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A mental health case: Voluit Leven

MASTER THESIS
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SUMMARY

Background
The calculations of the National Compass of Dutch Health Care show that the costs for treatment for people with depression and anxiety are growing. The widespread use of web based applications, based on the principles of persuasive technology, show promising results in reducing these costs. However, it is also known that the adherence to these kinds of technologies is not very high. To increase adherence and decrease attrition persuasive manipulations will be useful.

Objective
The aim of this study is an assessment of five persuasive manipulations: personal/automatic feedback, text messages, multimedia, tailoring and personalisation, integrated in the nine-week lasting course Voluit Leven on three different adherence levels: *adherence to the course* (user preferences for manipulations), *adherence to the lessons* (amount of completed lessons) and *adherence to the technology* defined as the difference between intended and actual usage (times of logging in and manipulation use).

Methods
Users (*n*=239) with mild onto moderate depressive or anxiety symptoms were randomly assigned to eight different designs of Voluit Leven. They received all five manipulations in different combinations. Most users were highly educated (78.7%, 188/239), aged 45 and female (70.7%, 169/239). A mixed- methods research design was used. An assessment is done based on the online Analytic Hierarchy Process questionnaire from which patient preferences for the five manipulations could be derived (adherence to the course). Log files were used, with the following main outcome measures: (1) site usage measures like amount of completed lessons (adherence to the lessons), (2) times of logging in and times of clicking on manipulations (adherence to the technology), (3) dropout rates (attrition). Also, fifteen telephone depth interviews were done, to collect information on the reasons for adherence and attrition.

Results
126 out of 239 users filled in the AHP questionnaire from which 79 questionnaires were consistent. The most preferred manipulations were personal feedback and text messages. It was personal feedback that appealed users: it was motivating because of the personal content and the frequency of receiving. The designs that had integrated personal feedback and text messages were both neither the triggers for the highest percentage of users that completed all nine lessons nor the triggers that scores the highest average amount of completed lessons. Also, none of the other designs with the other combinations of manipulations did show a significant difference. Just like the log files, that did not show an influence or correlation of the manipulations in all eight designs on adherence to the lessons or the technology. Also the influence of activity degree (continues/discontinued/non-user), activity pattern (high/low) and age do not show any correlation with the manipulation received. The usage patterns per manipulation show a decline in amount of log-ins in week 4 –from an average amount of log-ins of 1.7 a week to average 1.2 – and a variable use that every week raises and falls, probably caused by the content of the lessons. All users that are still in the course after week 9 (45%, 80/179) are the continuous users, from which 12% represent the hard core users (28/179). The attrition pattern is a constant attrition with a constant proportion of users that drop out each week. The most users drop out in week 1 (26 of the 99 drop outs) and a rise of drop outs (*n*=14 against an average of 8.4 all other weeks) can be seen in week 4. Because of the small amount of users spread over eight designs, it was not possible to connect –statistically reliable– the data to manipulations that were received. None of the drop outs has signed up for a telephone interview what makes it impossible to support the data with qualitative results. Non related persuasive technology factors, indicated by users, influencing their adherence were costs and the strength of the complaints. Users can not give an estimation of their willingness to pay.

Conclusion
For all combinations of manipulations that were integrated in this study, none of these combinations shows a great influence on adherence with regard to Voluit Leven. None of the designs with a specific combination of manipulations show a unusually high or low amount of log-ins in comparison with the other designs, differences in usage patterns in comparison with the other designs, or differences in amount of completed lessons in comparison with the other designs. Statements about which *individual* manipulation has the possibility to increase adherence –as represented in usage by times of logging in and amount of completed lessons– cannot be done. However, it is possible to derive the users preferences for individual manipulations. Personal feedback is evaluated by users as the most important manipulation to keep using Voluit Leven, followed by text messages. Tailoring, automatic response and multimedia are evaluated as less important. Personalisation is evaluated as unimportant to keep using Voluit Leven. In the future, more research is needed focusing on the individual influence of personal feedback and text messages without integrating them in multiple manipulation designs.

INTRODUCTION

Twenty people are sitting at a table of an Amsterdam's Cafe. Predominantly young, beautiful and happy people, busy talking to each other. 'But make no mistake', warns an Amsterdam's professor of clinical psychology. 'Four of these people have a depression or anxiety. Perhaps you may be, or me'. [1]

According to the World Health Organisation, depressions and anxiety related diseases are fastly becoming population disease number one in the western world, expressed in loss of healthy life and premature death [2]. The calculations of the National Compass of Dutch Health Care show that the costs for treatment for people with depression and anxiety are growing in the Netherlands [3, 4]. Costs for the treatment of depressions and anxiety by a general practitioner or psychologist are high, and in a few years even as high as the costs for heart diseases [5]. For this reason, alternative treatments are becoming more and more widespread practice [6]. One of these alternatives is offering online treatments to achieve larger target groups, to provide effective assistance and to increase the autonomy of patients [7]. These so called web based applications are increasingly successful used for treatments like depression and anxiety, because they can reduce costs [8], increase the access to health care, increase self-care management and perhaps most important: people stay anonymous [9-13]. However, it is also known that the adherence to these kinds of technologies is not very high. Studies have shown that in the case of internet treatment, as few as 1% have completed all lessons [14], and that the treatment is most effective when all lessons are completed and all parts of a technology are used.

Possibilities to increase adherence for web based applications have been studied for many years now [8, 14-21]. One of the most common ways is the development and implementation of persuasive technology [19]. This means the use of technology to change or influence users behaviours of attitudes. Influencing and manipulating sounds negative, but that does not need to be. Persuasive technology can also be used in a positive way; in a conscious or unconscious way. Popular are changes in the design of a web based application, for instance through the integration of different manipulations. This study focuses on the effectiveness of manipulations –integrated in designs in different combinations– in increasing adherence and decreasing attrition to web based applications. These selected manipulations are: feedback, text messages, multimedia, tailoring and personalisation. The uniqueness of this study is the quantitative assessment for this setting: the integration of users preferences. After using the intervention, users have to evaluate which manipulations were most important for them to keep using the web based application. This will be compared to the actual usage data. Central questions are which manipulations have the greatest influence on adherence, what the relevance of the manipulations is, and how they influenced usage and attrition patterns. To realize this goal four different research methods are used.

The structure of this study is as follows. Chapter I gives the theoretical background of this study. The current state of the literature should be taken into account to make a correct outline of the subject. Literature study is done to understand the current assessment methods for adherence and usage. Also, the context of this study is represented by describing the role of persuasive technology and which manipulations will be studied.

Chapter II describes the web based application Voluit Leven, that is used to focus and accomplish the research questions. The target population of Voluit Leven are users with mild depression or anxiety complaints. This online treatment is an example of a persuasive technology, developed to learn to live with the difficulties associated with mild depression and anxiety and is a short term treatment of nine weeks. The chapter first describes the programme, followed by the background of the programme, target population and the mental diseases depression and anxiety. The chapter ends by establishing a link with Chapter I by explaining how persuasive technology, the persuasive manipulations and adherence are integrated in the Voluit Leven programme.

Chapter III represents the overall research objective and research questions of this study. These were derived from Chapter I and II.

Chapter IV describes the role and the background of the assessment used in this study: the online analytic hierarchy process questionnaire (AHP). Also the relation with the other quantitative and qualitative methods will be explained: log files, telephone interviews and an online open question. These methods are used to test the influence of persuasive manipulations on someone's adherence (AHP and log files), and on usage (log files). Reasons for fluctuations in usage will be made clear together with factors that are non-related to persuasive manipulations and can explain adherence (done with the use of an online open question and telephone interviews).

Chapter V represents the results of this study after which conclusions are being drawn per research question. After the conclusions, the discussion is represented, reflecting on the impact of the conclusions for increasing the adherence to e-health interventions. Also will be highlighted how this is related to the findings of the literature study as described in chapter I and how the results of this study give a different view on this. The study ends with recommendations for future research related to persuasive technology and to the tested web based application Voluit Leven.

CONTENT

CHAPTER I THEORETICAL BACKGROUND

To formulate relevant research questions, it is necessary to consider the current state of developments within the field of e-health. This information is needed to identify, focus and delineate the research questions. This will be done with a theoretical deepening for two main elements: adherence and persuasive technology. First a review is represented for the assessment of adherence. On the basis of this the definitions for adherence will be formulated, as used for this study. Also, a review for the assessment of usage is given. The second part of this research is about persuasive technology. The role it has in the development of e-health interventions, what exactly is meant by persuasive technology and what role it plays in this study.

1. Assessment of adherence

In recent years, adherence have been studied in many different ways [14, 22-26]. When talking about taking medicines or following up a medical advice, the definition of adherence is quite unambiguous. For instance the definition from The World Health Organization: 'the extent to which a person's behaviour corresponds with an agreed recommendation from a health care provider' [27]. When talking about adherence to online self-help technologies, a definition is far less ambiguous. In appendix 1 an analysis of six articles is represented. This analysis gives the definitions and methods that are used to measure adherence. Besides this, it is indicated what the author supposes he/she is investigating and the interpretation of this by the researcher. This analysis gives some remarkable points:

- It appears that in many recent publicized articles elements of adherence are studied, without given the definitions [23, 25] , or only give a part of the definitions [24, 26];
- Also a striking points is the investigation of same elements under different headings. For instance the articles of Eysenbach, Wanner and Neve [22, 24, 26]. Eysenbach and Neve want to find attrition rates (non-usage and dropout), Wanner wants to find adherence and attrition. Remarkable is that Wanner and Eysenbach uses attrition curves for this, Neve did not. This means that corresponding methods are used to measure different elements, and contrary. Besides this, all three authors use other definitions for drop out attrition and adherence. Only non-usage attrition is in all three articles the same.
- Another point is that all articles use 'usage' as a middle to measure adherence but none of the articles did define it .
- Last, adherence to the technology and the lessons will run into each other and are used interchangeably. This has consequences for the focus of the research. The definitions of adherence to the lessons are relatively small. They are about finishing the lessons, but not about usage of all specific parts or features of the website are used [14, 22, 24, 26]. Adherence to the technology also includes both parts. There are two articles that take adherence to the technology as a starting point but there is no definition given [23, 25].

For these reasons adherence to the technology and usage will be defined and specified in this study. To do this, four broader definition should be the basis. The articles of Nijland and Kelders have been leading in drawing up these definitions because they take adherence to the technology as starting point [23, 25].

Definition 1:
Adherence to the technology is the difference between intended and actual usage.

- *Intended use* is the usage of the technology that is given by the developers of the treatment. For instance 3 times per week over a period of 9 weeks is a total amount of 27 log-ins.
- *Actual use* is usage during the whole period of the treatment.

By making this distinction it becomes possible to get an insight in what happens during all weeks of a treatment and not just at the beginning, or at the end. Mostly, there is a black box in the measurements of adherence [25]. This black box means that adherence to the technology is measured at one or two moments during the treatment. For this reasons it is not known what happens with log-ins and usage of features during all weeks of the course [14, 26].

Besides to adherence to the technology, also adherence to the lessons, adherence to the course and attrition will be central points of this study. These are defined, based on the literature as given in appendix 1 and the view of the research on this [14, 22-26].

Definition 2:
Adherence to the course is the relevance of the manipulations to keep using the online treatment.

Definition 3:
Adherence to the lessons is the amount of log-ins that is needed to complete the treatment.

Definition 4:
Attrition is the phenomenon of stopping to use the technology.

1.1. Assessment of usage

In recent years, there have been many studies to measure usage [14, 24, 28-31]. The data for usage differs between these different kinds of studies. Also appendix 1 shows that there is no best way to measure usage and with that adherence to the technology.

Remarkable differences out of appendix 1:

- The moments when measured during the online treatment. Mostly it is longitudinal (what occurs in a period of time), but the amount of measurement moments is diverse. Some authors use predetermined moments, concerning a period [14, 24, 26]. Other authors use a sample at a chosen time [25]. There are also authors that use computer software that register data over the whole period [14, 24, 25].
- Most measures for attrition use survival analysis. This type of analysis gives insights in the dropout in usage at specific moments but not in the patterns of usage. Such outcomes can be useful for analysis with a fixed use, for example 3 logs per week. On the other hand, this method gives no insights in what happened between the start and end date of the course and if there is not a fixed use.

There are also some similarities in the way of data analysis, as can be seen in appendix 1.

- Attrition curves are used to comment adherence to the lessons [14, 26].
- Log files are used to get an insight in adherence to the technology [24, 25].
- Interviews, surveys and e-mail messages are the most common used to justify dropout [14, 25, 26]. Also pre- and posttest questionnaires are used to get an impression of the perception from users. A
- The experimental manipulation of factors [14, 24, 30].
- Correlation and regression analysis is the most common method for handling the data, to get an association between adherence and factors like demographic factors or personality or to get an hierarchy in predictors of adherence[14, 22, 23, 26, 28].
- Another strategy that is used to give a value for adherence is the duration of membership, also: the duration of following the intervention [24]. The data were reported by using indications as log-ins [14, 31], durations of Web exposure number of exercises completed and number of postings [14, 28]. Mostly the number of completed exercises were the primary outcome measure.

Problems related to the measurement of usage
One of the biggest problems is that many studies do not use appropriate statistical techniques to analyze missing data, this gives a bias in data [14] and with that an incorrect interpretation of the data.

Also a problem that many limitation-parts of studies highlights are the problems related to generalizability. Results that studies were found are only useful for a very specific target population. Mostly, the reason for this is that the inclusion of factors for adherence is too small [28].

1.2 Previous research and influencing factors for adherence

Previous research has shown some factors that have an influence on adherence to the lessons and to the technology. Most of these studies do not make a distinction between these two separate forms of adherence. To make this distinction not to artificially, this distinction will not be leading in this description of the factors.

According to these studies, the adherence rate depends on:

- *The baseline rates of depression*. The lower the rates, the higher the adherence rate [14]
- *The knowledge of psychological treatment*. The poorer the knowledge, the higher the adherence rate [14];
- *Gender*. Female adolescents are to be more likely to seek mental health assistance [28];
- *Age*. Users in the age 45 to 65 are representing the lowest adherence rate. The people in this age group have lower levels of internet access, spend less time on the internet, and exhibit the most resistance to user-generated sites [24]. Overall can be concluded that the younger the age, the higher the adherence rate [24];

There is also some research done to find factors that can predict adherence [14]:

- Time constraints;
- Lack of motivation;
- Technical or computer-access problems;
- Depressive episode or physical illness;
- The lack of face-to-face contact during the course;
- Preference for taking medication instead of online therapy;
- Perceived lack of treatment effectiveness;
- Improvement in condition;
- Burden of the programme.

Intention to use
Another factor which seems to have a major impact on adherence to the technology is the intention to use that is determined by the designers of a technology. Curiously, that intention has nothing to say about actual use [23]. Kelders found that the application tested is not used as intended through the designers of the application [23].

2. Persuasive interventions in e-health

2.1 A holistic framework for development and implementations of e-health interventions

The development of e-health technologies is a complex process and means much more then designing a tool. Developing e-health is a combination of knowledge dissemination, communication and the organization of health care. It is the creation of an infrastructure in which the interaction between the technology, people and their social-cultural environment are the central points. To make e-health technology a success, these total fit between human (H), health care organization (O) and technology (T) is essential. Yusof has shown in case studies this is needed to make an effective and efficient use of a technology and to promote user acceptance [32]. Mostly, the developmental attention is largely focused on technical and clinical issues while this should be more focused on human and organizational aspects [32].

In order to develop e-health technologies it is important to consider how people live their daily lives and what their driver is for managing their health and well-being. Also socio-cultural environments and family support are important factors that should be taken into account. These are, for instance, the social economic status (SES) and the possibilities for supporting healthcare via technology. The combination of these factors in one technology is called a Human-Centered and Value Driven technology [33, 34].

Especially for the creation of human-centered and value driven technology, a holistic (or broad) e-health framework was designed and redesigned [33, 34]. A 'new' model was developed because existing models were inadequate. Existing models mostly focused on individual behaviour change or rationality and neglected the strong interdependencies between technology, context, communication and care [33]. Also, adjustments for design improvements were not translated into practical guides [34]. The frameworks prescribe what should be done in the development process but are, as one would expected, not a tool in themselves for this purpose [34]. By merging strong elements out of old models, the new model was created. This model can overcome the problems of the old models by focusing on principles of human centered and value driven e-health. This is the match between technology (T), environmental factors (for instance organization of health care and resources) (O) and human factors (H). According to Van Gemert-Pijnen, this holistic view is essential to know for sure that e-health technologies will be used and effective [34].

The model

A human centered and value driven view is integrated in the framework by two interdependent strategies as can be seen in figure 1: Human Centered Design (HCD) and Business Modeling (BM).

Human-centered design covers the involvement of the users' perspective into the design of the technology. HCD can optimize the technology in the way users want, need or use the technology instead of forcing the users to change their behaviour. With the help of the end-user of the system, functionalities and a content of the technology will be created.

Business modeling covers the value driven approach. Mostly, the development of e-health technologies is only based on these needs of individual end-users. These technologies have much to do with financing problems because the trust and commitment with these stakeholders is lacking. For this reason a value driven business modeling approach is needed. This part helps to determine critical factors of the technology with the involvement of all stakeholders. Functionalities, specifications and requirements can be prioritized in this way what results in a business case based on the values from the stakeholders specified for the costs and the benefits of a technology.

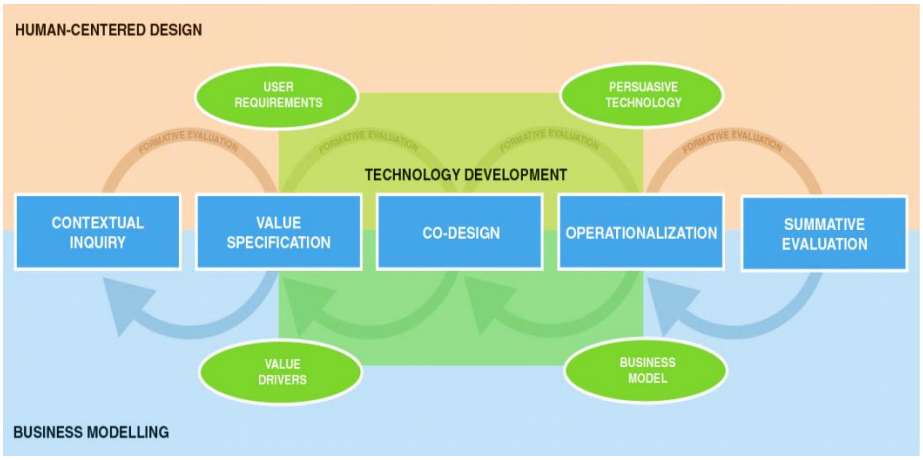


Figure 1. Roadmap for the development of e-health technologies [34]

The model itself functions as a roadmap and can coordinate e-health technology developments. There are five different concepts within the model [34]. Contextual inquiry entails information on the environment the technology will be implemented. Stakeholders and their roles and tasks will be identified. The value specification elaborates on the outcomes of the contextual inquiry. The stakeholders now determine their values in the areas social, economic and behavioural and rank them on the basis of finding solutions for the identified problem. The stakeholders translate these values into functionalities of the design and critical conditions for implementation. In the co-design part, the actual design process starts. Functional requirements are translated into technical requirements and the intended end-users will test the quality of the design. A prototype will be discussed by all stakeholders. In the operationalization part plans and actions for dissemination, adoption and incorporation will be made for the technology in health care. And finally in the evaluation part end users and other stakeholders give feedback and usage will be measured with the goal to change and improve the current implementation [33].

The integration in this research

In the development of e-health technologies designers mostly work with a product driven approach that results in a prototype that does not match with the end user 'expectations [33]. To get a high adherence of a web based intervention, it is important to involve stakeholders and end-users from the beginning of the process. Also evaluation constantly during the development process is important [34]. To give special attention to this point, the holistic e-health model was the basis for the creation of Voluit Leven[1].

At this moment Voluit Leven is in the design phase. This means that a prototype will be tested and disc used with intended end users. This will happen in a real-life situation. The development of a e-health technology is an iterative, flexible and dynamic process. This results in ideas and concepts that have to be continuously evaluated by the intended user. The technology will be used and constantly reshaped and redesigned in content and system on the basis of feedback from the intended user [33].

For this study this means that intended users are testing a prototype in the design phase. Also feedback from the contextual inquiry and value specification should be taken into account. The end-user and the technology are the central points. In figure 1 this is represented by the right corner: ***persuasive technology***.

2.2 Persuasive technology

Persuasion is a part of the human interaction. Always and everywhere persuasion attempts to influence people's attitudes and behaviours. For instance to stop smoking, to eat fruit and vegetables and protected sunbathing. Since long, media technology has played a role in this through televisions and billboards. This technology becomes special when it has the possibility to be interactive with the user of it, based on the users inputs, needs and context. This realization has let to persuasive technology [35]. Persuasive

[1] A good practice of an e-health technology tool on which manipulations will be tested in this study (see chapter II)

technology means that the *technology can reinforce, shape or change the attitude and behaviour of end-users*. This should be done without *coercion* and *deception* [18].

Humans are strong persuaders caused by some characteristics: unmistakable social presence and impact, can sense the appropriate timing, mood and context of others, and good feelings of praise, similarity and authority [15, 35]. According to Fogg, computers can have some distinct advantages [15]. They are: more persistent, allowing anonymity, have an unlimited store of data and can use many modalities. Computers can be applied as an persuasive technology. An interaction between the user and the computer will be created. The information given must be processed by a user, there must something be done. Users get tempted to do what 'others' want from them.

A range of persuasive applications supporting people in health care have been developed over the past years [36] . The widely used Functional Triad model developed by Fogg [15] provides a useful mean for understanding persuasive technology but gives no systematic analysis and design methods for developing persuasive design solutions [19]. In recent years the biggest weakness of this model seems to be that the design principles described by Fogg cannot be transformed into software requirements and features. The ideas cannot be implemented.

Oinas- Kukkonen and Torning have developed a model to explain how this can be done: the transformation of design principles into software requirements and system features. This model is a redesigning of the Functional Triad of Fogg [15]. The key issue of their model is to be able to say something about the persuasiveness of a system, the systems qualities and how the system should behave [18].

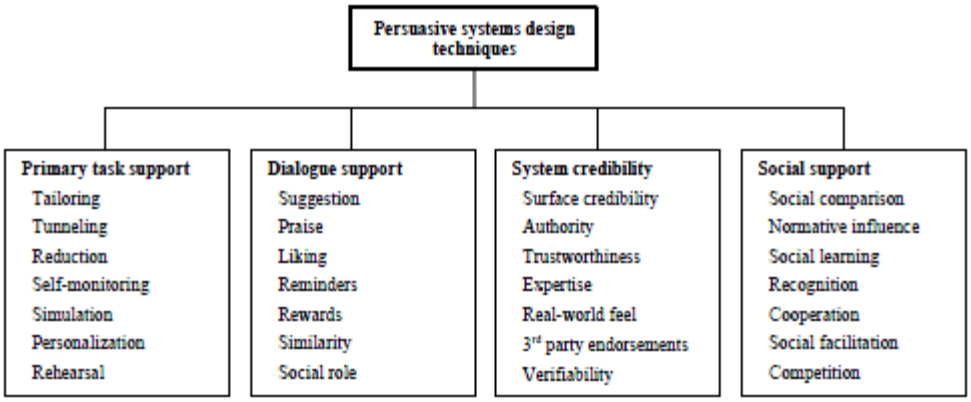


Figure 2. Persuasive design techniques for manipulation [37]

The model consists of design principles divided into four categories: primary task, dialogue support, system credibility and social support (figure 2) [18]. The design principles of the primary tasks category are focusing on the carrying out of the users primary task. The design principles in the dialogue support help to reach the goal set for using the programme. The design principles for system credibility are related to how a system can be more believable and with that more persuasive. The last principles of the social support are about the design of the system that motivates by social support. Oinas-Kukkonen and Torning have studied the scientific research of system features. The features that are studied the most are tailoring, tunneling, reduction and self-monitoring out of the primary task category, suggestion and surface credibility out of the primary task and supporting dialogue category and as social comparison, normative influence and social learning out of the social support category [21].

Disadvantages of the model

One of the disadvantages is that there are few empirically proven persuasive system design methodologies. There is not much scientific evidence which method can transform design principles into software requirements and system features.

Another disadvantage is the small focus of persuasive computer technologies. The computer technologies are focused on one individual end-user. The focus of interaction with the computer is on one person. System features and software requirements are based on the individual user and can change and vary for different end-users.

Besides to the there is no interaction with a social environment. Yusof has shown that a fit between Technology and Human is important, but also the Social environment (O) should be taken into account to make an effective and efficient use of a technology and to promote user acceptance.

2.3 Description of persuasive manipulations

Previous research has shown that (design) manipulations can have a positive influence on the adherence[2]. These manipulations were chosen specifically because in literature they show the most promising results. Beneath these five criteria are defined, and the literature in which their positive results is shown will be summarized. The definitions of the criteria with literature justification are as follows.

- ***Feedback:*** the way of giving response on assignments and processes to users: personal or automatic.

Personalized feedback is one of the most promising factors for stimulating usage [33]. There are two different options: e-health technologies with patient-professional interaction for instance via e-mail and e-health technologies without patient-professional interaction by using automatic generated messages [33]. The studies of Fry and Nijland has shown that the use of personalized feedback will be more persuasive then automatic generated feedback [16, 25]. To test if this results in a higher usage, this manipulation is included in this study.

- ***Text messages***: mobile technology in the application with the goal to support people at the moment and place that it is needed. For this study, this will be text messages. During the week users get messages to help implementing the learned exercises into daily life.

If a system reminds target behaviour, the users will be more likely to achieve their goals [18]. It can be used as a supplement of the system as giving care at the right time and the right place [15]. A conclusion from Harris is that cues have no effect on any measure of intention [38]. In this study this will be tested with text messages that can remind users to implement the lessons learned into daily life and so stimulate the intention to finish the course.

- ***Multimedia***: the integration of sound (for example music) and frozen(for example pictures) and moving (videos) images in the website. Multimedia can be incorporated into a website through animations, videos, and interactive assignments.

