

Designing for Happiness

How design can contribute to people's subjective well-being

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ABSTRACT

People love when services or products can give them a pleasurable user experience, a great feeling or simply enjoyment. In a broader sense, all people want to be happy, and live a life with great quality. In the present paper, research within the field of positive psychology and positive design are reviewed. It addresses the aspects of happiness, flow, subjective well-being and experiences, and the corresponding design principles of experience design, emotional design, service design and a positive design framework. An illustrative case is presented to show how service design together with a positive design framework can be used as a tool to improve the school health service, which ultimately contributes to a proactive mental health among youth. The purpose of the paper has been to discover what the elements of happiness are, why it is important to design for happiness, and how we can design for happiness and meaningful experiences. It was found that happiness depends on genetic factors, voluntary control and circumstances. People are able to enhance their happiness by behavioral change. Design can therefore contribute to a happier life by inspiring and engaging people in activities that will make them happier. The positive design framework states that this can be done by designing for pleasure, virtue and personal significance. A few reflections upon ethical issues related to positive design are briefly discussed, and finally some further research suggestions are given.

KEYWORDS: Experience Design, Flourishing, Flow, Happiness, Positive Design, Positive Psychology, Service Design, Subjective Well-being

1 INTRODUCTION

2300 years ago Aristotle claimed that above all else, men and women seek happiness [1]. People of all ages and cultures have strived to find out how to become happy, and find the secret and recipe for a life filled with quality. Until the 80s, psychology focused mostly on negative emotions such as anxiety and depression [2]. In the past decades however, the interest for positive psychology, happiness and meaningful experiences has increased globally [3]. A new field of positive design that builds upon positive psychology has emerged and needs exploration and further research [4].

It is not easy to measure people's happiness, both because reported happiness is subjective, and it is difficult to compare one person's perceived happiness with another's. The definition itself for happiness is also quite broad and complex, which makes it even harder to create indicators or indices to measure it. Nevertheless, there exist a few different measurements and indices. Among others, we have Gross National Happiness (GNH) and Happy Planet Index (HPI). The HPI has three component measures: Life expectancy, experienced well-being and ecological footprint. The HPI is an efficiency measure of national progress; it ranks different countries on how many

happy and long lives they produce per unit of environmental input [5]:

$$\text{Happy Planet Index} \approx \frac{\text{Experienced well-being} \times \text{Life expectancy}}{\text{Ecological footprint}}$$

In this paper, the focus will lie on the experienced well-being component of the HPI. The motivation for writing this article is to try to examine what happiness is, and figure out how design can contribute to happiness in a broader perspective.

The research questions are: What is happiness? Why should we design for happiness? Lastly, how can we design services and products that contribute to enhanced life quality and inspire to subjective well-being?

The paper will start with a brief introduction to the transformation in the value system in the western world, following a short discussion about why we should design for happiness. Then we will go deeper into positive psychology, addressing the aspects of happiness, subjective well-being, flow and experiences. Further, different approaches within positive design will be examined, exemplified by design for pleasure, experience design, emotional design and service design. A presentation of a new, positive design framework by Desmet and Pohlmeier follows. This is illustrated with a service design project about an improvement of the school health service, with focus on youth and their mental health. A discussion about the happiness concepts in relation to the design principles follows. Furthermore a brief discussion about ethics in positive design is given, and finally a conclusion summarizing the findings and further research suggestions.

1.1 Methods

This paper is written based on a literature review within the fields of positive psychology and positive design. The central journals used in this paper have been the American Psychologist's special issue of positive psychology, and the International Journal of Design's special issue about positive design. Papers, web-articles,

informative movies and books have also been used. A brief case study presents a project undertaken by the author of this paper, and is included as an example of the theory reviewed.

Several search terms were used, including happiness, flow, flourishing, subjective well-being, positive design, design for happiness, service design and experience design. The terms will be defined and described in chapters 2, 3 and 4. The words happiness and subjective well-being will be used interchangeably. In the following section an introduction to why we should design for happiness will be given.

2 WHY SHOULD WE DESIGN FOR HAPPINESS?

In the western world, postwar affluence has led to a value system transformation from a materialistic to a post-materialistic one. This is also described as "the silent revolution" by Inglehart [6]. Our desire for material goods is now more often replaced by the desire of belonging, to be meaningful, to reach personal goals, to give a helping hand to others and to engage in interesting social activities [7]. However, this does not mean that material wealth is not contributing anything to the term of happiness. Material wealth can support people in their pursuit of happiness, but without being the direct source itself. Biswas-Diener argues that it is what people *do* with their resources that can provide them happiness [8]. Why should we design for happiness?

