In case you wish to include two team members from the same section, please explain why.
Procedural Checks - IDE Master Graduation

APPROVAL PROJECT BRIEF
To be filled in by the chair of the supervisory team.

chair dr.ir.J.C.Diehl date signature

CHECK STUDY PROGRESS
To be filled in by the SSC E&SA (Shared Service Center, Education & Student Affairs), after approval of the project brief by the Chair. The study progress will be checked for a 2nd time just before the green light meeting.

Master electives no. of EC accumulated in total: ___ EC
Of which, taking the conditional requirements into account, can be part of the exam programme: ___ EC
List of electives obtained before the third semester without approval of the BoE

name date signature

FORMAL APPROVAL GRADUATION PROJECT
To be filled in by the Board of Examiners of IDE TU Delft. Please check the supervisory team and study the parts of the brief marked **. Next, please assess, disapprove and sign this Project Brief, by using the criteria below.

- Does the project fit within the (MSc) programme of the student (taking into account, if described, the activities done next to the obligatory MSc specific courses)?
- Is the level of the project challenging enough for a MSc IDE graduating student?
- Is the project expected to be doable within 100 working days/20 weeks?
- Does the composition of the supervisory team comply with the regulations and fit the assignment?

Content: [ ] APPROVED [ ] NOT APPROVED
Procedure: [ ] APPROVED [ ] NOT APPROVED

name date signature

IDE TU Delft - E&SA Department /// Graduation project brief & study overview /// 2018-01 v30
Initials & Name PS SalariC Student number 4741706
Title of Project How design for well-being can lower the taboo of menstruation in India
How design for well-being can lower the taboo of menstruation in India

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date 04 - 03 - 2019
end date 28 - 08 - 2019

INTRODUCTION
Please describe the context of your project, and address the main stakeholders (interests) within this context in a concise yet complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money,...), technology, ...)

This graduation project is an extension of group work from the 3 ECTS elective course “Design for Emerging Markets”. In the course, I was focusing with my group mates on the issues around the taboo of menstruation in India and how this taboo affects the lives of Indian girls and women.

Menstruation is a globally shared experience among all women and yet, it is also a globally stigmatized issue. Indian women, however, face more difficulties during their menstruation than the women of the western world. Culturally it is not an acceptable topic in public.

The stigma around menstruation effects the life of Indian women in many ways, as can be seen in figure 1. Girls from all over India, between the age group of 12 and 18, miss at least five days of school every month during their menstrual cycle due to the lack of separate toilets(FSG,2016). A study found that 71% of girls in India report having no knowledge of menstruation before their first period(FSG,2016), causing their first experience of a period to often be a traumatic one. During menarche girls experience many negative emotions, most dominant ones being shock (25%), fear (30%), anxiety (60%), guilt (2%), and frustration (22%)(Gupta,2013). Around 80% of the teachers believe that menstrual blood is impure(Reuters,2018). Literacy rates for women in India (55%) are significantly worse than those for men in India (78%) (Ministry of Health and Family Welfare, India, 2014). Almost 88% of women and girls in India use homemade alternatives such as an old cloth, rags, hay, sand, or ash instead of regular sanitary products(USAID, 2014). The larger part of Indian women risks getting severe infections, at times causing death, due to poverty, ignorance and shame attached to their menstruation cycle (The Tribune, 2014).

Many changes have been made recently towards solving the situation around menstruation and the issues connected with menstrual hygiene. There are many NGOs and governmental activities on bringing better menstrual hygiene management education, as well - from those in schools to public activities. The government has made efforts to tackle the subject too, with many educational programmes in schools but also by reducing the tax on the production of sanitary napkins which resulted in the creation of a larger market. Many NGOs are working on bringing these products to those in need. However, many studies have shown how just putting products on the shelves and promoting them is not enough(Psi,2018). To tackle the problems around menstruation it is first required to change the set behaviour and the mindset of the society, and design for wellbeing can help in that.

Reuters (2018), Not a dirty word: Indian girls shatter menstruation myths, retrieved from:https://www.reuters.com/article/us-india-women-taboos/not-a-dirty-word-indian-girls-shatter-menstruation-myths-idUSKBN1F1J69
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image / figure 1: problem definition - all the aspects affecting the menstruating woman in India

image / figure 2: the current behaviour and the desired behaviour

IDE TU Delft - E&SA Department /// Graduation project brief & study overview /// 2018-01 v30

Initials & Name PS SalariC  Student number 4741706

Title of Project How design for well-being can lower the taboo of menstruation in India
PROBLEM DEFINITION **
Limit and define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 30 EC (= 20 full time weeks or 100 working days) and clearly indicate what issue(s) should be addressed in this project.

In India it is considered how menstruation is a women's issue (fact taken from interviews) and for her to deal with it. As mentioned in the introduction it can create a lot of issues to her wellbeing, and the taboo surrounding menstruation makes the subject even more stigmatized. But the situation around menstruation actually poses a problem on the entire society as it forms the economic and health picture of the country.

Another effect on the wellbeing of women comes from the household. Home is often pictured as a safe and secure space, but in India, when it comes to the topic of menstruation, it is not an easily discussed one. Firstly, women have an attitude of not ‘burdening’ men with their dealing with menstruation. But not pointing some issues out when needed can lead to more serious problems as stated before. Secondly, not only are men often not informed about the states of the women that surround them, they are usually not educated enough to be able to help if needed. During the research in the course of the ‘Design for Emerging markets’, we found out how the education level and knowledge of men in the topic of menstruation mainly depends on their own efforts to inform themselves on the topic.

This is important because as India is a patriarchal country, men often have the decision-making role in the house which means that they have a direct effect on the way women execute their menstrual hygiene and if they have safe and secure menstruation or not.

ASSIGNMENT **
State in 2 or 3 sentences what you are going to research, design, create and / or generate, that will solve (part of) the issue(s) pointed out in “problem definition”. Then illustrate this assignment by indicating what kind of solution you expect and / or aim to deliver, for instance: a product, a product-service combination, a strategy illustrated through product or product-service combination ideas, ... In case of a Specialisation and/or Annotation, make sure the assignment reflects this/these.

In this graduation project, I would design a product/service which would facilitate conversation between men and women on the topic of menstruation in India within the household. The idea is to create a captivating design which would go around the societal views and myths to subtly bring the importance and naturality of menstruation.

This graduation project is an extension of the project from the course ‘Design for Emerging Markets’.

In the project, I plan to investigate the effect of the taboo of menstruation on the wellbeing of women. I will follow their experiences in the household and society and their relationships with family members. Specifically with the men in their lives and their understanding of menstruation and of the experience women go through.

I believe how men as a part of society should be equally involved in the discussion about menstruation. As men are the decision makers in the household, it is important to take them as allies in the topic of menstruation in order to help women and bring their wellbeing up.

The plan is to use the methods of design for wellbeing and the tools from the Design for Emotion course. The problems of the third world countries are rarely approached from the aspect of design for wellbeing but rather a problem-solution approach. I wish to understand the needs of the users, as well as their aspirations.

As the main issues of the taboo of menstruation are within the society, created by old and lasting myths and their religion, design can be used to go around these set views in order to subtly provide them with the relevant knowledge on menstruation.

Through design which is used within the household and involves all members, it can ease the discussion around this sensitive and stigmatized topic, but an extremely relevant one. By making it more natural and less of a taboo, the wellbeing of women is simultaneously affected as well.
PLANNING AND APPROACH

Include a Gantt Chart (replace the example below - more examples can be found in Manual 2) that shows the different phases of your project, deliverables you have in mind, meetings, and how you plan to spend your time. Please note that all activities should fit within the given net time of 30 EC = 20 full time weeks or 100 working days, and your planning should include a kick-off meeting, mid-term meeting, green light meeting and graduation ceremony. Illustrate your Gantt Chart by, for instance, explaining your approach, and please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any, for instance because of holidays or parallel activities.

The project starts on 11th March 2018 with the first phase. In the first phase I will be finishing my literature research on the following topics – the historical view and development of India, gender inequality, myths around menstruation, the importance of religion in India, feminist development in India, family relations in India; as well, I will be emerging myself into the culture and practices through meeting people and interviewing organizations. After getting myself more familiarized and creating a network, the second phase (25th March), field research, starts. By interviewing and using methods such as context mapping I plan to follow the experiences of a couple of participants thoroughly.

After the field research comes the third phase (29th April) of ideation and testings with data analysis of the field research and the ideation of different concepts and their testings. Here comes the midterm evaluation, so I can do the pre-check and receive the advice on how to do the last tests most fruitfully.

The first 3 phases I will be in India in order to get the first-hand experience on the context. And the final 2 I will spend in the Netherlands. Before the fourth phase (17th June) I will take a personal leave in order to prepare myself for the second part of my graduation. In the fourth phase, I will be analyzing the last data and creating the final design.

And then the last, fifth phase (15th July) comes with the making of the final deliverables. Here comes the green light, at the 25th July. And the final date at the 28th August.
MOTIVATION AND PERSONAL AMBITIONS

Explain why you set up this project, what competences you want to prove and learn. For example: acquired competences from your MSc programme, the elective semester, extra-curricular activities (etc.) and point out the competences you have yet developed. Optionally, describe which personal learning ambitions you explicitly want to address in this project, on top of the learning objectives of the Graduation Project, such as: in depth knowledge, a specific subject, broadening your competences or experimenting with a specific tool and/or methodology. Stick to no more than five ambitions.

One day I read a post on Facebook about a journey a student in Germany had to go through to graduate on the topic of stigma of menstruation in the Western media. The issues she faced triggered me to more explore this topic. By doing so I received a lot of comments - from hatred and pain slapping to anger from women directed to men, to blaming it on a typical ignorance on the men’s part when it comes to difficulties women go through. This made me more aware of how important this topic truly is and its presence in our surrounding. But even more, it made me aware of how little I know about this topic. It created in me a sense of responsibility, as a woman and as a designer. I first had the chance to learn about and tackle this topic through the course of “Design for the Emerging Markets”. Insights I gained in the course were so enriching and interesting that I found many fruitful grounds to build a graduation project on.

As an activist my entire life, I always wished to use my knowledge and skills to work on social topics. I found the topic of menstruation interesting because it also concerns me personally as it is a topic that affects women most directly. But menstrual health is a basic human need, and the need to tackle the issues women in India face came intrinsically. This graduation project is a perfect chance for me to make a contribution and a project on a bigger level than I had before.

As in the future I wish to be able to work for the emerging markets, for that it is necessary to have prior experience, not just professional but also a personal one. As the graduation project is the last chance before starting my career, I want to experience how to deal with learning and working in another culture, especially in a one that is so different as India is. Working in the base of the pyramid countries often includes cultural shock and culture sensitivity. The aspects I will face in this project, such as understanding of the complexity of cultures and its dimensions I got to learn from the elective course “Culture sensitive design”. In the course I became aware of different values each culture might hold and the way to design for them. I want to learn and design with different values than mine and to conduct them through participatory design. These forms of working I learned in the course of “Context and Conceptualization”, but also by attending the Participatory Design Conference 2018.

Moreover, one of my personal interests is in psychology and understanding human behaviour. Through the university I had a chance to learn about design for wellbeing and the methods and tools that can be used to understand human needs - one of them is "Design for Emotion" where I also had the privilege to be a student assistant and get a stronger connection with the content and the topic. As well, when designing for social impact it often goes along with behaviour change. The tools and methods and theory I learned from the elective course of "Experience and Persuasion".

My previous work experience was mostly in art and graphic design, which I love. But I wish to use them in socially relevant topics. A graduation project is a perfect way to combine all of my interests and showcase my potential along with the support of professors who I admire and wish to work with closely during this stepping stone to my career.

FINAL COMMENTS

In case your project brief needs final comments, please add any information you think is relevant.
Reference list


Appendix


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Figure 18. Different aspects in the life of a woman in India which menstruation can affect, Own Illustration, Design for Emerging Markets course, (2018.)
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Figure 64. Indian girl kills herself after alleged period shaming by teacher, retrieved from: https://www.theguardian.com/world/2017/aug/31/indian-girl-kills-herself-after-alleged-period-shaming-menstruation

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Transcript interviews with companies

INTERVIEW TATA TRUST
My intro of the project

TATA TRUST: I think our thought process is on the right path... The actual stigma would be when we get them in the same room to speak. That would be that breaking moment. But right now we have been working on this for the past 2 years. We scaled up to 6 states right now... My understanding is that we, you cannot at this point of time... what we do is that we create that safe space for women and we get them the support of the fellow women. They haven't yet spoken to each other. So in that safe space they start sharing that knowledge to each other. They only become comfortable to discuss that when they sit together. If there are rooms available then yes, but sometimes we have to do it in their backyard. And you can see if a man passes, you can see the definite change in their entire training. That it's a very uncomfortable environment. Our boss hasn't been able to come and see a session on the ground. They have a very different response to when a man is there than just women. After getting sensitized maybe there is a point, maybe, but now getting them both in the same thing in India is not only tough but also dangerous. And sex is also a stigmatized subject in India and there is a lot of curiosity with regard to sex; when talking about menstruation; they want to get into details of that; and that itself will bring an uncomfortable environment. Maybe in 5 or 10 years, but right now that is not something even we aim with this project. Sukhibhava and we have been closely working for the last 2 years. The boys module we started with another consultant... This is really rural interiors...

ME: even if I go to rural area I would not be able to work...

TATA TRUST: 70% India is in rural villages, but the slum areas are very heavily populated and they have their own dynamics.

ME: Because I don't see how I would be even able to design for something like that.

TATA TRUST: Maybe eventually when you get professional you can think of something, but for now for a graduation project it's better just to stick to urban areas.

ME: I am really interested in this topic and I think it is so wide and affects so many things. And for wellbeing specifically as each country has their own TATA: guidelines

I want to know the activities that you do – how do you approach this topic?

TATA TRUST: We recently started. We designed the module. So the fellows that we have in the field they have been working with women and girls for the last 5 months, now it was time to move to boys. We did an ideation workshop with them as to what they think will work and what they think will not work, what should come from the girls module to the boys module and what are the things that need to be extra added to the boys module. Based on that the boys module was developed in which we talk about what also boys experience during the adolescence and also how can they support girls, what is menstruation; how can they support girls if it is in schools or how can they support sisters or mothers at home. So it is the very first draft of the module and after taking two months in the field from the fellows we will be taking feedback to understand what is working and what is not working. In February we launched it and currently the fellows have started doing it with boys. The fellows are very enjoying in working with boys as they are very interested in knowing, they have a lot of questions; when doing sessions with girls they are very shy, not talking, not answering questions, but boys they are so active. Each and every boy will answer the questions. So for example the Nightfall they ask how do they feel and they are like "we feel ashamed" and they are excited to go to schools and experience it. In the sessions we would ask them to draw of how they feel about themselves or how they feel about their bodily changes and the drawings that are coming out they are very interesting. They are feeling worried of how the community will think about them or how others thing about them. Now we haven't been able to do a lot of sessions but whatever we have done the response has been really good. They say more that it is a normal thing, why do we not talk about it. So with boys it has been good. We plan to also work with men, but we want to talk with men only through women because directly talking to men is very difficult as they keep saying it is a women's issue and why don't you first start with women.

This again we talk about extreme rural areas. Tribal areas... very remote areas of the states.

We thought how we will first generate awareness amongst women and then move to their husbands through them. Willing to understand this more, to support their wives or daughters. We are still in process of designing that. We call it the couple's counselling module.

The entire idea is how can we support women more, and how can women feel comfortable in their space and how can they practice the right behaviours. A lot of women are using cloth, so how can they dry it in the open sunlight instead of drying it in shade because that is not healthy; so how can they shift to a healthy behaviour; they don't do it because there are men in the community or men at home so... its about how can we ensure that women at home and girls in schools are having the right practice at home.

ME: How do you see that the taboo is manifested in the city? + wellbeing aspects visual

TATA TRUST: I will talk about myself personally. I come from a city and I have never had any stigma at home about menstruation. It is hard to say it is a city – rural thing, it is subjected to family really. So maybe my mother doesn't propagate it because her mother didn't. But say suppose my mother in law, she would have that. It's just generations passing on certain things and people follow it without rationalizing why they do what they do. It is classical conditioning. As soon as you start your menstruation you are told not to do these things. So without thinking when you start this process you are taught not to do these things. But then again in the urban cities there is a large number of people who have these myths ...maybe it is not as deep rooted as in rural areas where drying a cloth is a huge issue, here there will be more as not going into temples, not entering the kitchen, not touching the pray room at home...so these would be the myths practiced in urban areas. But personally me I do not see it affecting.

ME: How do your friends or family react to what you do as you must be more open minded by working on this topic?
TATA TRUST: Our field fellows, for example a girl stating how her family is not talking to her for the last five months because I am working on menstruation and I was shocked. How does it happen really? We are working on it, we are teaching rural women and we ourselves are not able to make our family accept or our friends. Even one of our fellows has friends who are like “What kind of a topic are you working on?” With us it has never that our friends are telling us...in fact they are glad we are working on it. And I believe it is a lot about questioning. A lot of people around us, our friends, they are very, ignorant about reality and about this topic. We have researchers telling us that only this percentage of women are using pads, and we are happy that only this percentage of women are using it. And they are like but they are using cloth, it is bad. And we are like, no, it is not bad. It is actually a better option than sanitary napkin.

Why are you not even thinking about what these means are supplying to you, you are not even thinking what they are giving to you. Like what is the expiry date of the pad that you are using. So this time when I went, I was in the field office and I was asking for a dustbin to dispose my pad because I was not wearing my cloth pads. And they told me that there is no dustbin, so I asked where can I dispose it. They told me to dig a pit and bury it in the ground. And I asked how to do it...this was the first time I experienced that. I went to this family's home and I was in a lot of pain and they were in the village only and as they asked me what is happening and I told them I have period cramps they told me not to enter the house and just to stay out. We won’t let you enter. I was sitting on the stool and for two hours women were standing in front of me and didn’t want to share the stool with me because I was on my periods.

This has not really happened with me at home. I have had stigmas at home; like my mom doesn’t let me enter the temple and all. Of course she has come along from where we started , but still my mother follows this. So we have seen it but when I experienced it at the village it has hit me hard. We are teaching this and I myself am facing this.

I think that in urban areas people really need to question things. So people are disposing sanitary pads, but they even wrap it into another plastic and creating all this waste. Just wrap it in the newspaper, at least reduce one layer of plastic. People just don’t know. I feel there is so much need to just go out there and question people as to why are we doing what we are doing. I have this woman in my office. And she uses tampons and she is good at MHM and she is 40 years old. I have this girl in the office who is 20 years old and says she doesn’t want to use a menstrual cup because her hymen will break. And she is in the head office of one of the NGO’s we are working with.

ME: How would you actually want to feel when talking about this topic?

TATA TRUST: Our program is mapped to certain impacts we want to see. So one is hygienic behaviour. For us that is very important as we are doing the social program. Number of UTI cases coming down – that’s what we want. Another impact is to break the silence and encourage conversations. The current behaviour is completely bad and it is bang on. Normalcy is not just a societal change but also the change the woman needs to accept herself.

Women do not know how many holes they have, they have never seen a pad...the awareness levels are below normal. They don’t know that menstruation is connected to pregnancy. No information. I think that information with a desirable behaviour change is to go. I just feel that if you talk about is telling what is the right thing to do. Just do the right practices. Because women can share the same cloth, they actually do that.