Fogg concludes that by adding multimedia through providing sensory information like audio and video, intervention have the unique capability to motivate [15]. It is interesting to know how this multimedia influences the drop-out rate of the intervention. This is scarcely experimental examined and for this reason integrated as one of the manipulations.

- ***Tailoring***: the extent in which users can identify themselves with the programme. This can be reached with success stories. Success stories are short messages written out of the perspective of a fictive users of the programme. The text is about what are the reasons of participating in this programme and the positive of the programme on the daily life of the user. Also is told how the fictive user has overcomes barriers.

Tailoring is derived from the results of the study of Stretcher [20]. This study about smoking cessation shows that the extent to which an individual is absorbed by a story has a strong influence on persuasion. The high depth success stories in this study were attempted to validate these results for e-mental health interventions [18].

- ***Personalisation***: the automatically adjusting of the content of the page and historical characteristics of user behaviour and the possibility for the user to suit the site.

A lot of studies have shown that personalisation becomes important to support users in doing their primary task [18, 20]. Systems that offers personalized content has a greater capability for persuasion because the user involvement is increased. This can reduce the drop-out rate and for this reason included in this study.

In chapter II will be described how these manipulations are integrated in the web based application Voluit Leven.

[2] In the design of Voluit Leven were five persuasive manipulations integrated.

CHAPTER II
HEALTH TECHNOLOGY: VOLUIT LEVEN, A WEB BASED APPLICATION AS A TOOL

To study adherence and persuasiveness, a web-based application or tool is needed. This allows us to focus and accomplish the research questions. Firstly, the tool Voluit Leven will be described. Secondly, the background of the web-based application is described: which disease Voluit Leven targets and how it was previously studied. A link will be established between Chapter I and the tool in the second part of this chapter. Firstly, the integration of persuasiveness and secondly, how adherence will be examined.

1. 'Voluit Leven' as a tool

The tool that is used in this research to study adherence to the technology is called 'Voluit Leven'. Voluit Leven is an treatment that tries to support people in accepting their negative feelings and emotions. People learn a new way of living instead of a trick. The online treatment is in Dutch and consists of a homepage with headings where all the different possibilities that the course offers can be selected (figure 3). This online treatment is based on a self-help book written method developed by Bohlmeijer and Hulsbergen [12]. This book is integrated in an online treatment that follows the complete book, but has some additional assignments.

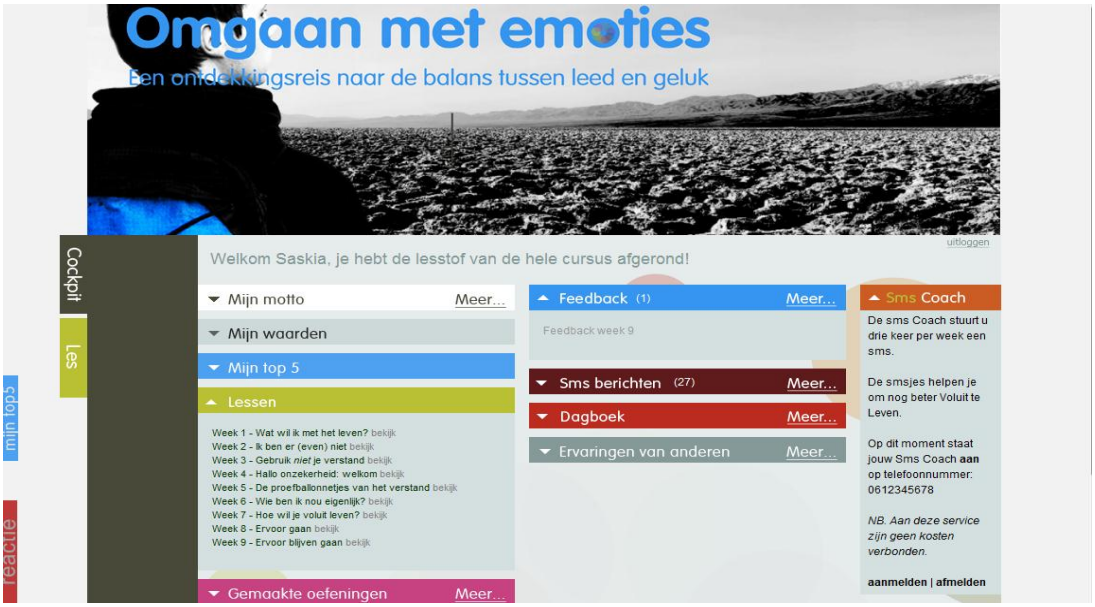


Figure 3. Screenshot of Voluit Leven

Earlier research has shown that not ignoring emotions helps, instead learn to live with them in the daily life. The purpose of the course is learning to cope with mild depression and anxiety feelings. The programme lasts nine weeks and works with lessons, exercises, feedback, text messages, dairies, text message coaching and support groups. The online treatment consists of three pillars that try to get people to accept their negative emotions [39]:

- Leaving the fairytale of a 'long and happy life';
- Learning to feel what is currently in someone's mind and accept the reality of life;
- Learning to discover what is really important in life and making this the basis of your actions.

These three pillars are based on two different therapies: mindfulness and the Acceptance and Commitment Therapy (ACT). Mindfulness means the consciously giving of attention in a specific way: purposeful [40]. Without judgment, learning what is going on in you [39]. ACT is based on accepting what

is out of your personal control, and which actions can be taken to improve a person's quality of life [41]. The aim of ACT is to create a meaningful life by effectively handling the pain and stress that life brings. A study of Fledderus has shown that ACT based self-help programme is effective when it is used for people with mild depression symptomatology [42]. Participants who received the guided ACT self-help treatment had a significantly greater reduction in their depressive symptoms directly after the treatment, than participants who were on a waiting list.

From the beginning of the treatment, this mindfulness and ACT points are combined from the begin of the treatment. This is done though [41]:

- Teaching psychological skills that enables a person to deal with thoughts and feelings that are painful and are known as ineffective. This is called mindfulness.
- Clarifying what is truly important and meaningful to a person and using this knowledge to guide and inspire someone's life

The Web-Based system

The web based application Voluit Leven is developed with the use of a User Centered Design (UCD). The core principle of this is the end-user involvement. Goals of the end-user should be taken into account during designing [33, 40]. The centrality of the end user is more important than good programming or design. The UCD model starts by exploring the needs of the end-users. After translating this needs into a design, a prototype will be created that will be evaluated and redesigned. When all the needs have been met, the last phase is the implementation [40].

These steps are applied to Voluit Leven by Oskam [40]. The methods he used were needs assessments by users, design evaluations, user tests, system usability scales and cognitive walkthroughs. In the needs assessments, some contextual and functional requirements and needs were found. The most important needs were the integration of personal feedback and contact with other users of the systems. The requirements of the system were that the content of the system had to be good and there must be clear user instructions. When this needs assessment takes place, the application has already been developed, so these results were largely not integrated in the design of the application [40]. In the design evaluation, users had to judge some screenshots with possible design. After the design evaluation, some changes were made in the design of the website. Some examples:

- The design was too business-like, this was overcome by making changes in forms, for example triangles in circles;
- The menu was unclear and changed in a 'cockpit'. Out of the needs and requirements it became clear that users have a preference for an overview page.

Out of the combination of user testing and cognitive walkthroughs by experts came observations which again led to improvements of the design. Three usability constructions were used to label the observations: satisfaction, effectiveness and efficiency. None of these constructions had a very positive or negative score. Most of the observations were related to the poor information quality. Finally, there were 57 improvements were made, ranging from spelling to lay-out. Out of the system usability test by users, it became clear that the average score of Voluit Leven was 89.3 on a scale from 0 to 100. This is a high usability score. [40]

The conclusion of Oskam is that the use of a User Centered Design has an added value for the application [40]. First of all the usability was increased, which resulted in an effective and efficient web based application. During the development all disciplines were collaborated. The collaboration of designers and developers will to lead to lower drop-out and non-usage rates.

2. Voluit Leven: a tool for mental diseases

In the Netherlands, about six percent of the population suffer from depression [43]. In reality, this percentage is higher, because some people still do not seek help or the symptoms are not recognized. It is estimated that more than a half of the people do not receive a proper treatment. Depression is at population level one of the most expensive diseases. In 2005, 773 million euro was spent on people with depression. This went mostly to mental health care (58%), followed by drugs (14%)[3]. A depression can occur at any age but starts in the most cases around the thirties. There are three main explanations for a depression: the biological, the social and the psychological factors. By a depression, a shortage in some brain areas occurs of the neurotransmitter serotonin and noradrenaline. Also, the sleep-wake rhythm and light intensity in the different seasons has a great influence. In addition to these biological reasons,

relationship and family problems can also be a significant factor in undermining self-esteem. It is unclear whether the depression is the cause, or the consequence of these problems [43].

Some people are so afraid, that a normal life is not possible anymore. It is estimated that 15% of the populations suffers from anxiety, which is almost 1.1 million people. Also, depressions have much to do with anxiety. When there is no obvious reason for the anxiety (pathological anxiety) and there are no physical conditions that can cause this, then anxiety is the main feature. Results from repeated population research have shown, that it is unlikely that there is an increase or decrease in anxiety diseases. In 2005, the costs for caring for people with anxiety were 286 million euros. The biggest costs were for the 30-44 age group. This is also the group with the most patients [4]. Anxiety is mostly related to depression, but there are some major differences in behaviour, perception and physical symptoms.

This study will focus on people with mild depression and anxiety. A mild depression is characterized by the temporary presence of depressive symptoms as described in table 1. When these symptoms are chronic and of great intensity, it is called a depression [44].

Table 1. Distinction between anxiety and depression

	Anxiety	Depression
Behaviour	Avoidance not related to specific situations	Indecision, inactivity, crying and delays in movement
Perception	Peaking on everyday matters	Self-blame, indecisiveness, slowed in mind and gloomy feelings are leading
Physical conditions	Heart palpitations and sweating	A lot of physical complaints

There are two methods to measure depression: semi-structured interviews, or questionnaires. This study will focus on the questionnaires: the Hospital Anxiety and Depression Scale- Anxiety (HADS-A,[45]) and the Center for Epidemiological Studies Depression scale (CES-D, [46]). Previous studies has found the cut-off scores that indicate the presence of clinically relevant depressive symptoms and also the cutoff for mild depression.

Mild to moderate depressive symptoms were represented on the scales of the HADS-A as > 15 and on the CES-D the score is >10 and <39 [46]. People with severe depressive symptomatology or anxiety (more than 1 standard deviation above the population mean on the CES-D (cut-off score ≥ 39, [45, 47]) or HADS-A (cutoff score ≥15; [48]) were excluded, because severe distress would require more intensive individual diagnostics and treatment.

3. Depression and anxiety related to Web-based interventions

Depression appears to be the primary target for internet interventions over the last three years [13]. This information and communication technology (ICT) are related to internet support or improve mental health conditions and mental health care. This is called e-mental health [13]. Different studies have shown that it is possible to decrease depressive symptoms immediately after the treatment and in the six-months follow-up with the use of web based applications [31, 49-52]. These results were also observed with regard to anxiety [51]. It is remarkable that there are, to our knowledge, no studies were found with evidence that depressive, or anxiety feelings increase or stay the same after using the internet intervention. This may be due to a publication bias: positive results being more likely to be published, than neutral or negative results [53].

Advantages of using e-health for depression and anxiety

There are many reasons for the use of internet technology. In studies this reasons are the most appropriate: reaching many people, easy storage of large amounts of information, providing personalized feedback and the ease of updating information [54]. The reasons for delivering health interventions with the use of internet are related to the unique advantages of the internet: reducing costs and increasing convenience for users, reducing health service costs, reaching isolated or stigmatized groups, timeliness of access to the internet, bridge geographic distance, and need for user control [54]. The key difference between intervention delivered via internet and not delivered via the internet are time and place [54].

Disadvantages of using e-health for depression and anxiety

One of the disadvantages, that many studies mention is the limitation to the access to online treatments offered through internet [51]. This is due to two reasons. First, in many countries from outside Europe, a small proportion (30% or less) of the population do not have the possibility to participate in online courses, because the care is not accessible enough. Second, outside Europe, 30% of the people don't have accesses to the internet. The reason for this is that people cannot receive internet at home [49]. Here, there may be a selection bias in the study population, because more highly educated people were included then lower educated people. High educated people have more access to care and internet when they have reached a better economic position. This is an argument against the use of internet interventions.

Another disadvantage is that for open access web-based interventions less than 1% completed all lessons of a treatment [14, 31]. This represents the *biggest* disadvantages of web- based interventions: many participants drop out of the intervention or do not use all components of the programme. The best scientific proven way to overcome the problem of adherence to the lessons or technology is still not known.

4. The integration of the manipulations in the design of Voluit Leven

The different manipulations are integrated in Voluit Leven by getting a level. Half of all users get the variant with a high or more variance of the manipulation, half of all users get the low or less variant of the manipulation. An exception on this is the manipulation feedback. Here is a difference made in automatic tailored given feedback or personally tailored given feedback. For the different manipulations these levels mean something different as can be seen in table 2 and will be explained beneath the table. The different manipulations will be separately explained, whit a screenshot, what makes it possible to see the integration in the design. Also the hypotheses that are formulated on the basis of chapter 2.3 will be given. Large screenshots of the manipulations within Voluit Leven can be found in appendix 9.

Table 2. Manipulation levels

	Feedback	**Text messages**	**Multimedia**	**Tailoring**	**Personalisation**
Half of users	Automatic	Yes	More	High	High
Other half of users	Personal	No	Less	Low	Low

Feedback

The way of giving feedback can be automatic or personally. The personally feedback will be given by a psychology master student of the University who have had special education for it. The student acts as tutor throughout the duration of the treatment. The users will be randomly divided to a particular tutor. Tutors can view the completed assignments, give feedback on these assignments and the users have the possibility to ask questions to the tutor. The tutors have the availability of a standard feedback. Automatic feedback is written by the developers of the course for the start of the course and will be tailored on the answers the users give. The screenshot can be seen in figure 4 and appendix 9.

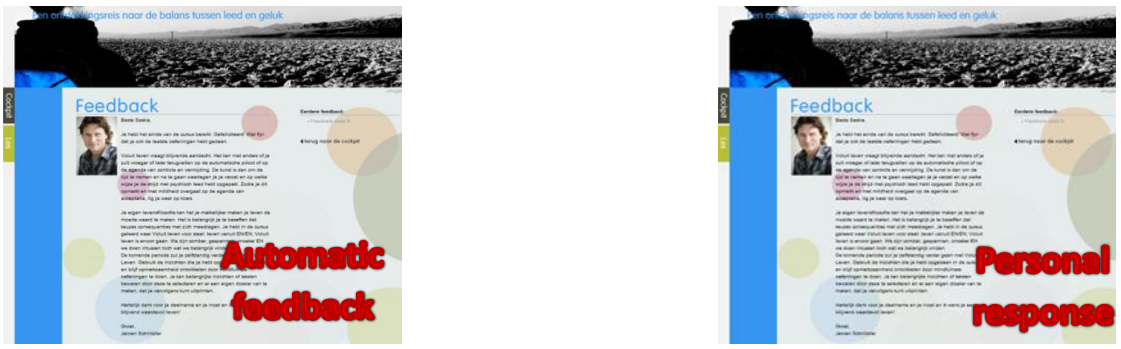


Figure 4. The integration of feedback in the design of Voluit leven

Text messages

There is a version with and without text messages. If users are in the design with text message support and they activated it, they will receive three times a week a text message consistent with the practices out of that week. The screenshot can be seen in figure 5.

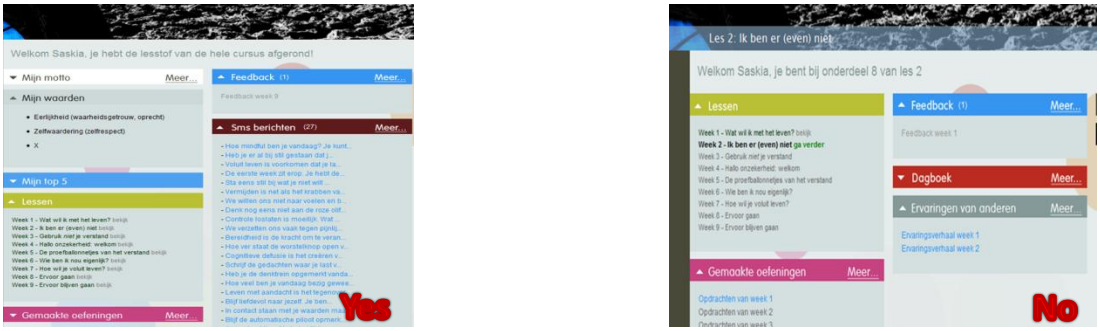


Figure 5. The integration of text messages in the design of Voluit leven

Multimedia

Multimedia can be More or Less. Less means that the application is textual completed with MP 3 assignments and images (2 elements). The 'more' version is the same as the 'less' version, supplemented with animations, videos, and interactive assignments (5 elements). The content of the lessons does not change within both variants. The screenshot can be seen in figure 6.

Figure 6. The integration of multimedia in the design of Voluit leven

Tailoring

Tailoring of the success stories can be low and high. Low means that the text starts with a beginning with the name of the user, this is only one element that is integrated in the design. The high variance has in spite of the name of the user in the beginning also three of these five aspects: age; the married state; work; most important complaint and reasons for participating in the course. The screenshot can be seen in figure 7.

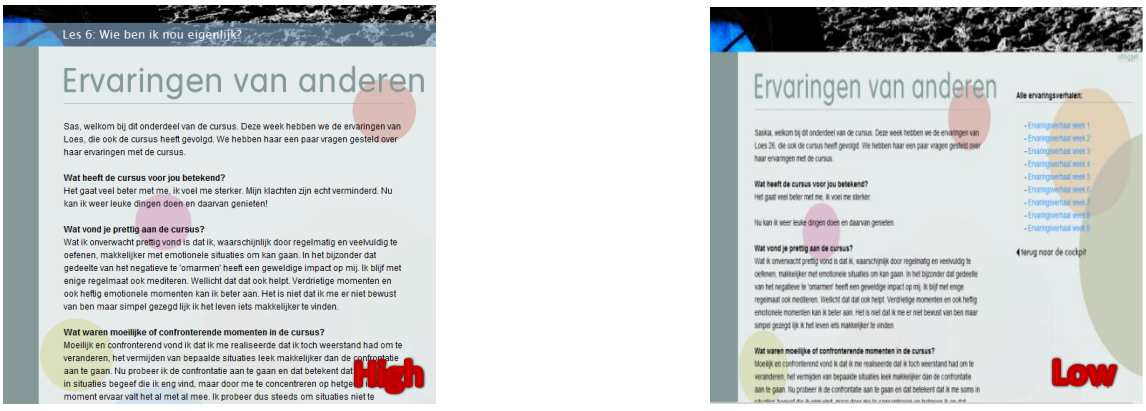


Figure 7. The integration of tailoring in the design of Voluit leven

Personalisation

For personalisation the difference between the high and the low variance is in the extent in which the homepage is adapted or can be updated by the user. In the low variance the homepage cannot be changed into personal preferences and the only personalisation that can be seen in this page is the name of the user, the progress that is stated and the mailbox that shows the inbox (3 elements). In the high variance

are some elements added. The user can change personal elements on the homepage like motto and values, and the users has the possibility to display interesting assignments in a top five on the homepage (a total of 6 elements). The screenshot can be seen in figure 8.

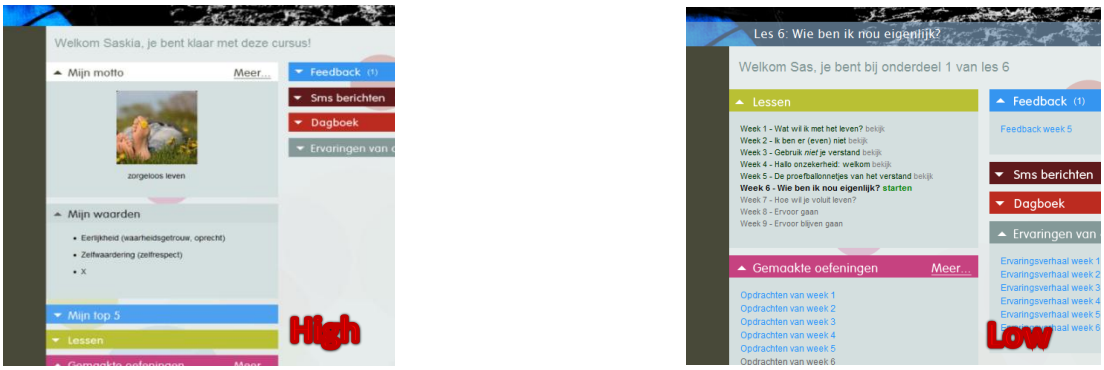


Figure 8. The integration of personalisation in the design of Voluit leven

Hypotheses

On the basis of the explanations above some hypotheses and the substantiating for this can be formulated.

Feedback	
Hypothesis	Users who get personally feedback achieve a lower drop-out rate than users who get automatically tailored feedback.
Substantiating	A result of personal feedback is that users are more persuaded. This results in more and better use of Voluit Leven.

Text messages	
Hypothesis	The users who receive text messages will be more motivated then users who do not get text messages so: the drop-out rate will be lower for users that receive a text message.
Substantiating	A result of the text messages is reminding and motivation. Because of this users will be more involved with the treatment and use it more persistent.

Multimedia	
Hypothesis	By adding five multimedia elements to the design, the dropout rate will be lower than by adding two multimedia elements to the design.
Substantiating	Multimedia has the power to motivate. Users who get five multimedia aspects will be more motivated then users who receive two multimedia elements.

Tailoring	
Hypothesis	The integration of success stories with four identification elements (high version) will lead to a lower drop-out rate then the integration of success stories with one identification element (low version).
Substantiating	Because of the higher identification in the text that is used in Voluit Leven, people can identify themselves more with the successful user. This results in more and better use of Voluit Leven.

Personalisation	
Hypothesis	The integration of six elements of personalisation (high version) will lead to a lower drop-out rate then the version with three elements of personalisation (low version).
Substantiating	Because of the high personalisation the application is more of the users themselves what results in a higher involvement.

5. The norms of adherence and attrition for Voluit Leven

Adherence and attrition are clarified in section 1. The norms for adherence and attrition for Voluit Leven are depending on the clear structure that the designers have built into the programme. The programme/treatment lasts nine weeks. Users have 12 weeks to finish the whole programme. There is an margin of three weeks built into the programme.

Intended usage

The designers have built a restriction in the programme. Two conditions must be met before new content of the lessons can be seen: all exercises of a specific week must be done, and there must be at least one week between the first log-in on the content of that week and the first log-in on the content of the next week. Lessons are equal to week numbers. It is estimated by the designers that 3 log-ins are needed to read the text and make the exercises of the lessons. This is an expectation and not necessary needed. For example:

- A user can log-in from Monday till Monday three times, The first Monday the content of lesson 1 is visible, after logging in on the second Monday the content of lesson 2 is visible.
- A user can log-in on Thursday and make the whole lesson at once. If the user logs in Saturday of the same week, he will not see new content, but he can see everything that had previously made. If he log-ins Thursday of the next week, or one of the following days, the content of the next lessons will be visible.

Because the 3 times of log-ins during nine weeks is estimated by the designers, this is defined as intended usage to measure adherence to the technology.

Also, some users activity levels are distinguished for the adherence measures. As can be seen in figure 9 on the next page, 4 levels of users activity can be determined. This will be explained below.

12 weeks group and 13-17 weeks group

The first level is a distinction between users that did finish the course within the 12 weeks, and users who did not. The 13-17 weeks group is separated from the 12 weeks groups for the entire study. The reason for this will be explained in the results, part 0.

Activity pattern

The second level is based on activity patterns. This is the distinction between the continuous users, discontinuous users and non-users are. All users there were within the 12 weeks groups can be further subdivided in these categories, To set the norm for discontinuity and non-usage, is looked to the total weeks the treatment takes. This is called the activity pattern. The total amount of weeks is nine weeks with a margin of three weeks.

- *Continuous user*: completed the whole treatment defined by 0-3 weeks of no log-ins. Users have 12 weeks to finish 9 lessons. Every lessons takes a week and a user cannot continue the course after finishing all lessons of that week.
- *Discontinuous user*: started to use the treatment but did not finish the whole course defined by 4-8 weeks no log-ins.
- *Non user*: never started to use defined by 9 weeks no log-ins.

Activity degree

The third level is the separation between low and high active users. To set the norm for high activity, the intended use of the treatment is leading. It is intended that 3 log-ins per week are needed to complete the treatment, this is a total of 27 log-ins over nine week. This amount of total log-ins is used as a cut-off (27 log-ins). Continuous users with an activity degree of <27 log-ins were characterized as *low active users*. Continuous users with an activity degree of ≥ 27 were characterized as *high active users*.

Completers and non-completers

High and low active users can be completers or non-completers. This means that users did/or did not finish the treatment, despite of logging in for 9-12 weeks. Because this can affect adherence and the standard structure of the programme made by the designers, this distinction is made.

