

RESEARCH ON SUSTAINABLE DIAPER USE & DESIGN FOR AN INFORMATION PACKAGE FOR DE GEBOORTENIS

Public Abstract

5-8% of all residual waste in the Netherlands consists of diapers and incontinence material (RIVM; NVRD, 2015). The use of diapers therefore has a major impact on the environment in the Netherlands. In the first part of this thesis, an answer is sought to the question: "How can diaper use be dealt with in a sustainable way?". This thesis was written on behalf of de Geboortenis (translated: the Birthing). De Geboortenis is a foundation that is committed to provide a promising start for babies.

In the second part of this thesis there is looked at a way, in which the Geboortenis can effectively communicate the information regarding sustainable diaper use. The research question of this thesis is formulated as follows: "How can diaper use be handled in a sustainable way and how can de Geboortenis communicate this information effectively to its clients?"

In order to answer the first part of the research question, research has been conducted into disposable and washable diapers, the environmental impact of both, and sustainable initiatives that exist regarding this subject. A comparison was made between the disposable diaper and the washable diaper.

Subsequently, a survey was held to gain insight into current Dutch diaper use. After this, different ways were considered in which de Geboortenis can communicate this information to its clients effectively. Different directions for a design solution were devised and different requirements were set up. These requirements have led to a concept, which has been improved through iterations and turned into a final concept.

This thesis looked at the two categories of diapers that are currently on the market: the disposable diaper and reusable diaper. The reusable diaper can be washed and therefore reused. One of the main reasons for a consumer to choose a reusable diaper is that it would be better for the environment. Research shows that this statement is true when looked at the average use of a washable diaper versus the average use of a disposable diaper. However, it is very complex to compare these two diapers. There are many choices when it comes to diapers (disposable and reusable) and the use of the chosen diaper. All these choices have their own impact on the environment. Moreover, it is difficult to find out exactly how environmentally harmful a choice is. Furthermore, it is like comparing apples and oranges, because the waste processing of the disposable diaper has to be compared to the energy and water consumption of washable diapers.

The most important conclusions that can be drawn after the research regarding sustainable diaper use are that:

- On average, the use of washable diapers is more durable, but this does not have to be the case in every individual case.
- The environmental impact of diapers can be reduced by using fewer diapers. This can be done in two ways:

- Using fewer diapers per day.
- And a child is potty trained (earlier). It should be noted that it is not wise to start potty training too early, as it can have negative consequences for the child (Hodges, Richards, Gorbachinsky, & Krane, 2014)

After research there was thought of an effective way in which de Geboortenis can communicate this information. De Geboortenis reaches its clients through various media. Therefore, it has been decided to create an information package with various components. The information package consists of:

- three different playground equipment with an educational value that can be used in the sustainable Birthplace de Geboortenis plans on building;
- three posters that can be used in places such as the Birthplace;
- five posts that can be distributed via the various social media channels of de Geboortenis;
- a module for the course Vitaal Zwanger (translated: Vital Pregnancy) which can be purchased via the website of de Geboortenis;
- a user profile test that, after completion, provides a personalized advice on the use of diapers. This test can be implemented on the website of de Geboortenis, but can also be distributed via social media channels;
- and a knowledge quiz about diaper use, which can also be implemented on the website and distributed through social media channels.

All these components have undergone several iterations to make them meet the stated requirements. For example, there was looked at the style of de Geboortenis, the different target groups of the various components and if the appearance and material correspond with the sustainable message it conveys.

The main suggestion for follow-up research that has been made at the end of the report is that when the playground equipment will be realized, more research should be done into sustainable use of materials, so that the material being used is consistent with the message it conveys.

References

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