First, happy people contribute positively to the society. There exists a lot of material on the benefits produced by happiness (Eid & Larsen [9], Lyubomirsky [10], Diener [3] and Myers[2]). Happier people are more productive at work, more creative, are physically healthier, cope better with stress and trauma and they are better leaders and negotiators [10]. They have more friends and social support and are more helpful and healthier than others.

Second, happiness is acknowledged to have an important role in human development. The former

king of Bhutan actually stated in 1972 that Gross National Happiness (GNH) should be his nation's priority, and not Gross Domestic Product (GDP), as is the case for most other countries. He wanted Bhutan to focus on the quality of life rather than on relative wealth [11]. The United Nations has also recently acknowledged happiness as a fundamental human goal in line with the Millennium Development Goals, in a 2011 United Nation's resolution [12]. As a follow up to this, they decided in 2012 to proclaim 20 March as the International Happiness day [13].

Third, by inspiring people to do activities that make them happy, we can shift the focus from materialistic pleasure to lifelong happiness, which ultimately will lead to fewer products, and a more sustainable world. Since the 1950s our material wealth has doubled, whereas our emotional well-being has stayed the same [4]. Desmet explains this as a paradox; we have many products that make us feel good, but they do not make us happy. Design for long-term happiness is therefore an important and interesting area yet to be discovered. To be able to understand how we can design resources that will help people to become happier, the following sections will take a closer look at the terminology of happiness, and understand what happiness really is.

3 POSITIVE PSYCHOLOGY

3.1 Happiness and subjective well-being

The empirical study of happiness has the past years gained significant interest (Seligman [14-16], Lyubomirsky [10], Csikszentmihalyi [1, 17], Sang Ho [18], and Diener [3]). Happiness can be understood as many different things; it can be momentary pleasure, or something that gives us life satisfaction. This paper will look at happiness in the broader perspective, and not just as an enjoyable onetime experience.

Lyubomirsky says happiness is the experience of joy, contentment, or positive well-being, combined with a sense that one's life is good, meaningful and worthwhile [10]. Lok Sang Ho indicates that the answer is the same as subjective well-being

[18]. Subjective well-being reflects people's own evaluations of their respective lives, and these evaluations are both cognitive and affective [3]. The "father of positive psychology" Seligman [16], states that it is impossible to say that happiness is one specific state, and he choose to call it well-being. He divides well-being into five different elements that people choose for their own sake, that are defined and measured independently of the other elements, and that contribute to well-being. These are positive emotion, engagement, positive relationships, meaning, and accomplishment (PERMA). Richard Ryan proposes that there exist three universal and basic psychological needs that relate to intrinsic motivation: competence, autonomy and relatedness [19].

Other researchers such as Schmuck, have been looking at the importance of intrinsic and extrinsic motivation in relation to happiness. Extrinsic motivation can be explained as external motivation, for instance to earn money, get a higher work position or rewards. Intrinsic motivation is on the other hand internal and self-motivated, driven by the enjoyment of a task in itself, e.g to play the piano because you like it, or to work as a volunteer because you feel good about it [19]. In a study of students Schmuck found that those who were especially focused on extrinsic goals had a low well-being, whereas students with intrinsic motivation reported high well-being [20].

Keyes explains another concept focusing on the mental health in general. The presence of mental health is described as flourishing, whereas the absence of mental health is called languishing [21]. For people to flourish they must be filled with positive emotion and be functioning well both psychologically and socially. Flourishing can therefore be described as an ultimate form of happiness and life satisfaction.

Seligman uses an equation for describing happiness [15]:

$$H = S + C + V$$

Here S stands for “your set range”, C is “the circumstances of your life”, V is “factors under voluntary control” and H is the sum of the three factors and represents “the enduring level of happiness”. The set range “S” refers to a range of happiness that we are born with, and that is “set” by biological and genetic factors that determine our personality. This means that there is a certain range that a person’s subjective well-being tends to return to. Ho [18] proposes that this range is not 100 % set, because of a person’s mental capital. Negative mental capital is actually possible to reduce, and positive mental capital can increase. She gives us a slightly revised equation,

$$H = S(G, V) + C(t, V)$$

where the set point S is a function of both genetic factors *and* the voluntary control. In other words it means that a person that seems to have a predefined negative personality can practice to become a more positive person, and therefore live a happier life. However this does not change overnight, and hard work, patience and will are needed. To practice, one has to change the “V”, – which can be explained as the attitude of the person, which allows him or her to overcome obstacle, and remain cheerful.