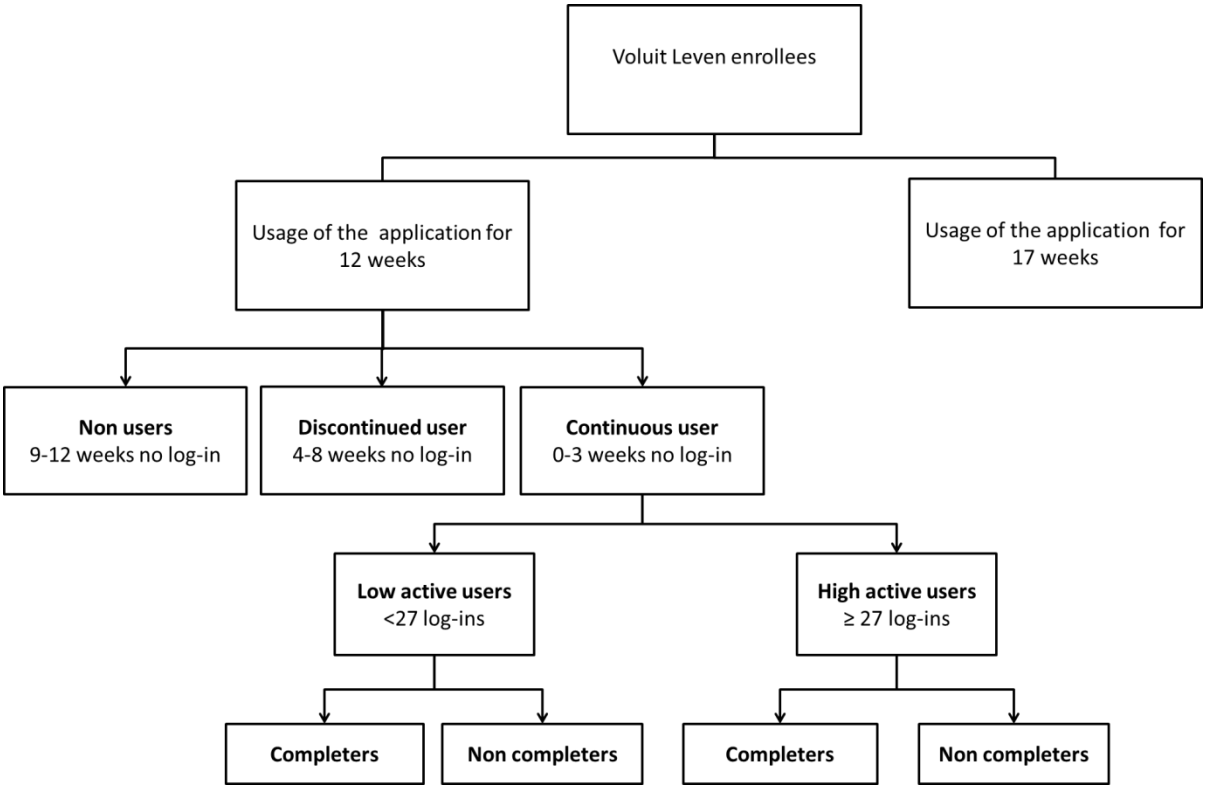


Figure 9. Activity pattern and activity degree

CHAPTER III
OBJECTIVE AND RESEARCH QUESTIONS

In the view of the current state of research within e-health (on the basis of chapter I and II), an objective and research questions for this study can be formulated.

Online self-help interventions for mild depression and anxiety show promising results [8, 12]. However, a large proportion of people do not alter the course. Research has shown that the effect of a course is greater if users complete the whole course [14]. However, there is little known about the effect of specific persuasive factors on adherence. In this study, it is intended to examine if five varying manipulations have an influence on adherence and if incorporating various combinations of affect usage patterns. The five manipulations are derived from persuasive technology (feedback, text message, multimedia, tailoring and personalisation) and chosen on the base of the potential impact these factors have shown in literature [15, 16, 18, 20]. Also, an assessment with an analytic hierarchy process plays a central role, to integrate the user's preferences. This has not be examined in this context before.

The objective of this study is assessing the influence of five persuasive manipulations on adherence, to gain insight in the dynamic of usage patterns of the web based application Voluit Leven, to trace reasons for non-usage and non-adherence, along with the identification of non-related persuasive technology factors that can have an influence on adherence.

Relevance

This research gives information about adherence to the technology. It gives insights in the definitions of adherence and which methods are used to measure and assess this at this moment. Also, can be shown if it is possible to improve the adherence rate by the use of persuasive manipulations and which of the manipulations is responsible for this. Indeed, other research has shown that the treatment is effective after finishing the whole treatment. Evidence can be showed of manipulations that really promote adherence to the technology. The results can be used to improve the effects of Voluit Leven.

Besides this, the increase of adherence has the power to increases the effect of online courses for public health. As stated before, there are not more people suffering from mild depression or anxiety, but more and more people using expensive first line care because over the last decade people are better informed. If these people could use a less expensive and effective online course this may reduce the public health costs. Also, the design development can make a step forward with the results of the effect of the manipulations.

The research question is:

Which persuasive manipulations have the greatest influence on the adherence of Voluit Leven?

The sub questions are:

1) Which of the five persuasive manipulations is relevant to keep using the online treatment?
2) What are the differences and similarities in the weights of the manipulations by users who did receive a specific type of manipulation from those that did not?
3) Do the five difference manipulations have an influence on the amount of completed lessons?
4) What are the usage patterns for different combinations of manipulations as represented by the eight different designs and the different variances of the manipulations?
5) What is the attrition pattern of Voluit Leven and is there a connection with manipulations?
6) Do users give other factors as an explanation for their non-usage, that were not related to the persuasive manipulations?

CHAPTER IV
METHODS

1. Assessment: Analytic Hierarchy Process Questionnaire
2. Research design
3. Design of the experiment
4. Methods of data collection in connection with research questions
5. Data analysis
6. Intended users
7. Justification of telephone interviews

Different methods will be used to answer the research questions. Data is needed about the manipulations that are indicated as influencing adherence to the technology. Data is needed about the real usage of the manipulations. Also, information is needed about the reasons for decline in usage and other not persuasive technology related factors that can have an influence on adherence.

Firstly, the assessment that is used for this study will be explained: the Analytic Hierarchy Process Questionnaire. The method will be explained, the scientific justification will be given and the realization of the questionnaire. After this the role of the AHP and the other methods will be explained in the research design. The way in which the manipulations were integrated by using an experiment and the connection with the research methods will be made clear. After this, the methods of data collection that are used to get an answer on the research questions will be explained followed by the methods for data analysis. This chapter ends with an exploration of the intended users, and the justification of telephone interviews.

1. Assessment: Analytic Hierarchy Process Questionnaire

In this study, the assessment will be done with the use of an Analytic Hierarchy Process- survey (AHP), to measure the opinion about the persuasive manipulations. Users have to indicate their preferences for manipulations, based on a description that is given within the questionnaire. Each question consists of 2 criteria for which users have to indicate they think are most important. A pairwise comparison is needed for this. Firstly, users have to indicate which manipulation is the most important to keep using Voluit Leven (an example is given in picture 10, made with Expert Choice software) and secondly, in which the degree the manipulation is more important (example is given in figure 11).

Figure 10. Example of AHP question

Figure 11. Example of AHP question (2)

A total of 30 question is needed for this AHP questionnaire (the total questionnaire is given in appendix 2). Each manipulations needs to be valued against all other five criteria. In table 3 can be seen that this gives a total of 15 questions. The numbers 1 till 15 show all questions. The other 15 questions are the

questions in which degree the manipulation is important, this for each comparison. This brings the total amount of questions on 30 (see appendix 2).

	Automatic response	Personal feedback	Text messages	Multimedia	Tailoring	Personalisation
Automatic response	X	1*	2	3	4	5
Personal feedback	1/ ** value of 1	X	6	7	8	9
Text messages	1/ value of 2	1/ value of 6	X	10	11	12
Multimedia	1/ value of 3	1/ value of 7	1/ value of 10	X	13	14
Tailoring	1/ value of 4	1/ value of 8	1/ value of 11	1/ value of 13	X	15
Personalisation	1/ value of 5	1/ value of 9	1/ value of 12	1/ value of 14	1/ value of 15	X

Table 3. Questions of AHP questionnaire

*= the numbers are representing the questions in the AHP score.

**= by diving the value that users gave by the corresponding question (1 by 1 and 2 by 2) the weights for all possible pairwise comparisons can be obtained

This online questionnaire will be held under the users of Voluit Leven to rank the manipulations which influence peoples decisions to use the site, and to keep using the site. This can give the hierarchy of the five manipulations based on the priority value that users gave them.

Validated method

The AHP is a validated multi criteria decision technique. It is a quantitative method used to select a preferred alternatives by using a pair-wise comparison of the alternatives based on their relative performance against the criteria [55]. For this study it can give users the chance to make relative judgments and multiple decisions. The method can overcome the difficulty that people have with dealing with more than seven considerations at a time and making absolute judgments. Another advantage is that it has a great discrimination power between the alternatives. This means that AHP makes it possible to make a clear distinction between alternatives. Besides this, the mathematics behind the analysis are theoretically justified and assumption free [55, 56].

The choice for the 9 points ratio scale

Alternatives are scored, using a pair-wise comparison method. This pair-wise comparison will be made on a nine point ratio scale [56]:

1= equal importance
3= moderate importance
5= strong or essential importance
7= very strong or demonstrated importance
9= extreme importance

(2, 4, 6 and 8 are the intermediate values.)

The 1 to 9 scale has proven to be an acceptable scale and recommended for the use in AHP [57, 58]. However, any ratio scale can be used in this method, but people can only compare stimuli in a limited range, the range must not be too wide or too small. If the range is too wide, elements that are close together tend to be summarily lumped together [57]. Because there is great experimental evidence that the 1 to 9 scale can portray an individual's intensity of preferences, this scale was chosen for this research [55, 57-60].

Scientific justification of AHP

The AHP analysis starts with representing the decision: the goal to be achieved, the alternatives being evaluated and the criteria to value these alternatives (appendix 2). Normally, requirements are determined that the solution of the goal must meet, but in this study this will not be done. The AHP analysis will be used to rank the criteria and through this to find a hierarchy in this criteria [56]. The criteria are therefore: personal feedback, automatic response, text messages, multimedia, tailoring and personalisation. The alternatives are the different designs.

The criteria (manipulations) are all based on a persuasive technology and are not affiliated with requirements. However, there are some conditions which should meet the criteria.
Criteria should be independent of each other and should not overlap. The criteria discriminates between alternatives in a meaningful way in the sense that the goal of this study is to look for a criterion that has the greatest chance to reduce non-usage. Each criterium represents another part of this design. The criteria are also non-redundant and not few in number [56].

Online questionnaires
The questionnaire used will be an online survey (appendix 2), based on the guidebook of Baker [56]. There are some advantages of using a survey. It is a good method to collect original data for a population that is too large to observe [60]. All participants of the site should be included and that are too many people to interview everyone personally. Besides this, it is a good method to measure attitudes. In the survey the intention to use would be the central point, this is represented through the attitude towards the criterion that the user thinks has an influence on adherence.

The design of the online survey will be as follows:

- Questionnaire instructions;
- 15 pair-wise comparisons
- 15 question to select the degree of preference on a nine point scale.

This survey will be integrated in another questionnaire that will be held at T_1 and will be in Dutch. The intention is that people fill in the questionnaire at the end of the course. This will be done by sending an e-mail with a link to the questionnaire to all people that start using the treatment, regardless they stop using the treatment or not. *This means that people who completed the course and people who drop out will be approached so that they can complete the questionnaire.* All this is done because of the intern validity of this research. The goal of this research is to get an insight in the dynamic of usage patterns and to find out the influence of five persuasive design manipulations on adherence. The higher the response rate and the more drop-outs that are included, the more the resulting conclusions are valid for the study population [60]. The survey will be pretested by asking 10 non-users to complete the questionnaire. Ambiguous questions or questions that people cannot answer or unclear instructions will be made clear in this way. The main points of the improvements were: adding the option 'not preferred' to maintain clarity, fewer instructions, less scientific language and the instruction more in the imperative. The data will be analyzed with the use of Excel to measure the inconsistency of the different questionnaires. All questionnaires with an inconsistence level above 0.3 will be excluded from the analysis [55, 59]. This is done because the literature has shown that this is an acceptable inconsistency level [55, 59]. Besides this, out of the calculations within Excel can be seen that the differences in *average* weights given by the users (n=79) between the inconsistency of 0.2 and 0.3 is very small as can be seen in table 4. By taking the inconsistency of 0.3, 35 (79-44) users could be included. Besides this, for online questionnaires, the inconsistency of 0.3 is more common [55, 56].

Table 4. Average weights of the manipulations for inconsistency levels 0.2 and 0.3

	Weights					
Inconsistency 0.3	0,342	0,121	0,181	0,145	0,128	0,083
Inconsistency 0.2	0,343	0,116	0,195	0,135	0,132	0,079

2. Research design

To explore the persuasive manipulations that can influence adherence to the technology, lessons and course, four-methods research design was used. Via an AHP analysis, individual preferences for the manipulations will be found. Via an open question, the feedback button and the telephone interviews it becomes possible to explain non-usage or discontinued usage. Log files enable an assessment of the actual usage of the manipulations and drop outs. All of these results combine to give insight into the usage pattern and preferences of individual users for specific technology features. Figure 3 presents the chronology of the data collection process.

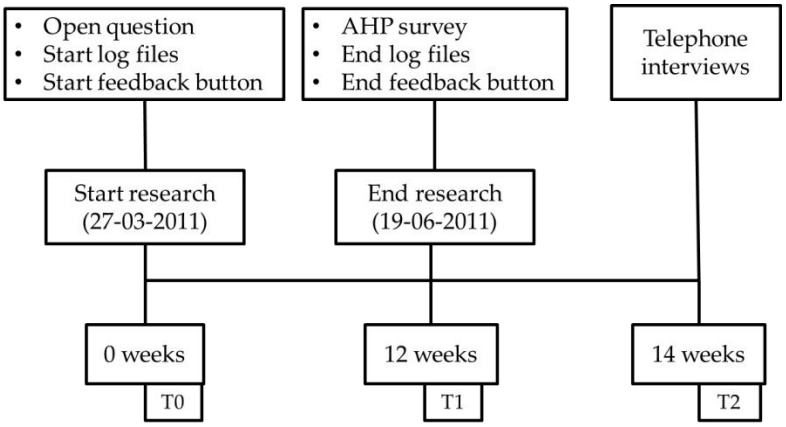


Figure 3. Chronology of data collection

There are three different measurement points:
1. Directly prior to the treatment, before the start of the treatment (T_0)
2. After completing the treatment (T_1)
3. Two weeks after completing the treatment (T_2)

These different measurement points are specified in table 5. The demographic information, the depressive and anxiety complaints and the usage motivation will be measured at T_0. T_1 will only measure the manipulation preferences. At T_2 the manipulations preferences and usage motivation will be measured again.

Table 5. Measurement points

Measurement Points	T0	T1	T2
Depressive complaints	X		
Anxiety complaints	X		
Demographic information	X		
Manipulation preferences		X	X
Usage motivation	X		X

Data about the adherence to the technology and usage are kept in the application of the online course: log files track the amount of completed lessons, the number of log-ins and usage patterns. The feedback button stores feedback given by users. Telephone interviews are used to get supplementary information about (non-) adherence to the technology and (non-) usage. In addition two online questionnaires will be used. One for the open question at T_0 and one for the AHP at T_1. In table 6 can be seen which outcomes will be measured in the online questionnaires.

Table 6. Measurement instruments

Outcome	Measuring instrument	Reference	Amount of items in questionnaire
Depressive complaints	Center for Epidemiologic Studies Depression Scale (CES-D)	[45, 46]	20
Anxiety complaints	Hospital Anxiety and Depression Scale-Anxiety subscale (HADS-A)	[45]	7
Demographic information	Age, gender	-	21
Evaluation of manipulations	Analytical Hierarchy Process	[55, 59]	30
Usage motivation	One open question	-	1

3. Design of the experiment

The basis of this study is an experiment with the tool Voluit Leven. In this experiment the features will be manipulated.

The design of the web based application is based on the fractional factorial design [61]. The basis of this is the identification of components that are active in an intervention and which level of component leads to the best outcome. Through the use of this method the influence of the different manipulations can be determined without losing statistical power. The active parts of the intervention can be identified without testing all combination of factors. A full factorial experiment would require 2^5= 32 combinations. In this case it should be a large experiment that is not feasible in terms of time and logistics. One option would be to reduce the size of the experiment but that is unsatisfying from a scientific point of view. Promising manipulations out of the persuasive system design must not be removed out of the study [62]. Under these circumstances, a fractional factorial design can be a solution because all factors can be studied using many fewer combinations. Also, the experiment will use this design.

In this experiment the different manipulations will be leading, instead of the different designs. This is because the effect of the manipulations will be measured and not the influence of the different designs on adherence. The designs are a tool for this purpose. In table 7, an overview is given of which manipulations are in the 8 different designs. Because of the design of the experiment the half of all users get a variant with a high or more variance of the manipulation, the other half of all users get the low or less variant of the manipulation. An exception of this is feedback: automatic given response or personally given feedback. This gives the possibility to analyze options of features integrated in a design.

Table 7. Fractional factorial design

Design	Feedback	Text messages	Multimedia	Tailoring	Personalisation
1	Automatic	Yes	Elaborate	High	High
2	Automatic	Yes	Basis	Low	Low
3	Automatic	No	Elaborate	Low	Low
4	Automatic	No	Basis	High	High
5	Personal	Yes	Elaborate	Low	High
6	Personal	Yes	Basis	High	Low
7	Personal	No	Elaborate	High	Low
8	Personal	No	Basis	Low	High

To measure the effect of manipulations instead of designs, this means that design will be taken together. The designs with the same level of a manipulations will be taken together. All other manipulations are regarded as noise. An example of this is given for the manipulation feedback in table 8. This can be done because of the fractional factorial design. The first three manipulations are full factorial: all different options are compared to each other and all effects are mutually adjusted [61, 62].

Table 8. Grouping of designs to find the influence of manipulations (in this case feedback)

Design	Manipulation	Other manipulations regarded as noise
1 till 4	Automatic response	Text messages, multimedia (elaborate and basis), tailoring (high and low) and personalisation (high and low)
5 till 8	Personal feedback	Text messages, multimedia (elaborate and basis), tailoring (high and low) and personalisation (high and low)

The manipulations tailoring and personalisation are balanced, but not fuyll factorial. This means that not all possible options are compared to each other as can be seen in table 8. This overview is made with use of Treeage software. If all options should be compared then the outcome of the tree would be 32 branches, see figure 10 on page 30. For feedback, text messages and tailoring all options are compared, but for tailoring and personalisation, some are missing. All options with red triangles at the end of the branches

of the trees ends are integrated in the experiment. All branches that ends with green circles are not integrated in the design.
This can be done, since the integration of these manipulations (or manipulation of the feature) is relatively small. Tailoring is only about the success stories with the goal that users can identify themselves with Voluit Leven. This is a specific part of the web application and not integrated in all text. For this reason, the expectation is that it should not affect feedback, text messages or multimedia. This also applies to the manipulation personalisation. The integration in the design can only be seen in a motto on the home page and (in one of the latest lessons) values are added to this motto. The effect of personalisation and tailoring on the effect of feedback, text messages or multimedia is expected to be very small, or even negligible in comparison with all parts of the site that would be personalized, or tailored [61] .

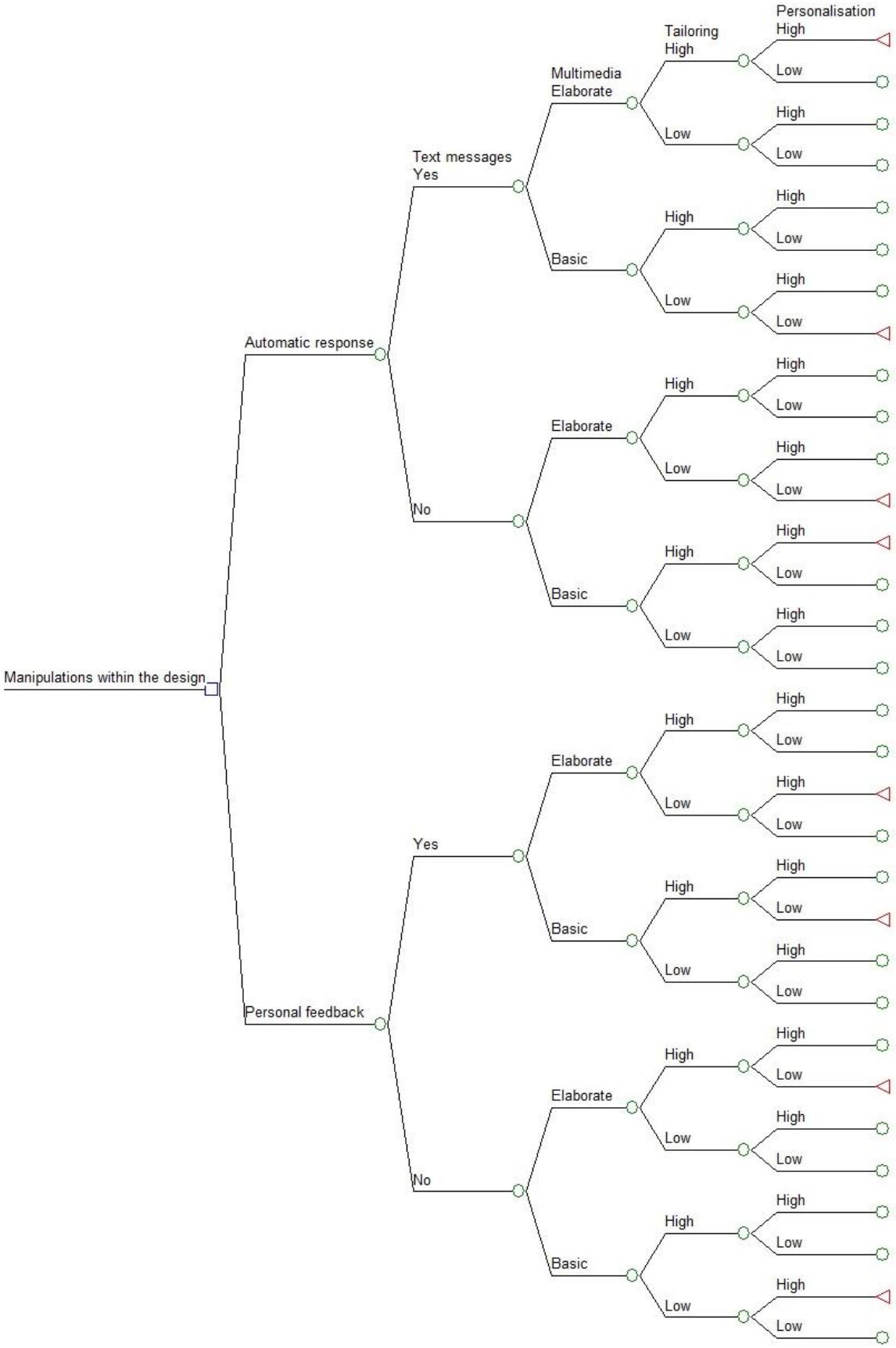


Figure 10. All comparisons of manipulations integrated in Voluit Leven (* and **)
*: red triangles are the branches with manipulations integrated in the experiment
**: green circles are the branches with manipulations that are not tested in the experiment

4. Methods of data collection in connection with research questions

Four different methods will be used to get an answer on the research questions. Table 9 presents an overview of the research instruments and the accompanying characteristics of the study. Besides this, the number of users who were enrolled in the various methods are given. Below is table 10 (page 32) where an explanation of the five methods is given.

Table 9. Research instruments

Research instrument	Purpose	*Amount of included users/respondents*
AHP survey	Evaluation of the importance of manipulations	128
Log files	Usage of features of the web application Usage patterns based on number of log-ins Amount of completed lessons	179
Open question	Suspected factors that influence adherence Overview of expectations about usage	239
Telephone interviews	Suspected factors that influence adherence Overview of expectations about usage Reasons for (non-) usage or decline in usage	15

After nine weeks of usage an *online AHP survey* (n = 204) was performed to investigate users' experiences with using the systems core features (feedback, text messages, multimedia, personalisation, identification). The survey consists of 30 questions. After using the treatment, the users have to fill in a questionnaire that results in an overview of the importance of the manipulations by giving them a value between 0 and 1. All manipulations together have then the value 1. This questionnaire will be received by sending an e-mail with a link to the questionnaire to all people that started using the intervention, regardless if they stopped using the intervention, or not.

Via *log files* the activity patterns (continuous vs. discontinued vs. non-users), activity degree (high vs. low), the amount of log-ins, the use of system features and the number of completed lessons will be measured. The users will be randomly divided in eight designs as discussed above. The log files will be analyzed on the basis of grouping users that were in a design, based on the selection described above. Also, an average of the number of log-ins and the number of completed courses for all eight groups together will be calculated.

A *online open question* was administered at baseline to all users of the system (n = 204) to assess suspected factors that can influence their adherence. The question was: 'What do you think is important for you to keep using the online course?' All the given answers will be screened broadly and (depending on the answers) a general list of factors will be made. In total, 239 users returned the open question integrated in the questionnaire.

Telephone interviews will be done directly after finishing the intervention. Two weeks after the initial use of the web application, all users received an e-mail with an invitation for a questionnaire. In this questionnaire, a question was integrated asking if they are willing to participate in the telephone interview. The questionnaire at T_1 will be sent to all users that start with the intervention, regardless if they complete the treatment, or not. The users that respond positively will be selected on the base of the design and whether if they stop using the intervention or not. A total of 15 users is interviewed. The ideal situation would be: half drop-outs and half finishers and as many as possible users out of design 1, as this is the design with all manipulations. The method used is the convenience sample. After users have signed in they were called on their house phone. The researcher did use Skype Voice record with a credit, what gives the extra option to record interviews. In the telephone interviews, users were requested to report their opinion via open ended questions.

The input for the telephone interviews are: the open question, the response at the end of questionnaire T1 where users can give all kinds of response and the results of the AHP and log files. The outcome are an overview about expectations around usage and support, and factors other than the values of persuaded manipulations that can explain the adherence to the technology and (non-) usage.

Connection of methods with the research question

All four research methods are linked to another research question. An overview of this is given in table 10. The middle column gives the central elements/questions that are needed to answer the research

questions that are formulated in Chapter I (the intended research question is represented by a number in the last column). The first column gives the appropriate method.

Table 10. Connection between research part, instrument, adherence level and question number

Research part	Research instrument	Questions to answer	Adherence level	Research question out of Chapter III
I. Influence of manipulations on adherence	**Analytic Hierarchy Process**	*Which of the five persuasive manipulations are evaluated as important to keep using the online treatment?*	**1 (to the course)**	**1**
	Analytic Hierarchy Process	*Are manipulations valued differently by users who received that type of manipulation from those who did not?*	**1 (to the course)**	**2**
	Log file (completed lessons)	*Do the five manipulations have an influence on the amount of completed lessons, and to what extent?*	**2 (to the lessons)**	**3**
II. Adherence to the technology and attrition	**Log files (number of log-ins)**	*What are the usage patterns? Which manipulations of the web application are really used?*	**3 (times of logging in) 4 (use of manipulations)**	**4**
	Open Question Telephone interviews	*What are the reasons for decline in usage? What are other influencing factors?*	**-**	**5+6**
III. Connection between all levels of adherence	**All methods**	-	**-**	**1-6**

The first research part is about *Influence of manipulations on adherence*. This part has three research questions and two methods: the AHP and a part of the log files. To answer the research question given in the last column, additional questions were formulated for each method. These are given in the middle column and in italics. These additional questions were needed to structure the data analysis. Besides this they were used to give an complete answer to the questions of chapter I, although several methods were used to answer one question.