And then overtime, we have very often uterus removals. 1 out of 5 women have white discharges. Right practices is the right way to start. We know we have the long way to go.

Women, above 50, it is very difficult to change their mindsets. It is children who can actually bring the change. So when they become mothers or grandmothers they know what is the right thing to do. So in 30 years or 50 years that is the time we see practices that we are doing now in action. But right now when you try to get into grandmothers head she doesn’t want to know.

So we actually have cases when mothers brought their daughter in law and she is like ”you teach her, she is in that age and she really needs to know. But I am going. But you teach her it is important for her.” There have been cases when they were like ”What are you teaching our kids? We don't want for you to teach her that shit” and they would take her away.

We also train the women from the community. So they have never spoken about menstruation before and we make them trainers in 7 days. From understanding the theory and what it is to them becoming trainers.

ME: Presenting the ideas

TATA TRUST: People are connected to each other but they do their own things. After dinner everyone is at home. There are festivals when everyone gets together. There are family gatherings, but no community gatherings. In the evening around 5-6 they are free, around tea time.

There has to be an age – when talking about it keep it above 8. Even father and daughter can be uncomfortable. A lot of women in this office have never spoken to their fathers about it. Even to their sisters. But maybe some community of women.

But if you have read about period documentary they have been put with this subject in their faces. You have been left with huge issues. You cannot expose them, but otherwise game seems good.

(for monopoly)

Storytelling is a very effective tool in India. But it has to be something they can empathize with it. They will remember the story couple of months down.

Make a very holistic story about one girl.
It can also happen that some women might be shy openly playing that games but can go and check the stories.

ME: Cards and booklet through storytelling, to combine both would be good.

TATA TRUST: They have access to the market. So everything is out there. So in rural areas anything what seems out there people will want to have that. In the houses everyone has the same. If you manage to design something that is more than the ordinary, they know that that is something different. 3D kind of a thing.

This makes a lot of sense what you are doing. …In India there is xyz and everyone is using it. There is no innovation.
SD: When I started looking at this problem the issues that we saw was that issues to menstrual products was as big of a problem as awareness. There were very few people working actively on it. Either very large scale manufacturing companies with more expensive brands which were focused on urban areas or non-profits making pads with hand technology so the quality of products were not as good. We were looking at what exactly in terms of the product needs to be there and the few options were – the communication on how do you make the cloth better, then there is the disposable napkin and the third is something like a cup or sustainable solutions. So for the cloth, personally, when we started thinking about it, women are already using cloths. So cloth doesn't make a product sense for any company to do, it is more of an awareness issue to solve. They have access to old clothing; it is more about how they use it, how they dry it. ...And there is very little data on how much can you use a cloth, after what point does it actually start becoming unhygienic. So that was due to the lack of any sort of material data on it and things like that so that we didn't consider into it, but still in the terms of awareness we do a component if you still don't want to use a pad, it is completely your choice, but if you want to use a cloth this is the hygienic way of using it. So that's why we did a product from a start up perspective. In India the insertion is a massive taboo, even I don't use a cup and I have been in this space for 5 years and I find it difficult. I know a lot of athletes use it; people who used a tampon, for them that switch is very easy because you are used to inserting something. I think as a practice itself we hardly see people adopting any sort of health care technology that easily of what goes inside your body. Given that the menstruation taboo is so huge we can't wait for 10 years of women becoming ok with it and adopting a product; given the internet and everything it will require a smaller shift for them to be ok with health issues and practices? That's why we focused on pads. We started looking more in terms of what are good quality pads. High cost pads usually last long, they are more hygienic so we wanted to bring that quality at an affordable price. That's something we started focusing on. Looking at the problem we saw that supply chain was an issue. So the business model got evolved and we could look it more at a detail but from the research perspective it might not be that relevant.

ME: So many people on social media is very good research to do that. How many people on the ground are willing to actually pay extra amount of money for the green options. So there are biodegradable and plastic free materials that degrade in the environment, they are compostable. There are products like that but they are at least 2-3 rupees more expensive per pad and even that is something that the customer is not willing to pay. Non-profit organizations are more environmentally conscious – when there is a free distribution people would rather use that; the second aspect of this is absolute zero regulation on whether they are biodegradable or not and the ways to prove that. Independently companies are doing their own tests but there is no existing standard body to say what is what. So there is so many people who are complaining to be biodegradable but there is a credibility thing to it – so is it biodegradable or not, should we pay a premium to it, that is sort of a big confusion. Thirdly I think plastics is a larger problem. Fundamentally I feel that we are, women are going to create a lot of garbage here anyway, we are burdening them with changing their entire lifestyle firstly and then putting the burden of saving the entire environment on them, and rural women specifically. Urban women are anyways using pads, and using more pads than they need and throwing them into the toilet and using panty liners... There is so much plastic that we are producing in urban area but when it comes to rural areas it is like "they will damage the environment"… it should actually start from the urban areas where you actually have the washing facility to use a cup, you have somewhere where you can sterilize it and you are passing the entire burden of the environment to rural areas. The second thing is that this is actually a 5 to 6 year long process and plastic will actually be eliminated from every state with packaging and everything. So there is a massive shift which is happening and we will have replacements of plastics because plastics are being banned, at least the single use ones. And the thin ones which cannot be recycled are anyways banned in Maharashtra. So uniformly everyone will shift to a compostable pad eventually. The solutions exist but they are not cost effective right now. Once you put extra taxes on the construction of plastics this will become popular.

ME: So you focus mostly on rural areas?

SD: Rural and semi urban areas.

ME: So what is the impact you generally want to achieve

SD: Every organization has its own core. We come from a very industrial background. There are many amazing organizations like Sukh-ibhava that work on the awareness and we partner with them. So for example even in one of our programs there will be fellows placed. We are looking more from the access perspective so do we create more meaningful safe access.

So we are focusing on access and products and how do we make different sizes or for wrappers that are disposable and making it more creative. We saw that more women are using pads but they need to travel a lot to get them. Awareness, ideally in five years we shouldn't have this problem. There are mainstream movies and actors working on this. Eventually we feel that how we handle this conversation now will define the attitude towards menstruation. Larger engineering and supply chain is something that we focus on.

ME: asking about wellbeing

SD: Infrastructure – toilet infrastructure. Even semi urban areas. If you are on your period you have to cancel a trip. Even if the toilets are available they are very unhygienic. Like no soap, water, dustbins to change your pad. You can see pads kept and tucked behind the toilet.

ME: Talking about a cup

SD: So that is not a concept that exists at all. The wipes and the boiling. So the boiling only exists at the kitchen and kitchen is seen as a hole religious place where you take out your slippers before you go there. Of course we need to break this taboo but it will take some time.

Women are not even allowed to enter the kitchen when they are menstruating so how can you imagine them to boil their cup? Eventually if people become ok with this you will see if people broke the taboo. All of the products should be easily accessible and affordable and sustainable. And cups work great for urban context and offices where you have the hand wash facility inside the toilet so...
you can use it properly.

ME:
SD: My family is fine when I talk with it. But back in my hometown where my father belongs to it is a taboo. I am not allowed to enter the house when menstruating. There is a house where any menstruating woman needs to stay for five days. For those five days you are washing your clothes and you are not touching your utensils. So growing up as a child and going for my vacations there was really tough when I was 12 or 13 and I started menstruating. At such very young age you are not informed about the practices that you should follow. I was told not to play with boys and to play with girls and to wear certain type of clothes when I am going there so it was really tough. And then I stopped going there and my mom supported it because she personally didn't like that practice.

ME: The utensils
SD: Every culture has its own concept. So in Vedas for 3 days you should rest as you have a lot of these energies. In the awareness sessions we play the game called “Chinese whisper” and by the end of it will be a different sentence. So saying about myths and how practices should change.

Even in American Indian culture they believe that women are a lot retrospective.

I think purity and impurity has not been written in scriptures but that most of it has been made because of patriarchy.

You can see that men say that it is a disease that women get (Period. End of Sentence)

Recycling, flushing of waste.

A guy didn't tell his family about what he is working on. Just saying that he works on machines but not what those machines do.

ME: about parts of wellbeing
SD: So the emotional wellbeing, it somewhere correlates with dignity as well?

I would say a lot of times mother- daughter relationship, or grandmother and women in the family, the relationships are very restricting. And that has not just to do with menstruation. This is how it always happens and I do not know when...this is how our culture so this is how it happens and we cannot change our tradition. And we have gone through it so you are supposed to go through it.

I think it has to do with broadly cultural thing. Obedience is – the parents praise you if you are following what you are told. And it is a guru, your teacher, your parents, there is something you need to listen to. You do that and you are considered as an ideal child. So we attended these rituals and we didn't even know what we are doing, just that our parents wanted us to do it. And if you are a good child you will do it. It has to do with everything. Even for men there are negative aspects of patriarchy. A man has to be strong, he cannot cry and it has extreme repercussions, eventually they become aggressive. And somewhere it comes down to profession as well. That men have to become engineers, more physical strength or more masculine and on the contrary women are doing other ones, low paid ones. So in the end it is men who are dictating women.

ME: How would you want to feel when talking about this subject?
SD: I am feeling what I want to feel already. Or I remember when I started working on this. Whenever I was on my period I felt some sort of stress but now in our organization there is no problem.

If we don't take this stand who will? If we are not able to be that kind of make people uncomfortable that will never change. Maybe we are not the right people to ask that. There are people who take some time. You will find boys in our office and wiping their face with the pad.

On the personal level I would say that I want the society to be open about and me as well. I started having conversations about sexuality and menstruation with my male friends and they started opening up. And that is what I want as that will help them understand their families.

We have done demonstrations of pads in coffee shops and it is so often that we have done it. But there is positive attitude on social media about menstruation. It is not seen as cool to say openly that is dirty and it is not welcome.

ME: game design
SD: I was thinking from my family, so if it is very specific to menstruation I am not sure if someone will go and buy that game. Or if it is about multiple things put together it might still resonate. Giving something very specific depends on what the family is like. Whatsapp and phone game design, random videos, influencers. The first level of barrier women usually see...audiovisuals would work well. If you wanna see for the next generation going forward...we play cards but they are traditional ones. Like at festivals. Maybe that context fits in but only menstruation I don't see that fit.

People do play games during celebrations. That I thinks should work with progressive families. Now women give demonstration comic books to their children. For example for security. People have started using that because even for parent having that conversation is quite uncomfortable.

PRIYA VORA

ME: introduction
PV: high economical strata comfortable in discussing with a lady doctor. If there is a male doctor, they will definitely feel a little uncomfortable. So this is what we are talking about metro cities where they are quite open about it. But again, in the rural population they do not come up so openly. We have to indirectly questions them – are you having these issues? I think in cities, because a lot of us are on the net, and reading, and they are quite aware of these problems before they come to us; they have at least done a basic homework.

ME: the focus target and asking for a certain demographic
PV: Maybe the upper middle class; but I even cater to all of them. Even if they are poor I take them in. I go to many charitable hospitals.
ME: do women come alone to the visits or..
PV: Usually the women come with a relative, most of the times and if they are adolescent girls as usually I also get this college crowd with hormonal imbalance; and usually they may come along with their mothers or older sister. There are many smarter girls who come on their own. So it just varies.
Very few may come with a men, some relative but it definitly comes.
ME: Did men come to ask for some questions?
PV: Yeah definitely when couples come because they have problems with conceiving. We always tell them to come with your partner, what is a safe period, what is an unsafe period, when to practice sex...It is not that men totally come, they do come, but it is less.
ME: Increase in and a better situation
PV: Yeah definitely, with the urbanization and all people are aware. There are these menstrual cups that are also available in the Indian market and a lot of them are using even these cups. Yesterday I had a patient so I asked if you are comfortable with inserting and you have to change it 3 to 4 times. So they are quite aware.
ME: What do you find as a main problem regarding the taboo of menstruation in India?
PV: A lot of it has to do with religion, where they think that indoors they have to be for 4-5 days. Now there is two ways to think about it – they would feel that she is not hygienic enough so even going to a religious place they thought she was not pure enough to touch the God and all. Second thing is the touch – if you touch fermented things, a pickle or salted things in the house it can become impure. And then they would make them segregate indoors and they are not allowed to participate in the house things in that phase of menstruation and they have to sit separately. Even if they don't want to tell people, everyone would come to know that they are menstruating. But there are 2 ways. Now if you ask some people, the old timers why is this there they say that it is to give rest to the body. We think it is out casting and that it is the taboo and we think when God has given it to us and why are we not supposed to be participating in poojas and religious practices when you are in your heavy periods.
ME: What do you think is the way to go?
PV: Making people aware. Newer generations like us we are all aware, we were not put the same restrictions or we do not put on you when you are growing up. When we will have a daughter in law we will not do this. But you cannot change the mindset of grandmother or our mother's age group. My mother was also a gynaecologist, we never followed or were told don't do this don't do that. She comes from a background and so she doesn't do this. But her mother definitely had these problems which were there and we were not allowed these things in her house.
ME: So how would you create awareness?
PV: Education awareness of the problems. It should be seen as a part of growing up, a part of productive phase, you should make person aware of that. And as you said – counselling the husband, the rest of the family also, to make them play a role.
ME: Taboo of menstruation – if it has an effect on her life?
PV: Not really. I don't let anyone decide what I need to do. In fact, I go around the country, giving talks and trainings and teaching people so I will not get affected if anyone tells me. I will explain it to them, I will not listen to that.
ME: No people turning around
PV: We have a lot of awareness programs. Half of them are educated there so we are giving them sex education and all, on women's day we go and we give them what are the problems with menstruation or other reproductive problems . And then we also explain to them on menopause; so we are trying to create awareness. In colleges also guidance on contraception. So we are trying in every part of life how we can educate people according to their age group and what is important for them.
ME: What is the biggest impact of the taboo on life of women in India?
PV: A lot of it has to do with religion, where they think that indoors they have to be for 4-5 days. Now there is two ways to think about it – they would feel that she is not hygienic enough so even going to a religious place they thought she was not pure enough to touch the God and all. Second thing is the touch – if you touch fermented things, a pickle or salted things in the house it can become impure. And then they would make them segregate indoors and they are not allowed to participate in the house things in that phase of menstruation and they have to sit separately. Even if they don't want to tell people, everyone would come to know that they are menstruating. But there are 2 ways. Now if you ask some people, the old timers why is this there they say that it is to give rest to the body. We think it is out casting and that it is the taboo and we think when God has given it to us and why are we not supposed to be participating in poojas and religious practices when you are in your heavy periods.
ME: What do you find as a main problem regarding the taboo of menstruation in India?
PV: The religion and education and maybe the economy. Because a lot of them, the lower strata they don't want to spend money on sanitary napkins. We tell them how it is quite cheap, today it is ever cheaper than what is showed. Others will sit and wash the cloth, use the homemade cloths which are not sterile so there is definitely a chance of infection. These people are monthly calculating and these patients may have a problem.
ME: What is the biggest impact of the taboo on life of women in India?
PV: The religion and education and maybe the economy. Because a lot of them, the lower strata they don't want to spend money on sanitary napkins. We tell them how it is quite cheap, today it is ever cheaper than what is showed. Others will sit and wash the cloth, use the homemade cloths which are not sterile so there is definitely a chance of infection. These people are monthly calculating and these patients may have a problem.
ME: Showing designs
PV: They say papaya, and eat something hot and you will get your period.
As a game even this, the taboo game, where you have worlds also. In a game format rather than a booklet. Or where you give cards and then you guess the taboo.
Big event when they call all the aunties and they dance.

LIVINGUARD
ME: first impressions
LV: Ties to what you were saying about men being integral to the discussion, as what they think has an impact on women. In Bihar, 2 weeks ago there was this health education which we did in partnership with organization called Arogia. They do early cancer detection with cancer survivals. And they, because they were doing health programme Saafkins ties well with what they are doing. So we have actually set across 5000 sets of Saafkins through the funding that we have got through GiveHer5, and they were doing the entire thing and then they were identifying key girls and women to use the product and then distributing them free of cost.And on the first day you had men kind of coming up to the counter and being like what are you talking about and what is this, and when they would say something the men would just walk away. But they saw the amount of interest that women had and the lady who was there told me that literally on men kind of coming up to the counter and being like what are you talking about and what is this, and when they would say something then they were identifying key girls and women to use the product and then distributing them free of cost.And on the first day you had actually set across 5000 sets of Saafkins through the funding that we have got through GiveHer5, and they were doing the entire thing and they have to sit separately. Even if they don't want to tell people, everyone would come to know that they are menstruating. But there are 2 ways. Now if you ask some people, the old timers why is this there they say that it is to give rest to the body. We think it is out casting and that it is the taboo and we think when God has given it to us and why are we not supposed to be participating in poojas and religious practices when you are in your heavy periods.

Big event when they call all the aunties and they dance.
it to be on a health thing. Women were going together to have free medical check ups and women were doing cancer detection but men had cancer detection and few others. So you literally people walking from one counter to the other, like families and friends whatever it was. And this was just one of the things that was present. And it just happened to be that there was that initial no, but eventually people were like – ok we want to know more. And they were curious. I think to bring men to a discussion you have to at least bring them to the table and it can be done in a family setting through like a game or something or through a community level. We had yesterday the event, the TATA organized it. It was the event for women making barriers. This lady, she won an award. She spoke about the play she had written, which they did throughout India in the communities. It was about a man becoming pregnant.

ME: My plan is to work in the urban areas rather than rural. How is the taboo directly manifested in the city

LV: Neepa in Bangalore. She spoke to women in their community. Jains. Non violence. In general because of the bacteria that is usually formed on the pad, that is why Saafkins falls into their believes. She started propagating it in her community. Her cousin markets it in Bangalore.

I can connect you and you can talk to her.

In terms of taboo and I see this in another Jain friend of mine, there is still this believe that menstrual blood is different than regular blood. Of course there is a chance of cloth and darker, but it is still not impure. That is the big taboo. It is so much of a myth that you cannot get pregnant when you are on your period. I pretty sure it is even brought in school, and only later I realized that is not accurate. People believe that only women can menstruate but at GiveHer5 we really try to include all sorts of people, so some people are thank you for including us and others are saying that is nonsense.

Biggest one in India is that no matter how rich or pure you are you cannot go to temples and even for funerals. There can be some religious that are more conservative, but definitely the one for temples.

In Parsis, they kind of leave in colonies and they made a pact that they wont convert. Parsis also celebrate menstruation and when you get your first period you are gifted a Surry and you became a women. For me it was a positive experience but for a lot of my friends it wasn’t. So my friend when she got her period she was told you can do this you cannot do this, here is your cloth and you have to wash it because no one else can touch it. Because it is dirty. Very educated girl. So this time she washed her disposable pad which states how some products are more appropriate to certain culture than others. Like the convenience of a disposable product because they are going to wash it. Even today I know that my period doesn’t make me dirty, but my mom tells me it is not about what you think it’s about what the person to whose wedding you are going to thinks, or to a funeral and what are their wishes. So if you are fine with it and doing it on your own time it is ok and I am not stopping you from praying but if other people will have an issue with it just respect it. It becomes difficult because who is right and who is wrong in this scenario. So we went to a school in Bombay where we were doing a project and we were doing the awareness part of it and talking about why menstruation makes you impure because in Bombay there is not much segregation but a lot of women won’t enter the kitchen.