The circumstances of one’s life, C, is a function both of time and partly affected by behavior. This will also affect subjective well-being. A high income will make a person happier, and extreme poverty will make a person unhappy. However, according to Kahneman, there is a limit where emotional well-being is not having any further progress, and that is where one earn more than about 500 000 NOK annually. Whereas a high income may buy some life satisfaction, it will not automatically give a person happiness [22].

H, the sum of S and C, is the enduring level of happiness. This describes that one should look at the life as a whole to describe happiness, and not just the mood of the moment. Sonja Lyubomirsky has done research for several years, and concluded that 60% of differences in happiness are due to genetic and external circumstances, see figure 1.

Behavior patterns and specific thinking can explain the remaining 40 % [10].

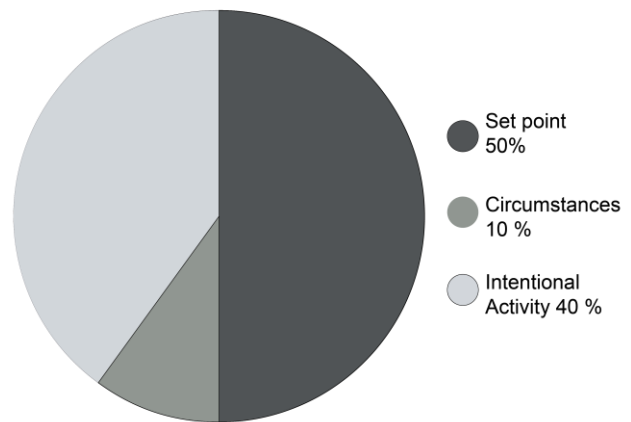


Figure 1: Determinants of happiness[10].

This elaborates on Seligman and Lok Sang Ho’s equations, and means that 40 % of our happiness can be influenced and changed. A question that arises if this model should be used is what intentional activities people should spend these 40 % on. This leads us over to another concept within positive psychology; the concept of flow.

3.2 Flow

Flow is defined by Csikszentmihaly [1]:

“Flow is the state in which people are so involved in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it even at great cost, for the sheer sake of doing it”.

When in flow, we are completely involved in what we are doing, totally focused and concentrated. It is almost as if it is a sense of “ecstasy” – we are so to speak outside the everyday reality. We know what needs to be done and how to do it. There are no worries about oneself, and a sense of timelessness. We are totally focused in the present time, and hours seem to pass in minutes [17]. In other words, flow is the state in which people do what they really like to do. To come to this definition, Csikszentmihaly observed painters’ persistence in completing painting, even if they were hungry and had discomfort. Afterwards he experienced that the painters had a loss of interest

when the creation was completed. Flow is a state that is immersive for the human being, and people experiencing flow often seem to have a higher life satisfaction rate.

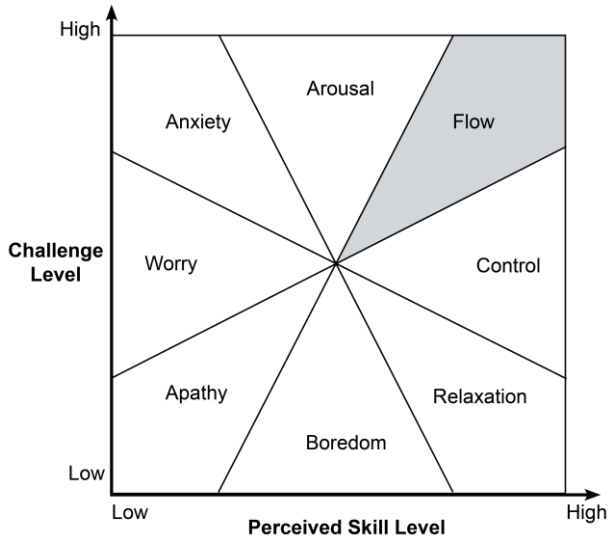


Figure 2: The FLOW model [1].