The second research part is about *adherence to the technology and attrition* and consists of three methods. One method to answer research question 3 and two methods to answer research question 4. Here were also some additional questions to ensure the structure and the completeness of answering the research questions.

The third research part is about the *connection between all levels of adherence* and is a merging of part I and II.

5. Data analysis

For all methods, other data analyses were used. These were explained per method.

Statistical analyses

Statistical analyses were performed using SPSS version 16.0. Standard descriptive statistics were performed and paired samples t- tests to measure significance. Also regression analysis (One-Way Anova) were used to find differences in correlations, supplemented with Pearson's correlations, Kendall tau C and Spearman's rho to find correlations for data that is not on interval or ratio scale.

Analysis of online AHP survey
The AHP is used in order to identify the users value of the six persuasive manipulations. This will be done by sending an e-mail with a link to the questionnaire to all people who started using the treatment, regardless if they stopped using the intervention or not. The data was analyzed with the use of Excel and SPSS version 16.0 to measure the inconsistency of the different questionnaires. All questionnaires with a inconsistence level above 0.3 were excluded from the analysis (n=47). The outcome is an overview of the importance of the six manipulations. All manipulations get an value, were the total value was 1.

Analysis of usage
In order to identify the actual use of the web application by patients (n = 204) during the study period (9 weeks). The measurement of usage was defined by five log file measures:

(1) *Number of completed lessons* (Appendix 5); measures how many lessons were completed during the nine weeks of treatment.
(2) *Number of log-ins* (Appendix 5); measures how many time users have logged in during the entire nine weeks.
(3) *Activity pattern (continuous vs. discontinued vs. non user)*; measures how regularly users(for all three groups) have actually used the web application during the total study period (Appendix 5).
(4) *Activity degree (high vs. low)*; measures how many log-ins have been made during the whole study period (intended usage of 27 log-ins) (Appendix 5).
(5) *Use of system features*; measures if features were activated and how many times users actually clicked on it.

(1) Number of completed lessons
The number of completed lessons will be measured on a ratio scale. The values between 10 and 20 % mean the same as between 80 and 90% and have an absolute zero. The scale of the manipulations are for all five manipulations dichotomous (yes/no), consequently nominal or ordinal. On the base of this the right regression analyses is One Way Anova. The outcome is represented with a correlation coefficient, based on if there is a relation between the manipulations that are tested. The stronger the relation (the farther of the zero point), the more influence has the manipulation. This can be positive or negative.

(3) Activity pattern
To set the norm for *discontinuity and non-usage*, we looked at the total period the treatment took. The total amount of weeks was nine weeks.

- *Continuous user*: completed the whole treatment as defined by 0-3 weeks of no log-ins. Users have 12 weeks to complete 9 lessons. Every lesson takes a week and a user cannot continue the course after finishing all lessons for that week.
- *Discontinuous user*: started to use the treatment but did not finish the whole course as defined by 4-8 weeks of no log-ins.
- *Non user*: never started to use the treatment defined by 9 weeks of no log-ins.

(4) Activity degree
To set the norm for *high activity*, the intended use of the treatment is the leading value, that is set by the designers of the treatment. It is estimated that 3 log-ins per week are needed to complete the treatment; this is a total of 27 log-ins over nine week. This amount of total log-ins is used as a cut-off (27 log-ins). Continuous users with an activity degree of <27 were characterized as *low active users*. Continuous users with an activity degree of ≥ 27 log-ins were characterized as *highly active users*.

Analysis of comparison made in AHP online survey and log file part 5.
After getting the results of the AHP analysis and the log files, both results should be compared to get an overall conclusion. Out of the AHP analysis can be seen if users who get the manipulation value it with the same importance as users who do not get the manipulation. This result can be compared to the correlation coefficient and shows if both analysis gives the same preferences for manipulations.

Analysis of open question
The open question and feedback button were analyzed using the intuition of the researcher. All reactions were scanned for factors that were credibly able to have an influence on adherence. In total, the researcher found 10 unique problems or reasons among 239 patients (analysis can be found in appendix

3). Each user mentioned one problem. The coding for problem categories were derived from the literature about predictors for adherence.

Analysis of telephone interviews
The input for this were the open question, the response of the feedback button and the results of the AHP and log files. Users who completed the intervention (n=15), were called for expectations around usage and support, and factors other than the values of persuaded system design that can explain their decline in usage. Most preferable are users from design 1 (n=..) because they get all manipulations.

6. Intended users

All participants that use Voluit Leven were recruited through an advertisement in the Dutch newspapers Trouw, Volkskrant and Metro. Those who were interested in participating were directed to a questionnaire were they completed the HADS- A anxiety and CES-D depression scale [45, 46]. Voluit Leven is at this moment in the development phase. Partly because the funding structure has not yet determined. This means that the ultimate target population has not been established. It is only known that patients with mild depression and anxiety are a part of the target population. On the basis of the scores of the questionnaire it will be determined whether the user meets the inclusion and exclusion criteria. After filling in the questionnaire, the users receive an immediate message via email and on screen about whether or not they meet the criteria.

The inclusion criteria:
1) a score above 10 on the CES-D scale;
2) a score beneath 15 on the HADS-A;
3) older than 18 years of age.

The exclusion criteria:
1) The presence of severe depression symptoms represented by a score on the CES-D above 3;
2) The presence of severe anxiety represented by a score above 15 on the HADS-A;
3) Use of depression or anxiety related medicines in the last three months;
4) Receiving a depression or anxiety related treatment during participation;
5) Insufficient time to spend to the course, on average 3 hours a week;
6) No access to a computer with access to the Internet;
7) Unable to speak Dutch.

All this users will be included in the AHP analysis and the experiment. The inclusion of users and non-users is done to get a higher power of the analysis. The inclusion and exclusion criteria are relatively narrow. The results only give the estimated possibilities of people with mild depression and anxiety. The inclusion criteria in this study promote the homogeneity and good interpretable findings for this domain. [60]

Randomization
At the start of the study, the users get an invitation by e-mail for the T0 questionnaire. Randomization takes places after receipt of the questionnaire. Participants will receive an email with the outcome of the randomization and the link for the start of the online course.

The start of the intervention will be with an enrolled population of 100% 'intent-to-use' participants, who have already gone through a recruitment, selection and informed consent procedure. All participants have already agreed to use and adopt the intervention [22].

After receiving the informed consent and the T0 questionnaire, the randomization was conducted centrally at the University of Twente. Users were individually randomized and distributed over the eight conditions. It is stratified by gender, age (older and younger than 50) and training. In that way there is the guarantee that the groups regarding gender, age and education are fully comparable.

The users that participate in the telephone interviews were selected by the T1 questionnaire. Users had to answer the question whether they would be willing to cooperate. If they gave a positive answer they all received a reaction by e-mail to make an appointment. The selection of the interviewees was at time of registration, design and if they did complete the treatment or not. The expectation was that 15

people were needed to get no more new information from the telephone interviews. If more people have registered they will receive an email thanking them for their willingness to participate.

The burden on the user

The users have to spent 2 to 4 hours a week on Voluit Leven. This was for nine weeks. Time and place may be chosen by the users. The total burden arising out of the research will be one and a half hours. The users have to fill in a questionnaire at T_0, the start of the intervention. This will take 15 minutes. The questionnaire at T_1 will take 45 minutes as well, some users will have telephone interviews that will take half an hour.

7. Justification of telephone interviews

Telephone interviews have a few advantages: they are cheaper and faster than face-to-face and the respondent will be more honest in giving socially disapproved answers. This is important in this study. The real reasons why users stop using the intervention are important and socially disapproved answers overcome the problem of negative talk about the system. A disadvantage is the ease with which people can hang up. It is much easier to terminate a telephone interview than a face-to-face interview. This problem can be overcome by working with a 100% intended to use population [60]. For this study this is the case because all users were asked after finishing the intervention if they are willing to participate in a telephone interview. Only the users that respond positive will be called. This will be done with the use of Skype with the additional programme Skype recorder. This makes it possible to call users on the house phone with the possibility to record the conversation. It is expected that 15 users are enough to get no more new information. If there are more users who are willing to participate they will receive an e-mail in which they will be thanked for their willingness.

CHAPTER V
RESULTS

Part I- User characteristics

Part II- Influence of manipulations on adherence

1. The five PSD manipulations that are important to keep using the online treatment
Adherence level 1: Adherence to the course
Research question 1: What is the relevance of the five persuasive manipulations, important to keep using the online treatment?

2. Differences and similarities in valuing of manipulations by users who did receive a specific type of manipulation from those that did not
Adherence level 1: Adherence to the course
Research question 2: What are the differences and similarities in the weights of the manipulations by users who did receive a specific type of manipulation from those that did not?

3. Influence of five different manipulations on the amount of completed lessons
Adherence level 2: Adherence to the lessons
Research question 3: Do the five difference manipulations have an influence on the amount of completed lessons?

Part III- Adherence to the technology and attrition

4. Usage patterns- times of logging in
Adherence level 3: times of logging in
Research question 4: What are the usage patterns of the different combinations of manipulations as represented by the different variances of manipulations?

5. Usage patterns- use of manipulations
Adherence level 4: use of manipulations
Research question 4: What are the usage patterns of the different combinations of manipulations as represented by the different variances of manipulations?

6. Attrtion
Research question 5: What is the attrition pattern of Voluit Leven and is there a connection with manipulations?

7. Reasons for decline in usage
Research question 5: What is the attrition pattern of Voluit Leven and is there a connection with manipulations?

8. Other influencing non related persuasive factors
Research question 6: Do users give other factors as an explanation for their non-usage, that were not related to the persuasive manipulations?

Part IV- Connection between all levels of adherence

9. Overview of the importance of the manipulation

10. Overview of the influence of all manipulations integrated in the designs, coupled with possible causes resulting out of this study

Introduction

To get a first impression of the web based application Voluit Leven, a short introduction will be given, containing views of users. This introduction is a result of the combination of two qualitative methods: answers from the questionnaire at T1 and the telephone interviews (interviews can be found in appendix 4, in Dutch).

The *impression* users get from the course was mostly positive. The course distinguished itself from other courses because of the addition of personal feedback.

Many users were *motivated* to participate in Voluit Leven by interest. They want to know how an online course for depression could be offered and if it really has an effect. All of these users were positive about the design of the course and the way in which the lessons were offered. Despite those users that expected little from it (is it connected with the user's problems and is personal contact just not necessary in these situations) the experience was positive for all the users. Users who followed the course to actually learn to deal with emotions, were more cautious in their judgements. When users had problems with following the lessons, this was caused to a decline in their own situation and not on the website or the course itself. If a user was positive, this was caused by the personal feedback or because the approach was personal. In these cases, the course had a direct connection with the user's problems. This was also the reason most users were motivated to use the course during all weeks. This impression is clearly reflected in some responses people gave (questionnaire T1):

> *'Het mag nog wel een keer gezegd: ik heb veel aan de cursus gehad; mis het wel!' (user 979)*
>
> *'Ik was heel enthousiast en gemotiveerd om aan de cursus te beginnen. Dat gevoel is in de afgelopen maanden afgenomen. Voor mij heeft dat denk ik ook te maken met het anonieme via internet. Ik vind een persoonlijkere benadering prettiger. Voordeel is wel dat je niet geregeld naar iemand toe hoeft om te praten. Maar ik vond het af en toe toch een beetje abstract de inhoud van de cursus. (user 1088)*
>
> *'De cursus lijkt vaak op veel zwaardere problematiek (zware angsten en fobieën) gericht dan de mijne (negatief en chagrijnig in het leven staan). Dat maakt het vaak moeilijk om er in de stof mee te gaan.'(user 841)*

Positive points were the ease of use. There were not too many computer skills necessary and the use of language was nice. One of the most heard *negative points* was the absence of interaction options with the person who gave the feedback. For many users, the treatment would have had a greater influence on their problems, if there was a possibility to respond to the received feedback. What *annoyed* users, was the letter size. Users had trouble reading the text.

All users that received automatic response had 'discovered' that the answers were just standard. Regardless of what they had filled in, they received feedback, which gave irritation. From all interviewed users that had received personal feedback, only one felt that the feedback came from a standard format. This feelings arose because the user saw no connection between the input she had given and the feedback that was returned.

Part I – User characteristics

This chapter describes the user characteristics. This information is needed to get an impression of all users that have signed in for Voluit Leven, which of them is high active or a continuous user and if correlations can be found between user characteristics. Also a specification of the users that were included in the quantitative methods AHP and log-files is given.

Information about the user characteristics

A total of 239 users had signed up and came through the screening. The users (n=239) were aged between 19-88 (mean 45) years. The majority of the registrations were female (n=169) with a high education level (table 11). It is notable that relatively many highly educated people (188/239= 79 %) have registered for the treatment.

Table 11. User characteristics

Characteristic		n	%
Gender	Male	70	29.3
	Female	169	70.7
Age	< 21	5	2.1
	21-30	30	12.6
Min = 19	31-40	47	19.7
Max= 77	41-50	66	27.6
Average= 45	51-60	65	27.2
	61-70	21	8.8
	>70	5	2.1
Education	Low *	4	1.7
	Medium **	47	19.7
	High ***	188	78.7
		Average	**Standard deviation**
Anxiety score	HADS-A (n=239)	9,72	2,56
Depression score	CES-D (n=128)	17,90	8,94

*: Lager beroepsonderwijs;
**: Middelbaar beroepsonderwijs, Middelbaar algemeen voorgezet onderwijs;
***: Hoger algemeen onderwijs, Hoger beroepsonderwijs en Wetenschappelijk onderwijs

The separation of users

As described in the introduction, the 239 users will be separated in different groups. For all different adherence levels, different comparisons of users will be made. For this comparison users are subdivided based on their activity. The different levels will be described.

12 weeks group and 13-17 week group

Usage patterns were made out of the log files, and it became clear that not all 239 users have logged in and completed the treatment within the standard time that was set by the designers. A distinction is made between these two groups as can be seen in figure 5, showed by the red lined boxes.

The users in the 12 weeks group have (n=179):

- Completed the treatment within 12 weeks (intended usage), or
- Logged in for more than 12 weeks but did not complete the treatment within 13-17 weeks.

The users in the 13-17 weeks group (n=60) have all completed the treatment, but not within the standard 12 weeks, as determined by the designers of the treatment. These users are considered as a separate group, because the intended usage (3 times of logging in during 9 weeks) was not met. Remarkable is that none of these users that were interviewed, thought they had used the application for 13-17 weeks (n=8). An explanation of this could not be found. This distinction is valid for many adherence levels as described in the section below.

Continuous, discontinued and non-users
Also a distinction is made between the continuous users, discontinuous users and non-users are. All users there were within the 12 weeks groups can be further subdivided in these categories, as represented by the bleu lined boxes (figure 6).

About 33% of the users (n=88) continued using the web application for 12 weeks. The intended usage will be only reached by less than half of the continuous users (15%: 37 out of the 239 users). These 27 users are the **hardcore users**: users who are highly active in using the web application. 38 users are discontinued users and 61 users are non-users. Only for the results of attrition the discontinued user and the non-users are taken together. This is because these 99 users stopped using the web based application defined by 4 till 12 weeks of no log-in. This distinction is valid for many adherence levels as described in the section below.

It appears that one user (ID 905) is a discontinuous user but has reached week 10 by the last update. This users has completed all nine weeks of the treatment. Out of the extensive analysis of the usage pattern (table 12) can be seen that this user does not log-in for many times. This is an example of a user that makes the whole lesson during one log-in per week. The user has completed the treatment because he/she logged-in for 8 different weeks. It is possible that the user has read all text, made all exercises and have completed the treatment. This is a discontinuous user because the users did not log-in according the intended usage. Because this user is registered as a completer, this user will be included in the calculations focuses on completers. This brings the total amount of users that competed the treatment on 102: 13 low active completers, 28 high active completers, 1 discontinues completer and 60 users that complete the treatment within 17 weeks (represented by the grey boxes in figure 5).

Table 12: Usage pattern of user 905

	Week number																	
ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total amount of log-ins
905	1	0	2	0	1	1	1	0	1	0	0	1	1	1	1	0	0	11

High and low active users
The next level of users is that from the high and low active users as represented by the green lined boxes of figure 14 on page 40. Adherence can be influenced by the level of activity of a user. This is the reason why continuous users are separated into high active users and low active users. 43 continuous users are low active and 37 continuous users are high active. For different levels of adherence, this distinction is valid. This will be described in the next section.

Completers and non-completers and Finishers and non-finishers
Figure 14 also shows a specification of the completers and non-completers. From the continuous users, 30% of the low active users (5% of total amount of users) are completers. From the high active users 76% (12% of the 239 users) are completers. The separation between completers and non-completers between is made because these users (n=39) did not complete the treatment, despite of logging in for 9-12 weeks. It is possible that these users are registered as non-completers because of the definition that is users for a log-in. A log-in should be on another day of the week, but two exceptions were made for the calculations within SPSS. When the log-in is on the same day but there is more than 20 hours between both log-ins, the main rule is still valid and when the time between the two log-ins is less than 6-hours, the main rule is still to expire. It is possible that log-ins of the 39 users were not registered caused by these restriction, what makes it impossible for the user to finish the course with the 27 log-ins that were to meet the criteria for the intended usage of this study.

The distinction between completers and non-completers is something different than all finishers of the treatment. All finishers of the treatment are represented by the grey boxes of figure 5, this is a total of 101 users, plus the exception that is mentioned above, which brings the total on 102 finishers. But this is a grouping of users that finished the treatment within the standard period of 12 weeks, and within 13-17 weeks. For this reason, not all 102 users were used to say something about adherence.

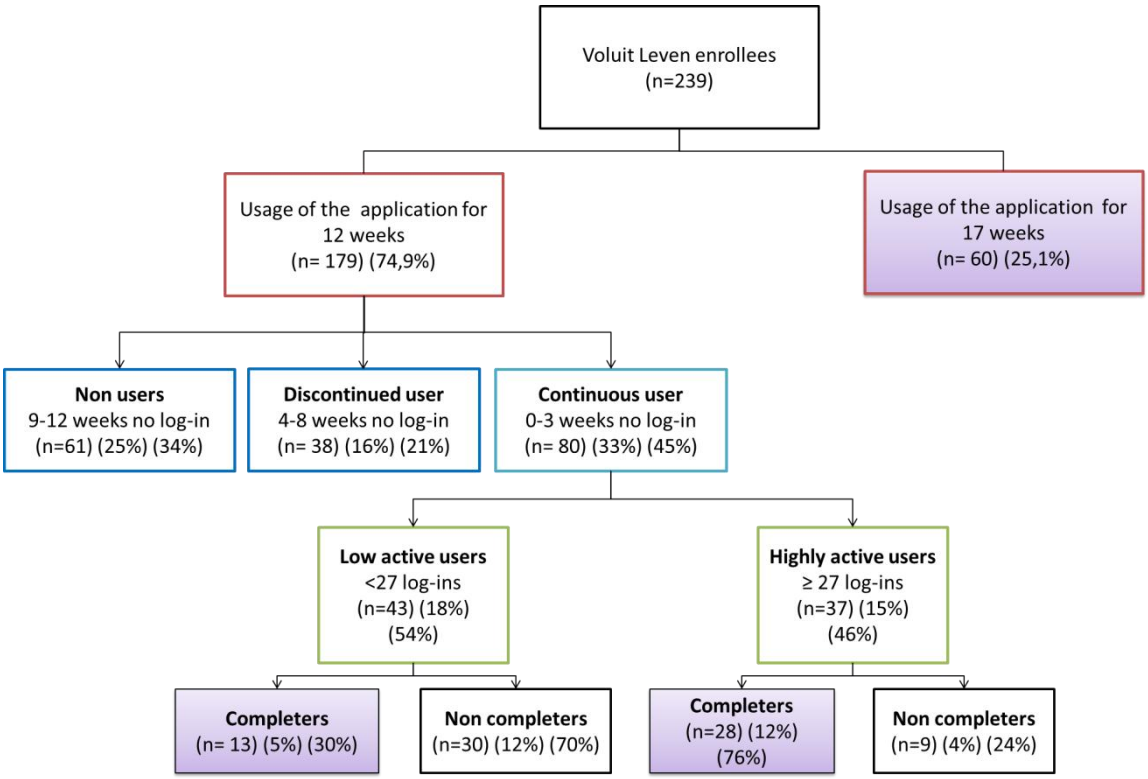


Figure 14. Users activity for Voluit Leven

Included users for Part I- Influence of the manipulations on adherence

For the different adherence levels within part I, not all 239 users are included. For adherence levels 1 and 2 will be described which users were included.

Adherence level 1: Adherence to the course

Adherence level 1 consists of research questions 1 and 2. For these research questions, the selection of users is based on the outcome of the AHP questionnaire. From the 239 users, 128 users (53%) have completed the whole questionnaire. 79 users (61,7%) were consistent (consistency ratio > 0.3) in their answers, 47 users (37,3%) were not consistent (figure 15). For AHP questionnaires, this 37,3% of users that were inconsistent is not remarkably high [55, 59]. All 79 users who responded consistently are included.

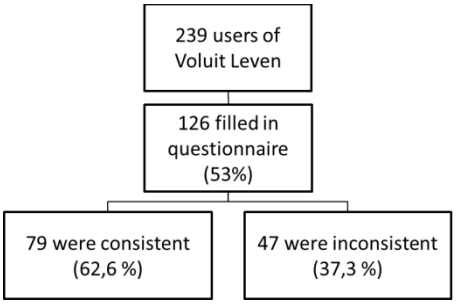


Figure 15: Overview of included AHP questionnaires

Adherence level 2: Adherence to the lessons

Adherence level 2 consists of research question 2. For this level all 239 users are included and no separation is made between 12 or 17 weeks patterns, continuous, discontinued and non-user, or low and high active users.

Included users of Part II- Adherence to the technology and attrition
Part II of the results consists of adherence levels 3 and 4. For both adherence levels the included users will be described.

Adherence level 3: Times of logging in

Adherence level 3 consists of research question 4. For the results of adherence level 3, a distinction is made between users who have used the application for 12 weeks and users have who used the application for 13- 17 weeks. Out of the log files, usage patterns were made and it became clear that not all 239 users have logged in and completed the treatment within the standard time that was set by the designers. A distinction is made between these two groups as can be seen in figure 14, showed by the red lined boxes.

Also, a distinction is made between the non-user, discontinued user and the continuous user. In figure 6, this is represented by the blue lined boxes. All these three groups are compared to each other separately.

A third distinction that is made between users of adherence level 3, is that of the completers and non-completers (figure 14). These are continuous users, out of the 12 weeks group. There is no distinction made between high and low active users. This means that the completers from the high and low active users are taken together within the SPSS calculations, which means that with completers 41 (13+28) users are meant, and with non-completers 39 (30+9) users.

For the graphic representation of the usage patterns, a distinction is only made between the 12 weeks group and the 13-17 weeks group represented by the red lined boxes in figure 14.

Adherence level 4: Use of manipulations

Adherence level 4 consists of research question 4. For this adherence level there is a distinction made between users that used the manipulation for 12 weeks and users that used the application for 17 weeks (the red lined boxes of figure 14). No distinction is made between continuous, discontinued or non-users to get groups with more users to compare to each other.

Besides this, the continuous users were filtered to get a distinction between high and low active users that received manipulations(green lined boxes of figure 14).

Attrition

The included users of research question 5 are the discontinued users and the non-users (dark blue lined boxes in figure 14). These two groups are taken together to get one value for attrition.

Patient characteristics of continuous, discontinued and non-users / low and high active users
After the subdivision of the users it is interesting to know if users in the different groups differ from each other. When taking into account the user characteristics, there are some differences between the continuous user, the discontinued user and the non-user as can be seen in table 13 on the next page. The highest amount of females are in the continuous users group (73.8%). Although, discontinued and non-users also have more than 60% female users within their group. Also, in all three groups, the higher educated user is most represented. Also age does not differ from each other. There is no difference between the continuous, discontinued and non-user.

Table 13. Specification of the continuous, discontinuous and non-user

		Continuous user (n=80)		Discontinued user (n=38)		Non-user (n=61)	
Characteristic		**%**	**n**	**%**	**n**	**%**	**n**
Gender	Male	26.2%	20	28.9%	10	38.8%	23
	Female	73.8%	60	71.1%	28	60.7%	38
Education	Low*	2.5%	2	0%	0	1.7%	1
	Medium**	16.2%	12	23.7%	9	28.3%	17
	High***	81.2%	66	76.3%	29	70.0%	43
		Average		**Average**		**Average**	
Age		46.3		42.5		44.7	
		Mean		**Mean**		**Mean**	
Anxiety score	HADS-A (n=239)	9.46		10.26		9.70	
Depression score	CES-D (n=138)	18.44		24.30		17.75	

*: Lager beroepsonderwijs; **: Middelbaar beroepsonderwijs, Middelbaar algemeen voorgezet onderwijs; ***: Hoger algemeen onderwijs, Hoger beroepsonderwijs en Wetenschappelijk onderwijs

Also, a specification is made between the high and low active users characteristics as can be seen in table 14. This comprehensive comparison shows that the high active user does not differ from the low active user (table 14), although one correlation can be found: *the higher the anxiety score, the more active the user will be* (table 15).