ME: segregation and kitchen

LV: I went to the all girls school till the 11th grade and I remember when we did the chapter on reproduction. Our teacher said that it is very normal and she said how she said that she told her son on it. But she is a biology teacher. But a lot of my friends weren’t taught anything. Just the basics. But she still spoke about it. In other schools you tend to have the splitting of the class. And boys teach only about the penis and girls about the vagina and then bring them together. So you have boys pointing and laughing. And they are probably not paying attention to the days of the cycle or what exactly is going on. So when you ask a boy how often you get the period and he is told like oh once a year? We learned about sperm and everything so why can’t they learn about female? So even when you go out, and boys try to throw the girls in the pool and the girl would say she is on her period and they would be ewww. But that is a get out of jail free card thing. In urban areas it can be as bad if the families are conservative. It can be very difficult because to a conscious school and we spoke about how traditionally back thousands of years ago it was physically demanding and women couldn’t do it. So to give them the break women should be alone and rest. They were said don’t eat pickles so you don’t have water detention. And they got passed on generation to generation and it became a rule than actual freedom. So what we consider dirty and impure is really just a perversion of what was done in case of safe carding woman’s health and wellbeing. So we try to explain this to kids and one girl asked if she can go to a temple – so we would say that she needs to speak to her parents and see if they are ok and explain everything.

Because the parents… all her life she has been doing something so she will not change her mind. Especially if they are very religious then you don’t want to get that backfiring. So you are better of doing it on an individual level and we faced it going into religious and talking to women and children at the same time. Of course some women came with children under 10 and they had no idea what we are talking about and we were giving a health seminar, and when we got to the part about menstruation the woman said – you cannot talk about it my child is too young to learn about it, she didn’t get it yet. And then we said so what if she gets it and she doesn’t know anything about it, to which she said – that’s how we all did it. Yeah and wouldn’t you have appreciated somebody telling you something about it before you got it. It is not dirty, it is talking about biology. Its something to sit and talks with your father so that he becomes more sensitive to how normal it is then they will not be giggling in class.

Girls only cared about staining and smelling because that’s how others will know and they don’t want anyone to know.

ME: talking how boys laugh because they don’t know it

LV: At this event one doctor was talking how you have to study this thing at the oncology for 3 years and you cannot take a break. And one girl was pregnant and she needs to take 6 months off and she was so scared. They had to bend the rules for her.

Another part is abortion because in India you can have the abortion until 5 months pregnancy but still you have a lot of cases of packs doing abortion because of lack of access or stigma and female infanticide and that’s why you have so many debts oppose to in America doing the prolife.

Everyone is entitled to your own opinion, and if you are a doctor and don’t want to do it it is ok but if the government doesn’t allow it it is a different thing.

But I think overall a realization is how men need to understand a period, a girl never can ask her father about the opinion because it is
I use tampons and I started it in America. I would always ask my friends to bring them. So my dad is in Switzerland, he would ask his friends or wife and one year into working on this in the middle of the meeting he would just give it to me across the meeting. So there is just this big switch. And he was giving it to me over men. And it is so natural.

People don't need to be talking about menstruation all the time, but things should be natural to say without...or even asking in class if someone has a tampon or not.

ME: Mental health
LV: Oh, huge taboo.
ME: problems with finding a job when pregnant or just because you are a woman
LV: Even if you are not supposed to ask if you are married or if you are trying to have kids, somehow it gets in. And conclusion – it is just easier to get a man. And unfortunately everyone is ok with it. And many girls get a job and get a kid and stop. It is terrible that girls are scared to get open that they are pregnant to their officers.

Women's acceptance of domestic abuse. Someone who is completely uneducated that will accept domestic abuse as a natural sort of things. Someone who is secondary educated only a third of them is likely to accept domestic abuse. Has anyone done a study that when men do understand it is not ok for women to be abused? It is the same with the #metoo movement and that women need to protect themselves.

ME: What do you believe to be a primary step?
LV: First part is education. There is also this comic book, but there is also this TV show that brought in menstruation, and there is Padman. It can be a game which so normally comes in. The more normal it becomes to say menstruation or period.

ME: Basically providing information
LV: It is only in the past 5-6 years that you see a rise in talking about condoms. Otherwise it was always hush hush. In Hindi movies you don't even have people making out.

For country that brought kama sutra it is insane how sex is like a very shameful thing and everything that comes from it. Homosexuality, toys are illegal for a long time. Menstruation is shameful. Sex, masturbation

A girl can marry a boy, then they can have sex, and then they can have babies. You don't have enough information on std, hiv, most people use the withdrawal method as a birth control, because it is not highly effective and it does not suppress stds.

I spoke to a gynaecologist, and she told me it is so difficult to convince that the withdrawal method it is not working. And there is a huge thing about going to gynaecologist. Because they believe you should not go to the doctor unless you have sex.

Most of my friends have never been tested for std because people think it won't happen to me. In USA they do STD panel, in India you have to go specifically to ask and they will be judgemental.

As like you are not married so why do you want the check up? And even if you say that you will do the internal check up they will still do the external.

All comes from this topic with sex and everything connected with it, all is seen as shameful and a topic behind close doors, men never need to know. That entire mentality needs to change, but there is very small nb of people working on it. And there are great people doing great work, and slowly getting there. But it is still a niche and it hasn't become mainstream like feminism. But you cannot do it without men, otherwise it is just women yelling what they want. And of course menstruation is a thing that women experience but it is a topic relevant to men. That is the first thing we explain – this is menstruation and it is where you come from too.

And you definitely won't see a change in this generation, but if you make it normal enough, then there can be a change in the next generation.

About the conditions of making pads and the machine for making pads
The standard
The game of life – oh you need to go to the gynac and make it normal
ME: showing the games
LV: It would be interesting to see the life of girls through the eyes of boys. He sees that suddenly she gets her period, cannot go out that much...there is also the system when girls are kept isolated and you are like what that happens. Young boy not understanding why his elder sister cannot go out.

LV MEN: Growing up in the urban area I was quite aware of and we were quite ok with talking about it. But of course coming here it is much different. It is more in the discussion part than anything else

In the urban slum I wasn't feeling comfortable going there and I wasn't sure if they will be comfortable talking to me, but they were. They wished for their brother to understand this much.

He was like – I don't mind not getting involved but when you are discussing with people it more depends on with the sensitivity of the people on discussing it.
They have only sons so they don't know how to handle it etc.
ND: Mental health is not acknowledged as the issue, and it is a deep rooted thing.
The most popular pads are called whisper. Even the name gives the attitude towards it.
If you go to a medical store and buy a sanitary napkin they will give it to you in the newspaper.
In India you have no alternative to sanitary napkins, you get tampons without applicator. I feel even with sanitary napkins, I really feel bad that I don't use something biodegradable.
Because the sanitary pad is so degraded, so spoken about that if there is something new happening it might be more accepted.
ME: Showing the games
ND: The comic book on patriotism, stories, so this is what I would know...But today nobody reads them. And they didn't want to change the way they sketched or the way they did, so they also had a bigger problem. So how do we make young kids read. The way we handle the issue, and in the store you get your picture clicked and you become one of the participants. So today they are all narcissistic. So when you say – what my sister goes through, people will get into it as it is more personal.
The big problem is a temple thing. And my mother says just don't tell anyone but that is just...not addressing the thing. And the men find it dirty.
ME: But women find it dirty too.
ND: And that is a bigger problem.
It has multiple levels.

BOONDH
The aim is to bring positive attitudes towards menstruation from all parties. No discriminatory practices and to involve agency in women. To have better relationships with their bodies.
They have intervention programmes that can last from 8 to 18 hours.
It involves different stakeholders – they work on how to enable everyone to get menstruation positive

Digital literacy which is present in the urban areas has a strong effect
They never attack someone, they accept everyone's perceptions. But they go through storytelling – for example on blood being pure or impure. They talk about the oxidization of the blood by being outside. Like when you leave the food out it will go bad

Facilitation is important when talking about myths and taboos. It is personal, important to make them feel comfortable. And can be very powerful.
They have about 30 – 60 people. If there is more than 30 people then there are 2 facilitators
Try to use their people, as a lot gets lost in translation and people interpret it the way they want to. It is hard to remove the bias

Hygiene practices and products – pro – choice; they talk about economical, sustainable, usability, health aspects of the products
Villages are very eco – sensitive; they burn everything or otherwise everything ends up in their rivers

Shame is omnipresent and has a long history. Shame needs to be killed, not the cloth.
Very often women are not even aware of how menstruation affects their life. For example asking what do you do when on period – all the same things. But when you ask them what they don't do then there are many answers.
Scientific aspects people do not really know. So it is important to bring different perspectives. For example from different religions. Like Jain people or Parsi people – do your beliefs work for other people? No. Then how those practices are important for you?
The game Chinese whisper – on how things got different from the original story.
The women in the urban areas are affected through – menstrual leave, prohibition of temples, the tax on sanitary products – on reusable products is 5% on cloth, and 18 % menstrual cup. The thing is that people who decide for things don't really know, they are not familiar with menstruation fully and the functioning.
Activities: menstrual literacy, interventions, activism(crimson wave), products
Everything goes with education and literacy
Providing menstrual products depends on economic aspect of the society.
Campus catalyst ambassador – even in the high end schools there is the strong taboo
Tampon book
You are treated in the home like the untouchable – no utensils, different clothes, people even change clothes after interacting with you, you don't sleep on the bed, you sleep on the floor, different sheets
Idea – 10 things you didn't know about menstruation

AAKAR INNOVATIONS
- Me telling about the story of the project
- The well-being aspects being affected by menstruation

JAYDEEP: I think the design covers everything.
The structure is changing quite a lot, earlier there were joint families, but now because of more organizations, people are working, so you will see nuclear families.

Few cases..for example my uncle, my uncle's wife, they are all staying in the house. But people are slowly going out, relocating due to jobs. So that is one part. Then in those nuclear families, it is possible that people are talking about it, but in the situations where we are talking about larger families, there we want to think very creatively, what sort of acceptance they will have. They are very religious. You will see very rich people have a lot of religious stuff too, the tabs and all. So we are talking about situations where women are not allowed to cook, they are not allowed to worship. This is very common. In some places people even have to sleep separately. In cities it is very less. In Nepal it is a very bad tradition. So in that context I see two options, one is nuclear family and one is joint. In nuclear family it is far easier as now people are forward looking. They are making it a discussion topic. They might find it interesting. That should be ok, there just needs to be found a right way. Like Menstrupedia, flipbooks and etc. There is a company WCC.

Having kids is very important, but menstruation is not. That creates a lot of challenges. This basically shows what is in the human body, the organ developments, what they try to showcase is how what happens in a woman's body is very similar to what happens in a male body. So the taboo goes away. These tools and videos are very important, because theoretical thing doesn't work. So there are apps, the period calculators and etc. We use a lot of tools, videos which we codeveloped with people. There is about breaking the silence. So first you need to come to a classroom and make them comfortable. Because if you just straight away start they will be shocked. So firstly you need to make them feel comfortable, be it with games or videos, so they can get into the topic.

So it cannot be done in one day. What we do is that we go for 6 months, and there is one monthly session. And important is who is talking – so someone who they feel comfortable too and who understands the integration and science behind it. We do not touch myths and taboos directly. We talk about the science. So what are the health consequences, so what happens in the 28 cycle. So we talk about that, the science behind that. And it needs to be in a local language and context. So for example these people in the villages – we documented local issues which were happening in that area, so for example people get scared about the white discharge, and let's say she needs to be operated or something, so she could have avoided that..so example from the real local area helps. In urban area that is hard because people hardly know the surroundings which is in the village context very well because people know each other. And the second part that we do not do, when we talk about the solutions we give freedom of choice and the bucket of choice. So for ex, cloth is something that people have been using for many years, but unfortunately they tend to yours old cloth, they don't wash it properly and etc. People who cannot afford sanitary pad, unless the government is providing. So for them the cloth is an option. So then we teach them how they should use it. So how to wash it, not to use synthetic, to dry out in the sun,...sometimes you have a family using the same cloth. Same thing we talk about compostable pads, menstrual cup, tampons etc. For example ,the menstrual cup is the best product in the market but it has it's disadvantages, people feel uncomfortable inserting it, seeing the blood in that way is in a challenge of your own thing, then washing it in a boiled water etc. Those things practically creates challenges. Similarly tampons is good for people who are in sports. So it's a simple product like that, but it also has challenges, for example if you forget inserting it. One must be careful when using. So for example SAP is banned in America, and it is in pad but if you use it in the insertable products, it shouldn't be used. There are positive and negatives. So we say – there is a bucket of choice and you are the one to choose what you want.

We talk about bucket of choice and freedom of choice. So India is a very culturally and religiously strong country, so if you go and say no you cannot use this or cannot act that way – they will be 'oh no they are talking against our religion'.

So what we say – let it be there, we are not the ones to say what you should do and what you should not do. We come from science, and it is important for them to see it from that point of you. So if they understand ,slowly they will talk to their colleagues and peers...it will take time. It is not something that can be done on a one session. And slowly they should realize on their own.

That's why – we have created a curriculum and what are the best practices. We have been adding and changing , what works. Same game won't work in all places. We primarily try to educate health workers and teachers. The reason is, because we would still be reaching as an outsider and people wouldn't feel comfortable to talk to us. So we always try to find a local person who they can share with. So that's something of an engagement that we do. But general silence breaking workshop is what we do. We call it a behaviour change and communication programme. So if you only talk about menstrual hygiene ,you are isolating it and not touching on all other things that it touches. We also talk with men and boys because they are part of the system and if they don't know lets say those given examples, men do not know in villages that menstruation and childbirth is connected. But for them the childbirth is very important. So it is important that they know that if you don't have menstruation there is no childbirth, then they will understand. And once they understand they act positively so supporting them financially or helping in the household. In case it is a coed school and when someone got period and if she had leakage then boys they made fun of her. And it is not that they want to make fun of her because of menstruation, it is that they don't know. If they are aware of it then some of them would support and bring pads or something. Then beyond these too, there are religious leaders who are also a part of the system, in villages, in urban it is not that way. But they have big influence. If you are going to the community and not involving the religious leaders. But if they are part of the system they can also help.

Age group also – before they start menstruating, why you got started, then you can become mother, there are needs they will have.

ME: taboos manifested in the city – how?

JAYDEEP: Taboos are very simple ones which is everywhere – religious, the worship part of it, so don't do poojas, and secondly, in some cases, you cannot cook. Or similar is don't go to temple. It is not much other that is relevant.

Pooja thing – even if they are educated, they are like “no we cannot do that”.

ME: sharing about the experience of tata trust

JAYDEEP: Some families are very rigid and they won't accept talking about it. There is a very small segment of people working on menstruation. When I started my family also didn't feel comfortable about me working on menstruation. But it changes. Another thing could be about people who are working in corporates. People are not comfortable working, so they work from home, or take a half a day leave. So they either won't express it or it is not appreciated. It depends on seniors
or bosses. It is not something also that you can stamp – some women have cramps some do not at all. It can also vary from age groups. So there are many scientific backgrounds. So those understandings are still missing, and it needs to reach there. That is also a taboo. Sharing those information. So let’s say a colleague needs a sanitary pad, so they will ask someone who they feel comfortable.

ME: about situation in De Gist
JAYDEEP: interns coming from US. There is a basic level taboo across the world, which is about sharing things with others. Many girls from other countries by coming to India might have even for first time started talking about it. But the taboo on sharing information – I am menstruating and I need help, it is still there. In last few years it has started talking about it, but few years back it was of no importance.

ME: what would be the first step to take to remove the taboo?
JAYDEEP: Education is of course the priority, but it has to be a solution module. You cannot cover just one part of it. For example, if you are having products then you don't have education. So education is important, but if you are educating without giving a solution like a tampon or pad then you are just doing one part of it. So I feel it goes hand in hand. But the best thing would be to do it parallelly. But if you have the priority, then it should be education followed by a product or solution.

ME: What impact do you wish to see
JAYDEEP: Everyone should have a basic knowledge, what is it, why is it important what is the science behind it. All people should have this basic information. And then comes with solutions. I think solution should be left to the users. It should be the case, but then people bombard with information like – our product is the best, this is the best. Now our product is the best, and everyone else is bad. Every product has its own market and there are merits of each product. The woman should choose which product and which brand. We produce the products and hire 12-15 women, and so they become curious about it and then younger boys, husbands get curious about it too..and that's the way to go around this. That's another aspect we try to cover. And involving doctors, because if the doctor would say something..they trust the system. We try to collaborate with people..but it needs to be a solution thing.

ME: showing the games
JAYDEEP: I think this topic is ..I would say to focus on biology. The health effects if you don't follow the right practices. 1 is following the right practice, and 2 if you don't follow what would happen.
I think it is interesting, and storytelling always works. But then you have to cover the local language. Or first two languages is Hindi and English.
These games could be good for when cousin or niece stays over. That age group works better than with everyone. All these three are more for lower age groups.
It could be maybe made
Interview curriculum

PERSONAL INTERVIEWS
Within the family- to get an understanding of the view and behaviour towards menstruation within the family, the attitude of each member; to understand the size of the taboo and its impact on women, from her side and her family's.
For design - understanding this I will get to understand the design space for the product; most importantly, how should I form the language in the product, how should I present the terms, what sort of engagement the girls feel most comfortable with, and to which extent can I point out the existing taboos.
For wellbeing - understand and specify which exact parts of women's well-being are being affected by the existing taboo in order to design for it

INTRO TO ALL PARTICIPANTS
Talking to in private. Make sure to make them feel comfortable. Say if allowed to take photographs and do recording and that is just for the purposes of my graduation.
Ask questions like - how are you? How was your day? Say something about the place or family. "Thank you for taking your time to talk to me. I will ask you few questions about your view on the topic as it will help me to understand better the context in India and how I can design for the situation.
And feel free to interrupt if you have anything to add, or if you just need to have a bit of a break."

FAMILY TESTING
INTERVIEW TIME - TOTAL aprox 2h 20-30 min
GAME TESTING - about 1h

FATHER’S CURRICULUM aprox 30 min

RESEARCH QUESTIONS
What is the knowledge men receive on menstruation? How do they feel about that?
How do they feel about talking about menstruation? How far is the point when they start feeling ok and comfortable when talking about it (design space)
How do they feel about their own role within menstruation? Do they see it even existing? Or that it should exist?
What is their awareness around the existing taboos and their effect on women?
How do they feel about the existing taboos around menstruation and the way it affects the lives of girls?
How far are the men willing to go in order to increase the wellbeing of women?
How do they see family as a role or a space for discussion around menstruation?

PARTICIPANT DETAILS
Age
Education level
Occupancy
Family type
Family members - age
profession

1. GAME TESTING
2. QUESTIONS AFTER GAME PLAYING
What did you like the most and why?
What didn't you like and why?
What struck you the most and why?
What made you most think and why?
What did you enjoy the most and why?
3. INTERVIEW QUESTIONS
What are the first associations you have when someone says menstruation?
What do you think menstruation is?
What was your first encounter with menstruation? How was it? And how do you feel about it? Why?
Did you have sisters when growing up? If yes, how did they behave about menstruation?
How did your mother behave towards you when in regard to menstruation? If you had sisters, how did she behave towards your sisters? What do you think about that behaviour?
How much do you know about products? How did you get to know about it? Would you like to know more about them? Why yes, why not?
What are the practices in your family around menstruation? How does your family act to you when in regard to menstruation? How do you feel about that?
If they have a daughter - If the daughter already had menstruation - How was your first reaction to your daughter's menstruation? Do you talk about menstruation with your daughter? When was the last time you bought your daughter a product? Do you know what products she is using? If no, why no, if yes, why yes? How do you think she feels about menstruation? What do you think about that?
When did you find out your daughter had menstruation and how? How do you think she felt when she first had it? How do you think she feels now? How do you feel about that?
If they have a son - How much do you think they know about menstruation? What do you think about that?
What do you think of the education of menstruation in India? In schools? Why?
What is your opinion around superstitions of menstruation in India? Do you know their origin? What do you think caused them to develop?
Show images - What are your thoughts on this? How does it make you feel?
How do you see menstruation in India? Is there anything you wish to change about it? Why?