In Csikszentmihalyi’s model for flow, see figure 2, people’s everyday life is represented. There are two axes: People’s perceived skill level and their challenge level. The average everyday is in the center of the model; here the mean challenge level and the mean perceived skill level are positioned. This is based on an individual and subjective perception. An important factor here is balance; to achieve flow one must have the right balance of skill level versus challenge. If one has a high-perceived skill level, but a lower challenge level, one will feel in control, or even relaxed. With a high challenge level and low perceived skill level, one will feel anxiety and worry that one might not be able to complete a task. With no perceived skill level and no challenge, people experience apathy. Flow is found in a high-perceived skill level, and an equally high challenge level – a perfect balance, that is subjective.

As with Lyubomirsky and Ryan’s theories, to achieve flow the motivation must be intrinsic; whatever produces flow becomes its own reward. A key and central aspect of both happiness and

flow are experiences, which will be described in the next section.

3.3 Experiences

Experiences are like services, intangible. Boswijk et al [23] explains human experiences as

“Continuous interactive processes of doing and undergoing, of action and reflection, from cause to consequence, that provides meaning to the individual in several contexts of his life”.

Experiences and emotions are closely linked; when people do things that are enjoyable, they are probably also evolutionarily beneficial, and our brains will motivate us to keep doing that activity by giving us neurological rewards – positive emotions [24]. Emotions make us act. So, what makes an experience meaningful? Boswijk provides some characteristics [25] of meaningful experiences: There is a heightened concentration and focus, and timelessness. One is touched emotionally, and the process has intrinsic value. One does something and undergoes something, and there is a sense of playfulness. Control is present, and there is balance between challenges and own capacities. Lastly, there is a clear goal.

Pine & Gilmore state in their paper about experience economy [26], that successful experiences are those that people find unique, that they want to repeat and build upon, they are memorable and sustainable over time, and people want to enthusiastically promote the experience via word of mouth. Experiences are personal and more often social and have often to do with discovery [25]. People that are asked the question of which experiences they will never forget in their life that they paid for, tend to answer things like buying their first car, special holidays, wedding parties etc. A common factor in meaningful experiences is that they have a high emotional impact, and that excitement is important. As Keleman states: “Excitement is what bonds us to the world” [27].

We see that the elements of happiness, flow, and meaningful experiences have quite a lot in

common, which will be discussed in section 5. In the following section we will move from the focus on positive psychology and over to the field of positive design.

4 POSITIVE DESIGN

The recent focus on subjective well-being, has been on when and why people are happy, and on which processes that influence subjective well-being [3]. Lately more designers have looked into the field of positive psychology to figure out *how* to make products and services that specifically will enhance people’s positive emotions and subjective well-being (Desmet [4, 28], Desmet and Pohlmeier [28], Norman [29], Jordan [30], Hassenzahl [31] and Pullman [32]). Patrick Jordan has for instance made a design framework that differentiates between four types of pleasure; physio-pleasure (stimulation of senses), socio-pleasure (social interaction; relationships with others), psycho-pleasure (cognitive and emotional reactions) and ideo-pleasure (value based) [30].

Another emerging design field nowadays is experience design [31], [32]. To design for meaningful experiences, any moments of contact between the different stakeholders need to be identified [25]. For the design principles, we need to know how we can make an impact on the individual. Experience design research by Pullman, states that factors that can contribute to this are having a theme, harmony, ad something memorable, engage all the five senses, and having a holistic concept [32]. To create meaningful experiences, we have to focus on the meaning of human experiences, and the list by Boswijk from section 3.3 can come in handy [25]. Don Norman indicates that memory is more important than actuality; When we remember events, we often minimize the bad part and amplify the good [33]. So if a person stands in line for a rollercoaster for 30 minutes, and has an awesome ride afterwards, it is likely that he or she later remember a great experience. Therefore, it is not possible to “create” a perfect experience, because what matters is the total experience. Experiences and emotions are closely linked as mentioned in

section 3.3, and emotions are important within experience design. However, there is a design field explicitly dedicated to emotional design. A conference focusing on this called Design and Emotion has been hosted every year since 2005 [34], and the field is constantly developing.

The director of user experience in MailChimp, Aarron Walter argues that we should never settle for usable, when we can make interfaces both pleasurable and usable [35]. He focuses on emotional design to create loyal and happy customers, and puts emphasis on using forgiveness, emotional engagement and personality in design. To block a busy user’s workflow is not a good idea [35]. Therefore, the design must be smart enough so not to get in the way of the work itself. Sometimes as in the Mailchimp, a joke encourages users on to the next step in the workflow. In the next subsection a relatively new design approach called a positive design framework will be presented.