Table 14: Specification of high and low users

		High active (n= 37)		Low active (n= 43)	
Characteristic		**n**	**%**	**n**	**%**
Gender	Male	10	12.5	11	13.8
	Female	27	33.8	32	40.0
Age	<21	0	0%	1	1%
	21-30	6	7.5%	3	3.8%
	31-40	5	6.2%	6	7.5%
	41-50	11	13.5%	17	21.2%
	51-60	11	13.8%	13	16.2%
	61-70	4	5%	1	1.2%
	>70	0	0%	2	2.5%
Education	Low*	1	1.2%	1	1.2%
	Medium**	4	5.0%	9	11.2%
	High***	32	40.0%	33	41.2%
		Mean	**Standard deviation**	**Mean**	**Standard deviation**
Anxiety score	HADS-A (n=239)	8.65	2.56	10.16	2.25
Depression score	CES-D (n=138)	17.24	9.13	19.64	8.17

*: Lager beroepsonderwijs; **: Middelbaar beroepsonderwijs, Middelbaar algemeen voorgezet onderwijs; ***: Hoger algemeen onderwijs, Hoger beroepsonderwijs en Wetenschappelijk onderwijs

Table 15. Correlations between anxiety and depression scores and patient characteristics

		HADS-A	CES-D	Low or high active	Continu or discontinu	Lessons completed
HADS-S	Correlation	1,000	0,132	0,269**	-	-0,142
	Sig. (2-tailed)	-	0,165	0,001	-	0,097
	n	138	112	138	138	138
CES-D	Correlation	0,132	1,000	0,134	-	-0,102
	Sig. (2-tailed)	0,165	-	0,158	-	0,238
	n	112	112	112	112	112

** Spearman's rho Correlation: significant at the 0.01 level (2-tailed)

Sub-Conclusion

In this chapter, the subdivision of users is described together with the inclusion of users in the different adherence levels. Also users characteristics were identified, it became clear that the majority of the users of Voluit Leven is female and highly educated. The continuous, discontinued and non-users do not differ from each other. Also the low active users does not differ from the high active user. Only one correlation can be found between all users characteristics and users activity: the higher the anxiety score, the more active the user.

Part II – Influence of manipulations on adherence

In this part, adherence to the lessons and to the course will be highlighted with the use of quantitative methods. This part will give an insight in the relevance of the five manipulation to keep using the online treatment, evaluated by the users themselves. This will be compared to outcome of the influence that the five manipulations have on the amount of completed lessons, measured with SPSS. With that, an answer is given to research question 1, 2 and 3. For each adherence level will be first described which users are included, then how the data is processed after which explanation for these results will be given.

1. Weights of the manipulations

With the use of AHP a view can be obtained which of the manipulation are evaluated as important to keep using the online treatment. This is represented in research question 1 and is called adherence to the course in this study.

Adherence level 1: adherence to the course

Out of the 126 filled in questionnaires, 79 were consistent with an average consistency level of 0.14. The average consistency of the inconsistent questionnaire was 0.48. The 79 consistent were included. The users had to indicate in a pairwise comparison, which of the two manipulations is the most important to continue using Voluit Leven and to what extent.

Table 16. Weights of the manipulations.

Personal Feedback	Text message	Automatic Response	Multimedia	Tailoring	Personalisation
0,359*	0,169*	0,128	0,128	0,126*	0,090
Important		**Less important**			**Unimportant**

*: significant higher than the manipulation to the right (see appendix 7 for calculation of paired samples test)

As can be seen in table 16, personal feedback is evaluated as the most important, followed by text messages, these differences are significant at 5% (p=0,000) resp. (p=0,005). The categorisation is made by the researcher, based on spread of the weights. Also tailoring is evaluated as significant (p=0,001), but is weighted as less important. Personalisation is evaluated as unimportant to keep using Voluit Leven.

2. Are manipulations valued differently by users who did receive that type of manipulation from those that did not?

It is also interesting to know if users weight manipulations different if they had received the manipulation, from users who did not receive that manipulation or did receive it in the low variant. This is related to research question 2 and adherence level 1. All 79 users that respond consistent (with a consistency ratio of 0.3) where included in this part of the analysis.

Adherence level 1: adherence to the course

In Voluit Leven, the manipulations are integrated in designs. All 239 users get 5 manipulations. Depending on the design, the manipulations were received in different levels. This can be seen in table 17. For instance design 1: they get automatic feedback, text messages, multimedia in the elaborate variant, tailoring in the high variant and personalisation in the high variant. A total of 11 users was included in design 1.

Table 17. The designs that are taken together to get groups with an higher power

Design	Feedback	Text message	Multimedia	Tailoring	Personalisation	*n*
1	Automatic	Yes	Elaborate	High	High	11
2	Automatic	Yes	Basis	Low	Low	44
3	Automatic	No	Elaborate	Low	Low	36
4	Automatic	No	Basis	High	High	22
5	Personal	Yes	Elaborate	Low	High	51
6	Personal	Yes	Basis	High	Low	20
7	Personal	No	Elaborate	High	Low	35
8	Personal	No	Basis	Low	High	20

In the last column (n) of table 17 can be seen that the amount of users for design 1 and 8 is small (11 resp. 20). To get an higher power to answer research question 2 (more users to compare to each other), users that receive the same level of manipulations are taken together. For instance for feedback. The users that received automatic response were taken together and compared to the group that received personal feedback. Because all users get five manipulations, the remaining four manipulations are regarded as noise. This can be seen in table 18. This is also the case for text messages (table 19), multimedia, tailoring and personalisation.

Table 18. Grouping of users for the comparison of feedback for research question 2

Design	Manipulation	Other manipulations regarded as noise	*n*
1 till 4	Automatic response	Text messages, multimedia (elaborate and basis), tailoring (high and low) and personalisation (high and low)	11+44+36+22
5 till 8	Personal feedback	Text messages, multimedia (elaborate and basis), tailoring (high and low) and personalisation (high and low)	51+20+35+20

Table 19. Grouping of users for the comparison of text messages for research question 2

Design	Manipulation	Other manipulations regarded as noise	*n*
1,2,5 and 6	Text messages	Automatic response, personal feedback, multimedia (high and low), tailoring (high and low) and personalisation (high and low)	11+44+51+20
3,4, 7 and 8	No text messages	Automatic response, personal feedback, multimedia (high and low), tailoring (high and low) and personalisation (high and low)	36+22+35+20

The outcomes of the comparison for feedback can be seen in table 20. This calculations are made with the use of the paired samples T test (SPSS) to set the significant difference on not more than 10% and because an comparison is made between two independent groups. As can be seen in the first grey column of table 20, the group that was receiving personal feedback weighted it higher than the group that received automatic response. For the group who received personal feedback, this difference was significant (with the number below in table 20).

Both groups weight automatic response as less important than personal feedback, the second grey column. Only for the group that received automatic response, this difference is significant.

Table 20. Ranking of manipulations based on getting automatic or personal feedback

	PF**	AR*	TM	MM	T	PS	Amount of users
Automatic response	0,311	0,148	0,186	0,140	0,113	0,102	39
Personal feedback	0,406	0,109	0,152	0,116	0,139	0,078	40
Total	0,359	0,128	0,169	0,128	0,126	0,090	79

**: significant at 5% (p=0.018) with the number below
*: significant at 10% (p=0.071) with the number below

There is a significant difference in the manipulation text message as can be seen in table 21. The users that received text messages weighted it significantly higher than users who did not receive text messages.

Table 21. Ranking of manipulations based on getting text messages or not

	PF	AR	TM*	MM	T	PS	Amount of users
Text message	0,361	0,142	0,201	0,111	0,105	0,081	46
Not getting text message	0,357	0,110	0,123	0,152	0,155	0,103	33
Total	0,359	0,128	0,169	0,128	0,126	0,090	79

*=significant at 5% (p=0.019)

Users who did not receive multimedia seem to expect more from it than users who did receive multimedia, this difference was not significant (p=0,234). This can be seen in table 22.

Table 22. Ranking of manipulations based on getting elaborate or basis multimedia

	PF	AR	TM	MM	T	PS	Amount of users
Elaborate multimedia	0,366	0,126	0,184	0,114	0,127	0,082	45
Basis multimedia	0,350	0,131	0,148	0,146	0,125	0,101	34
Total	**0,359**	**0,128**	**0,169**	**0,128**	**0,126**	**0,090**	**79**

Users who did not receive tailoring seems to expect more from it than users who did receive tailoring (success stories), this difference is not significant (p=0,525). This can be seen in table 23.

Table 23. Ranking of manipulations based on getting the high or low tailoring variance

	PF	AR	TM	MM	T	PS	Amount of users
High tailoring	0,379	0,131	0,154	0,122	0,118	0,097	30
Low tailoring	0,347	0,127	0,178	0,132	0,131	0,086	49
Total	**0,359**	**0,128**	**0,169**	**0,128**	**0,126**	**0,090**	**79**

Users who did not receive personalisation seems to expect more from it than users who did receive personalisation, this difference is not significant (p=0,171). This can be seen in table 24.

Table 24. Ranking of the manipulations based on getting the high or low variance of personalisation

	PF	AR	TM	MM	T	PS	Amount of users
High personalisation	0,359	0,131	0,182	0,134	0,117	0,078	36
Low personalisation	0,359	0,126	0,158	0,123	0,134	0,101	43
Total	**0,359**	**0,128**	**0,169**	**0,128**	**0,126**	**0,090**	**79**

Remarkable is that the users who did receive personal feedback, automatic response and text messages all weighted it higher than the users who did not get that specific manipulation (table 20 and 21). Exactly the opposite can be seen for multimedia, tailoring and personalisation. The users weighted it higher when they did not get the manipulation, and with that expect more from it (table 22,23 and 24).

Inconsistency of AHP between groups

Because some striking results can be seen out of the inconsistency of the AHP questionnaire, this will also be highlighted. Table 25 presents an overview of the inconsistency levels of the AHP questionnaires that were filled in by all users (n=126). Striking is the high inconsistency of the group that receives personalisation (0,420). This high inconsistency means that users had no clear understanding of the manipulation. The user had no consistent, rational image of the manipulation (each time users filled in a question about personalisation, something different was keep in mind) and gave no consistent answers for the questions related to personalisation. This is in accordance with what the users in the telephone interviews indicate. The users that were asked (n=5) to personalisation aspects, could not remember it was integrated in the treatment/website. A reason for this could be that this aspect was integrated in one of the lessons.

Table 25. Inconsistency levels of the different groups

	The manipulation that was received	**Inconsistency level**
Feedback	PF	0,275
	AR	0,269
Text messages	Yes	0,262
	No	0,267
Multimedia	Yes	0,258
	No	0,281
Tailoring	Yes	0,305
	No	**0,241**
Personalisation	Yes	**0,420**
	No	0,265

Explanation of AHP scores with telephone interviews

The results out of the quantitative methods above can be compared to the qualitative method. It can be seen that the quantitative methods correspond with the qualitative methods.

Out of the telephone interviews it became clear that users who received personal feedback were all very enthusiastic, this correspond with the AHP outcome. It was seen as an added value and a manipulation that could not be missed. The most important reason for this was that users themselves feel heard. This was in contrast with the users who get automatic response. The most important difference between both types of feedback is that personal feedback is 'human' (physical given without face to face contact) and automatic response 'computer' (feedback automatic tailored by a computer). The users who received automatic response, all felt that it was not physical. The feedback was too general and not enough specified to the user themselves.

> *'Jammer dat er geen persoonlijke feedback wordt gegeven. Op deze manier heeft de cursus hetzelfde effect als het invullen van een testje in de Flair.' (user: 835)*

> *'Persoonlijke feedback erg gewaardeerd.' (user: 1165)*

'Naar het eind toe had ik steeds minder met automatische response. Het werd steeds meer een automatische beantwoording, dat gevoel kreeg ik heel sterk aan het eind. Te weinig gericht op de specifieke inhoud die ik geef. De feedback hoeft niet persoonlijker ingericht te worden met video's of foto's, maar de inhoud van de tekst was gewoon niet genoeg op mezelf gericht. Kwam niet goed binnen op deze manier. Het voordeel was dat ik het gevoel kreeg dat niet al mijn feedback 'beoordeeld' werd waardoor het anoniem voelde. Dit gaf mogelijkheden om meer open te zijn.' (user: 960)

The weights of text messages (weighted as important) can also be explained with the use of the telephone interviews. Half of the users (8 out of 15) found it a fun experience, but one that was not specific needed to continue using Voluit Leven. For most of the users, only a few were personal (out of the 25 text messages) in the sense that they were corresponding to their situation.

'Soms vond ik ze leuk, soms te kinderlijk. Ze hadden duidelijke raakvlakken met de lesstof en soms was het echt een reminder. Meestal was de timing niet ideaal. Ik heb me er niet aan gestoord.' (user: 951)

'Mijn ervaring was wel leuk om éven weer wat te lezen maar ze zijn standaard. Het is goed om je bij de les te houden. Ik hoefde ze niet persoonlijker, ik had er zo genoeg aan. ' (user: 986)

'*Ik heb ze gelezen maar vond het vooral een leuk kleurplaatje. Het was niet motiverend. Het is maar net hoe je in elkaar zit. Waren algemene kreten en ik denk dat het wel motiverender was als het meer op mijzelf gericht was. Waren wel leuke zinnen om even bij stil te staan maar wel algemeenheden.' (user: 989)*

Most of the users did use multimedia. This happened because of the integration in the exercises. The design of the treatment made it impossible for a user to complete a lesson correctly (this means: doing all exercises) without watching the multimedia. For most of the users it did not feel as an added value, but as something that should be done. For this reason the weight of multimedia could be low. None of the users did read the success stories (tailoring) very often. Most commonly heard reason for this was that users were interested in their own problems and not those of someone else.

'Ik heb ze niet gelezen. Het sprak mij niet aan. Het voegde niets toe. Ik had gewoon geen interesse. Het leidde mij af van mijn eigen ding. Misschien ga ik twijfelen over mijzelf qua antwoorden geven. Ik ging mezelf vergelijken met anderen. Ik heb het expres zo gelaten.' (user: 989)

Ik heb ze weinig gelezen. Ik had er geen behoefte aan. Het ging om mezelf en niet om anderen. Het was allemaal succes, succes. Daar zat ik niet op te wachten. (user: 1151)

Just 1 of the 15 users have had an added value from personalisation. A part was not interested, a part did not see it, and a part did not feel any added value .

*'De vragen over personificatie zijn vreemd voor mij als gebruiker. Ik heb er het beste van gemaakt.' (*user 1188)

'Ik vond het zeker prettig dat ik mijn eigen motto en afbeelding in kon voegen. Moeilijk maar leuk. Hadden wel meer elementen van mogen zijn.' (user: 1155)

Sub-conclusion

The outcomes of adherence level 1 (to the course) shows that personal feedback and text messages are the two most important evaluated manipulations to keep using the online treatment (significant at 5%: p=0.018 resp. 0.019). Followed by automatic response (p=0,071). Users that received these manipulations weight it significant higher then users who did not receive this manipulation. These results of the quantitative method AHP was corresponding with the results out of the telephone interviews.

3. Do the five different manipulations have an influence on the amount of completed lessons, high and low active or continue and discontinued user, and to what extent?

This central question of this section is: Are the manipulation that users evaluate as important to keep using the online treatment in accordance with the log files? Or, are the outcomes of adherence level 1 (to the course) and 2 (to the lessons) common. With the use of SPSS, an answer will be find on research question 3. One-Way Anova makes it possible to see if the manipulations have an influence. Also will be looked for relations between the activity degree and patterns of users and the amount of completed lessons (detailed description in part 0). Therefore, all users were included in this section. The users were grouped as in section 2.0.

Adherence level 2: adherence to the lessons

To make it possible to get results on manipulation level with enough users to compare, it is necessary to group users. This will be done on the basis of: getting, or not getting (or high and low) the manipulation. The example for feedback and text messages is given in the following two tables: 26 and 27.

Table 26. Grouping of users for the comparison of feedback for research question 3

Design	Manipulation	Other manipulations regarded as noise	*n*
1 till 4	Automatic response	Text messages, multimedia (elaborate and basis), tailoring (high and low) and personalisation (high and low)	11+44+36+22
5 till 8	Personal feedback	Text messages, multimedia (elaborate and basis), tailoring (high and low) and personalisation (high and low)	51+20+35+20

Table 27. Grouping of users for the comparison of text messages for research question 3

Design	Manipulation	Other manipulations regarded as noise	*n*
1,2,5 and 6	Text messages	Automatic response, personal feedback, multimedia (high and low), tailoring (high and low) and personalisation (high and low)	11+44+51+20
3,4, 7 and 8	No text messages	Automatic response, personal feedback, multimedia (high and low), tailoring (high and low) and personalisation (high and low)	36+22+35+20

The amount of completed lessons

To be able to comment on the influence of the manipulations on the amount of completed lessons, two parts will be analyzed. First the differences in averages of the amount of completed lessons between the groups that get the high and the low variance. Secondly, the amount of users that have completed all the lessons will be taken into account. For this part again the users that got the high variance of the manipulation will be compared to the users who got the low variance of the manipulation. Because separate groups will be re-grouping and compared (users within the groups under 'manipulation' in table 31) and the manipulation is on ratio scale (the value between 10% and 20% means the same as between 80% and 90% and have an absolute zero), this will be done with One-Way Anova in SPSS for the calculations of the data and the significance.

Table 28: Influence of the manipulations

Manipulation	High or low variance	Amount of users	% all 9 lessons completed *	Average amount of lessons completed *
Feedback	AR	113	*38,1*	6,50
	PF	126	46,8	6,75
Text messages	High	114	42,1	6,83
	Low	125	43,2	*6,45*
Multimedia	Elaborate	134	41,0	6,69
	Basis	105	44,8	6,55
Tailoring	High	88	45,5	**6,85**
	Low	151	41,4	6,50
Personalisation	High	106	**48,1**	6,49
	Low	133	38,3	6,81

*= none of these differences is significant with the number below (One- Way Anova).
Italics represent minimum value, bold represents maximum value

As can be seen in table 28, feedback has an influence on the percentage of users that completed all nine lessons (8.7%), but this difference is not significant. There was no difference in the average amount of completed lessons between both variants of feedback. Also personalisation has a big difference in the percentage of users that has completed nine lessons (9.8%). This difference is not significant. All the other differences between getting the high, or the low variance were small and not significant.
Remarkable is that the manipulation with the highest percentage of users that had completed all lessons was not the manipulation with the highest average amount of completed lessons.

The outcomes of adherence level 1 (to the course) cannot be seen in these results. Personal feedback and text messages are weighted high but they are both neither the triggers for the highest percentage that completed all nine lessons nor that scores the highest average amount of completed lessons.

Influence of combinations of manipulations
Because three out of five manipulations have personal aspects, there is an overlay between the manipulations. These are: text messages, personalisation and personal feedback. It is interesting to know if these combinations of manipulations have an influence on adherence to the lessons.

Design 3 is the design that has all three related manipulations in the low variant (personal feedback, personalisation and text messages). Design 5 has all these three manipulations in the high variance. Both other manipulations were in the same variant received, elaborate multimedia and low tailoring (table 29). With that, multimedia and tailoring cannot cause noise. With the use of the Descriptives Statistics within SPSS the results in table 30 were found.

Table 29. Comparison of design 3 and 5

Design	Feedback	Text message	Multimedia	Tailoring	Personalisation	*n*
3	Automatic	No	Elaborate	Low	Low	36
5	Personal	Yes	Elaborate	Low	High	51

Table 30. Amount of completed lessons with and without personal aspects

	Design number	
	3	**5**
All 9 lessons completed	36,1%	46,2%
Average amount of lessons completed	6,472	6,577

A clear difference can be seen in the number of users that have completed all nine lessons (10.1%) (table 30). Out of table 28 it becomes clear that this difference cannot be explained by text messages. Text messages did not show an influence on the average amount of completed lessons or the percentage of users that has completed all nine lessons. Personalisation and personal feedback both provide large differences in the amount of finished courses and the amount of users that reached lesson 9. This could indicate an effect of both manipulations. However, no correlation was found between the three manipulations with the One way Anova (r=0,079) (table 31). One Way Anova is used because two separate groups (users within design 3 and 5) were compared. This suggests no correlation between personalisation, text messages and personal feedback.

Table 31. Correlation between text messages, personalisation and feedback

R	R Square	Standard error of the estimate
0,079*	0,006	3,62617

*: One way Anova correlation between text messages, feedback and personalisation

Correlation between adherence level 2 (to the lessons) and the manipulations

The results in table 28 can be specified. By looking at correlations between adherence level 2 (to the lessons) and the manipulations or correlations between activity degree and age and the manipulations, more specific information is got about user characteristics and the amount of completed lessons.

Table 32 shows that no correlation can be found between getting or getting not one of the manipulations and the amount of completed lessons (=adherence level 2). For this calculation the standard Pearson's correlation is used because only linear relations will be expected. This is controlled be calculation also the Spearman's Rho, were the same low correlations were found.

Table 32. Correlation between adherence to the lessons and the manipulations

	Manipulations				
	Feedback	**Text messages**	**Multimedia**	**Tailoring**	**Personalisation**
Correlation*	0,036	-0,053	0,019	0,047	0,044
Sig. (2-tailed)	0,582	0,412	0,764	0,473	0,494

*: Pearsons correlation (n=239)

Correlation between activity degree and manipulations

With the use of Spearman's rho and Kendall-tau C can be seen that if a user is high or low active and if this depends on the manipulations that is received. The Spearman's rho and Kendall tau-C are used because the independent variables (manipulations) are on an interval scale and also non-linear relations are expected. The standard Pearson test is not suitable. Kendall-tau C is used as a check: the same outcomes in correlations were got.

Out of table 33 can be seen that high or low active does not depend on the manipulation that is received. Also being a continue, discontinued or non-user does not depend on the manipulation, caused by the correlation that are not significant. The only difference that is significant is feedback versus high/low. This means that, from all users who got automatic response, 22.1% was high active, 77.9% was low active. From all users who got personal feedback 34.9% was high active and 65.1% low active. All the other outcomes of significance can be found in appendix 7.

Table 33. Correlation between high or low activity and the manipulations

		Manipulations				
		Feedback	**Text messages**	**Multimedia**	**Tailoring**	**Personalisation**
Continu, discontinued or non-user	Correlation*	-0,068	0,062	-0,084	-0,031	-0,043
	Sig. (2-tailed)	0,239	0,342	0,194	0,634	0,506
Low or high active user	Correlation*	0,141**	0,035	0,043	-0,027	-0,011
	Sig. (2-tailed)	0,029	0,587	0,508	0,679	0,863

*: Spearman's Rho correlation (n=239)

**: Correlation is significant at 5%

Correlation between activity degree, adherence level 2 (to the lessons) and age

It is also possible to measure if age and activity degree are related to the adherence to the lessons. For the same reasons as above, the Spearman's Rho is used for this (interval scale of manipulations and no linear relation is expected). Out of table 34 can be seen, that there is a correlation between the number of completed lessons, continue or discontinued or non-user (-,882**), and low and high activity (-,574**). These correlations are strong, caused by the selection criteria that were used to categorize the users. Users became continuous, discontinued or non-users, depending on how much weeks they logged in. These weeks of logging in are directly related to the amount of completed lessons.

The correlation of age with low or high active (0,186**) showed that older user are more active than younger users. However, this is a weak correlation.

No correlation can be found between age and the activity pattern (continuous/discontinuous) and the number of completed lessons (respectively -0,095 and 0,049 out of table 34).

Table 34. Correlations between activity degree, adherence to the lessons and age

		Completed lessons	Age on august 9th 2011
Continue or discontinued or non-user	Correlation*	-0,882**	-0,095
	Sig. (2-tailed)	0,000	0,144
Low or high	Correlation*	0,574**	0,186**
	Sig. (2-tailed)	0,000	0,004
Completed lessons	Correlation*	-	0,049
	Sig. (2-tailed)	-	0,446

*: Spearman's rho correlation (n=239)

**: correlation is significant at 1% (2-tailed)

Sub-conclusion

The log files did not show an influence of the manipulations on adherence to the lessons. With that, an answer is given on research question 3. None of the manipulations (low or high) have showed a significant difference in percentage that completes all nine lessons or in the average amount of lessons.

Also the influence of activity degree (continues/discontinued/non-user), activity pattern (high/low) and age do not show any correlation with the manipulation received or the amount of completed lessons. This means that, being a continue or discontinued or non-user does not depend on the manipulations and also being a high or low active user does not depend on the manipulations. Also age has no influence on being continue/discontinue/ non-user or low/high active.

Part III- Adherence to the technology and attrition

In part II of the results the focus will be on adherence to the technology as defined in the introduction. Adherence to the technology is the difference between intended and actual usage. *Intended use* is the usage of the technology that was given by the developers of the treatment: logging in 3 times per week over a period of 9 weeks. *Actual usage* is usage (logging in) during the whole period. This is related to research question 4 and adherence level 3. First of all the usage patterns for the high variances of manipulations will be given. This will only be done for the users that are in the 12 weeks groups. After that, the usage patterns of the low variances will be given. The chapter ends with an insight in how many times users clicked on the manipulation tailoring and feedback devoted in 12 weeks and 13-17 weeks users and based on log files.

Decisions made in the creation of the Usage patterns

The usage patterns were made for all 239 users. Because 60 users had logged in and completed the treatment after more than 12 weeks, a separation is made between users.

- *The 12 weeks group:* are users who logged in for 12 weeks and completed the treatment within 12 weeks, or users who have logged in for more than 12 weeks but did not complete the treatment within 17 weeks.
- *The 13-17 weeks group:* are all users that did log-in for more than 12 weeks and completed the treatment after more than 12 weeks.

Some users have logged in for 17 weeks, but completed the treatment in week 13,14,15 or 16. Through the coupling of Excel documents it became possible to trace when users have completed the nine lessons and how many weeks was needed for this. It is assumed that after completing all lessons, the treatment is still available, but no new content will be received by the user. The intended usage is then 0, users can log-in, but it is not needed. After a user has completed the lessons, the log-in data will not be used to measure adherence. For all users that have logged in for 12 weeks, completing the lessons is seen as an end point and not the amount of weeks that is logged in. *Reaching week 10 is defined as completing the treatment***.**

Also a *'log-in'* is defined. The main rule was that the log-in should be on a different day of the week. Two exceptions are made:

1. When the log-in is on the same day but there is more than 20 hours between both log-ins, the main rule is still valid;
2. When the time between the two log-ins is less than 6 hours, the main rule is still too appropriate.

During the analysis of the log files it became clear that data was incomplete. There was a difference of 20 users between the amount users who had completed the questionnaire at T_0 and the amount of users for which log files were available. The reason for this was that all these users were still working to achieve the end of lesson 1 and not included in the log files. The reason for this is unclear. During handling with the log files, these users are all integrated by giving them manually 0 log-ins during all weeks. This because they did not log-in during the remaining weeks. This gave them the status, low active and non-user.