4. 1 WEEK LATER - test the effect of the game // bring products
How are your thoughts after the played game? Do you feel anything different?
Have you had any discussions about the topic and with whom?
How are your family members - did you have any discussion after it? And who is the most one to comment?
Do you see a change in yourself and in what way?
Would you play the game again?
What stuck in your mind?
Would you like to have something like this and why?
Which game do you tie with the following words and why?
Biology, fun, uncomfortable, taboo, anxiety, interesting, informative

MOTHER'S CURRICULUM aprox 40 min

RESEARCH QUESTIONS
How do women feel about their menstruation?
What are the aspects of wellbeing affected by the taboo? Where does taboo the most affect them?
How are they aware of the aspects of wellbeing being affected?
How do they feel about the taboo?
What do they wish for to change and why?
How do they feel in the families? What do they wish for to change there?
How do they see men in menstruation? And why?

PARTICIPANT DETAILS
Age
Education level
Occupancy
Family type
Family members - age
profession

1. GAME TESTING

2. QUESTIONS AFTER GAME PLAYING
What did you like the most and why?
What didn't you like and why?
What struck you the most and why?
What made you most think and why?
What did you enjoy the most and why?

INTERVIEW QUESTIONS
1. What are the first associations you have when someone says menstruation?
2. What do you think menstruation is?
3. How did you learn about menstruation?
4. How do you feel when talking about it? Why?
5. Did you have sisters when growing up? If yes, how did they behave about menstruation?
6. What were the home practices around menstruation? How did your mother behave to you when in regard to menstruation? What do you think about that behaviour?
7. How much do you know about products? How did you get to know about it? Would you like to know more about them? Why yes, why not?
8. How does your family now act to you when in regard to menstruation? How do you act towards them? How do you feel about that?
9. If they have a daughter - If the daughter already had menstruation - How was your first reaction to your daughter’s menstruation?
10. How much do you know about products? How did you get to know about it? Would you like to know more about them? Why yes, why not?
11. If they have a son - How much do you think they know about menstruation? What do you think about that? do you talk about it with your son? What does he ask you about menstruation? Do you think he is curious about it? What do you think are his thoughts on it?
12. What do you think of the education of menstruation in India? In schools? Why?
13. What is your opinion around superstitions of menstruation in India? Do you know their origin? What do you think caused them to develop?
Show images - What are your thoughts on this? How does it make you feel?
14. How do you see menstruation in India? Is there anything you wish to change about it? Why?

4. WELLBEING by Carol Ryff time about 3-5 min (Ryff, 1989)
Please do the questionnaire. Specify from 1 to 6 to which extent you agree with the statement or disagree.
After you have done, specify in which parts and questions do you see a correlation with menstruation.

PERSONAL PREMISE: The fact that India is a patriarchal country, the environmental mastery might be affected by the society itself. Positive relations is probably going to be good as they have strong ties with people. This also automatically lowers the sense of autonomy. And personal growth, purpose in life can be affected due to the poverty percentage and in general economical situation in India which can have a psychological effect as well.

**Autonomy:**
1 I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people. AUTONOMY
37 I judge myself by what I think is important, not by the values of what others think is important. AUTONOMY
31 It's difficult for me to voice my own opinions on controversial matters. AUTONOMY
25 I have confidence in my opinions, even if they are contrary to the general consensus. AUTONOMY
19 I tend to be influenced by people with strong opinions. AUTONOMY
13 I tend to worry about what other people think of me. AUTONOMY
7 My decisions are not usually influenced by what everyone else is doing. AUTONOMY

**Environmental Mastery:**
38 I have been able to build a home and a lifestyle for myself that is much to my liking. ENVIRONMENTAL MASTERY
32 I have difficulty arranging my life in a way that is satisfying to me. ENVIRONMENTAL MASTERY
26 I often feel overwhelmed by my responsibilities. ENVIRONMENTAL MASTERY
20 I am quite good at managing the many responsibilities of my daily life. ENVIRONMENTAL MASTERY
14 I do not fit very well with the people and the community around me. ENVIRONMENTAL MASTERY
8 The demands of everyday life often get me down. ENVIRONMENTAL MASTERY
2 In general, I feel I am in charge of the situation in which I live. ENVIRONMENTAL MASTERY

**Personal Growth:**
39 I gave up trying to make big improvements or changes in my life a long time ago. PERSONAL GROWTH
33 For me, life has been a continuous process of learning, changing and growth. PERSONAL GROWTH
27 I do not enjoy being in new situations that require me to change my old familiar ways of doing things. PERSONAL GROWTH

36 Appendix
21 I have a sense that I have developed a lot as a person over time. PERSONAL GROWTH
15 When I think about it, I haven't really improved much as a person over the years. PERSONAL GROWTH
9 I think it is important to have new experiences that challenge how you think about yourself and the world. PERSONAL GROWTH
3 I am not interested in activities that will expand my horizons. PERSONAL GROWTH

Positive Relations:
40 I know that I can trust my friends, and they know they can trust me. POSITIVE RELATIONS
34 I have not experienced many warm and trusting relationships with others. POSITIVE RELATIONS
28 People would describe me as a giving person, willing to share my time with others. POSITIVE RELATIONS
22 I enjoy personal and mutual conversations with family members or friends. POSITIVE RELATIONS
16 I often feel lonely because I have few close friends with whom to share my concerns. POSITIVE RELATIONS
10 Maintaining close relationships has been difficult and frustrating for me. POSITIVE RELATIONS
4 Most people see me as loving and affectionate. POSITIVE RELATIONS

Purpose in Life:
41 I sometimes feel as if I've done all there is to do in life. PURPOSE IN LIFE
35 Some people wander aimlessly through life, but I am not one of them. PURPOSE IN LIFE
29 I enjoy making plans for the future and working to make them a reality. PURPOSE IN LIFE
23 I don't have a good sense of what it is I'm trying to accomplish in life. PURPOSE IN LIFE
17 My daily activities often seem trivial and unimportant to me. PURPOSE IN LIFE
11 I have a sense of direction and purpose in life. PURPOSE IN LIFE

Self-acceptance:
42 When I compare myself to friends and acquaintances, it makes me feel good about who I
Am. SELF ACCEPTANCE
36 My attitude about myself is probably not as positive as most people feel about themselves. SELF ACCEPTANCE
30 In many ways, I feel disappointed about my achievements in life. SELF ACCEPTANCE
24 I like most aspects of my personality. SELF ACCEPTANCE
18 I feel like many of the people I know have gotten more out of life than I have. SELF ACCEPTANCE
12 In general, I feel confident and positive about myself. SELF ACCEPTANCE
6 When I look at the story of my life, I am pleased with how things have turned out. SELF ACCEPTANCE

4. QUESTIONS 1 WEEK AFTER
How are your thoughts after the played game? Do you feel anything different?
Have you had any discussions about the topic and with whom?
Do you see a change in yourself? If yes, in what way?
Would you play the game again? Explain your answer
Did something stick in your mind and what?
Would you like to have something like this and why?
Which game do you tie with the following words and why?
Biology, fun, uncomfortable, taboo, anxiety, interesting, informative

GIRLS CURRICULUM aprox 30 min

RESEARCH QUESTIONS
How does a girl feel about their menstruation?
What are the aspects of wellbeing affected by the taboo? Where does taboo the most affect girls?
How are they aware of the aspects of wellbeing being affected?
How do they feel about the taboo? Are they aware of it?
What do they wish for to change and why?
How do they feel in the families? How are their relations to the family- who has the biggest effect on the girls? What do they wish for to change there?
How do they see men in menstruation? And why?

PARTICIPANT DETAILS
Age
1. GAME TESTING

2. QUESTIONS AFTER GAME PLAYING
What did you like the most and why?
What didn't you like and why?
What struck you the most and why?
What made you most think and why?
What did you enjoy the most and why?

3. INTERVIEW QUESTIONS
1. What are the first associations you have when someone says menstruation?
2. What do you think menstruation is?
3. How did you learn about menstruation?
4. How do you feel when talking about it? Why?
5. Did you have sisters when growing up? If yes, how did they behave about menstruation?
6. Who do you ask for help around menstruation and why that person?
7. How does your family behave around menstruation?
How did your mother behave to you when in regard to menstruation? What do you think about that behaviour?
How did your father behave when in regard to menstruation? What do you think about that behaviour?
8. How much do you know about products? How did you get to know about it? Would you like to know more about them? Why yes, why not?
9. If she has a brother - does he talk to you about it? What do you think his opinion on menstruation is? What do you think about that?
11. What do you think of your school on the topic of menstruation? Why?
12. Where else did you learn about menstruation? What sources?
13. Do you experience any taboos around menstruation? How? And what do you think about them?
14. Did you ever feel bad about menstruation? Can you share the story?
15. How are the experiences of your friends?
16. Is there anything you wish to change about menstruation? Why?

4. WELLBEING by Carol Ryff time about 3-5 min
Please do the questionnaire. Specify from 1 to 6 to which extent you agree with the statement or disagree.
After you have done, specify in which parts and questions do you see a correlation with menstruation.

PERSONAL PREMISE: The fact that India is a patriarchal country, the environmental mastery might be affected by the society itself. Positive relations is probably going to be good as they have strong ties with people. This also automatically lowers the sense of autonomy. And personal growth, purpose in life can be affected due to the poverty percentage and in general economical situation in India which can have a psychological effect as well.

Autonomy:
1 I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people. AUTONOMY
37 I judge myself by what I think is important, not by the values of what others think is important. AUTONOMY
31 It's difficult for me to voice my own opinions on controversial matters. AUTONOMY
25 I have confidence in my opinions, even if they are contrary to the general consensus. AUTONOMY
19 I tend to be influenced by people with strong opinions. AUTONOMY
13 I tend to worry about what other people think of me. AUTONOMY
7 My decisions are not usually influenced by what everyone else is doing. AUTONOMY

Environmental Mastery:
38 I have been able to build a home and a lifestyle for myself that is much to my liking. ENVIRONMENTAL MASTERY
32 I have difficulty arranging my life in a way that is satisfying to me. ENVIRONMENTAL MASTERY
26 I often feel overwhelmed by my responsibilities. ENVIRONMENTAL MASTERY
20 I am quite good at managing the many responsibilities of my daily life. ENVIRONMENTAL MASTERY
14 I do not fit very well with the people and the community around me. ENVIRONMENTAL MASTERY
8 The demands of everyday life often get me down. ENVIRONMENTAL MASTERY
2 In general, I feel I am in charge of the situation in which I live. ENVIRONMENTAL MASTERY

Personal Growth:
39 I gave up trying to make big improvements or changes in my life a long time ago. PERSONAL GROWTH
33 For me, life has been a continuous process of learning, changing and growth. PERSONAL GROWTH
27 I do not enjoy being in new situations that require me to change my old familiar ways of doing things. PERSONAL GROWTH
21 I have a sense that I have developed a lot as a person over time. PERSONAL GROWTH
15 When I think about it, I haven't really improved much as a person over the years. PERSONAL GROWTH
9 I think it is important to have new experiences that challenge how you think about yourself and the world. PERSONAL GROWTH
3 I am not interested in activities that will expand my horizons. PERSONAL GROWTH

Positive Relations:
40 I know that I can trust my friends, and they know they can trust me. POSITIVE RELATIONS
34 I have not experienced many warm and trusting relationships with others. POSITIVE RELATIONS
28 People would describe me as a giving person, willing to share my time with others. POSITIVE RELATIONS
22 I enjoy personal and mutual conversations with family members or friends. POSITIVE RELATIONS
16 I often feel lonely because I have few close friends with whom to share my concerns. POSITIVE RELATIONS
10 Maintaining close relationships has been difficult and frustrating for me. POSITIVE RELATIONS
4 Most people see me as loving and affectionate. POSITIVE RELATIONS

Purpose in Life:
41 I sometimes feel as if I've done all there is to do in life. PURPOSE IN LIFE
35 Some people wander aimlessly through life, but I am not one of them. PURPOSE IN LIFE
29 I enjoy making plans for the future and working to make them a reality. PURPOSE IN LIFE
23 I don't have a good sense of what it is I'm trying to accomplish in life. PURPOSE IN LIFE
17 My daily activities often seem trivial and unimportant to me. PURPOSE IN LIFE
11 I have a sense of direction and purpose in life. PURPOSE IN LIFE

Self-acceptance:
42 When I compare myself to friends and acquaintances, it makes me feel good about who I Am. SELF ACCEPTANCE
36 My attitude about myself is probably not as positive as most people feel about themselves. SELF ACCEPTANCE
30 In many ways, I feel disappointed about my achievements in life. SELF ACCEPTANCE
24 I like most aspects of my personality. SELF ACCEPTANCE
18 I feel like many of the people I know have gotten more out of life than I have. SELF ACCEPTANCE
12 In general, I feel confident and positive about myself. SELF ACCEPTANCE
6 When I look at the story of my life, I am pleased with how things have turned out. SELF ACCEPTANCE

4. QUESTIONS 1 WEEK AFTER
How are your thoughts after the played game? Do you feel anything different?
Have you had any discussions about the topic and with whom?
How are your family members - did you have any discussion with them after it? And with whom?
Do you see a change in yourself? If yes, in what way?
Would you play the game again? Explain your answer
Did something stick in your mind and what?
Would you like to have something like this and why?
Which game do you tie with the following words and why?
Biology, fun, uncomfortable, taboo, anxiety, interesting, informative

BOYS CURRICULUM aprox 20 min

RESEARCH QUESTIONS
What is the knowledge men receive on menstruation? How do they feel about that?
How do they feel about talking about menstruation? How far is the point when they start feeling ok and comfortable when talking about
it (design space)
How do they feel about their own role within menstruation? Do they see it even existing? Or that it should exist?
What is their awareness around the existing taboos and their effect on women?
How do they feel about the existing taboos around menstruation and the way it affects the lives of girls?
How far are the men willing to go in order to increase the wellbeing of women?
How do they see family as a role or a space for discussion around menstruation?

PARTICIPANT DETAILS
Age
Education level
Occupancy - student
Family type
Family members - age
profession

1. GAME TESTING

2. QUESTIONS AFTER GAME PLAYING
What did you like the most and why?
What didn't you like and why?
What struck you the most and why?
What made you most think and why?
What did you enjoy the most and why?

3. INTERVIEW QUESTIONS
What are the first associations you have when someone says menstruation?
What do you think menstruation is?
What was your first encounter with menstruation? How did you react? What do you think about it?
How do you feel when talking about it? Why?
How does your family behave about menstruation? What are the practices? What do you think about it?
Did you have sisters when growing up? If yes, how did they behave about menstruation?
How does your mother behave to you when in regard to menstruation? If you have sisters, how does she behave towards your sisters?
What do you think about that behaviour?
How much do you know about products? How did you get to know about them? Would you like to know more about them? Why yes, why not?
When was the last time you bought your sister a product?
How do the girl members of the family act to you when in regard to menstruation? How do you feel about that? Who do you talk to about it?
How does your father act around menstruation? Does he talk to your sister about it?
Who do you talk to about menstruation? When was the last time you asked and what was it?
How did you learn about menstruation?
What do you think of the education of menstruation in India? In schools? Why?
How all did you learn about it? What are the resources?
Have you experienced taboos on menstruation? Who did it involve? How did you feel?
Show images - blood what do you think about it? How do you feel?
Is there anything you wish to change about menstruation in India? Why?

4. 1 WEEK LATER - test the effect of the game
How are your thoughts after the played game? Do you feel anything different?
Have you had any discussions about the topic and with whom?
How are your family members - did you have any discussion after it? And who is the most one to comment?
Do you see a change in yourself and in what way?
Would you play the game again?
What sticked in your mind?
Would you like to have something like this and why?
Which game do you tie with the following words and why?
Biology, fun, uncomfortable, taboo, anxiety, interesting, informative
CHANGED 1 WEEK LATER QUESTIONS

Evaluation of the intent of the design

REFLECTION
When you think about the test, how do you feel now?
How are your thoughts? Do you feel anything different?
How do you see menstruation now? Did you get a new perspective on the topic?
Did something stay in your head from the testing? What?

DISCUSSION
Have you had a discussion with someone on the topic since the testing?
Who with? Why? How did it go? Who initiated it?

FAMILY
How is it in the family since the testing?
Do you feel something changed?
How are the communications on the subject?
Would you have them?

Evaluation of the design

FURTHER INTERACTION
Would you like to play the games again? N/Y, why, which one
Would you like to have something like these games? Why?
Would you recommend them to someone? Which one? Why that specific one? Is it specific why that person?
Could you see yourself using these games? What context?
How do you see them getting into your house and starting the interaction?
Interview curriculum for lower income

The curriculum for the lower income was all the same, expect that some questions were intended to only be asked if the participants showed comfort to discuss on menstruation.

RESEARCH QUESTIONS
What is the knowledge men receive on menstruation? How do they feel about that?
How do they feel about talking about menstruation? How far is the point when they start feeling ok and comfortable when talking about it (design space)
How do they feel about their own role within menstruation? Do they see it even existing? Or that it should exist?
What is their awareness around the existing taboos and their effect on women?
How do they feel about the existing taboos around menstruation and the way it affects the lives of girls?
How far are the men willing to go in order to increase the wellbeing of women?
How do they see family as a role or a space for discussion around menstruation?

ABOUT DESIGN
Is the design engaging?
The design distract them from the topic of menstruation?
Did they enjoy the game playing?
Did design make them feel comfortable with menstruation?
How did the design affect their relationships with family?

FATHER’S CURRICULUM
INTERVIEW QUESTIONS - *these questions were intended to be asked only if the participant showed comfort
What do you think of the education of menstruation in India? In schools? Why?
What is your opinion around superstitions of menstruation in India? Do you know their origin? What do you think caused them to develop?
Show images - What are your thoughts on this? How does it make you feel?
How do you see menstruation in India? Is there anything you wish to change about it? Why?

MOTHER’S CURRICULUM
INTERVIEW QUESTIONS - *these questions were intended to be asked only if the participant showed comfort
12. What do you think of the education of menstruation in India? In schools? Why?
13. What is your opinion around superstitions of menstruation in India? Do you know their origin? What do you think caused them to develop?
Show images - What are your thoughts on this? How does it make you feel?
14. How do you see menstruation in India? Is there anything you wish to change about it? Why?

GIRLS CURRICULUM *for girls all the questions were the same

BOYS CURRICULUM
INTERVIEW QUESTIONS - *these questions were intended to be asked only if the participant showed comfort
Have you experienced taboos on menstruation in your surrounding? Who did it involve? How did you feel?
Show images - blood what do you think about it? How do you feel?
Is there anything you wish to change about menstruation in India? Why? Ask based on the previous answers
Critical material

The critical material was used to investigate whether the participants are informed on the effect of menstruation on the well-being of women. Recent events which show the strength of the taboo and its danger were presented to participants to see their reactions. Also, two images of blood were presented to see whether participants view menstrual blood as impure or any sort of different from the blood from an injury such as paper cut.