4.1 The positive design framework

Based on the positive psychology in section 3, Desmet and Pohlmeier have made a new positive design framework, see figure 3 [7].

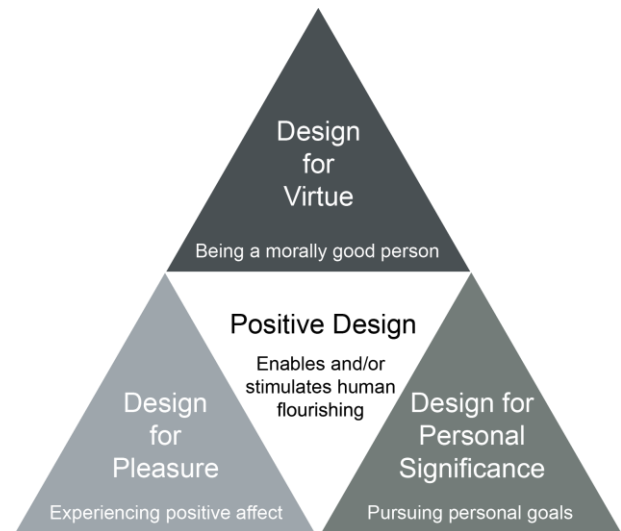


Figure 3: Positive Design Framework [7].

Positive design intends to increase people’s subjective well-being and ultimately to support human flourishing. When people flourish, they live

out their full potential, as explained in section 3.1. Positive design is the goal itself of the process of positive design, and not a nice ad-on to a product or service. Desmet and Pohlmeier states that design can enable, stimulate and inspire engagement in meaningful activities [28]. The findings from happiness and flow is therefore valid as a base ground for how design can improve; Design can bring our abstract intentions into the tangible world and facilitate activities that ultimately will make people happy.

The positive design framework consists of three elements; Design for pleasure, design for personal significance and design for virtue. Together they all form the “sweet spot” – where people flourish. It is important to include all three aspects, if one of them is missing; one cannot say that it is positive design. However, the amount of the three does not have to be equal. An example where all three design aspects are included is a strategy board game; one can be social interactive with other people, one can compete with each other and try to win, and one can decide not to cheat. In this way, the board game is meaningful by providing joy, personal direction and also virtue. To get a better understanding of the positive design framework, a short elaboration on each “ingredient” in the triangle will be given.

The first element in the triangle is design for pleasure: the sum of a person’s momentary pleasure – and the focus is on the present. Design for pleasure can make a person feel relaxed, being free of problems or simply having fun. Here emotions and feelings are central. Products, services and interactions can evoke positive feelings, or be a source of pleasure in itself.

The second corner of the triangle, design for personal significance, concerns personal meaning, and one’s own personal goals and aspirations. This can be to be a good dad, complete a marathon, or build a tree house. Here designed products can be resources that people can use to attain these goals; running shoes might make it easier to run faster.

The last corner in the triangle addresses the moral level of virtuous behavior, in other words “How can I behave honorably?” This is a bit tricky, because people have different perceptions of what is good and what is bad. Design for virtue assumes that there exists an ideal mode of behavior, that one should strive to live, which leads to a virtuous life. Seligman proposes some criteria for a virtue: It must be valued and endorsed by almost every culture across the world, and be valued in its own right (not just as a means to a goal) [14]. Six core and overarching virtues meet the requirements: Wisdom, courage, humanity, justice, temperance and transcendence. Examples on how design can influence on virtue, are products such as glasses that can help people to gain knowledge through reading, or an energy-saving thermostat can help you to be more sustainable, and thereby beneficial to society. Sadly, design products can also contribute to non-virtuous behavior, by e.g. being polluting through manufacturing.

Another way of stimulating people to be virtuous is through the behavioral science of nudging. Nudging is explained as something that aims to stimulate better choices without forcing people to make them [36]. It can be a cheap way to influence people’s behavior without making any rules. An example of nudging can be to put painted footsteps in front of a stair, to help people to become healthier by using the stairs instead of the elevator. Another example is to position fruit and healthy food at eyesight level in a canteen, to enhance people’s health. This can obviously be used in a negative way as well, for example in supermarkets, advertising, and so on. It is important to emphasize that nudging should be used in a positive and not manipulative way, although one cannot guarantee that people use it in a virtuous way.