Another difficulty of the log files was that the time of logging out was not always registered, because users did not log out. Click away the screen with the cross in the corner is not registered as logged out. For this reasons, this data is not used for this study.

4. Usage patterns: times of logging in

Before that the usage patterns will be given, first the users will be identified. As stated before, the users were divided into a 12 weeks group and an 17 weeks group. This because the 12 weeks group did not mention the criteria for a minimum of 27 log-ins during all 9 weeks. Both groups will be highlighted.

Adherence level 3: Times of logging in

Times of logging in 12 weeks pattern

During all 12 weeks, an average amount of 1,204 log-ins is reached through 179 users, or the 12 week group. This seems to be very low, but this is the average including all discontinued and non-users what brings the mean down. It can be seen in table 35 that for each week (that corresponds with the lessons) the average amounts of log-ins is decreasing. The lessons lasted until week 9; week 10, 11 and 12 are the so called turn out weeks. In figure 16 can be seen that is a rising average until week 2, after that a decline can be seen until the average amount of log-ins in week 12 is 0,6.

Table 35. Average amount of log-ins for the 12 week group

	Week number (=lesson)												
	1	2	3	4	5	6	7	8	9	10	11	12	Average
Amount of log-ins	1,4	1,8	1,7	1,5	1,4	1,3	1,2	1,1	1,0	0,8	0,7	0,6	1,2

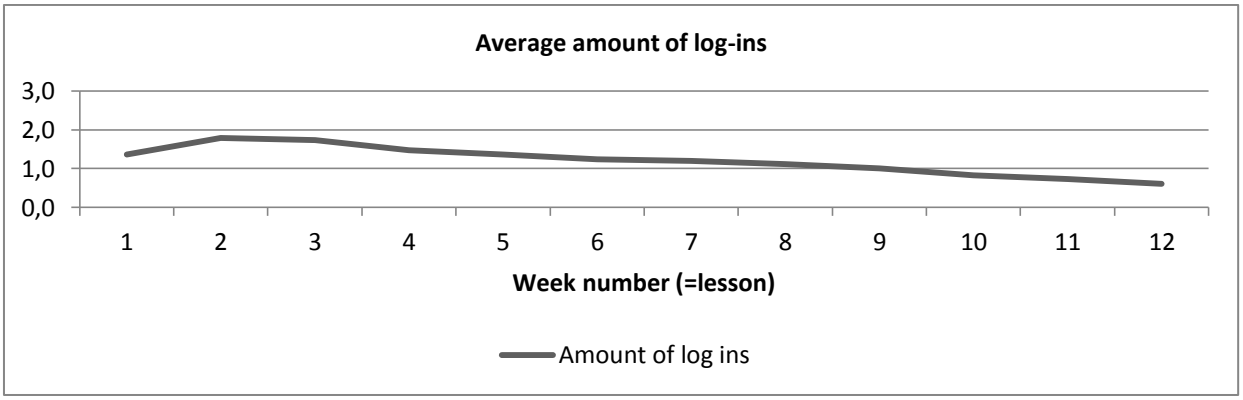


Figure 16. Average amount of log-ins 12 weeks

For the 12 weeks group, there are some remarkable users. This are the continuous and low active users. Some of the users are completers, as can be seen in the red lined boxes in figure 17, and some users are non-completers, represented by the blue lined boxes. These will be highlighted beneath figure 17.

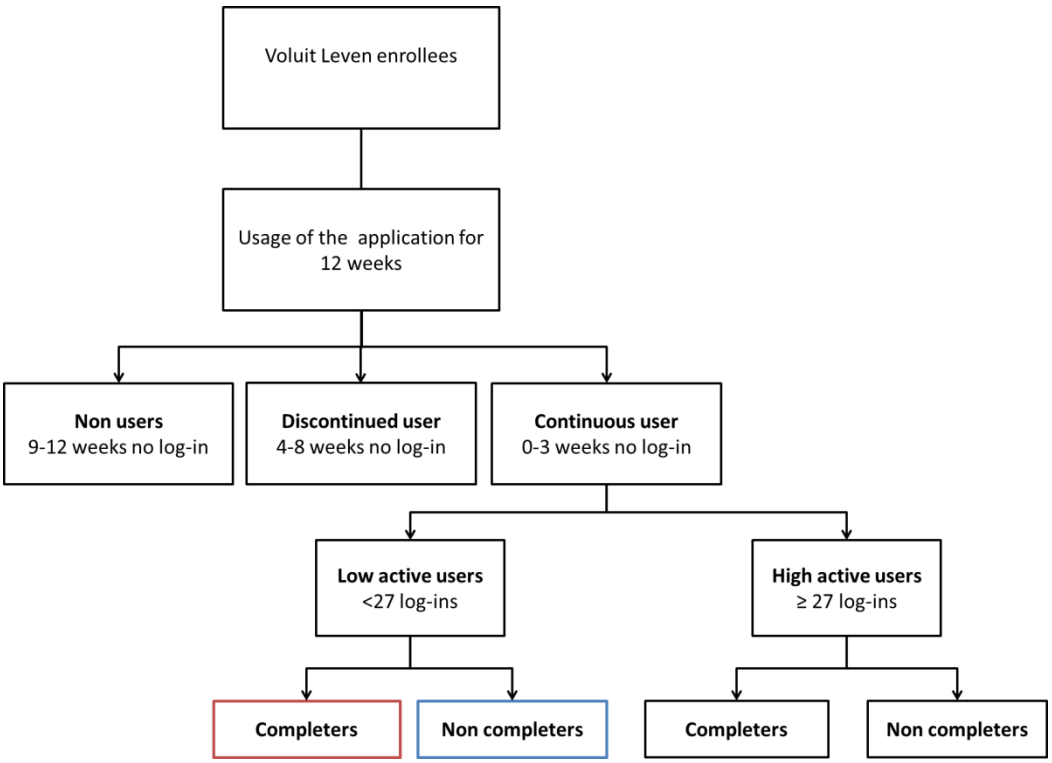


Figure 17. Continuous and low active user

The continuous, low active user and completer (red lined box)
Not every continuous user has reached the intended usage of 27 log per week, but has completed all lessons of the treatment. It is possible to complete the treatment with less than 27 log-ins. But it could be that the criteria that were used for one log-in were to narrow, whereby some log-ins were not counted. For this reason, the total amount of log-ins and the lesson that is reached is included in the usage patterns that were given in appendix 5 and 6.

The continuous, low active user and non-completer (blue lined box)
All other low active continuous users (blue box) have logged in for more than nine weeks, but did not reach the 27 log-ins and with that, did not reach the intended usage. After 12 weeks, the users did not log-in anymore and did not use the technology anymore. All these users did not complete the treatment. For instance it could be that for them, there was not enough time to finish the treatment. This is not called attrition (phenomenon of stop using the technology) because they did use the technology, but did not achieve the intended usage. This is also not called drop out of the treatment because they have logged in for all weeks, but not enough to reach the intended usage.

Identification of the users of 12 weeks pattern
The identification is done with the use of the descriptive statistics in SPSS.

Table 36. Identification of the user of the 12 weeks patterns

	Gender (% male / % female)	**Age (average)**	**Education (% low / % medium / % high)**	**Depression scores [mean] (HADS-A / CES-D)**
Continuous users (n= 80)	26.2% / 73.8%	46.3 years	2.5% / 16.2% / 81.2%	9.46 / 18.44
Lessons completed (n=41)	24.4% / 75.6%	45.7 years	0% / 19.5% / 80.5%	8.85 / 17.36
Lessons NOT completed (39)	28.2% / 71.8%	46.8 years	5.1% / 12.8% / 82.1%	10.10 / 19.73
Discontinued users (n=38)	28.9% / 71.1%	42.5 years	0% / 23.7% / 76.3% /	10.26 / 24.30
Non users (n=61)	38.3% / 60.7%	44.7 years	1.7% / 28.3% / 70.0%	9.70 / 17.75

Out of table 36 can be seen that the results of the user identification are common to the results in chapter 0- user characteristics. The most remarkable information out of table 36 is, that almost 40% (38.3) of the non-users were male. Only 29.3% (n=70) of all users that used Voluit Leven are male (table 11). This means that from the 61 non-users, 23 male were non users (A total of 61 non-users * 0.383). This is almost 40% of the male participants that became a non-user. The averages for the completers and non-completers are common to the averages of all users.

Times of logging in 13-17 weeks pattern
All users who still have logged in after 12 weeks, are considered as a separate group. This is because they do not meet the criteria for intended usage. All these users completed the treatment (n=60). The average amount of log-ins is 1,8, and the average amount of log-ins decreases almost every week (table 37) . Until week 12, the average amount of log-ins is 2.0. After this the decreasing line that can be seen in figure 18, is because users had almost completed the lessons in week 12 but needed some more time to finish it. The intended usage of 3 log-ins per week is not needed anymore.

Table 37. Average amount of log-ins for 60 users

	Week number																
	1	**2**	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Average amount of log-ins	2,0	2,6	2,7	2,8	2,4	2,2	2,3	2,7	2,2	2,1	2,0	2,0	1,5	0,8	0,5	0,3	0,1

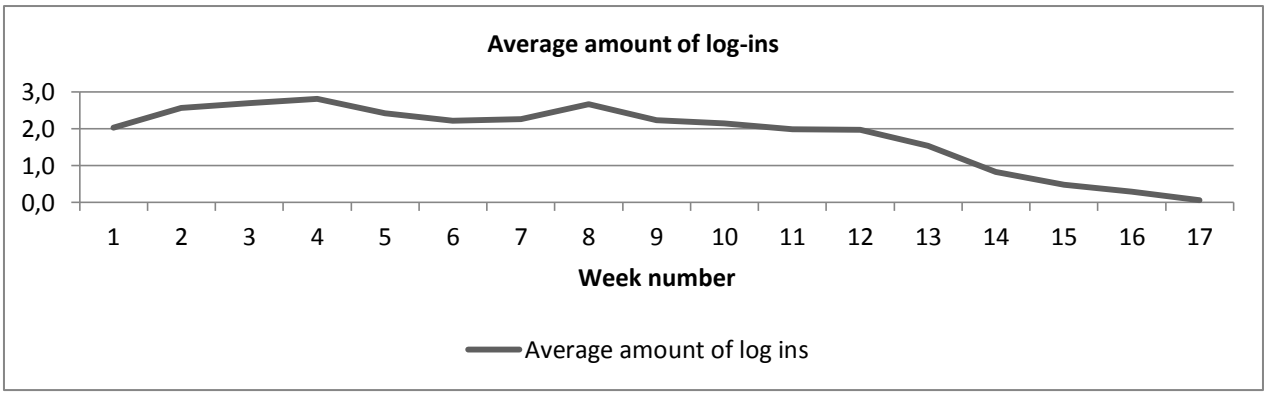


Figure 18. Graphic representation of average amount of log-ins

Remarkably, the number of log-ins required to complete all lessons was almost identical to the 12 weeks group: 31.1 (12 weeks) and 31.4 (13-17 weeks) as is calculated with the use of Excel as an average of the patterns out of appendix 6. This might suggest that users had too little time to complete the treatment. This corresponds to the response users gave in the questionnaire at T1.

'Ik heb de cursus nog niet afgerond en zou hier graag nog meer tijd voor krijgen. Hij werkt voor mij effectief. ' (user 794)

'Ik ben op vakantie geweest, en door drukte voor en na de vakantie, is het lastig om de cursus binnen de tijd af te ronden. Geen idee hoeveel tijd ik nu nog heb, maar denk dat het niet gaat lukken om het af te maken en dat vind ik toch wel erg jammer.' (user 900)

'Ik vind wel dat het heel snel gaat. Ik had graag meer tijd willen hebben voor de opdrachten. Alles moest binnen een week gebeuren.' (user 933)

' [...De cursus was kort en hevig. Je kreeg iedere week zoveel informatie te verwerken dat je niet alles kon opnemen...]' (user 1076)

Identification of the user from the 13-17 weeks patterns

The results of the user identification (table 38) are common to the results in chapter 0- user characteristics (table 1). In both groups, the females are the majority: 70.7% of all users is female and 76.7% of the 13-17 weeks patterns group. The average age for all users is 45, for the 13-17 weeks groups 46. In the 13-17 weeks group more users were highly educated (8%) than the average of all users, and less users have a medium education level (6.4%).

Table 38. Identification of 13-17 weeks users

Gender (% men; %woman)	Age (average)	Education (%low; % medium; % high)	Anxiety and depression scores (HADS-A; CES-D)
23.3% / 76.7%	46.0 years	0% / 13.3% / 86.7%	9.75 / 15.83

Graphic representation of usage patterns for different variances of manipulations

After the identification of the users of the 12 and 13-17 weeks pattern, the usage patterns out of appendix 5 will be graphically represented. This graphic representation is made with the use of Excel. In this representation, only the 12 week group is included because the met the criteria for adherence level 3 (times of logging in). This is an average of non-users, discontinued users and continuous users (figure 17).

In figure 19 all patterns for the high variances (and personal feedback) of the manipulations are represented. At the start of the treatment, a slight increase in the amount of log-ins can be observed for all manipulations (figure 19). Remarkable is the dip in the amount of log-ins in week 4 for all designs, independent of which manipulation is received. During the weeks, the amount of log-ins decreases, until an average of 0.5-0.8 log-ins per user in week 12 . This decrease is not linear but raises and falls every week. The design with the high variant of personalisation is responsible for the lowest amount of log-ins during all weeks of the treatment. A specification of the amount of users who got a specific type of manipulation can be found in table 39, the highest amount of users is 70, the lowest 109. This subdivision of users is the same as used and described in table 26 and 27 .

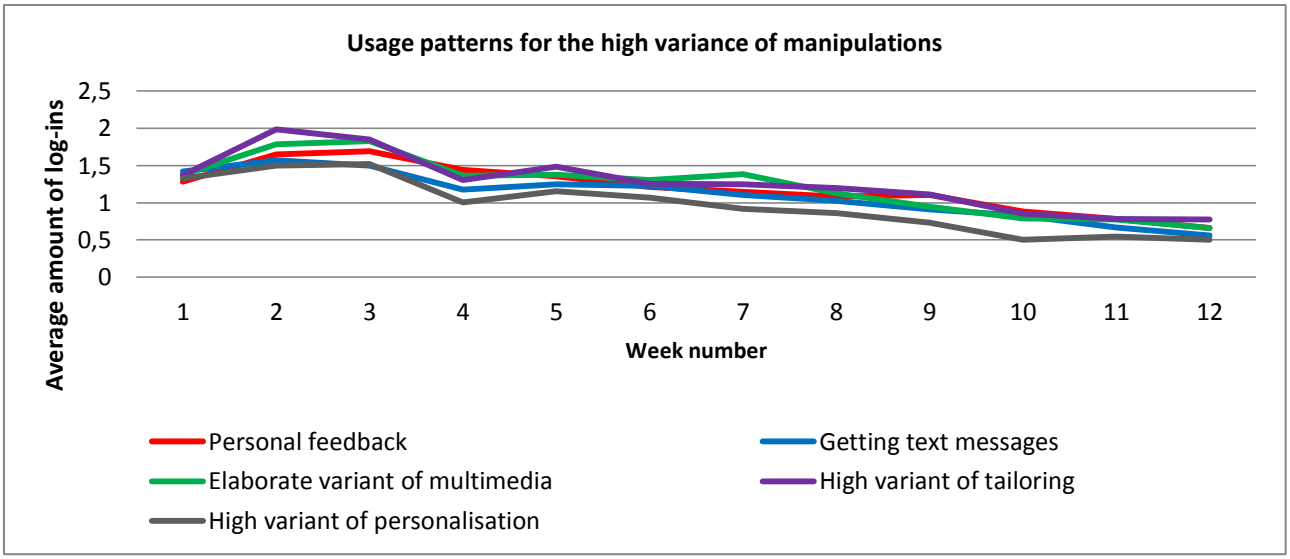


Figure 19. Graphic representation of usage patterns for the high variance of manipulations

Table 39. Amount of users who got a specific variant of a manipulation

Manipulation	Amount of users out of the 12 weeks patterns
Personal feedback	86
Automatic response	93
Text messages	88
Not getting text messages	91
Elaborate multimedia	101
Basic Multimedia	78
High tailoring	70
Low tailoring	109
High personalisation	70
Low personalisation	109

If a graphic representation of the usage patterns of all low variance of the manipulations is made, the same patterns of log-ins can be seen (figure 20). Until week 3 the average amount of log-ins is increasing for all designs. The design that did not get personalisation is responsible for the highest amount of log-ins during all weeks of the treatment.

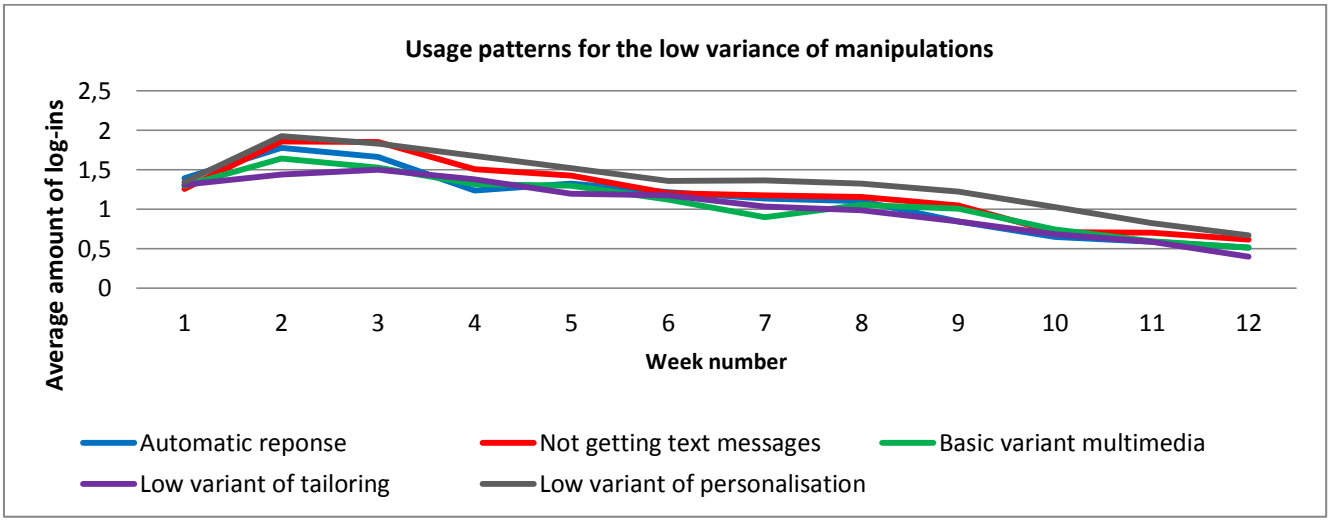


Figure 20. Graphic representation of usage patterns for the low variance of manipulations

Sub-conclusion

Out of this section can be seen that the users from 12 weeks pattern do not differ from the 13-17 weeks patterns. An answer on research question 4 is given by representing an insight in the usage patterns. The number of log-ins required to complete all lessons was almost equal: 31.1 (12 weeks) and 31.4 (13-17 weeks). The average amount of log-ins per week is 1.2 for the 12 weeks group and 1.8 for the 13-17 weeks group.

The usage patterns per manipulation show a decline in amount of log-ins per week in week 4 and a variable use that every week raises and falls. Getting personalisation is responsible for the lowest amount of log-ins during all week, not getting personalisation is responsible for the highest amount of log-ins

5. Manipulation use

To measure adherence and answer research question 4, it is also possible to look at the use of manipulations. Besides looking at the amount of log-ins after receiving a specific manipulation, also log files are accessible with the amount of clicks on a manipulation.
In this analysis all users are included: non-users, discontinuous users and continuous users. There is a split between users who haved use the web based application for 12 weeks and for 13-17 weeks.

Adherence level 4: use of manipulations

As a boundary for 'a click on a manipulation' 1 minute between to clicks is the limit. Many users had clicked dozens of times on manipulations within 30 seconds. The ability to read and understand the text within these seconds is very small. Hence, a 1 minute limit is maintained.

In addition, only the log data from feedback and tailoring was available. This is because text messages were received by phone and did not have log data. They can be read on a computer but real usage cannot be extracted. Personalisation is only visible in the design, it can be changed but no conclusion can be coupled to this. Multimedia was integrated in the lessons. Users have no choice to look at it, or not, and are therefore not associated with adherence.

Tailoring
Tailoring is the ability of the users to identify himself with the treatment/website. In this case through success stories.

12 week patterns
A total of 76.5% / 137 of all users (n=239) have viewed success stories one or more times (table 40). Per week, this percentage strongly decreases. Week 1 has a low number of users hits because some users started the treatment in week 2. The percentages were calculated over 179 users; all users that have used the application for 12 weeks. The graphic representation of this can be seen in figure 21.

Table 40. Amount of hits for success stories

Week number (=lesson)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Total amount of hits	35	72	60	49	40	47	28	27	28	20	8	18
Amount of users that clicked on SS once	22	32	39	29	18	12	22	11	18	7	8	8
Percentage	12%	18%	22%	16%	10%	7%	12%	6%	10%	4%	4%	4%
2x	5	14	7	10	4	14	3	5	5	2	0	5
Percentage	3%	8%	4%	6%	2%	8%	2%	3%	3%	1%	0%	3%
3x	1	4	1	0	3	1	0	2	0	1	0	0
Percentage	1%	2%	1%	0%	2%	1%	0%	1%	0%	1%	0%	0%
Total amount of users with hits *(n=137)*	28	50	47	39	25	27	25	18	23	10	8	13
Percentage	16%	28%	26%	22%	14%	15%	14%	10%	13%	6%	4%	7%

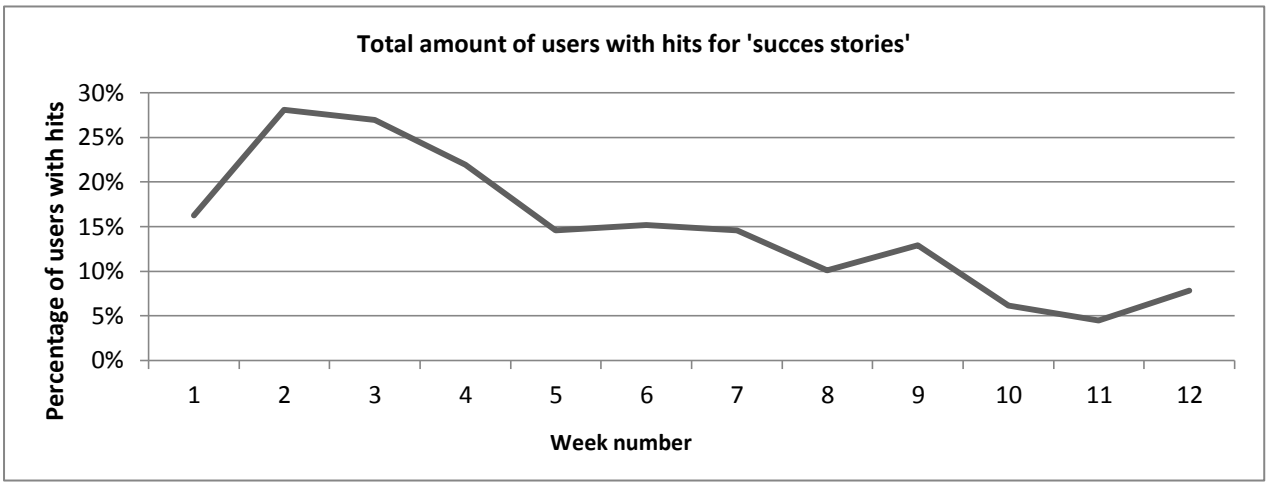


Figure 21. Graphic representation of success story use

13-17 weeks pattern

For the 13-17 weeks pattern, users a strong increase in users with hits can be seen until week 4 (figure 22). After that, it decreases until 15 %. The average of the 17 week group is higher (28%) than from the 12 week group (15%).

Table 41. Amount of useres that read success stories out of the 13-17 weeks group

Week number (=lesson)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Total amount of hits	10	38	30	46	19	17	28	23	17	30	18	19
Amount of users that clicked on success stories once	5	14	15	22	11	10	11	10	8	11	6	6
Percentage	8%	23%	25%	37%	18%	17%	18%	17%	13%	18%	10%	10%
Two times	1	7	6	12	4	2	4	3	1	6	6	3
Percentage	2%	12%	10%	20%	7%	3%	7%	5%	2%	10%	10%	5%
Three times	1	2	1	0	0	1	3	1	1	1	0	0
Percentage	2%	3%	2%	0%	0%	2%	5%	2%	2%	2%	0%	0%
Total amount of users with hits (n=57)	7	23	22	35	15	13	18	14	10	18	12	9
Percentage	12%	39%	37%	58%	25%	22%	30%	24%	17%	30%	20%	15%

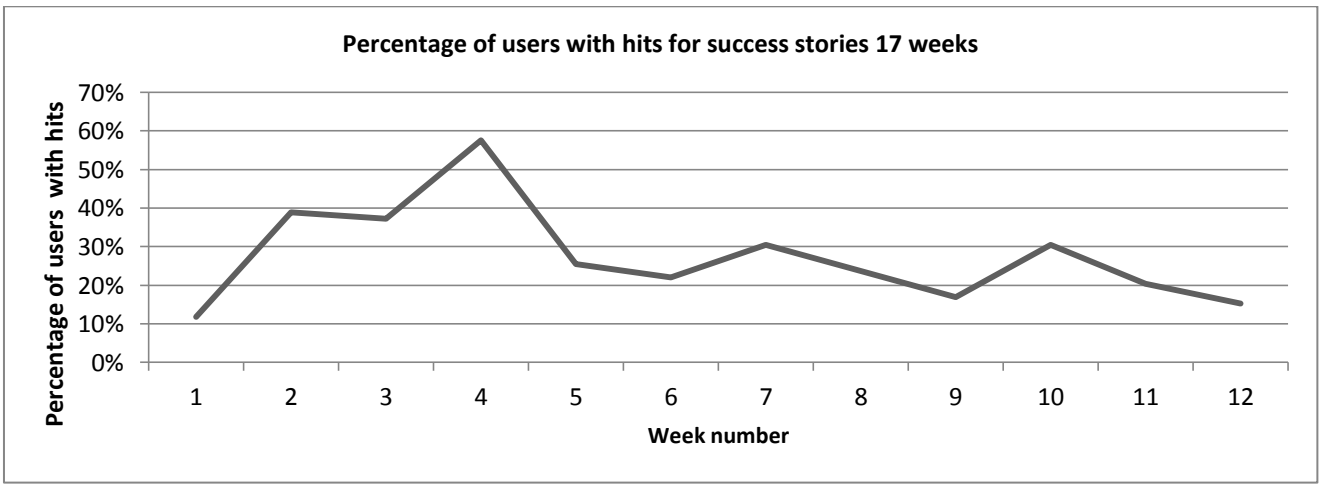


Figure 22. Graphic representation of amount of users with hits on success stories 13-17 weeks

Differences between high and low (12 weeks)
The percentage of continuous users that clicked on success stories can be split in high and low active users. The percentages are based on 239 users. The differences in percentage of users that clicked on success stories is in the beginning quite large as can be seen in figure 23. As the weeks passed, there are no differences between high and low active users and the percentage decreases to 2%.