Figure 11: taken from BBC news

Villagers in India’s southern state of Tamil Nadu are grieving the death of a 14-year-old girl who died in a cyclone after being forced to sleep separately because she was menstruating.

Figure 11: taken from BBC news
Woman and 2 sons suffocate to death in menstrual hut in Nepal

*Amba Bohara, 35, and her sons, aged 12 and nine, had lit a fire on Tuesday night to keep warm in the freezing mud and stone hut, but were discovered dead the next morning by her father-in-law in western Nepal’s Bajura district, police said.*

Representative image of a menstruation hut in Nepal. (Image: Reuters)

A woman and her two sons suffocated to death in Nepal after she was forced to sleep in a windowless shed during her period, police said on Thursday, the latest victims of an age-old tradition in the country that says menstruating women should be isolated.

*Figure 12: taken from India Today*
This article is more than 1 year old

Indian girl kills herself after alleged period shaming by teacher

Teacher had reportedly made 12-year-old girl show a period stain on her clothes in front of her classmates

*Reuters in Chennai*

Thu 31 Aug 2017 15.19 BST

Police in India are investigating allegations that a 12-year-old killed herself after a teacher humiliated her for a period stain on her uniform.

Officials said the girl took her own life near her home in southern India’s Tamil Nadu state on Monday, leaving a note saying her teacher had “tortured” her.

*Figure 13: taken from the Guardian*
Figure 14 and 15: pictures used to see whether menstrual blood of the participants is perceived different than the other blood leakage.
INFORMED CONSENT FORM

RESEARCH TEAM: Petra Salarić (graduate student)
RESEARCH SUPERVISOR: dr.ir.J.C.Diehl, dr.ir.Pieter Desmet
Design for Interaction, Faculty of Industrial Design Engineering, TU Delft, Netherlands

PURPOSE OF THE RESEARCH STUDY: The goal of the project is to understand the effect of the taboo of menstruation on the wellbeing of women and how can design help in lowering the stigma of menstruation. Moreover, to understand the needs of the users, as well as their aspirations. The aim is to investigate whether gamification as a tool for behaviour change can contribute to lowering the stigma of the taboo in the household and if by doing so, will the well-being of girls be improved. The testing involves individual interviews and the group testing of games. The testing also continues with a followup session of individual interviews to test the effect of the games. The follow-up session will be made a week after the testing and will be organized according to the best time suitable for the participants. The participants have the right to proceed with the testing or not at any time. Voice recordings or video recordings, photographs and all physical material will be collected for the purpose of the study and will not be distributed. Any data used will be de-identified where possible.

POSSIBLE RISKS OR BENEFITS: there are no risks involved in this study. There are no direct benefits besides personal gratification for sharing ideas and contributing to the project.

RIGHT OF REFUSAL TO PARTICIPATE AND WITHDRAWAL: The participants are free to choose to participate in the study, and may refuse to participate or withdraw at any time.

AVAILABLE SOURCES OF INFORMATION: The participants may contact the main researcher for further questions at petra.salaric@gmail.com or on the phone 7304034497

PARTICIPANT’S CONSENT DECLARATION:
I understand that I may discontinue participation at any time. Refusal to participate will involve no penalty. I understand that video and photographic recordings will be collected and deidentified where possible.
Date:
Participant(s) (signature):

RESEARCHER’S DECLARATION:
I declare that I have explained in detail the research procedures in which the subject has consented to participate.
Date:
Researcher:
PARTICIPANT OVERVIEWS

FATHER from Bangalore 
education: postgrad. in art 
occupancy: accupunture doc, meditation trainer 
age: 45

MOTHER from Mangalore 
education: postgrad. social work 
occupancy: housewife and meditation trainer 
age: 44

DAUGHTER 
education: high school 
occupancy: student 
age: 14

SON 
education: middle school 
occupancy: student 
age: 12

THE TEST
The testing started by introducing the steps of the test. After getting to know each other and signing the participant sheet, the family started playing the games. In order to test the written rules and the clarity of the introductions, the players were given the rules to read out without the intervention of the researcher. As the game started it was clear how they needed time to understand the steps. In order to make use of the time being tested, the researcher stepped in and explained when needed. The Puberty flute came as a warm-up and the players were a bit unsure. Just as they got to get a hang of it, the time for the testing of the Puberty Flute was done. The Memory game seemed to have been a bit demanding as at one moment the players became hesitant. The focus was required both on the cards and trying to answer the questions. It seemed quite hard and challenging. As well, due to the familiarity of the Memory game, the participants went to discover other cards instead of answering the extra questions on the already discovered ones. When it got to Giggles, it wasn't going as expected. The one minute given to do the answering seemed quite long and there was no expected adrenalin. Also, the boy felt uncomfortable when answering as the testing was his first encounter with the subject. The mother and the father stepped in to explain the subject to him. When it got to the Mix-Body-Match everyone started having a lot of fun and the boy felt very comfortable as in that game it wasn't necessary for him to know the topic. The father felt the most comfortable too, as he liked the fact that all of the members were involved in it, rather than being in teams or pairs. The testing was long as there was no specific time for each game and was spontaneously decided to go from one to another. After the testing came the interviewing. The questions from the interview curriculum (the Google doc shared with you at the beginning of April) were used to interview the participants. Along with the google doc, extracts from the online news was used to check the awareness and the reactions to the effect of extreme myths on the lives of women in India (the advice from Sukhibhava). Besides that, there were images of menstrual blood and blood from the finger to test the feeling towards menstrual which is often seen as impure.

THE FINDINGS

the testing
Have a clearer plan on the steps and the timing of the test, but try to keep it natural. Even though it was a long testing, the flow made the participants feel very comfortable so the interviews were insightful. Presenting the games or acting them out before the test could help in the understanding of the game and help in a better testing of the design.

the design
The Book of Q&A and the cards - trying to find the correct information in the book should be made easier as it brings a bit of nervousness and irritability - signage on the cards when in the book?
Puberty flute
- creating pairs has created comfort - the boy didn't know the answer so he gave the card to the father to answer
- the girl was the truth keeper as she knows the most on the topic (while the role was intended for the father)
- the Memory game - people do not get to open again and again the cards to answer all of the questions but prefer to go and discover the other ones - minimize the number of questions?
Giggles - uncomfortable for the people who do not know about the subject
- initial feeling comes to describe it with words when they know the topic
- when people do not know the subject they copy the drawing on the card
- one minute seems like a long time - keep it to 30 seconds?
- The Mix-Body-Match - it was the most enjoyable one
- it was also the most natural one in terms of bringing up the topic of menstruation
- the Memory Game and Giggles was a favourite one of the women
- girls get to learn more than they do and the mother uses it to teach about menstruation
- but the Mix-Body-Match was the most enjoyable for men and produced the most laugh - would Mix-Body-Match also produce conversation around the topic????

the taboo
Even though it is important to note that the family is a very open one, the taboo is still there to a certain degree.
1) the men feel left out of the topic of menstruation
2) the boys really want to know about the subject but feel how it is not their place to ask
3) women do not involve men into the discussion and often keep it to themselves
4) there is a jealous feeling in boys as they cannot have something private of their own like women have menstruation
5) talking about the topic brought a bit of discomfort but also relief that the topic is “cracked” and out there now
THE FOLLOW UP  
note: the father was out and couldn't be reached

REFLECTION
No much reflection. The family was travelling and due to organization were preoccupied and couldn't reflect.
The daughter didn't think there would be a game like that.

DISCUSSION
The family was travelling and therefore didn't discuss much about the test; if they weren't travelling they believe they would have for sure discussed it.

IN THE FAMILY
As the games were played together, for sure there would be a different dynamics.
The daughter feels that she can now more speak with her father
"Because it has been spoken in a nice way and in a fun way, so now i feel it will be easier to approach." The son would feel more comfortable now to talk about menstruation with his family but "after this(the test) I realized we can talk about it as now I know about it and it is normal".

FURTHER INTERACTION
They wouldn't play much, but they find it useful for other families with kids. They would own one game, and after certain time they would give the games away to other families. The daughter would like to play the games again, and also in her school.

DESIGN
"It is a very easy way, very casual, and normal way to share information. Nothing secret about it, and in that way it makes it easy." mother

PAIRING GAME
"This was the most fun. I like making funny things. I would like to have it. I would play it with my parents or friends."  
boy testing 1

"It opens up without any complication I was happy because she felt more easy.(the daughter)."
father testing 1

"You saw, we were all together and all laughing. Here we are all together. It has the best atmosphere."  
father testing 1

MEMORY GAME
"Board game it was too simple. This was informative and challenging. It was a lot of fun."
mother testing 1

"I would get it cause all the information is there. and then we would pass it on who have daughters. It would be beneficial for them."  
mother testing 1

"It was fun to remember where is what. And you can learn more too."  
daughter testing 1

2nd TEST 25.4.2019.

PARTICIPANT OVERVIEWS

FATHER
education: ba in commerce  
occupancy: business  
age: 44

MOTHER
education: engineer in printing  
occupancy: housewife  
age: 40

DAUGHTER
education: high school  
occupancy: student  
age: 15

THE ADAPTATION FROM THE 1ST TEST
The second testing started with a clearer planning of the test. After introducing all the steps the testing of the games started. This time the researcher started by asking whether they played similar games such as Monopoly prior to the playing to sensitize for the game. After that, the researcher acted out the games to give a better understanding to the games. When the participants started playing, the researcher didn't get further involved. This resulted in the Truth Keeper becoming as the facilitator.

THE TEST
When it came to Giggles, the father wished to be left out and left the mother and daughter to play. After about 10 minutes, the researcher tried to involve him, along with the pushes from the mother. He joined his daughter as a teammate against the mother, but her eagerness to answer the questions and to lead resulted in him staying as the observer.
The mother and daughter seemed to have much enjoyed the game Giggles, so the researcher included the cards which were put aside to test whether they produce opposition as to being uncomfortable (those cards were selected along with Sukhibhava). By that time they were only describing the terms by speaking them out (which also happened in the 1st testing), but then they wanted to experiment - so they started drawing and acting them out which made them laugh. Finally came to the testing of the Pairing game, which went very smooth and without any specific reaction.

During the entire time of the testing the father would check his phone, which brought to an obvious feeling of either discomfort or that he felt that it wasn't necessary for him to be involved on the subject of menstruation. During the testing, his answers were often followed by statement " From my understanding", stating how he has low knowledge on the topic of menstruation.
After the testing came the interviewing on them as their education, occupancy and age as well as my introduction. It came as a nice break before the interviews in order to get more personal and comfortable before them sheir their thoughts and feelings on the subject.
The interviews were very natural and straight on the point. The father seems to be comfortable on the subject, but without a lot to discuss.
He sees menstruation as a natural and biological cause, therefore, without a need to create a sort of a fuss about it.
The girl shared a lot of experiences of the her classmates and friends who come from conservative families which served as a good comparison to their situation.
The mother is the one who was interested for bringing this testing to the house. She is a very open minded person, open to experiences and new learnings. The mother in general is very natural and relaxed when comes to the taboo, but is also respectful of the ones who follow the tradition. Especially, the ones in the family.

THE FINDINGS

THE INSIGHTS

the testing
The clearer timing on the tests and the acting out the game helped. However, in the next testing it should be also tested the level of necessary information and the correct wording for the rules. Each game was played for no more than 20 minutes and it gave a good and an equal feeling into the games. Have a clearer structure for the future planning when there is 3 people.

the design
The Book of Q&A and the cards - there should be a better design when trying to find the information in the book as it brings a bit of nervousness and irritability. The icons should be redesigned as they are too minimalistic in their visual and are therefore confusing.
- role of the Truth keeper - also like in the first testing - the father didn’t get to be the Truth keeper like originally assumed, the daughter, also like in the 1st testing, enjoys the most challenging games as this is the subject she feels most comfortable about
- However, they were more annoyed as it was demanding to focus on the cards as well as to answer questions on the topic that they have not much knowledge.

the taboo
In this testing the main finding was the influence of the hierarchy and the family ties. Unlike in the first testing, this family lives in a joint family with a grandmother. The only time the girl experienced the taboo was when her grandmother forbided her to go to the temple when on her period.
The mother herself does not believe in the taboos nor does she practices the myths. However, she states that the part of the society is to follow the wishes of the elderly and how she doesn’t want to get into arguments. If it is a problem for her mother-in-law for her daughter to go into the temple, then she told her not to.
Besides that, they themselves haven’t experienced taboos nor do they practice it. The father is very open and he even goes to shop the pads with his daughter.
Their school has done the education for the parents and the students and the teachers with doctors on menstruation. And they find this extremely important.
They fit not to have also much to do with education but with the upbringing, as the very rich and successful people can follow old traditions.

"It goes from the home and the upbringing of the children. The parents should make the girls equal to boys and not let it(menstruation) discriminate". mother
Pooja room, temple

the wellbeing
The father seemed to have created a space for women to be comfortable to share and when needed to ask questions and for help. This brought the girl to feel very comfortable to express herself, even when it comes to PMS and emotional tantrums, making it quite obvious when she is on her period(something which is contradictory to the traditional behaviour of Indian women).
The women of the family are not affected by it, but they are aware of the cases around them who are. For example, with the girls living in conservative families and how they deal with menstruation with a lot of stress and anxiety. The first menstruation has a lot to do with the way women perceive menstruation in the future - such as being traumatized. That’s why it is important to have the prior knowledge about it.

THE FOLLOW UP

REFLECTION
The family is very open, there is no change in thoughts of the family members. The father feels happy as he understood better the topic. He liked the way the information was presented - visually.
The girl was surprised to be playing a game on menstruation. The games have put menstruation into another perspective. “I didn’t think you could make menstruation into a game, and not that awkward.”
In school and around, the tone around menstruation is a serious, uncomfortable and hushed up tone but the games made it seem fun and light and easy.

DISCUSSION
The mother initiated the discussion with her friends on the topic, and it stirred the discussion on the situation of menstruation in the country. They agreed on how there should be more actions happening to normalize menstruation and the view in India.

IN THE FAMILY
No much discussion was made within the family. They are very open on the subject. Father mentioned how playing the games probably made the daughter even more open to discuss it with him.
The daughter stated how discussing the topic in her family has an effect. She wouldn’t feel as comfortable discussing with someone else.

FURTHER INTERACTION
The parents see the game as an educative tool for the period, but also as a game to create the space for discussion on the topic. They enjoyed playing the game, but wouldn’t play it again. They wouldn’t have it in the house as their girl is already grown up.
The daughter, on the other hand, enjoyed playing the game a lot and would play it more. She sees it as a way to learn about herself. She would like to bring the games to school as a way to also involve discussion with everyone.

DESIGN
“This is something to play so that kids feel comfortable to talk with us(parents about puberty.)”

PUBERTY FLUTE

“With an example and stories you learn more. It is very good as it is interactive. And people need to learn in order to change. The parents and the children together.”
father testing 2

“If the schools starts to recommend it..it would be nothing like it.”
father testing 2
“I could see people using it. Everyone knows how to play Monopoly.”
daughter testing 2

“It is a great thing to have in the house to play with kids. So they can feel comfortable to talk to us about it. It’s a good idea. Booklet is very informative.”
mother testing 2

MIX-A-BODY-MATCH
“This was new to me...I think it’s a good start for children like 6 or 9 or 10.”
father testing 2

“This is the only game I could play with my younger cousins. Because they could understand these.”
daughter testing 2

MEMORY GAME
“I think when there is a knowledge to pass on, it is very effective. I would definitely recommend it to families. That way they get to chance to learn, but also to interact.”
father from testing 2

“I liked this the most. It was challenging and I learned something that I haven’t learned in school.”
daughter testing 2

“It is a great thing to have in the house to play with kids. So they can feel comfortable to talk to us about it. It’s a good idea. Booklet is very informative.”
mother testing 2

3rd TEST 7.05.

PARTICIPANT OVERVIEWS

FATHER
education: phd & post.doc.,
occupancy: academic & enterpreneur
age: 50

MOTHER
education: phd
occupancy: academic
age: 49

DAUGHTER
education: primary school, 4th standard
occupancy: student
age: 11

THE ADAPTATION FROM THE 3rd TEST
The introduction was made in the same way as in the last test - by explaining how each game is played and then they would start. As this family is a close personal connection - it was hard to be fully excluded like in the previous family. The Giggles was played under 30 seconds unlike in the previous games for 1 minute as the 1 minute seemed quite long. This way, with the 30 seconds there was more adrenalin which was believed could enhance the feeling of the game playing and bring more fun to it. More questions were added to the evaluation of the design in the interviews. The wish was to see on the most important aspects - the engagement, how much did they feel the focus on menstruation or was it normally and subtly induced into the topic of puberty, if it was enjoyable or serious and did it feel it has brought together the family. Those aspects were chosen to be improtant to the subject. to what is important to the aspect of design: was it engaging, distracting from the topic of menstruation, was it fun, did it make them feel comfortable/uncomfortable, and did it bring the feeling of togetherness.

THE TEST
Firstly the daughter wanted to be the Truth Keper but she had issues reading it through so the mother took over. The mother from the start has been leading the game. Even though the girl hasn’t known all the answers, at least she got involved into the game and got competitive.
The girl asked to help out with the answers as the truth keeper in the memory game. It took father and mother to realize that for the memory game it needs to be the same pair. The concetration wasn’t the best so they couldn’t find a pair for long. The girl in the end wanted to get involved and play, so the mother became a Truth Keeper again.
The Giggles was played by explaining to the father, both the daughter and the mother, as there was no 4th member.
The Pairing game was engaging and a lot of fun for the girl. She chose to be the Round King so she enjoyed to be the one who is in charge.

THE FINDINGS
testing
Important to make them understand that you are not involved in order for them to use best the product.
Most important is to make the participants feel comfortable to share honest information on it. The girl doesn’t like to talk about the subject, but through talk made her feel comfortable.

the design
The design is important and the visuals should be tested. Some of the designs were not understandable. Later were as there was a repetition of the visuals. The girl was not feeling super comfortable with the topic, but the engagement in the game made her get active more. That is why she enjoyed the most the Mix-a-Body-Match, where there were no questions. Later through interviews I found how she also enjoyed the most competitive game too, but she hasn’t specified that it was also because she learned. For some games it is better if there were more people involved, for example like the Monopoly.

As the last family mentioned, not all designs are best suitable for all families. Giggles is best suitable for family that is very open, while Mix-a-Body-Match is suitable with young children who don’t yet know about menstruation. Mother suggests to lower the tone and when speaking of body to be careful too.

Puberty Flute raises awareness as there are a lot of information there, so it makes you question. It seems how when comes to menstruation people don’t mind just the enjoying but also the education. In pictionary you are interacting - it is a way to discuss the taboo, especially in a family, to draw it out.

Some of the parts of the games should be more connected to the context - for example cups or tampons are not something that people in India are very exposed to.
The Mix-a-Body-Match was the favourite as it was fun, and it made people the most comfortable.

the taboo
The family experienced the celebration of the menstruation of the neighbour. Most of the people are not aware of why they are even there.
The father sees that the education of the parents is the most important aspect as they are the ones who spread the taboos. That is why he sees involving a family into game playing, and into one that is educative is a good way to start breaking the taboo. It is not that there is the taboo but they generally don’t speak about it. That was the biggest surprise for the father, as in general this discussion goes from the mother to the daughters. “Even we consider ourselves more open, but still...it is not that we are shy, but ourselves we would not discuss it at all together.”