A common factor within all the design methods mentioned is the focus of designing for human needs and the goal of enhancing subjective well-being. The positive design framework does not include any recipe for a design process. The next section will therefore present how service design

can be used as a tool together with the positive design framework.

4.2 Service design

Service design is an interdisciplinary approach that incorporates tools, methods and theory from many different disciplines, including design for emotion and experience design. Service design in itself is not explicitly focusing on design for happiness, but it is a holistic approach that incorporates the user's needs and values. The Copenhagen institute of interaction design explains service design as the following:

“Service design is an emerging field focused on the creation of well thought through experiences using a number of intangible and tangible mediums. It provides numerous benefits to the end user experience when applied to sectors such as retail, banking, transportation and healthcare” [37]

With this definition in mind, we will look at an example where service design is used.

4.3 A brief case study: Improving the school health service

An example of a project that could benefit from the positive design framework is a service design project aiming to improve the Norwegian school health service. Nansook Park, a professor in school psychology, has studied the role of subjective well-being in positive youth development, and she found that important aspects of youth's life satisfaction were supportive parenting, engagement in challenging activities, positive life events, and high-quality interactions with significant others [38]. Park also states that positive well-being is an important factor for optimal mental health. The school health service is an instance that serves as an important medium for youth, and since it is located at campus it has the possibility to reach all youth with potential everyday trouble and stress. Research shows that many Norwegian schools do not have a functional school health service, mostly because of lack of resources, but also in the way the service is structured [39]. A great number of adolescents experience psychological health issues such as stress, anxiety and loneliness [40, 41], but the

school health service is not tempting to use and for some perceived as embarrassing.

The goal of the project is to improve the school health service, with an ultimate vision of giving youth a better mental health. This will be achieved by lowering the threshold for getting in touch with the school nurse. The project is carried out as a user-centered service design project. The school health service is examined in all parts and elements, from interviews with school nurses, teachers, counselors and students, to observation, workshops and service blueprints. An important issue from the study is concerning the lack of information and visibility, and the stress related to using the service.

In relation to the framework of positive design, focusing on pleasure, personal significance and virtue can contribute to the project goal. A pleasure aspect can be to get a cup of coffee and a comfortable sofa to sit in while talking to the school nurse. A feeling of security and confidentiality from the school nurse is also important. It should be easy to make appointments, which also leads to a pleasurable experience. This is especially important in this project, when adolescents that want to use the service might already experience problems.

An example of design for virtue can be the nudge theory mentioned in section 4.3; to design the environment so that youth are encouraged to use the service, even though they do not have a major problem or disease. This can be as simple as a path on the floor leading to the different counselors and the school health service. Another way of doing it is to invite all students to a short and informal talk with the school nurse. This should be voluntary, but the invitation might encourage students to actually visit, and thereby making it more normal and accepted to use the service. An interesting part about this project is that the service itself focuses on helping youth to a proactive good mental and physical health. Getting a better mental health may increase the personal significance, and the school health service can be an important facilitator for this.

5 DISCUSSION

The research questions asked in this paper were: What is happiness? Why should we design for happiness? Lastly, how can we design services and products that contribute to enhanced life quality and inspire to subjective well-being?

When looking at the different concepts reviewed within positive psychology, we see that flow, happiness, subjective well-being and meaningful experiences have a lot in common. Flow and meaningful experiences both correlate well, by focusing on enjoyment, a high concentration and timelessness. As Seligman and Ho Lok Sang found, happiness consist of elements that are both preset, but also voluntary. The research by Lyubomirsky shows that people by intentional activities can enhance their happiness by 40%; this percentage should be used on meaningful experiences and activities leading to flow. This is where positive design has the ability to contribute. An interesting aspect of flow is the time right after an experience; Csikszentmihalyi experienced that the painters that he observed had a loss of interest when the creation was completed. It would be interesting from a design point of view to also consider how one can design to prolong the flow "effect".

Positive design is an emerging field within design; emotional design, experience design and service design all contribute to people's experiences. The positive design framework states the importance of designing for pleasure, virtue and personal significance, and all the three parts are needed for people to flourish. The motivation people have for using the product or service must be intrinsic. It can be challenging for designers to include all those aspects in one design. Service design can be a helpful method to embed all the characteristics. By using service design one can uncover potential problems with a service, and come up with solutions that has positive design as a goal. Other design disciplines such as interaction design and product design can also benefit from using a positive design framework, but this is not discussed in this paper.