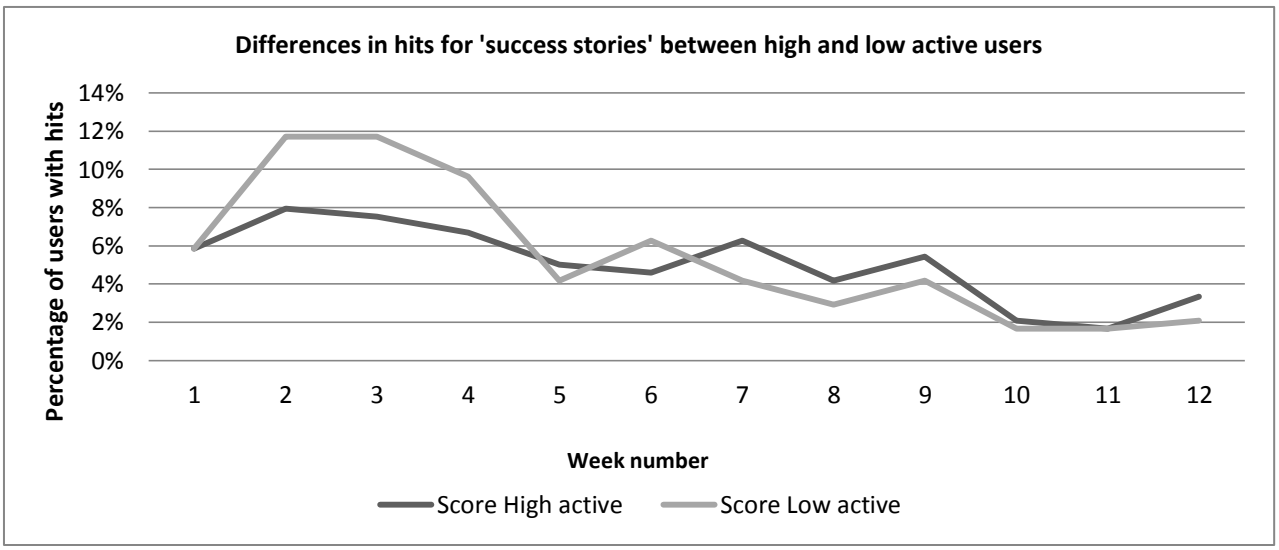


Figure 23. Graphic representation of amount of high and low users with hits on success stories

Connection with telephone interviews
The low interest in the success stories was confirmed by the telephone interviews. Users did not feel any need for the problems of other users. Another much heard reasons was the poor visibility of the stories on the website.

> *'Ik heb de ervaringsverhalen niet gedurende de weken bekeken. In de laatste weken heb ik ze allemaal terug gelezen. Maar ze waren niet goed zichtbaar op de website. Beetje ondergeschoven. Het lichtte niet op of iets dergelijks. Ineens dacht ik: 'oh ja'. De aandacht werd ervan afgeleid. De ervaringsverhalen liepen ook een week voor op de les waar ik was. Ik had het niet perse nodig, misschien had ik er meer aan gehad als ze beknopter waren geweest. Ikzelf had er niets aan. Ook omdat het in het zelfde sfeertje was als de feedback: heel positief, eigenlijk te positief. De situatie moet vergelijkbaar zijn. Maar bij vlagen dacht ik, die persoon past qua ernst niet bij mij, ik zag geen enkele herkenning'. (user: 1155)*

> *'Ik heb ze niet gebruikt. Het had totaal geen meerwaarde. Vond het niet interessant hoe het met anderen gaat. Alles gaat zo over jezelf, dan wil je dat niet. Als je weerwoord hebt steek je er meer van op. Ik kon er nu niet op reageren.' (user: 951)*

Feedback
Out of the log files can also be seen which type of feedback was mostly clicked on.

Personal feedback (12 weeks)
In table 42 and 43 can be seen that the percentage of users that read personal feedback is 67 from the 126 (all users of design 5 till 8). The first week is 0, because people had still not received feedback. The feedback was received at the end of a week, when the lesson was completed. Table 43 shows that 66 users read the automatic response from the 113 that have received it. In figure 24 can be seen that the amount of users that clicked on both forms of feedback during the weeks is almost equal.

Table 42. information about hits on personal feedback

Week number	1	2	3	4	5	6	7	8	9	10	11	12
Total amount of hits	0	20	47	43	54	39	32	37	27	21	26	28
Amount of users that clicked on feedback once	0	14	31	23	29	24	28	26	17	19	13	18
Percentage	0%	11%	25%	18%	23%	19%	22%	21%	13%	15%	10%	14%
Two times	0	3	8	8	11	6	2	4	2	1	2	5
Percentage	0%	2%	6%	6%	9%	5%	2%	3%	2%	1%	2%	4%
Three times	0	0	0	0	1	1	0	1	2	0	1	0
Percentage	0%	0%	0%	0%	1%	1%	0%	1%	2%	0%	1%	0%
Total amount of users with clicks on feedback stories *(n=67)*	0	17	39	31	41	31	30	31	21	20	16	23
Percentage *(n=126)*	0%	13%	31%	25%	33%	25%	24%	25%	17%	16%	13%	18%

Table 43. Amount of users with hits on automatic response

Week number	1	2	3	4	5	6	7	8	9	10	11	12
Total amount of hits	1	63	88	78	79	68	69	49	53	72	47	48
Amount of users that clicks on feedback once	1	9	16	20	16	19	21	18	15	8	14	11
Percentage	1%	8%	14%	18%	14%	17%	19%	16%	13%	7%	12%	10%
Two times	0	9	14	10	13	10	9	6	8	4	4	4
Percentage	0%	8%	12%	9%	12%	9%	8%	5%	7%	4%	4%	4%
Three times	0	0	8	8	3	2	2	3	6	5	3	3
Percentage	0%	0%	7%	7%	3%	2%	2%	3%	5%	4%	3%	3%
Total amount of users with clicks on feedback *(n=66)*	1	18	38	38	32	31	32	27	29	17	21	18
Percentage *(n=113)*	1%	16%	34%	34%	28%	27%	28%	24%	26%	15%	19%	16%

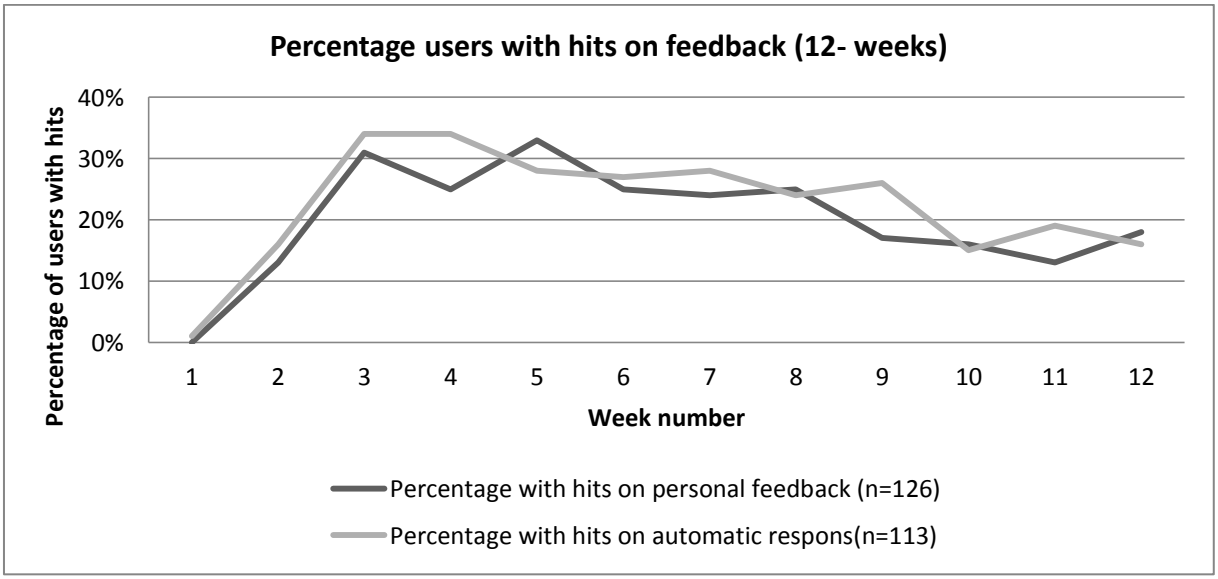


Figure 24. Percentage of users with hits on feedback

Personal feedback and automatic response 17 weeks

For the 13-17 weeks group a major difference can be seen between users that clicked on automatic response and personal feedback (figure 25). The percentage of users that clicked on personal feedback is considerably higher.

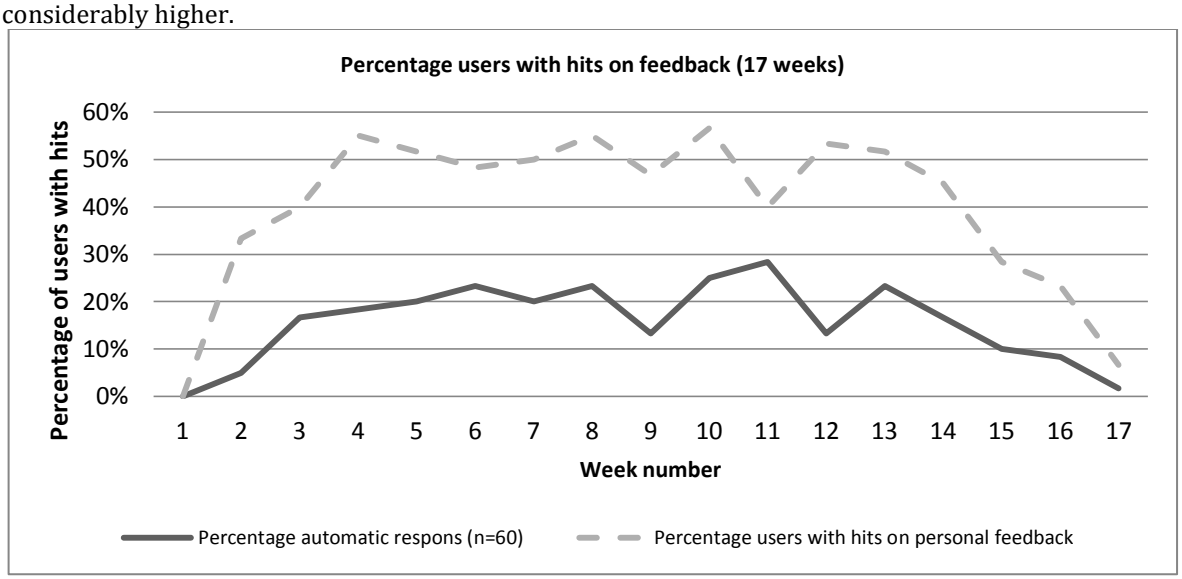


Figure 25. Percentage of users with hits on feedback 13-17 weeks

Differences between high and low active users

If is looked at high and low active continuous users the patterns are even for both forms of feedback (figure 26 and 27). For personal feedback can be seen that the percentage users that clicked decreased faster after week 4 (figure 26). In week 12, 10% of all users still read the personal feedback. These are 24 from 126 users that received feedback (19%). For automatic response, the low active users were more active during week 2-9 as can be seen in figure 27. At the end of the weeks, also 10% of the users were still reading the feedback. These are 21% of all users that received automatic response (23.9/113).

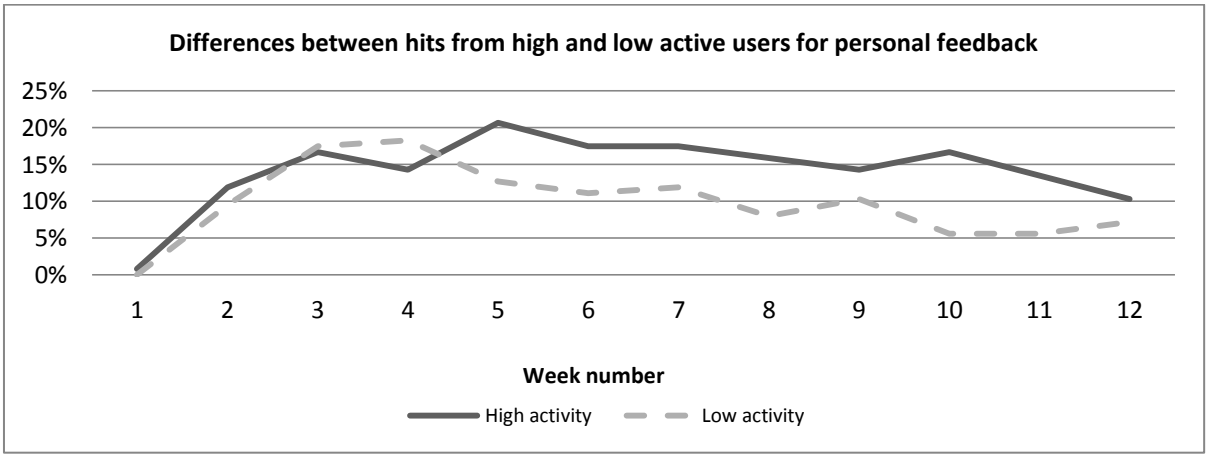


Figure 26. Difference between high and low active users that clicked on personal feedback

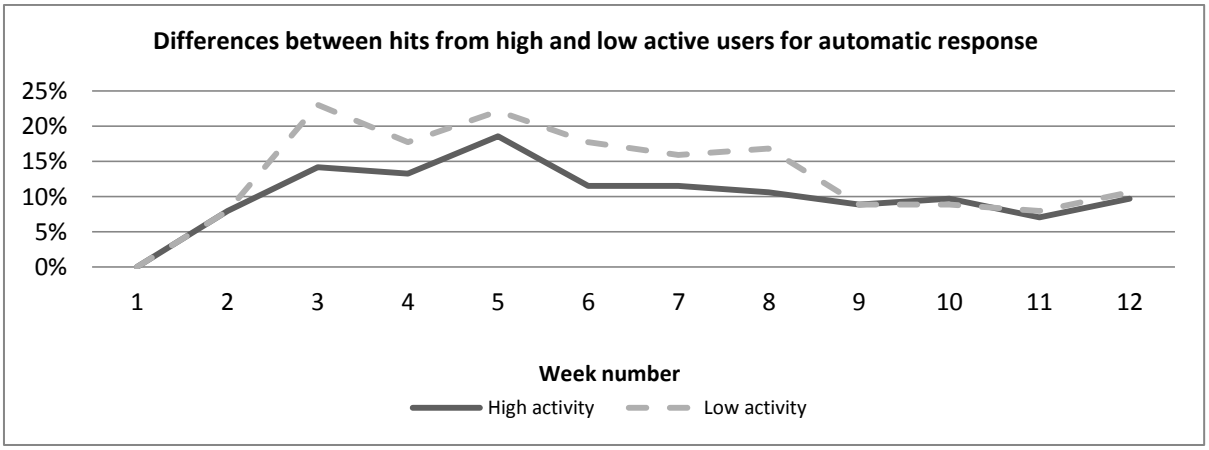


Figure 27. Differences between high and low active users that clicked on automatic response

Sub-conclusion

Research question 4 was also highlighted by another way to look at the usage patterns. The usage patterns of clicking on the manipulations itself. The results of adherence level 4 (manipulation use) show that the added value of tailoring is low. No difference can be seen between 12, or 13-17 week users and high and low active users. The quantitative method (log files) show that users did not click many times on success stories, this is supported by the qualitative method telephone interviews. The main reason was that users did not feel an added value caused by the absence of a need to hear stories from other users.

For receiving personal feedback and automatic response, there is a small difference between the 12 and 13-17 weeks patterns. For the 12 week pattern users there are no differences of clicking on the feedback between both forms. For the 17 weeks pattern users personal feedback has many more clicks. The differences in percentage of users that have read the given feedback is small between high and low active users.

In conclusion: adherence level 4 did not show a difference in adherence between receiving the high or low variance of tailoring and personal feedback or automatic response.

6. Attrition

Besides to the different levels of adherence, it is also interesting to know what the attrition patterns are: when do users drop out, which amount, and what are the reasons for that? Though a combination of quantitative and qualitative methods, an answer will be found for research question 5.

The attrition rates are gained from all users that were non-user or discontinuous users (n=99). A limitation was that users did not use the treatment for longer than 12 weeks. The non-users and discontinued users are taken together. In table 44 can be seen how many users drop out in each week: 26 of the users drop out before the treatment starts, they did not start at al. In week 1, 13 users stopped using Voluit Leven.

Table 44. Amount of users with non-usage in a specific week

	Week number								
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Attrition rate (n)	*26*	*13*	*8*	*14*	*11*	*6*	*6*	*8*	*7*
Total amount of drop outs (cumulative)	26	39	47	61	72	78	84	92	99
Percentage of the users that did drop out	11	16	20	26	30	32	34	37	41

Graphic representation

The graphic representation of attrition can be seen in figure 28, made with the use of Excel. To measure the follow up rate (blue line), the total amount of drop outs is deducted from the total amount of 12-weeks

users (n=179) and divided by 179 to get a percentage. It can be seen that it is a constant attrition with a constant proportion of users that drop out. All users that are left after week 9 (45%) are the continuous users, from which 12% represent the hard core users. These patterns are common to what other authors have found [63].

The red line represents the amount of users that drop out each week. Remarkable is the rising in the amount of users that drop out in week 4. To break this down further in manipulations has no added value. The groups of users are too small to draw a conclusion from it.

In figure 29 on page 67, the results of the amount of users that drop out each week are combined with adherence level 3 (times of logging in). It can be seen that there is no relation between continuous users that have increased or decreased in amount of log-ins, and the great amount of discontinuous and non-users that drop out in week 4. For the high active users a rise can be seen in week 1 until 3 and in week 6, 7 and 8. For the low active users a rise can be seen in week 1 and 2 and after that only a more rapid decline in week 7.

Influence of manipulations

Because the total amount of drop outs was 99, it was not possible to split the data in the 10 variances of manipulations that were received (personal feedback, automatic response, text messages, high tailoring, etc.). Some variants of manipulations did not then have users. It was also not possible to connect the results with the telephone interviews. None of the drop outs had signed up for a telephone interview.

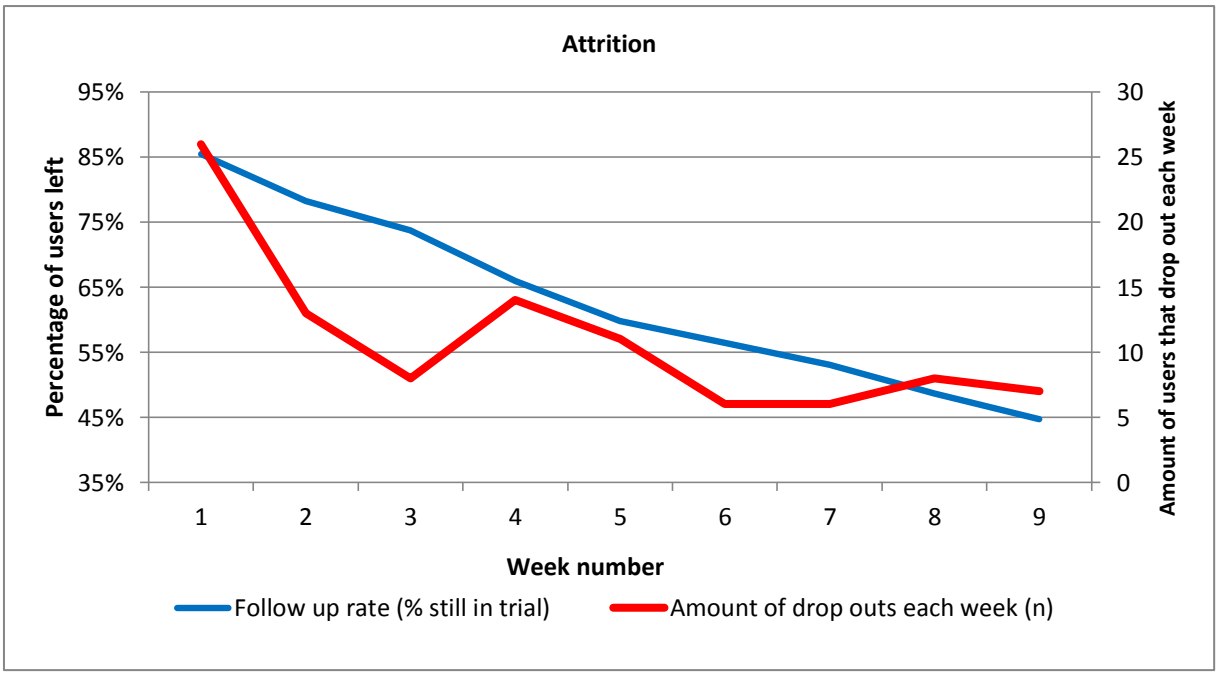
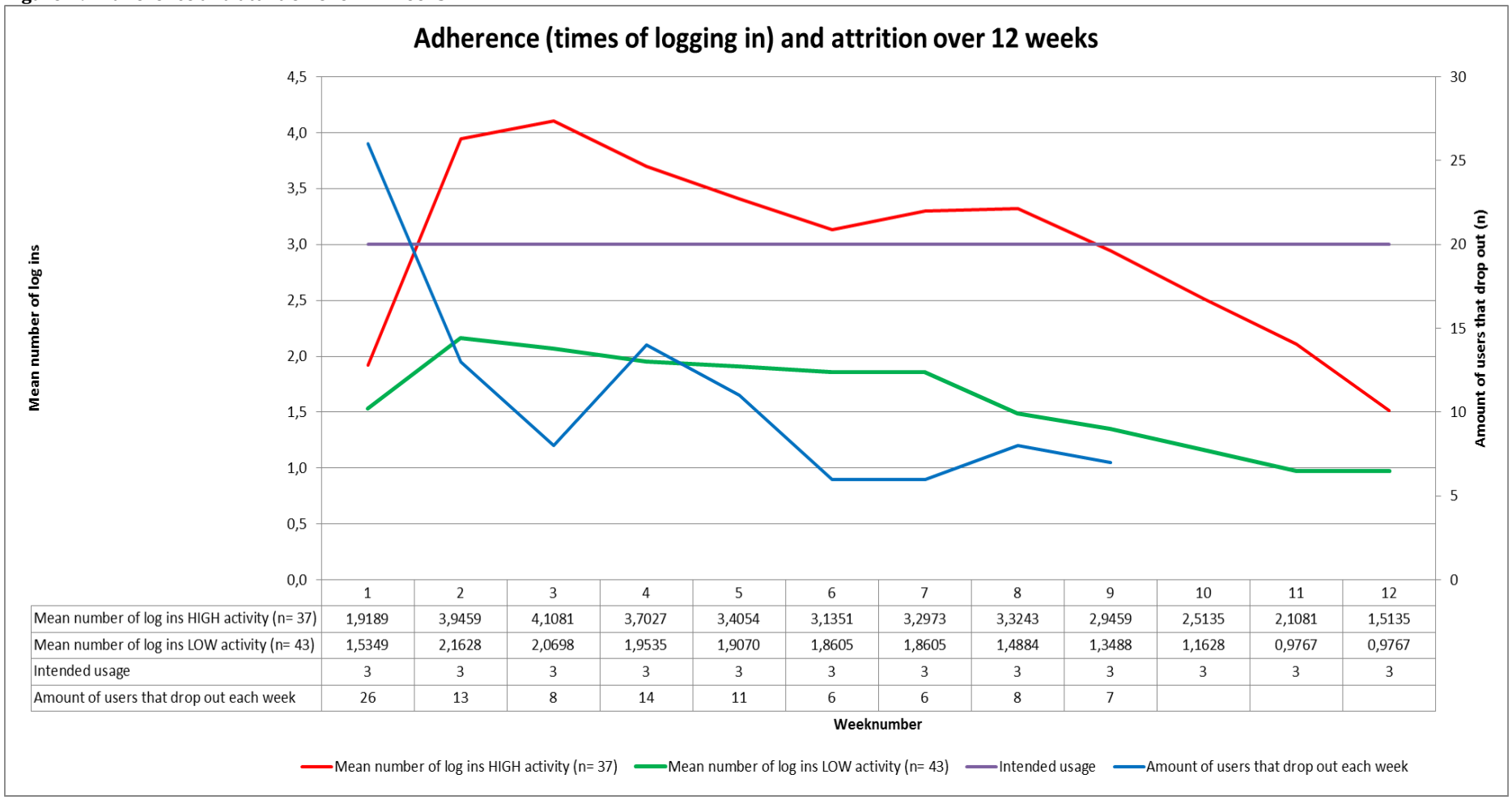


Figure 28. Attrition

Sub-conclusion

It can be seen that the attrition pattern is a constant attrition with a constant proportion of users that drop out each week. It shows that the most users drop out in week 1 (n=26) and a rise of drop outs can be seen in week 4. Because of the small amount of users it was not possible to connect the data to the manipulations that were received. None of the drop outs has signed up for a telephone interview what makes it impossible to support the data with qualitative results.