People should more openly discuss it, especially parents. Almost all parents come from superstitious families, and in school they didn’t discuss it. So it is important for parents to act. Because I didn’t have it I feel like my perception of girls was artificial, and a lot of discomfort. We don’t interact so freely, we don’t interact like normal people. So it is important to be in coed.

coed schools - so men get exposed earlier to women’s experiences. In school they should discuss it in a way so people don’t get uncomfortable.

The elderly daughter shared the experience of the younger daughter to the father, as the mother wasn’t there.

In city there can be more conservative families, the upper caste and they impose these things (the taboo).

From multiple fronts there should be actions to solve the taboo. The first thing would be to educate the parents. They are the ones who make the taboo. Even if the school wants to be open, lets say it is run by open minded people, the lot of parents would be uncomfortable.

Opportunities for discussion could help. But also there should be more information available and regularly.

Women don’t think and they do to the same to the next generation. I realize how my family was much closed. Education doesn’t have much to do with it. An educated woman, who stayed abroad and all - you cannot come close to the flower - Tulsi.
Pooja room, temple

the well-being
The girls well-being is good as they are an open family. The discussion is not there as much as in previous 2 families. The mother stops when she feels that the daughter is not feeling comfortable. However, the daughter got the menstruation in her class first so it makes her feel uncomfortable on the topic.

It was interesting to see how when we speak of well-being it is not only about the well-being of girls who got their period, but how to influence the well-being from even before they receive it.

As the girl doesn’t feel comfortable with her period she doesn’t share it with her father either. She doesn’t enjoy talking about it and tries to change the topic.

But her family has a good attitude towards it so she finds it natural. The girl got sooner and didn’t get it yet - so she feels uncomfortable and alone.

Men should help women through their discomfort - support them in work and house; work is not geared for this. Women have to adjust, they can’t even tell their boss. They cannot discuss this openly. The wife would let him know, but she wouldn’t discuss it. I realized gradually that women need support. That should be natural.

There is a need for an easier access to pads especially for those who cannot afford it.

The mother is going through a menopause and she senses difference on her mood and the way she goes through things. Things can become overwhelming and can bring stress. Therefore understanding of others is important to her.

THE FOLLOW UP

REFLECTION
The tests made us realize it is good to openly talk about this. The tests force you to think and get things on surface.

The girl came and brought the book on biology while we were talking.

DISCUSSION
Discussed with a friend - the father, and concluded how it is not a good thing, and especially the conservative the attitude of men. For men menstruation is like a mystery, some information came new.

IN THE FAMILY
No further interaction happened in the family, but the father believes they will be more open. And they believe they could more easily interact - the father and daughter. “This was a good starting
"I think it is the best part, that she can get comfortable with something she should be comfortable. Look, she came with the book to show. I think that's the best part, that it is best for her (the daughter), that she could get comfortable with it."

The girl likes because now she can easier interact with her sister on the subject. She hasn't learned yet in the school.

**FURTHER INTERACTION**

The family would buy as on some occasions they can play. They would be open to recommend them to others, but more careful on who they would recommend - depends on the openness of the family.

The mother wants to play so that the kids can learn more. “Game is always better. Not all information will get in, but some of the information will get in”. Recommendation would go for the organization working in this sector. "It's the best way to pass on information rather than giving a lecture. It's the best way to engage the girls. It would be fun for everyone - the teachers and the girls."

She would play with her friends as she enjoys playing games more with her friends.

She would share with her friends so they can also learn.

If the parents get the games into the house she would play the games.

**DESIGN**

More informal setting, the games see more fit for the community play or in the school. (but the children see it more comfortable with friends or family).

Conservative families not Giggles - too explicit.

Monopoly good because passively acting questions. But they are not bound - as it is played in partners. In pictionary there is pressure.

Mix-a-Body-Match is for shy - good game to just start of.

girl enjoyed the games where she learned new things. people orefere the games which see familiar

Liked the fact that there was reading the booklet and education at the same time while playing. And the systematically how it is made.

The level of education does not necessarily affect the discussion in the family, it's on the openness of the family. It's about the feeling of belonging - the girls who don't get the period or who get it too soon, both experience a bit of unease. The requirements of the ease of content doesn't go just for the male members, but also for the girls who feel uneasy of talking about it.

**GAME**

How long are games gonna be played? Is it necessary that they really love it? It is probably gonna be played just for once - try to make it effectful and memorable enough the first time in case they don't play it again.

**MIX-A-BODY-MATCH**

“I liked this the best. It is much more fun than anything else.”

daughter testing 3

“This is the best game to start the discussion in the family. To get people feel comfortable.”

father testing 3

“It makes it lighter, this is my favourite. You actually enjoy it.”

mother testing 3

**PUBERTY FLUTE**

“The Monopoly game was great as I learned new things and it was quite of fun. Now I can discuss more easily about it with my elder sister.”

daughter testing 3

**4th TEST**

**PARTICIPANT OVERVIEWS**

**FATHER**

education: MSc.

occupancy: entrepreneur

age: 44

**MOTHER**

education: MA

occupancy: housewife

age: 43

**DAUGHTER**

education: 7th standard

occupancy: student

age: 11

**SON**

education: 7th standard

occupancy: student

age: 11

**THE ADAPTATION FROM THE 3rd TEST**

No adaptations were made from the 3rd test.

**THE TEST**

Like in the previous test, the girl wants to be the truth keeper. The girl got her period recently. Through personal connection found out how they are quite open usually, but with me they were quiet which also the mother pointed out during the test.

The mother was the Truth Keeper, but the daughter wanted to be the truth keeper. "Can I be the Truth Keeper?" in the middle of the game.

The parents got very motivated and excited to teach their children "Come on, feel free".

"Thanks even I am learning" says the mother.

The parents are quite comfortable and easy to discuss. The test went smoothly till the Giggles part. The 30 seconds made it quite competitive and the children didn't know many aspects so were putting the cards back. Mom was again the Truth Keeper also in the Memory Game. The father decided to be the Round Kind in the Mix-a-Body-Match.

The girl didn't share as much after in the interview, but generally feels positive about the entire test.

The family finds it normal.

The father also buys the pads. The daughter doesn't want to talk much about it.

The mother finds how there is a more need for organic ways of dealing with menstruation - that people should use organic pads. She doesn't see how menstruation can affect women's lives in terms of
well-being. The father and the mother enjoyed the games cause they learned something new and their children get to learn about it. Now it is better, before we didn't get to know anything, now they are taught about it. (Father) The education should come directly before, so they know what it is when the puberty hits. (father) The family - everyone should support (father) The parents here wish for the children to be educated - so they lead in some sort - the mother being the truth keeper in both games, telling how to go when to play etc.

THE FINDINGS

the testing
It is important the position of the researcher. If staying a bit back it is more understandable that you are not getting involved.
Playing out one round by yourself makes it even better understandable for the way of playing.
Special problems like in all tests is with the Memory Game, takes more time to take in the ways.
The girl enjoyed the fact that they played on the topic of menstruation as they get to learn together about the bodies and gender, which is not a usual topic to discuss and play on.
During the interview with the daughter, the brother asked if he can come in.

the design
The preference of the games depends on which games the family plays usually. For each family member it is also different, as each family member has a certain need in the games (see the page - roles of gamification for each family member). The children prefer the engagement in the game and which game makes it more challenging and interactive, while for the parents the more important aspect is the educational part, with the interactive part being a plus. The father likes the educational part of games as it teaches the kids in case they have any doubts on the subject. The son found that the memory game was boring and the Giggles is more interactive.
The games made it seem more like puberty and biology rather than just on menstruation.

the taboo
The boy finds the menstruation natural and normal. He doesn't talk to his parents about it but he knows if he wants to he can. The father finds how the old practices are bullshit. It is important to rest and have take care of themselves but the practices make people ignore and hide things which doesn't contribute to anything. The daughter is also helped by her father. She doesn't know much about what happens in India. She got her periods just a bit before the test. She doesn't sense much difference in the family, but believes that the daughter will be more open around her brother. The daughter states how she doesn't feel anything different, but her brother senses how she somehow acts more comfortable.

No one ever told about us, we didn't know about it. We knew that there was something happening but we didn't know the reason why. (the father)
I think all of the superstitions are bullshit. These are made to make people ignore, to hide facts which is not right. Everyone should know what things are. We have to give them space too. Orthodox beliefs made it happen to the way they are now. Poor education or no education. The practices define the way women experience it, it restricts them.

the wellbeing
The father got to know about menstruation through his cousin in college. He was surprised and feeling empathetic towards women and how they have to go through all of it. That made him more caring and made him understand how it is important to be open on the subject to help women to go through it.
"The education should come from women to girls right before they hit puberty." father
"They should provide pads in the bathroom. They just should. The girls get their periods in the school and then they need to walk all the way to the station. That is too much." daughter
The daughter says how the emotions and hormones can very often influence the way she sees herself and interacts with others.
"If we don't support it, it gets tough for the females. They cannot do everything themselves, we should help them out!" the son
The husband helps out with the household chores, the daughter is stubborn. She has her own mood swings. It is a private affair and we should respect what women want. father

THE FOLLOW UP

REFLECTION
The mother didn't reflect much, but she feels happy as her kids gained new knowledge and information in a fun way. The menstruation was presented in a different way. For the father the games are an eye opener, to show how much things the children need to know. The daughter doesn't feel anything different, but the son feels he has gained a new perspective on menstruation as he has now more information on it and can better understand women and their experience. "We should support that, not make fun of it. It should be a natural thing."

DISCUSSION
No discussion occurred in the family, they were very busy with personal things in order to discuss.

IN THE FAMILY
The mother believes how now the daughter can be even more open with her father as they had the game out in the open. The father doesn't sense much difference in the family, but believes that the daughter will be more open around her brother. The daughter states how she doesn't feel anything different, but her brother senses how she somehow acts more comfortable.

FURTHER INTERACTION WITH THE DESIGN
Would play definitely and share with people she knows. The father would like to own the games and even play with friends when they come over to the house - believes people should be more comfortable with the topic. The daughter would love to play all of the games. The brother would like to play them again in the family and would recommend them to others.

DESIGN
The mother enjoyed the board game a lot because of the terms but also Giggles as it was interactive and with a lot of terms in a short time. It is important for her that her children know the terminology and have it in their language. The children enjoyed the Giggles the most as it was the most interactive one. Even though the most amount of issues were with the Giggles, that was the one that the daughter and the son enjoyed the most.

**MIX-A-BODY-MATCH**

“I liked this one the best. There was menstruation but it was still fun and easy.”
father testing 4

**MEMORY GAME**

“This one is the best for me. It requires you to be focused and concentrate. But at the same time you learn.”
mother testing 4

**GIGGLES**

“ With this was you get to know a lot of stuff.”
son testing 4

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### 5th TEST LOWER INCOME TEST

**PARTICIPANT OVERVIEWS**

**MOTHER**
- education: street vendor
- age: 44

**DAUGHTER**
- education: 12th grade
- occupancy: student
- age: 17

**SON**
- education: 11th class
- occupancy: student
- age: 19

**THE TEST**

The test was organized very quickly and spontaneously. The test was conducted in a house of a friend who was the neighbour of the family tested. The father wasn’t present. The personal connection served as a translator for conducting of the test. The game was explained and acted out prior to the test and then the test was conducted. The daughter chose to be the Round King, and the mother and the son was each given 10 cards. The game was played in silence and after that the interviews were made in a separate room along with the translator. In order to make the women feel comfortable, the wife of the personal connection was present. The interview questions can be seen in the Appendix. The question well-being - the girl doesn't have problem with saying what she thinks but her decisions depend on other people's thinging and their opinion.

### THE FINDINGS

**the testing**

Since menstruation is a sensitive topic it is important to be prepared about how you will interview participants. For example, having a woman next to the interviewer in order for the woman to feel comfortable in answering these questions. Very important for the testing to go smooth and disrupted is to have the translator prepared and familiar with the questions. Also to make clear to the translator what is the aspect of the questions which is essential as a lot of things can be lost in it. The mother felt uncomfortable answering some questions regarding the content in front of the translator as he was a male.

**the design**

Only the Mix-a-Body-Match was tested here. The game itself was playful and entertaining for the participants. They felt competitive - the mother felt happy when her card would feel chosen. However, the content has made them uncomfortable as it was the first time they all interact on it. This part is more connected to the taboo aspect and explained in the next paragraph. The girl enjoyed the game as in the playing, but she didn't enjoy the aspects of menstruation there as she doesn't like to have it in public. She thinks it's a private thing.

**the taboo**

All family members see menstruation as a private thing, a “women’s thing” and without a need for further discussion on it. They do not see the need of discussing it in the family nor do women wish to share their experiences. However, they feel how society's view should be changed and through education. The mother specifically sees herself as a very open person and does not feel bad discussing about it, but that by doing so she will be judged by the society. She wishes for her son to know about menstruation and for him to be informed, but she herself cannot do that. As others, he will get to learn through marriage.

Boy, even though curious and wants to know about the subject, feels how it is a women's thing and should be left to them. He wouldn't go talking about it, and he feels uncomfortable to do so. As a mother, she is in charge of the family, so she cannot feel shy about anything as she is the one dealing with it.

The mother doesn’t talk about menstruation with her son. She never shares anything, but when he comes to know it will be better, because he can take care of his wife. But she cannot share - it is like a secret, you cannot talk together, it’s a private thing. Her husband also doesn’t know. She just says that she is not feeling well. It seems how there is an issue with bringing menstruation in the open - the brother would go and buy pads to the medical shop, but talking about it brings discomfort.

The men should not involve it that - that's how the culture is. He wants to learn about it, but not to express it publically. Not in family, but with friends group but when they talk about menstruation - they don’t want to talk about it on purpose. Not as a topic to start or something. He is not aware when his mother and sister are menstruating.

Through the game like the Mix-a-Body-Match he believes the taboo can be lowered but with friends not in family. Girl - the period is common and the society should not see it negatively. It should be seen as normal, and not as ugly and dirty.

### the well-being

The mother and the daughter believe how in order for women to
feel better about themselves everyone should be informed. There is no need for an open discussion, they do not find it necessary. It is the feeling in the society and view on menstruation that should be changed so they can conduct their menstruation in peace and respectfully.
The mother doesn't feel shy about menstruation - she sees menstruation as purification. The pads are given by God and they protect the women.

When women talk about periods, the society doesn't see it as good. As seen in previous test - the behaviour is affected by the views of others.
The women in lower households cannot do all of these practices - they have to take care of others.
The girl believes how men should change and see it as normal and understand what the women around them are going through. The change should come from the school.

Nobody says anything about the menstruation, but the practice which comes from mother is taught how it is a bad thing to share.
We should not talk about it because then men feel bad (the girl) We should talk privately, not openly.

THE FOLLOW UP
There was no follow up to this test as the participants expressed clear discomfort to the test.

they only know about the pads, the tampons and others are influence of the answers because i am international; don't want to seem

The feeling of being watched - connected to the hierarchy and the psychology of how you behave. It is like society is a creature which they fear of, even though they don't agree with it.

6th TEST

PARTICIPANT OVERVIEWS

FATHER
education: MSc.
occupancy: engineer
age: 43

MOTHER
education: BA
occupancy: housewife
age: 36

DAUGHTER
education: girl school
occupancy: student
age: 16

DAUGHTER
education: girl school
occupancy: student
age: 14

THE ADAPTATION FROM THE 5th TEST
The Puberty Flute wasn't played from this test onwards for a couple of reasons. The tests were very long and with a lot of information already received from interviews and previous tests, there was a need to get more focused in a specific direction. Since the other games were specific in different matters (Mix-a-Body-Match as a creative game without any specific focus on menstruation, Giggles as a very interactive game and for more open-minded families) and Memory Game shares the educative part with Puberty flute but was more favoured, the Puberty Flute was left out from the testing. However, by the end of the game playing, the Puberty Flute was still explained to the participants to receive a feedback on it and to be compared with other games.
The order of the game testing was also changed. It started with the Memory Game and was continued by the Mix-a-Body-Match instead of Giggles. The reason for this was to sort of prepare the family for the most uncomfortable and the most explicit game since the Mix-a-Body-Match is the most "easiest" and the least uncomfortable one.

THE TEST
The test started with the Memory Game and it brought all of the family to play together. They were helping each other by saying where each card was. The father was the Truth Keeper in the Memory Game. When I wanted to change for the Mix-a-Body-Match they have asked to play a bit more as the younger daughter hadn't found a pair yet, and they wanted for her to get a point too. “She didn't get a chance yet.” With the Mix-a-Body-Match they most laughed. The elder daughter decided to be the round king. The father would be expressing how he imagined it to be. It was thought that the Giggles will be hard to test, but they have been quite comfortable and very open to one another. With Giggles, there were some cards that they didn't know so I explained to them. 30 seconds brought adrenalin so they laughed. "We learned something".

THE FINDINGS
the testing
The test went very fluent. Everything was planned well, each game
went well timely.
The elder daughter was about to go for a medical college so she was very excited about the game testing too.
The daughters would get comfortable and they got educated with the game. "Especially in India they are always trying to hide these things." Father believes the games got the daughters more comfortable with him. They share everything with me, but now I think they will be able to with their father too. (mother)

the taboo
This family was the only one that followed certain practices, but the taboo wasn't present. They practiced the practices for their recommended benefits. For example, staying in the bed in the living room for at least one day in order to rest during the menstruation. As the women are resting in the living room, everyone can help them and take care of them.

60% of people are not educated and not comfortable with menstruation. They should shift their mentality. (father)
Education is the key. We need practical education. We need to show them. In classroom also - the theory is not enough. We have to show them. The tv and media is helping. (father) Maybe because I have 2 daughters is why I am comfortable with it (father). In order to motivate them, they could play these games. And then we teach them.
The celebration for menstruation they do.
The mother - from 9th standard they would teach, not they have started from 5th and 6th.
The mother - one room is there and we were there during our period. Menstruation there is pain, so main point is to take rest. Otherwise we work.

the wellbeing
The practices that are practiced in this family is to protect the family. I tell them to take rest and to be hygenic. Menstruation for them is a good health signature. It's a symbol of health. (father)
If there is no menstruation then it means there is no good food eaten and that they stress and hormones are not in balance. (father) Girls should rest and take care of themselves. It feels natural for the girl to talk about menstruation, to whomever she feels comfortable. (the elder girl) It's not necessary actually to talk about it. It's normal (the elder girl)
Oh it started and I have to bear all the pain (the elder) She doesn't find it as a personal topic, but that it is not necessary to discuss it. They discard it by putting into cover and then into the outside bin. Because it was not a coed school, it was a girls school they were quite open - if someone was on the period and needed the pad they would just scream and ask. She gets help from her sister and mother, depending on things. Everyone is equal. They should think that they should change something. (younger girl)
As in the house she is cooking she cannot follow the myths. They should open up. By giving education from 4th onwards they should know about it.

THE FOLLOW UP
REFLECTION
There is a no specific feeling that changed in any of the family members. The daughters thought feel more comfortable about the entire subject. The new perspective was made as they got to know more about it. The father doesn't have a new perspective on the subject but has reflected on the information about what is happening in the other parts of India.

DISCUSSION
No further discussion about the subject was made within the family. The mother spoke with her sister and friends on the situation in India around menstruation, and how people should be more open on the subject. The elder daughter shared about the experience of the test with her friends. The father initiated a discussion about the test and the taboo of menstruation in his office with his colleagues.