It is quite hard to measure whether positive design really affects subjective well-being, or whether there are other factors that influence. Games might in fact be one of the few situations where design alone can contribute to subjective well-being. To be able to find empirical evidence for positive design, appropriate assessment tools are needed. Because of the nature of subjective well-being, this will have to depend on self-reporting. Desmet and Pohlmeier state that one difficulty in measuring the effect might be in the potentially indirect link of design to well-being; if a design enables, facilitates or represents a meaningful experience, the user will easier see a link between the experience itself and well-being, than a link between the design itself and well-being [7]. However, it is not required that the user is aware of the design, often the contrary is the desired outcome, but it means that the assessment tool needs to take this into account.

An important thing to be aware of is that there are no obvious or objective differences or distinctions between design that contributes to well-being and design that does not. The way positive design differentiates from other design guidelines or processes, is that it has an *explicit* focus on designing for human flourishing, whereas other design methods might contribute to this unintentionally. The positive design framework will in this way guide the whole design process, from beginning to end. In terms of outcome, positive design might not differ from other design approaches, but the process and vision will be different. Although the field of positive design continues to evolve, the development of an integrated positive design approach is yet to be developed [7].

5.1 Ethical and economic concerns

By introducing a design framework that includes virtue, an ethical discussion naturally follows. How much influence through a design is appropriate, and when does it become manipulative? Despite that positive design has an honorable goal, it needs to take potential ethical questions into consideration [7]. One might also ask the question

of why one should focus on how designers can contribute to people's happiness rather than on how people themselves can contribute to be happy. Aristotle said that a happy life is the life that follows ethical obligations. Happiness appears when people are content with what they are doing and how they interact with others. So, a task for design is rather creating space for interaction than things that satisfy one's own ego. In this way positive design can be a breeding ground for a new era in the field of design.

In the economic aspect of design, one might think that by making people design their happiness themselves, or let design be more of a facilitator, economy will stagger. This is however not the case; Market offerings might have to change, but there is a huge potential in creating experiences and social interactions that focus more on *doing* than on *having*. In this way service design can be a great process.

6 CONCLUSION

This paper has been reviewing literature within positive psychology and positive design. The concepts of happiness, subjective well-being and flow have been investigated, along with experiences and emotions. An introduction to the field of positive design has been given, and Desmet and Pohlmeier's positive design framework for flourishing has been reviewed and elaborated on. Furthermore a discussion relating positive psychology and positive design to service design was given. A brief case study of improving the school health service followed, with examples on how to use the three components of positive design together with service design. Finally an ethical discussion about positive design and suggestions for further research were proposed.

Conclusively, happiness is an ultimate goal for all people. Happiness can be described as the sum of a preset genetic range and voluntary control; it is to some extent possible to change one's personal happiness. From the flow and subjective well-being theory, it was clear that behavior is an important aspect of becoming happier; therefore

one should not only buy new products to increase happiness, but rather change the behavior and circumstances. Material purchases can to some extent "buy" happiness, but only if it can engage the customer in doing activities that are enjoyable.

Positive design is clearly inspired by positive psychology, and aspires to contribute to people's happiness, by setting this as the goal for the design process, focusing on human needs. By including design for pleasure, design for virtue and design for personal significance, Desmet and Pohlmeier proclaim:

"Design can offer a tangible representation of personal significance or purpose, it can direct one's own intentions toward desirable goals, and it can inspire and empower human engagement in activities that are meaningful both to the individual and to the community".

Designers should be aware of potential ethical concerns regarding positive design, especially when using the theory of nudging. By enhancing people's happiness, a lot of positive byproducts arise both for people themselves and for the society; they are more creative, more productive at work, being better leaders and are physically healthier. Designers should therefore strive to facilitate services or products that create interaction and activity, allowing people to feel pleasure, be morally good and rise individually. Desmet concludes by stating that designers should stop seeing design as an endpoint to a solution, and start seeing it as a beginning that unlocks the potential inside us.

Research about design for happiness, flourishing and subjective well-being is in its early stages. There is a great potential in linking service design with a positive design framework, based on the theory reviewed in this paper, but also through the project undertaken in the case study. Further research is needed to be able to make an integrated positive design approach. More examples and case studies of design using the positive design framework should be conducted, and an assessment of these services and products would be beneficial.

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