IN THE FAMILY
The family was very open about sharing everything so there has been no change in sharing.
But the younger daughter states how it did make her feel more connected with the family. The elder daughter states how it made her more free with her dad, even though she already was feeling free, as they have played a game on the subject.
The mother believes the daughters will from now on be more open with their father.
The father believes that the daughters still need more time in order to become fully open. He said to them not to hide anything as the subject is natural.

FURTHER INTERACTION WITH THE DESIGN
The girls would play all the games again, and would recommend them to friends. They wouldn't buy it but would get it through school. The elder daughter would like to play the game again with her family and would recommend to her friends to do the same. The father stated how he would have the Memory Game.
The mother states how they would only play if there were more people as they already know it.

DESIGN
The memory game is a favourite game of the female members of the family. It requires attention and focus in order to perform well, but at the same time it brings information. For the father it was Mix-a-Body-Match as it was light, easy and fun; but later he stated how the Memory Game sticked in his head as it required to be concentrated and to focus and it educated them as well.

MIX-A-BODY-MATCH
"I liked this one the best. It was light, easy and fun, and there is menstruation."
father testing 4

MEMORY GAME
"This one is the best for me. It requires you to be focused and concentrate. But at the same time you learn."
mother testing 6
7th TEST

PARTICIPANT OVERVIEWS
FATHER
education: bac.eng, MBA
occupancy: in education
age: 45

MOTHER
education: bac.eng, MBA
occupancy: freelance consultant, HR
age: 46

DAUGHTER
education: 4th standard
occupancy: student
age: 9

DAUGHTER
education: 6th standard
occupancy: student
age: 11

THE ADAPTATION FROM THE 6th TEST
from this test there was a new focus on the research. So the inter-
views were more directed in the aspect of the role of men in the
family, and the connection between the girl and the father. To the
mother a more specific question of comparison between the place
of growing up to the practices of the current family home

THE TEST
the family was over a personal contact but the mother was looking
for a way to convey to her daughters on the aspect of menstruation,
as the elder daughter will probably get her menstruation soon.
The mother looked for a way to educate her daughters, while the
father was more aside but he was not shy on the subject and spoke
fluently and naturally about everything.
The Memory game the family seemed to have enjoyed the most -
the girls were very competitive and they shared a lot of laughter.
They didn't wish to go for the following game and asked to keep
playing. The father was the Truth Keeper in this one. The Pairing
game was quite a lot of fun and competitiveness as well and persua-
sion from each member of the family. The youngest daughter was
the Round King and the rest of the family became very persuasive
in order to win the points. The youngest daughter, even though she
enjoyed the playing of the games, felt obviously uncomfortable as
she has no knowledge on the subject. "No I don't know the answer.
Forget it." The biggest discomfort came with the Giggles as this
game requires prior knowledge in order to express on it.
The father is very comfortable with the topic and the elder daughter
who played with her was clearly comfortable.
The children didn't want to stop playing also the Mix-a-Body-
Match. The father gave space for the female members to discuss
and express how they feel and what they want to know. He acted
extremely comfortable and natural on the subject.
The elder daughter is comfortable with the subject and she brought
the sanitary products from the bathroom to understand what is a
tampon. 'The younger daughter would ask

THE FINDINGS
the testing

The comfort and ease with the participants in this family I believe
helped having a relaxed conversation which brings honesty to the
answers. "We could learn more about our body and to be alert. I
liked it that we did it through a game." younger daughter
It is nice in a family setting because we otherwise we wouldn't think
of discussing it in this setting. And it is good that is it before the
menstruation - one who doesn't know anything and the other one
is starting to understand. It is good way to introduce it, and so they
don't see it as a taboo. If the family is introducing it in a fun way
then the younger ones will benefit. It is also very gender neutral
and it is good if the mother and a father is there; because
these things are usually done with the mothers and the fathers don't
play a participatory role." It did seem more focused on women, but
then again the puberty is more significant for women. (father)

the design
As in previous test, it is important to have clear visuals and better
culturate appropriateness. For example, the tampon is not a wide-
spread sanitary product in India.

the taboo
The family is quite open so the taboo is not present in this family.
The reason why the younger girl is shy is because she is not yet
familiar on the topic, and her elder sister is the first one to get it.
Moreover, the family is critical and analytical, which can also be
resulted in the elder girl diminishing the existing myth how the
tampon can break the hymen "It doesn’t because why would other-
wise they make a tampon?". Grandmother was forcing the mother
on the myths and taboos - Brahmins. "I think I should be allowed
to do what I want." the elder daughter
I think in the family there is nothing worth keeping a secret. I
wanted to know more but I never had a courage to ask. As I saw
that they were feeling uncomfortable to talk about it, so I didn't.
And I knew they would say something like I will know when I get
married.
I think it is education for both, so I don't think I would feel differ-
ent if I had a son and a girl.
As I grew up I was taught how it is negative, not to be spoken
about, people don't want to talk about it. Even though I went in a
c oed school, teachers don't want to talk about it.
We are programmed to think it is not good. And because it is a
male dominant society, boys should know, to look at the other
point of view. Once the fathers because comfortable with the topic
then you for sure can see the confidence in girls. If there is an open
discussion, then nothing will be hidden. It would be like catching a
cold. All normal.
There should not be negative emotions connected with it. When its
negative noone wants to know more. (so they dont speak)
Haying both genders knowing equally well and the right things
about it is the way to break silence.
The openness with the topic is also on the maturity - the mother sees
differences between the younger and the elder in comparison with
the same age time.
The mother was traumatized by the practices her grandmother was
putting on her and her mother. It was a joint family so the mother
told her to lie when she was having period.
The practices she finds to be stupid - if you need rest then who says
you have to sit in a corner? You can get a proper bed and do that. If
you wanna sit in the corner, then fine.
She comes from a Brahman family, so they are even more orthodox.
Its a social thing. You are brought up like that. If you see your
mother from a young age willingly sit in a corner every month
saying she is impure and do not touch me..(of course you will think like that).
So a lot of men from Brahman families are comfortable in the kitchen, because women were following the practices so they didn't cook, so men did.
The entire society is built on a thinking that men are more pure than women - prayers are done only by men priests, women cannot go to the pooja...women are inherently presented lower. But if men actually start and question that - but men then feel they will lose their power.
Now that this game has happened, I know my daughters would come and ask him. They needed a chance.
The role of a father is huge so they that can get a positive view, and not just on menstruation.
For example if you think about - sex before marriage is seen bad, but today people get married later. So actually their parents had teenage sex, just because they were married so much younger, even though people maybe have sex at the same age today it is seen bad because it is outside marital sex.

the wellbeing
The daughter is happy that she had the testing cause now she knows more about it and she will learn and read on it. “The games helped me understand,” elder daughter. Her mother taught her a bit but she didn't learn yet in the school. The elder daughter enjoyed the Giggles the most because she likes drawing.
The girl had in her previous school about puberty but she spoke just a little about blood. Nothing much that she knew. At first mention she didn't say that she even learned about menstruation. She said she wouldn't talk about it with her dad because he doesn't have much time, but she would maybe talk to him otherwise. My mother always says because we would see the bloody sanitary product. The daughter knows about the sanitary products her mother uses and what she likes. The daughter is a little nervous because she is a little scared, if it leaks through the dress or if she doesn't know how to manage it properly. “I haven't thought about talking with my mom, maybe I will ask her now.” It would be easier if somebody would tell me how to use sanitary products, then I would know and I would be so scared.”(Daughter)
I believe that age group, the girls must feel stressed about it. I think the discussion must be done with the opposite gender. If boys know about it then girls won't feel so uncomfortable it as they will probably look differently. They can say they are on their periods, and as everyone knows about it, it will be normal. If people are open about it then it will be ok.
If men make sure not to make women uncomfortable and are actually helpful when they are on period - they can help them.
Being with my husband who doesn't believe at all these practices, and he doesn't see women lower or anything, it has been so much easier and destressing.

THE FOLLOW UP

REFLECTION
They haven't reflected much as they were busy with personal stuff.

DISCUSSION
The parents haven't discussed it with anyone much as they were busy with personal issues. The daughters haven't discussed with anyone nor among themselves. They haven't met any of their friends yet due to the holiday season.

IN THE FAMILY
The family sees it as a normal thing and they don't have trouble discussing it. The elder girl is very comfortable about expressing her opinion in front of her both parents and feels very natural about it. The younger daughter, during the follow up kept away. I personally believe it is because she feels uncomfortable as she doesn't know about the subject while the rest of us, besides being her seniors, do. The belief is how the daughters can discuss it with their father even better now, but the younger one needs more time to get comfortable with the topic, get more confidence to approach on the subject.

FURTHER INTERACTION WITH THE DESIGN
The elder daughter wanted to play again all of the games, the younger daughter too but with less enthusiasm. The elder daughter would give it to all of her friends to play and in schools. They would definitely get the games as they believe it is a best way to teach the children on the subject, and after would pass on the games to others. The parents on the other hand would recommend it further, but it also depends on who as it is a sensitive subject.

DESIGN
For a change to be made there is a need for a lot of actions and efforts. They believe that the games are a great way to bring attention to people on the subject as it makes them comfortable, is interactive and engaging. They believe that the schools should have such games as then the children would learn a lot and through a fun activity, too. They see it also as an important aspect to be played in the family, to break the taboo.

8th TEST

PARTICIPANT OVERVIEWS

FATHER
education: MA,
occupancy: IT consultant
age: 44

MOTHER
education: PhD, management
occupancy: student, assistant professor
age: 43

DAUGHTER
education: 10th standard
occupancy: student
age: 14

DAUGHTER
education: 6th standard
occupancy: student
age: 10

THE ADAPTATION FROM THE 7th TEST
no changes from the previous test

THE TEST
The test like in the previous ones, started with the Memory Game. “She has no clue” for the younger daughter. They family share how
the younger daughter probably will not know the answers. The elder daughter, who was also the Truth Keeper, was very confident and seemed even proud of how she knows on the topic. She seemed quite in charge. "You got the thing so you should answer." when the mother asked the younger daughter to answer her question as she might know. She was also quite competitive, "I know where it is". The younger girl "I hate this" as she doesn't know the answers. Mother "It's ok not to know".

The Round Kind was the younger daughter. After about 2 minutes, they started quarrelling. They started having stories about how they envisioned for the combination to be. "Come on, you know the truth. You know my combination is better". They started persuading the younger daughter into what combination is the best one. "Now this time, you should choose mine"..."Don't even think about it. This is the best." The father would take the blue card and his and show how it is the best combination. The mother said how she wishes to be the Round Kind if there is one in the next game. The players were insulting each other "Where did your creativity go?"

When the Giggles came on, the mother said she will play with the younger daughter. But when they heard how it goes she expressed worry how the younger daughter won't know about it. "You choose drawing wherever possible".

The younger daughter didn't seem so uncomfortable while playing. The time limit and competitiveness of the family members came as a distraction. Even she said she has enjoyed it. At the same time a lot of information, which is the way I think it should be. states the father, but the mother answers - it is not the only way.

For the Puberty Flute, the elder daughter states how it seems more like a family game.

THE FINDINGS

the testing
It was fun, competitive, but productive, time passed without knowing (the elder daughter) I enjoyed it also because after a long time we were together. We didn't play together for a long time so it was nice. It was competitive and nice. (the younger daughter) We never thought games could be informative, and that they could be on puberty is the first time for me ever. (mother) My focus is always on my daughters, and they were involved, even though I knew what is that level this was a confirmation for me.

the design
With my mom I spoke only once, in the 8th grade. With the games, it was easier, otherwise it would be really akward, at least for me. I like to keep it personal. It was a less akward way of speaking the same thing, but not going through the cons of having the conversation.

The time passed so quickly, so it was a well spent Sunday morning. One game should have been postponed for Ria, as she didn't have period yet. Because the daughter didn't ask her anything, she doesn't want to push on her. Only if she asks will she then tell her. A shift happens after menarche. She stopped in sports. She used to be a swimmer, tennis player and all. The group of friends, the discussions changed, but I feel she is growing too fast. The child should also enjoy, so I want to delay it for her. But of course, it shouldn't be too late. I don't know if it will be the same for younger daughter, but the day when they ask we don't hide anything. There should be age appropriate information. For the younger daughter the best is the Mix-A-Body-Match, while for the elder is the Memory Game.

the taboo
The family is from the defence community, the father was in the marines. In that community, they state, there is no bad feelings or any sort of taboo.

She was in the catholic school and there was a clogging with a toilete pad. So the school realized how it is time to teach them. I am comfortable talking with my friends. The younger daughter thinks it starts with the education, but if she didn't speak about it with her family, she would feel really uncomfortable to talk about it with anyone. Boys should be educated, so they don't tease girls. Her parents haven't discussed, she didn't even discuss it with her mother, only auntie(mother).

Mother's never used to say anything, not because they don't want to tell, not because of a taboo, it is just because it is not spoken. It was the way it has been dealt. It should be told, age appropriate or when the child asks. "mother

The father grew in a family which was inclusive and open-minded. He grew up in a male environment, after the high school education he went to navy. So only in marriage he got to know about menstruation. But he wasn't in the environment where it was discussed. Through books he got to know about it. It is a sign of fertility. So how can something out of which you are born should be bad?(father)

The celebration, we had to do it, her grandmother expected it. If you ask anyone why they are ashamed of it, noone has an answer. Everyone has a mother or a sister or a friend, so how is it a taboo? It should start in a young age, as they are very impressionable.

the wellbeing
Now I know if I have to, I can speak to them. The younger daughter wasn't spoken about it yet, they plan to speak to her in a year or so. The elder daughter wants to be a point of connection about it with her sister. The elder daughter speaks with her father about it couple of times about menstruation. If he doesn't speak to her about it, she would have felt uncomfortable with her menstruation.

"It is not a disease. But if we don't deal with it, it will become an emotional disease," the elder daughter. It affects the way the women think.

The younger daughter would ask mom and then her dad, and then the sister. They keep periods for themselves. (younger daughter) It kinda scares me cause you don't know when you get it; I would like to ask my parents, so they tell me what to do. I would discuss it with my family, not friends. They take stuff very seriously sometimes, they don't like to talk about periods.

The children of my age can get very scared - does it happen to early, is it bad, is it good...The girl is not aware of the taboos and myth practices in India. (younger daughter)

We belong to a generation where we didn't have independent thoughts. Nobody told me things before. Brahman community, very traditional in rituals. We were sitting aside, which I enjoyed as there was a lot of rest and all. It is important to know why things are happening and what should be there. How would I know unless you ask? The younger daughter is though like that, not asking.

The men should know everything, to understand there are certain things which are different for me. This difference should create more respect towards women. So when she goes through things, they should be there to support them. More and more families are turning nuclear, so more the reason they should know. All of the bad things that are happening in the family between men and a woman is because the man doesn't know. The practices we made I actually like, but they took a turn.
While in urban India there is some kind of complecence. In rural India there has to be an open discussion. In urban India we can have to. But in urban area, there is like - it happens to me too. In urban, help goes to some extent. Discussions, preparing a child, even in rural areas, the schools take up this. there is always a session, but mothers are still shy, but they are opening a lot, but they don't discuss with her peers. For a long time I didn't know it was a ok thing to discuss so I had noone to discuss on it. I never knew that there was something known as PMS or post birth depression. They affect my activities, responsibilities and everything. The men they don't know what the women are going through. So there needs to be an empathy for what happens to women, as in any other case. As a father, I should understand what is it about, not blissfully away. Comfort her, to be a support system. There is nothing physical I can do. It is something she has to live with it her entire life.

THE FOLLOW UP

REFLECTION

For the mother there was no change in thoughts, but she was surprised to see how a game can help in discussing on menstruation. The elder daughter feels more open with the topic, but it hasn't brought any different perspective on menstruation besides that she hasn't imagined it can be gamified.

The younger daughter felt good about the test as it prepared her for what she will go through. She feels better about the topic as they have now discussed it all together. There is no new perspective for her on it, it feels the same.

DISCUSSION

The mother initiated a discussion with her friend on the test how went. The elder daughter hasn't discussed it in the family, but she has shared with 2 of her friends on the test and how they liked the concept and find it valuable. The test has brought more comfort to the discussion, but they haven't discussed much in the family as they are very busy. The younger daughter didn't discuss with anyone about it, it didn't come up.

IN THE FAMILY

The mother doesn't see a change in the family. She asked her youngest daughter who hasn't gotten her period yet how she felt and the daughter stated how there are many things she doesn't know but that it's fine.

The elder daughter states how the games made her feel more open on the topic with her family. The father states how the girls have always been open with him so does not see how things would have changed in the discussion in family. The younger daughter doesn't feel any different in the family, but the games she believes made it easiser to discuss, especially with the father cause they played all together.

FURTHER INTERACTION WITH THE DESIGN

The mother would play again the games in the family. She is not sure whether she would recommend the games as she doesn't know how others would react. She wouldn't buy the games, but she would use them if she gets a chance before the daughters period. The elder daughter would play the games again. The younger daughter would play again, and would recommend to her friends.

DESIGN

The mother believes she would have had less stress in childhood had she had something like the games. Now how she sees improvement in herself is that the games helped her in vocabulary on the subject. The elder daughter would recommend the games to families with daughters from 12 - 15. The father sees game playing of these games as a one time thing. That they serve as an ice breaker and to prepare the families for menstruation.

GIGGLES

“The timing made it very interactive and fun. r”
elder daughter testing 8

“I think it was more fun, here you have to more open up, speak and explain. Which I feel is a whole purpose.”
father testing 8

MEMORY GAME

“This one sticked the best to me, I had a lot of fun playing it.”
younger daughter testing 8

This was the best way to learn about menstruation. Suppose if children like me, I didn’t understand a few words but in other way would be tougher. The games are the best way to learn, because they are easier than explaining...like in school. And also, it was with my family, because I am open and free and ask but if I was in class, I would get shy to do so.

the younger daughter

9th TEST

PARTICIPANT OVERVIEWS

FATHER
education: MSc in advertising
occupancy: brand consultant
age: 47

MOTHER
education: 2 postgrad.
occupancy: market researcher
age: 44

DAUGHTER
education: 7th standard
occupancy: student
age: 11

DAUGHTER
education: 10th standard
occupancy: student
age: 14

THE ADAPTATION FROM THE 8th TEST
no changes from the previous test

THE TEST
The family has spent years in America which influenced them to
open about many topics. They do not represent typical Indian mentality and for them the topics thare are generally in India a taboo are for them normal - talk about sex, masturbation and menstruation. In the Memory Game, the Truth Keeper was the father. After the Memory Game I have interviewed the younger daughter. When all the members were again in the flat, we continued with the Mix-A-Body-Match. The Round King was the mother. They were laughing as all the family members were expressing their sense of humour, so they were laughing to each other. "You won't get it but its funny. Its funny." The elder daughter got to know about it through the mother and school and videos. With the younger sister she is not sure if she spoke about it. She speaks about it mostly with her mom. There is a thing with being impure, and temples, and my grandmother in Kerala, if I am on my period, I cannot go to puuja room. There are some tricks, but I don't pay attention to it much. The elder daughter Her friends went through that, but it depends on their background, how conservative their families are. But they are not comfortable to talk about it, so...(she couldn’t know). The boys in schools she doesn't know cause she doesn't engage with them much. I really want for it to be a normal thing to talk about. Like when you have to carry a tampon, you don't have to wave around with it, but it should be a normal thing like wearing a toothbrush or a comb. One thing is education and spreading awareness. So communication and education. Like with the games - it made it a very fun thing to talk about. (the elder daughter)

THE FINDINGS

the testing
The mother needed to go to a neighbour so the Memory Game was played between the father and daughters. In previous families it was played for only 20 min, so here it was good to test how long does it take to get a grip of the game.
The younger daughter enjoyed playing the Memory game cause of the playing in the family, but she realized how much she needs to learn more.
She will ask her family, Google it, and ask the teacher.
The mother liked that the games are simple and very different from one another, so she can experience the topic in different ways and different interactions.

the design
Some of the drawings weren't understandable. "What is this? I think it's a sperm. It looks like a snake though."
When all the members were again in the flat, we continued with the Mix-A-Body-Match.
The Round King was the mother. They were laughing as all the family members were expressing their sense of humour, so they were laughing to each other. "You won't get it but its funny. Its funny."
The both daughters more enjoyed the Mix-A-Body-Match because they found it funny and much more fun.
She didn't like Memory Game because she felt like it was never ending, but it's the best to learn the most.
The concept of wining and losing in the Giggles is the strongest which makes it very competitive and engaging.(father)

the taboo
So for example, the younger daughter is looking forward to getting her period cause of the celebration.
But, the her friend had a different celebration - she had a lot of sweets, she couldn't do sports, she has to come back home very early. So her family is open and she is looking forward to that, but many families are not that open.
The younger daughter doesn't feel comfortable talking about with everyone, because a lot of people don't feel comfortable so she avoids it. For example, the boys she doesn't talk because they are not mature are reasonable. "They are gonna make fun of it and i don't need to deal with that."
They( the boys) won't be very mature so everyone says to not tell boys about it but I don't agree with that. The school should open about talking about it with the boys because suppose when we are older and somebody tells them about it and they are going to be mature at that age it won't be cool."It should be normal. You shouldn't be saying like "Oh my god, its so distracting. It shouldn't be normal. Nothing special."
I think it is most important for people who have struggles making the conversation on menstruation. (mother)
The education is not a parameter. You can easily find highly educated people who will form a very different atmosphere around it than the one here. The mother of the mother had to be outside of the house. She comes from the Brahman family. But the mother liked it - because she felt like she was on a rest, people would be taking care of her etc.
"My whole focus is that you don't stop anything while on period, which is opposite to what is in India." I always questioned. And especially in my daughters school - the boys are sent out. No, they should sit. Some people are conservative, so what? The school should deal with it. They should be doing that."
My dad is a liberal, he was very much about power, that I should be doing whatever I want, but he was not talking about it. My mother is very open, but she didn't talk with my brother, because he is not comfortable to discuss a lot of things. It is not a gender thing, but a personality thing."
The role of a man in India is high. It is unfortunate. The impact of a father is very high. Whether she has the opportunities and needs. If a father ends up being a conservative asshole, then the girl is screwed unless she marries better. The girl should have either the father who is encouraging, or hands off but allowing for the daughter to have what she needs. The problem is because a lot of women themselves don't feel empowered to say a lot of things, or do a lot of things and the society doesn't help.
The women in the family had a high role. For example, the grandmother felt strong about segregation. Her mother when she got married, and was on her period and her husband came back home and there was no food - he didn't care. He grew up where there were no such practices.Brahman - mainly blamed for these practices. Without the view on purity and impurity. What is done in the schools is good, but they should involve boys. my point - by doing so it is explicitly shown how boys should not be a part of it. There is a lot being done on to move taboo.
The father comes from a family where menstruation was not experienced as a taboo - he doesn't even remember when was the first time he encountered menstruation. It was a totally normal thing for him.

the wellbeing
The mother is the one who answers the most of the questions when it comes to menstruation. Not because the father wouldn't answer them, but because she can have probably the best answer because she goes through it.
In general, it is found easier to discuss it with the mother because they know more. But I as a father should know enough to support
when the support is needed. Some roles are naturally made by gender. I would tell them what I know and what I don't know, if they came to discuss with me. I personally stand against when the outside of 4 of us state how to behave when it comes to it. We don't do it that way and we won't. Society discrimination against women which is present, I would be against it. Maybe that's the role, to say that I am against the taboo. I think it should be frank and open. It is for sure a private one, rather than the public, but it should be natural. The moment you get into puberty, we literally segregate genders. It comes close to human violation. This is almost the starting point of it. Toxicity, masculinity. There is a lack of freedom that happens in home and in society, for women. For me it is related to freedom. It is not about taboos or something to me, but this is where we first step may be happening. And all that happens happens in the family. If they are not free in the home they won't be free out. Freedom and lack of freedom happens at home. And menstruation and puberty changes that happen with them are the first opportunity to set them free.

THE FOLLOW UP
There was no follow up in this family as they are very open in discussing these topics. The necessary information was the influence on the daughter who has not yet menstruated and how does it make her feel after the test. It was clear to her how there are many more things to learn on the subject and how discussing the topic motivated her to do so. And also, the view of the father on his role in the family.
The 4 designs

Here are presented the 4 designs that were created and tested during the field research in India.

PUBERTY FLUTE

These girls get all mixed up in puberty – how many parts of the body do girls get changes when they hit puberty?

You cannot recognize that boy anymore – how many parts of the body do boys get changes when they hit puberty?

Girls and boys experience only physical changes

What is the uterus?

What are ovaries?

What is a Fallopian tube?
MEMORY GAME
PAIRING GAME / MIX-A-BODY-MATCH
APPENDIX 4

72 The explorations of the form for the Mix-A-Body-Match
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The explorations of the form
The explorations of the interactions

**Bears vs Babies**
Bears vs Babies is a card game developed by the makers of Exploding Kittens. With this party game do you create amazing bears (and other monsters) to horrible babies to eat it. Build a beautiful salmon armed with knives and burritos or a bear in zakenpak with bat wings and compete against the awful babies.

**Set game**
real-time card game. The deck consists of 81 unique cards that vary in four features across three possibilities: number of shapes (one, two, or three), shape (diamond, squiggle, stadium), shading (solid, striped, or open), and color (red, green, or purple). Each possible combination of features (e.g., a card with [three] [striped] [green] [diamonds]) appears as a card precisely once in the deck. In the basic game, three cards make up a “set”, which a player collects by making sure each of those three cards has exactly the same matching feature or else all have a different feature. If two cards match in one of the four features, but the third card does not, then the three cards are not a “set” and the player is penalized instead of being able to collect. SET is a speed game. The first to see a SET, calls out “SET” and picks up the three cards that make the SET. There are no turns and no luck.

**1000 Blank White Cards**
1000 Blank White Cards is a nomic type of a party game played with cards in which the deck is created as part of the game. Since any game rules are contained on the cards (rather than existing as all-encompassing rules or in a rule book), 1000 Blank White Cards can be considered a sort of nomic. It can be played by any number of players and provides the opportunity for card creation and gameplay outside the scope of a single sitting. Creating new cards during the game, dealing with previous cards’ effects, is allowed, and rule modification is encouraged as an integral part of gameplay.

**Killer Bunnies and the Quest for the Magic Carrot**
The objective of the game is to win, accomplished by acquiring carrot cards, one of which is revealed to be the winning “magic carrot” at the end of the game. The player with the winning carrot card must also have an alive bunny in the Bunny Circle. Acquiring carrot cards is done primarily through the use of bunnies, which allow the use of an enormous variety of in-game actions. Thus, the game revolves around playing bunnies and eliminating opposing bunnies through various means (some comical and some violent, but the game art never shows blood or gore).
PLAYED IN INDIA

1. Taboo

2. Exploding Kittens

3. Uno

4. Mafia

5. Board Games

6. Types of Card Games

7. Trick-taking games

8. Matching games

9. Shedding games

10. Catch and collect games

11. Fishing games

12. Comparing games

13. Drinking card games

14. Multi-games

15. Dedicated card games

16. Poker games
PLAYED IN INDIA - older

TEN PATT
- meaning ‘three cards’ in English, is a gambling card game played with the 52 card deck, that originated in the Indian subcontinent and is popular throughout South Asia. It is played in the English game of threes and thongs, with influence from poker. It is also called flush or flash in some areas.

5-0-5 (Team De Pandi)
or 5-5-5 is a popular card game which is commonly played in India and Pakistan. It is a very similar concept to Bridge, except there are three players instead of four and all play individually. The game uses 52 cards (7 of spades to Ace of spades, 7 of hearts to 7 of clubs, 8 of diamonds to Ace of diamonds, and 8 of clubs to Ace of clubs). Three cards, namely a ten, three, and a five are taken out from the pack, shuffled and dealt to the three players. Whoever gets the number ten is the declarer and must make five tricks. The player sitting to their right must make four tricks, and the third player must make three tricks. Players who make more than the minimum number of tricks required win the round.

GOLF
This is a trick-taking game played individually. This is the game most commonly associated with golf clubs; each player playing for himself or herself. The objective is to win the most cards by taking tricks. At least three players are required. In some games, a neutral player is required, and it is also possible to play in pairs.
The explorations of the content

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<td>1. STINK</td>
<td>PUBERTY</td>
<td>O</td>
</tr>
<tr>
<td>1. BREASTS</td>
<td>PUBERTY</td>
<td>F</td>
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<tr>
<td>1. UTERUS</td>
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<tr>
<td>1. facial hair</td>
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</tr>
<tr>
<td>1. Chest hair</td>
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<tr>
<td>1. MUSCLE GROWTH</td>
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<td>1. PENIS</td>
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<tr>
<td>1. VOICE change</td>
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<tr>
<td>1. Sperm cell</td>
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<td>2. PAD</td>
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<tr>
<td>2. BLOOD DROP</td>
<td>MENSTRUATION</td>
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</tr>
<tr>
<td>3. Menstrual cup</td>
<td>MENSTRUATION</td>
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<td>4. PANTIES</td>
<td>MENSTRUATION</td>
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<td>5. TAMPON</td>
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Appendix

PENIS

[Diagrams of male anatomy, including representations of the penis in various positions and stages of erection.]
The explorations of the booklet

MEMORY GAME BOOKLET

1. Name female inner organs.
2. What are all the openings that women have between their legs?
3. Through which exit does the baby come out?
4. Where does the fetus grow into a baby?
5. What is a menopause?
6. Name the symptoms of the menopause.
7. Vagina is also one of the openings that women have between their legs. They also have urethra, the opening for the urines, and what they share with men is the anus, where faeces come out from.

Unlike women, men have outer male organs. The outside male organs are the penis and the scrotum. The scrotum is a pouch like sac of skin that the holds and protects the testicles (or testes). The scrotum acts as a "climate control system", keeping the testes at temperature slightly cooler than the body temperatures so the testes can produce the normal...

Some other changes

Sweat
Once you have reached puberty, you may also find that you sweat more. The increase in various hormones during puberty makes the body’s sweat glands more active and they produce more sweat. Remember that sweating is a normal human function. The healthiest, fittest and most active sports people commonly lose buckets of sweat on the sports field! By itself, sweat does not have much of a smell but bacteria which live on the skin can create a smell called body odour or BO. To avoid body odour, wash your body at least once a day, especially the underarm area, using mild soap and warm water. Change and wash your clothes often, including your socks. It helps to wear loose fitting clothing, made from natural fibres. An underarm deodorant may be useful, too. Worrying about body odour is one of the many things that people get needlessly anxious about. If you bathe and wash your clothes regularly, it is very unlikely you will have a problem.
Taboo me not

1. Make sure you wash your undergarments and dry it in the sun.
2. Wash your hands with soap after changing sanitary products to avoid infections.
3. No dirty pads or wettened sanitary products
4. Remember to wash up directly after you menstruate.
5. The external genitalia doesn’t need to be clean, it has enough good bacteria to keep it clean.
6. Take a bath or shower at least once a day.
7. Use clean undergarments and change them regularly.
8. Pads and tampons are enough to change once a day.
9. It is important to wash the genital area with soap, but not with water.
10. Keep the area between the legs dry, otherwise you may experience itching. Your vagina will remain moist most times.
11. Sanitary pads cause vaginal tissue toches.
12. Cloth is bad for the environment.
13. The cloth is not needed to dry out in the sun.
14. Sanitary pads is sanitary and does not cause allergies.
15. Girls can get pregnant even from a touch when they are on their period.
16. Menstruation is the time when one is girl-fertile and can conceive a baby.
17. Get a girl cannot get pregnant when menstruating.

Who is to blame for these changes? The thing called hypothalamus

When the hypothalamus is part of the brain, it begins to produce a hormone called gonadotropins releasing hormone (GnRH). GnRH then affects different areas of the brain, the pituitary, causing it to secrete two hormones crucial to normal reproductive function—luteinizing hormone (LH) and follicle-stimulating hormone (FSH).

These hormones then stimulate cells in the testes, causing them to enlarge—the first sign of male puberty. LH and FSH act on cells in the testes, causing them to produce testosterone and androgen-binding protein (ABP). ABP helps to raise testosterone levels in the testes. Testosterone plays an important role in the physical changes associated with puberty, and in secondary sexual development. However, testosterone is never sufficient amounts for to help men to have its effects. In addition to the enlargement of the testes, testosterone produces other changes in the male body that are associated with puberty.
**Mix-A-Body-Match**

This is a graduate project made at the Design for Interaction Faculty of Industrial Engineering at the Technological University of Delft in the spring semester of 2019. Many thanks to Saki Ishihara for helping out with creation of the context for this booklet.

**The cards for the family, to tell a story, to create a combination, to burst into laughter, to make connections, or even build their own scenarios, to burst into laughter out of the crazy thing called puberty.**

**The fun is yours.**

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**Mix-A-Body-Match** is a game that is created to make you and your family laugh about the confusing time of puberty.

It is there to make you creative, to tell stories, make creatures or pretty much whatever comes to your mind, differently every time.

The game comes in 2 decks - one for the Round King and the second one is for the rest of the players. All the cards are spread into 5 categories, which are indicated by the design on the back of the cards.

The categories allow you to get creative in your own way. By combining as much as you can from different categories, the game can take other directions. You can also play the game in a way you prefer by excluding certain categories or by grouping. You can try different ways of playing as are suggested here, or even make up your own way with Mix-A-Body-Match the fun is yours.
WHAT IS ON MY CARDS

Tampons are an insertable sanitary product. It can be used for 4-6 hours. Useful side of a tampon is that it can be used while doing water sports, too.

Hair growth is one of the physical changes that happen to boys and girls. Puberty is one of the physical changes that occur in puberty mostly to boys.

Breast growth is one of the physical changes that occur, mostly in girls.

Pimples are an often issue of many teenagers. Some teenagers can have even more serious situations, with acne.

Biggest change for girls in puberty is the start of menstruation.

The hair growth also can happen in the armpit area and the pubic area.

During puberty, many teens get oily skin which happens due to the strong work of the oil-producing glands.

Boys get very hairy in puberty. Chest hair occurs, for some a lot for some not at all.

The behaviour in puberty can change to the hormones can cause mood swings.

Menstrual cup is an insertable reusable type of a menstrual product. The cup can be used up to even 12 hours.

There is an increase of sweat during puberty due to the work of our sweat glands.

Those newly muscles on you! The muscle growth occurs in puberty, mostly to boys.

Increase of sweat can also bring a certain body odour (BO) in puberty.

THE RULES

There are 3 designed interactions with the cards of Mix-A-Body-Match. Find what you like best or even create your own game!

GENERAL RULES:
The game is best for minimum of 3 players, and minimum of 3. We suggest to take no more than 10 cards per each round.

But later when you get into the mode of playing, you will find how works best for you.

THE RULES OF FUNNY PAIRS

RULES: the Round King and the players.

THE AIM OF THE GAME: for the players to get rid of their cards. The one who gets rid of his cards first wins.

HOW IT IS PLAYED:
You first choose who will be the Round King in this round. The game starts with the Round King putting down one card from his deck in the middle, with the card facing up and for all the players to see.

The other players choose a card from their desk for which they believe would create the funniest combination with the card from the Round King. The players place their cards facing down, one by one.

The Round King then turns the cards facing up and examines the cards and chooses the one he finds to make the funniest combination. The player who discarded the card has 10 seconds to make the story behind the combination to defend the card. The Round King chooses whether the combination is worthy or not. In case the Round King is convinced, the combination is taken on the side, and the rest of the cards are returned to the players and the game continues. The round is done when the Round King is out of cards, and the player who is left with the least amount of cards wins.
When pimplies become very inflamed, this condition is called acne. Some teenagers are troubled by pimplies and acne for several years. There is no single treatment to suit everybody. Frequent, gentle washing with warm water and a mild soap or face wash can help. Diet doesn’t cause acne, but washing can get rid of the excess sebum. You may also find that certain foods make your pimplies worse, so a more careful diet, with a lot of fresh fruit and veggies and water can help.

Everything starts with the cells, reproductive, fertile cells. Women’s fertile cell, the egg cell or ovum is fertilized by the men’s cell, the sperm cell. The scene for this fertilization is happening inside the woman’s body. Specifically, in one part of her inner female organ.

The fertilization usually occurs inside the Fallopian tubes. These are narrow tubes that are attached to the upper part of the uterus and serve as tunnels for the eggs (egg cells) to travel from the ovaries to the uterus. Ovaries are small, oval-shaped glands that are located on either side of the uterus. The ovaries produce eggs and hormones.

The uterus or the womb is a hollow, pear-shaped organ that is the home to a developing fetus. The uterus is divided into two parts: the cervix, which is the lower part that opens into the vagina, and the main body of the uterus, called the corpus.
hormone, and for generating sperm. Within the testes are coiled masses of tubes called seminiferous tubules. These tubes are responsible for producing sperm cells. The internal organs of the male reproductive system are the epididymis, the vas deferens, the ejaculatory ducts, the urethra, and the seminal vesicles. The epididymis is a long tube that transports and stores the sperm cells from the testes to the vas deferens. Then, the vas deferens transports it to the urethra. The urethra, besides carrying urine from bladder to outside, also takes the semen from the vas deferens to outside (ejaculation). Seminal vesicles and the prostate gland enrich the sperm with fructose and the additional fluids to ejaculate.

In boys, the initial puberty change is the enlargement of the scrotum and testes. At this point, the penis does not enlarge. Then, as the testes and scrotum continue to enlarge, the penis gets longer. Next, the penis will continue to grow in both size and length.

But those are not the only changes they experience. There are also emotional changes happening. The hormones that begin the physical changes during puberty also affect your moods and the way you feel. Some kids experience quick changes

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**THE SANITARY PAD**
The most popular and most widely used product. Practical but can be harmful for us and the environment - contains plastic and chemicals that our body absorbs. Can lead to allergies and rashes.

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**THE REUSABLE PAD**
A cost effective, environmentally friendly and healthier for our body than the sanitary pad. It is treated hygienically. It doesn’t contain chemicals like a sanitary pad. With washing, it can be re-used, unlike the sanitary pad.

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**THE TAMPER**
The internal usage of the tampon prevents the odour, unlike the sanitary pad or the reusable/cloth pad. The tampon can be worn during sports such as swimming. The tampon can hold more flow than the menstrual pad. However, the tampon poses a higher risk of vaginal infections and toxic shock.

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**THE MENSTRUAL CUP**
The menstrual cup is an environmental and pocket friendly solution. It is the longest lasting product that you can use - one cup can last from 10 to 12 years. It though, requires more maintenance, such as the special cleaning before and after the cycle.
Making of the final product