Figure 29. Adherence and attrition over 12 weeks



	1	2	3	4	5	6	7	8	9	10	11	12
Mean number of log ins HIGH activity (n= 37)	1,9189	3,9459	4,1081	3,7027	3,4054	3,1351	3,2973	3,3243	2,9459	2,5135	2,1081	1,5135
Mean number of log ins LOW activity (n= 43)	1,5349	2,1628	2,0698	1,9535	1,9070	1,8605	1,8605	1,4884	1,3488	1,1628	0,9767	0,9767
Intended usage	3	3	3	3	3	3	3	3	3	3	3	3
Amount of users that drop out each week	26	13	8	14	11	6	6	8	7			

7. Reasons for decline in usage

A decline in usage can be observed in the different adherence levels. For an explanation will be looked for reasons formulated by the users themselves. The open question is a reaction to the question: 'What is important for you to keep using the online treatment?'. This can give information about factors that are important for adherence, except persuasive technology related factors. Also, fifteen in depth phone interviews were held. The information given beneath will be used to answer the research question 6 (if users give other factors as an explanation for their non-usage), and as input for the discussion.

Open question

At the beginning of the treatment, users had to fill in a questionnaire. At this moment, users had not seen the application Voluit Leven.

239 users did respond to the question. 11 responses were removed because people themselves indicated that they did not understand the question or their answer did not correspond to the question. 20 users give more than one reason. A total of 117 answers were used for the analysis.

Remarkable is that 131 users (55%) have interpreted the question as 'What do you want to achieve by participating in the online treatment'. This instead of what they think is important for them to keep using the online treatment. What users want to achieve has two main categories: help and insight in behavioural feelings to learn to live with emotions.

Indicated factors of the open question

34 % of all users that answered the question correctly found feeling progression or effect from the treatment the most important reasons to stay motivated. 17% wanted to get tools or handles for daily life. 12% of the users think that the time they have to invest in the treatment is important to keep using the online treatment. 10% of the users want to see that the content of the treatment is connected to practical situations. The rest of the users want clear exercises (8%), continuity by triggers (7%), motivation (6%), feedback (2%), accessible methods (2%) and no suffering from technical problems (2%). Appendix 3 gives an analysis of all given answers with some examples.

Telephone interviews

Also the telephone interviews will serve as an input to find reasons for decline in usage. In appendix 10, a coding of the answers can be found. Here, an explanation of the most important reasons will be given. A total of 15 users was interviewed; 1 discontinued users and 14 continuous users. None of the none users had enroll themselves.

- For automatic response, the content is perceived as too general. Users said that the content of the messages that were received, were not attuned to the content of their answers. They got the feeling that every user received the same feedback, no matter what their input was. As the weeks passed, the feedback was starting to irritate because it was too positive and not enough focused on the user. It would be more motivated if the content was more focused on personal preferences, interested and the current situation. Users gave an input themselves by answering questions that were integrated in the assignments, but the feedback was not matching this input.
- Text messages were perceived as a nice addition, but they could usually be missed. There were about 25 text messages sent to each user. Only a few were actually applicable to the person. In addition, they were very general. For some users (2 out of 15), the text messages were more motivated if they were more focused on the current situation of the user.
- None of the users were interested in the success stories. The reason for this was, because they were busy with their own problems and there was no need for the problems of others. It did not motivate them, but it was also not a reason for decline in usage.
- The motivation to participate in the treatment is for all interviewees either curiosity or the personal situation that they wanted to change. Decline in usage was not caused by the technology or treatment but through a lack in their personal situation or motivation.
- Problems with sustaining the following of the lessons did not rise for most interviewees, or had occurred around week 5 or 6. All interviewees gave as a reason a fall back in their own situation. No apparent cause in the website or treatment could be given. This is contradictory to the usage and attrition patterns. There could be seen a raise in amount of users that drop out in week 4 and a fall in amount of log-ins (section 6).

- Half of the users want to have more interaction, such as an option to post a comment on the feedback they received, or to ask questions. It times is was difficult for users, this could be motivated and gives possibilities to make an added value out of it.
- None of the interviewees have made intensive use of the diary and the response button. Some users could not even remember it was integrated in the design. The dairy was mostly discovered when people need to use it for the assignments. After the exercise, it was no longer used. The most common reasons was that users did not need a diary or they were no writing types. Two of the 15 users had later regretted not having used this feature.

8. Other influencing non related persuasive technology factors

During the telephone interviews, users indicate two reasons as important for motivation: costs and strength of the complaints.

Costs seems to be one of the factors that can motivate a user. Most users could not give an indication because users think they can make no good estimation of costs regarding online courses. If the costs are too high, users prefer face-to-face contact. If the costs of an online treatment and face-to-face contact were equal, face-to-face contact is preferred. Despite this is less anonymous and time and place cannot be free chosen. Before users wanted to pay, they first wanted to receive a positive reflection of it from a general practitioner or a psychologist.

Another factor that has an influence is the strength of the complaints. If these were to strong, it would be difficult for a user to motivate themselves. With face-to-face contact, this is a smaller barrier. A combination of both, online and face-to-face, would be the ideal situation.

Not having enough computer skills was not one of the motivating factors. The web based application was not difficult to use. An exception of this was the possibility to download the MP3 exercises. For most of the users this was difficult, what was an obstacle to repeat the exercises. Five of the 15 users indicated that repeating the exercise would cause an higher impact of the treatment in daily life.

9. Overview of the outcomes on different adherence levels

In figure 30 on the next page, an overview of the outcomes of the quantitative methods are given, based on the influence the different persuasive manipulation have on the difference levels of adherence.

Five tables are given. Two in the grey area which represent the outcomes of the AHP questionnaires and three tables in the blue area which represent the outcomes of the log files. All five tables have the same structure. The manipulations are shown from left to right. In the second row the outcomes for that specific level are given. In the last column of each table, the meaning of the values is given. In the last row, the meaning of the values is given in words. Beneath the table, the significance levels are given. In table 45 an example is given.

Table 45. Example of outcome

Manipulation	**Manipulation**	**Manipulation**	**Manipulation**	**Manipulation**	Explanation of values
Value*	Value*	Value*	Value*	Value*	
Value in words		**Value in words**		**Value in words**	

*: significance level

In the grey area in figure 30 on the next page can be seen that users evaluate two manipulations as significantly important: personal feedback and text messages. It can also be seen that the users weight both manipulations as higher if they received it, from users who did not receive it. For adherence level 1 (to the course) applies that personal feedback and text messages were important for the 179 users that did consistently fill in the questionnaire.

In the blue area in figure 30 on the next page (log files) can be seen that none of the manipulations have a significant influence on adherence.

Level 1 To the course (1)

Personal Feedback	Text message	Automatic Response	Multimedia	Tailoring	Personalisation	Weights of the manipulations
0,359*	0,169*	0,128	0,128	0,126*	0,090	
Important		**Less important**			**Unimportant**	

*: significant (at 5%) higher than the manipulation to the right

Level 1 To the course (2)

Personal Feedback	Automatic Response	Text message	Multimedia	Tailoring	Personalisation	Differences in weights of the manipulations between getting or getting not.
Yes: 0,406 * No: 0,311	Yes: 0,184** No: 0,109	Yes: 0,201*** No: 0,123	Elb: 0,114 Basis: 0,146	H: 0,118 L: 0,131	H:0,078 L: 0,101	
Important			**Less important**		**Unimportant**	

*: significant at 5% (p=0.018) with the number below
**: significant at 5% (p=0.019) with the number below
***: significant at 10% (p=0.071) with the number below

Level 2 To the lessons

Personal Feedback	Text message	Automatic Response	Multimedia	Tailoring	Personalisation	(Percentage all nine lessons completed/ average amount of completed lessons)
(46,8/ 6,75)	Yes: (42,1/6,83) No: (42,1/ 6,83)	(38,1/6,50)	Elb: (41,0/6,69) Basis: (44,8/6,55)	H: (45,5/6,85) L: (41,4/6,50)	H: (48,1/6,49) L: (38,3/6,81)	
Unimportant						

None of these differences was significant

Level 3 Times of logging in

Personal Feedback	Text message	Automatic Response	Multimedia	Tailoring	Personalisation	Average amount of log ins over 12 weeks
1,192	Y: 1,103 N: 1,208	1,119	Elb: 1,226 Basis: 1,085	H: 1,267 L: 1,044	H: 0,970 L: 1,341	
Unimportant					**Less important**	

None of these differences was significant

Level 4 Manipulation use

Personal Feedback	Text message	Automatic Response	Multimedia	Tailoring	Personalisation	Percentage of users with hits (lowest percentage of hits within 12 weeks/ highest percentage of hits within 12 weeks)
13/31%	x	16/34%	x	28/17%	x	
Unimportant						

Figure 30. Overview of the outcomes of different adherence levels

10. Overview of the influence of all manipulations integrated in the designs, coupled with possible causes

In the overview of table 46, a summary of the results for all manipulations is given, coupled with possible causes for these results out of this study. These comments are based on the manipulations that were integrated in designs with 5 manipulations together. To comment one manipulation, to others manipulations that were integrated in the designs, were regarded as noise.

Table 46. Results of the manipulations integrated in the designs linked to possible causes of this study

Manipulation	*Results*	*Possible causes out of this study*
Personal feedback	• Evaluated as most important manipulations to keep using Voluit Leven (AHP) • Users who received it weighted it higher then users who received automatic response • Is not the manipulation that is responsible for highest percentage of users that completed all 9 lessons or has the highest average amount of lessons completed • Amount of log-ins does not differ from the other manipulations	• Quality of the messages was not as expected by users: too general, not enough focused on the needs and situation of the users, received late, grammatical mistakes. • Users get the feeling that they never could do anything wrong. All messages that were received were positive and enthusiastic. At the end of the treatment, this began to irritate. • Not all users get the feeling that the feedback was tailored on the input that was given by humans. • Picture was not an added value.
Automatic response	• Evaluated as less important to keep using Voluit Leven (AHP). • Users who received automatic response (by computer) weighted it higher than users who received personal feedback (by human). • The designs with this manipulation are responsible for the lowest percentage of users that completed all nine lessons. • Average amount of log-ins per week almost equal for the designs with automatic response in comparison to the designs with personal feedback. • Percentage of users with hits on personal feedback and automatic response each week is almost equal.	• Quality of the messages: content to general and feels as a supplement of the course materials instead of feedback. • Users felt that it was tailored by a computer, especially as the treatment progressed.
Text messages	• Evaluated as important manipulation to keep using Voluit Leven (AHP). • Users who receive it weighted it higher then users who did not receive text messages. • The designs with text messages are together responsible for the lowest average amount of users that completed all lessons. • Same pattern of log-ins as all other manipulations.	• Content is often a repetition of course materials: too general, not corresponding their situation, too serious and childlike. • Other users saw a recognition of themselves in the messages: they were funny, motivating and a reminder. • Arouse feelings of shame in users who did not make known that they were following the treatment.

Multimedia	• Evaluated as less important to keep using Voluit Leven (AHP). • Users weighted it higher when they did not get the manipulation in the elaborate variant (MP3 assignments, images, animations, and videos). • The expectation was greater than the actual satisfaction in terms of influence on amount of log-ins. • Not remarkably high inconsistency level of the questionnaires (AHP) within the designs that received the high variant, or high percentage of users that completed all nine lessons or high average amount users that completed all lessons within the designs with the high variant.	• Integrated in the exercises, not in the design. • The content of the videos was not as expected: the exercise with videos were much, long and little sparkling. Caused impatience. • No possibility of interaction for the user. • MP3 voice records were in high demand but could not be repeated due problems in downloading. • An added value.
Tailoring	• Responsible for the questionnaires with the lowest inconsistency level (AHP) • Users weighted it higher when they did *not* get the manipulation in the high variant (including: name, age, married state, work and most important complaints). • Users who get the low variant did expect more from it, but it is not the case that users in the high variant have logged in for more times or clicked more on the stories. • Designs with the high variant of success stories are responsible for the highest average amount of completed lessons.	• Most stories where to general which means that stories did not join the perception of users and users did not feel it was about themselves. • Not enough visible in the design . • Users did not feel a need to read the stories, because there was no need for problems of others. • For some users it was a replacement of fellow-sufferers contact, they feel that they were not alone with their problems.
Personalisation	• Evaluated as the less important manipulation to keep using Voluit Leven. • Responsible for the questionnaires with the highest inconsistency level. • Users weighted it higher when they did not get the manipulation. • High variant of personalisation responsible for the highest percentage of users that completed all nine lessons.	• Users cannot form an image of the manipulation: not easily distinguished from tailoring. • The elements of the manipulation were Integrated in one of the last exercises, not in the design. • Not a good timing, users became aware of it at the end of the treatment. • In the low variance to little elements (only name and progress on homepage).

CONCLUSION

In this study, an assessment is performed to investigate the influence of persuasive manipulations on adherence in e-health interventions. The five manipulations were: feedback given by humans (in this study called personal feedback) or by the computer (in this study called automatic response), text messages, multimedia, tailoring (success stories) and personalisation (motto).

The main question was:

Which persuasive manipulations have the greatest influence on the adherence of Voluit Leven?

The aim of this study was to gain an insight in the manipulations that can increase the use of Voluit Leven and with that the use of e-health technologies. In this chapter, the most important results are summarized and conclusions are drawn. This will be done in the order of the research questions. One by one will be examined to see which manipulations are important for users to keep using the online treatment and if this evaluation differs if users have received the manipulation or not. Afterwards will be described which influence the manipulations have on the amount of completed lessons and what the usage patterns are. The chapter ends with an description of the attrition patterns and the other factors that have an influence on adherence according to the users. Also the range of the conclusion will be described; with how much certainty are these conclusions valid for the influence of the manipulation, and for which type of web based applications.

1. Which of the five persuasive manipulations is relevant to keep using Voluit Leven?
Personal feedback is evaluated as the most important, followed by text messages. Tailoring, automatic response and multimedia are evaluated as less important. Personalisation is evaluated as unimportant to keep using Voluit Leven.

2. What are the differences and similarities in the weights of the manipulations by users who did receive a specific type of manipulation from those that did not?
Users who received personal feedback, automatic response and text messages all weighted the manipulations higher than the users who did not get that specific manipulation. Exactly the opposite can be seen for multimedia, tailoring and personalisation. The users weighted it higher when they did not get the manipulation, and with that expect more from it.

3. Do the five difference manipulations have an influence on the amount of completed lessons?
It appears that no influence can be found of the manipulations on the amount of completed lessons. None of the manipulations (low or high variant or less or more variant) have showed a significant difference in percentage users that completed all nine lessons, or in the average amount of lessons that was completed. Also the influence of activity degree (continued/discontinued/non-user), activity pattern (high/low) and age does not depend on the manipulations that were received or the amount of completed lessons.

4. What are the usage patterns for different combinations of manipulations as represented by the eight different designs and the different variances of the manipulations?
The average number of log-ins to complete all lessons was 31.1. The average amount of log-ins per week was 1.2. The usage patterns per manipulation show a decline in amount of log-ins per week in week 4 and a variable use that every week raises and falls. Getting personalisation is responsible for the lowest amount of log-ins during all weeks, not getting personalisation is responsible for the highest amount of log-ins. The usage patterns of clicking on the manipulations itself show no difference between high and low active users for clicking on tailoring or feedback. Also, there are no differences of clicking on the feedback between both forms: automatic response and personal feedback.

5. What is the attrition pattern of Voluit Leven and is there a connection with manipulations?
The attrition pattern is a constant attrition with a constant proportion of users that drop out each week. However, the most users drop out in week 1 and a rise of drop outs can be seen in week 4. Because of the small amount of users, it was not possible to connect the data to manipulations that were received. None of the drop outs has signed up for a telephone interview what makes it impossible to support the data with qualitative results.

6. Do users give other factors as an explanation for their non-usage, that were not related to the persuasive manipulations?
Other factors, indicated by users, are costs and the strength of the complaints. Costs seems to be one of the factors that can motivate a user, but users could not give an indication. If the costs are too high, users prefer face-to-face contact. If the costs of an online treatment and face-to-face contact were equal, face-to-face contact is preferred. Another factor that has an influence, is the strength of the complaints. If these were to strong, it would be difficult for a user to motivate themselves. With face-to-face contact, this is a smaller barrier. A combination of both, online and face-to-face contact, would be the ideal situation.

Main question: Which persuasive manipulations have the greatest influence on the adherence of Voluit Leven?
For all combinations of manipulations that were integrated in this study, none of these combinations show a great influence on adherence with regard to Voluit Leven. None of the designs with a specific combination of manipulations show an unusually high or low amount of log-ins in comparison with the other designs, differences in usage patterns in comparison with the other designs, or differences in amount of completed lessons in comparison with the other designs. Statements about which individual manipulation has the possibility to increase adherence –as represented in usage by times of logging in and amount of completed lessons– cannot be done. However, it is possible to derive the users preferences for individual manipulations. Personal feedback is evaluated by users as the most important manipulation to keep using Voluit Leven, followed by text messages. In the future, more focus is needed on the individual influence of personal feedback and text messages without integrating them in multiple manipulation designs.

Range of this conclusion
The manipulations were examined by testing eight different combinations of manipulations through integrating them in designs. This means that only the influence of a manipulation in comparison to the other manipulations is examined; each design consisted of five manipulations. There were no designs in which the *individual* influence of the manipulations was examined. For all results related to individual manipulations it applies that the remaining four manipulations were regarded as noise.

The results of this study are suitable for web based applications with an online treatment for three months aimed at users with mild depressive or anxiety complaints. Other groups are not included in this study, so the conclusions are only valid for this group.

DISCUSSION

In the discussion, the meaning of the conclusion for the theoretical and practical problem – the low adherence towards web based applications – will be described, followed by how this findings are related to the literature. Firstly, a reflection of the conclusions for the low adherence towards web based application will be given. This reflection is based on own results and the literature. Secondly, an evaluation is given for the research methods that were used. This chapter ends with recommendations resulting out of this study. The numbers in the brackets refer to the chapter and section number in this study for instance (2.1) means: chapter 2, section 1.

Meaning of the findings for the theoretical and practical problem

A reflection of the results and conclusions will be given per research question. It starts with the main question for which the results for each manipulation of this study is compared with the literature and what these results mean for the current state of the literature. This will also be done for the sub questions that gave rise for a reflection, these are sub question 4 and 5.

Main question: Which persuasive manipulations have the greatest influence on the adherence of Voluit Leven?

First, the main results of the main question will be discussed. Per manipulation will be described what the results of this study were, what the current state of development in the literature is and how the results of this study reflect the literature.

Personal feedback

- With the use of literature, the hypothesis for feedback is formulated as: users who get personal feedback achieve a lower drop-out rate than users who get automatic feedback (a detailed description of the origin of the hypotheses can be found in chapter II, section 4). The AHP questionnaires enables us to assess that the influence of personal feedback is significant regarding adherence to the course (5.2). This influence is not significant for: adherence to the lessons, times of logging in and manipulation use. Some reasons can be identified for this (unexpected) remarkable fact. For the short term needs of the users, the feedback was too positive and not stimulating enough (telephone interviews in appendix 4). The reaction was always positive, no matter what users have filled in. In these cases, the suspicion arises by us, that positive personal feedback had a negative impact on motivation. In the beginning, it was motivation, but as the course progressed it feels too forced. Suggestions for improvements could not be given by users. Another striking point was the feedback that was too linear. The given feedback was mainly focused on the reactions from the completed lessons of that specific week. The lessons before and progression in general were not mentioned. Personal feedback is one of the most promising factors for stimulating usage [33]. The studies of Fry and Mohr have shown that the use of personal feedback will be more persuasive than automatic feedback [16, 25, 64]. This study confirms these results.
- Another point is that feedback is related to the factor time. The relation between time and feedback is essential for the relation between feedback and changes in future feelings, emotions and motivations [65]. Users indicated that they were 'waiting' for the feedback. Sometimes it came a few days after completing the lesson, it came later than expected or it did not come at all. Information delivered by feedback can only affect future behaviour. The later the feedback was received, the later the effect and impact on emotions and motivation, the more the reaction is about information out of history, and the smaller the impact will be for the user.

Automatic response

The hypothesis was that an effect was suspected, but not as great as that of personal feedback had on adherence (based on the literature as represented in chapter II, section 4). This study is focused on a short term treatment for mild depression and anxiety and the results show for none of the adherence levels a surplus value of automatic response. The most plausible reason that could explain this difference (apart from the differences in focus: short term focus and online treatment) is that the automatic response was not enough matching personal situations and preferences (telephone interviews). The users had the feeling that a computer was answering their input, not a person. The content of the response was too general and was therefore not perceived as feedback. Users want to receive feedback that matches their

given answers. In most cases it was seen as a complement of the assignment. In spite of the effect the users expected, in the light of this study, the positive effect of automatic response cannot be proven (2.0). The amounts of elements that were matched with user's needs, interests, personality and usage context [18], and the different versions of response in the programme were too limited. The hypothesis that is formulated is based on the results of Fry and Mohr [16, 64]. Both articles had another focus. The systematic review of Fry et al. is focusing on behavioural change in target behaviour like weight loss and physical activity. The intervention length ranged from 6 weeks to 30 months. The study of Mohr et al. focuses on coach supported e-health interventions, published in the last 20 years. So, we suspect that this results of the influence of automatic response are caused by the length of the treatment, the quality of the content (5.10 table 46) and the combination with other manipulations that were included in the designs together with automatic response.

Text messages

This study hypothesis (based on the literature as represented in chapter II, section 4) that the users who received text messages will be more motivated than users who did not receive text messages. Out of the results of adherence to the course can be seen that users expected that text messages can have a great influence to keep using the online treatment (5.2). Also, it becomes clear that users who received the text messages expected more from it than the users who did not receive them. Reasons for this can be found in literature, for instance: if a system reminds target behaviour, the users will be more likely to achieve their goals [18]. Also, it can be used as a supplement of the system as giving care at the right time and the right place [15]. The results of this study do not show these results in times of logging and users did not indicate text messages as an important factor to keep using Voluit Leven (5.3 table 28/5.4). Also, the amount of completed lessons did not rise within the designs that received text messages. According to us, the main reason for this can be found in the content of the messages, indicated by users that were interviewed for this study. The users indicate that the messages were too general and not filtered enough on the situation in which the users currently were (telephone interviews). As the weeks passed, the messages began to irritate in never reaching the effect of reminding and motivation. The messages were not focused enough on target behaviour, were a repetition of the lessons and not at the right time (telephone interviews). According to us, the disappointing effect of the text message in this study may be caused by the repeating function the messages had (5.10 table 46), instead of a supplement of the treatment, as intended in literature [25].

Multimedia

The hypothesis states that adding five elements (animations, videos, interactive assignments, mp3 assignments and images) of multimedia will be more motivating than adding two elements (mp3 assignments and images). This hypothesis is based on the literature as represented in chapter II, section 4. Because this influence was little empirically studied, this manipulation was integrated in the design. In this study can be seen that the designs with multimedia do not have an above average of log-ins in comparison with the designs with the other manipulations. Also, multimedia is evaluated as less important to keep using Voluit Leven (5.2 table 22/5.3 table 28/5.4 figure 18-20). One reason for this can be that the videos were integrated in the lessons and users had no choice of using it. However, there are no reasons to believe that multimedia has an great influence on the adherence, caused by the outcome of adherence to the lessons, that shows that the average amount of log-ins in the designs with the elaborate or the basis variant of multimedia is almost equal (elaborate: 1,226 and basis: 1,085) (5.2). The AHP analysis does not show that users think multimedia has an influence to keep using the online treatment. Even can be seen that users who did receive multimedia, weight it lower than users who did not receive multimedia (5.2). This hypothesis was based on Fogg who concluded that by adding multimedia through providing sensory information like audio and video, interventions have the unique capability to motivate [15]. We suspect that the impact of multimedia on adherence is influenced too much to prove this effect. This because multimedia was integrated in a design with 4 other manipulations that can be regarded as noise and multimedia was integrated in the assignments.

Tailoring

The hypothesis of this study was that the integration of success stories with four identification elements (high version: name, age married state and work) will lead to a lower drop-out rate than the integration of success stories with one identification element (low version: name). For this e-mental health study, this result is not that clear: users evaluate the manipulation as less important to keep using Voluit Leven and the percentage users that completed all nine lessons in the designs that received tailoring in the high variant do not differ from the designs that received tailoring in the low variant. This is also the case for the average amount of log-ins (5.2 table 23/5.3 table 28/5.4 figure 18-20). Out of the telephone interviews it becomes clear that not the content of the messages, but the need for messages was the main cause for this. All the interviewed users (n=15) were not interested in the feelings and emotions of others, but had

enough of their own. The few who did read the stories, experienced the insertion as too positive and did not feel that is was corresponding their own feelings. This in accordance to the outcome of the AHP analysis, users who did receive the high tailored version of the success stories weighted it as less important to keep using the online treatment, as users who had to imagine that they had received it. In literature this impact has only be proven for not e-mental health related studies [18, 20]. Fogg has found that the high-depth tailored versions of the success stories work as an attempt to transport users (smokers) into a familiar environment while addressing relevant outcome and efficacy expectations within the message of the story [66]. According to us, the disappointing effect of the success stories for this e-mental health case is caused by the visibility of the manipulations in the design and the target population that did not need fellow-sufferers.

Personalisation and the personal aspect of manipulations

In this study, the manipulation 'personalisation' is focused on the ability to change motto, values and interesting assignments on the homepage. Also the name of the user, the progress in lessons and the mailbox can be seen on the homepage, but there are more manipulations that are 'personalized': personal feedback and text messages (5.3). In order to overcome the low impact of the manipulations in most studies done in the past, literature states that features need to be more personal [18, 20]. Unexpectedly, no influence of the manipulation personalisation can be found on adherence in this study (5.2/5.3 table 28). Users evaluate it as unimportant to keep using Voluit Leven and the designs with the high variant of personalisation does not show a difference in users that have completed all nine lessons or in the average amount of log-ins in comparison to designs with the low variant. This may be caused by a number of elements:

1) Out of the AHP analysis can be seen that the users have no clear idea what was meant by personalisation. With a very high average inconsistency of 0,42 (all other inconsistency levels ranged from 0,241 up to 0,305) it may be indicated that this feature was not well developed within Voluit Leven or within the questionnaire the users received at T_1.
2) The results of the telephone interviews and the open question support this, by showing that users cannot imagine what kind of effect the integration of more personal aspects provide on their adherence (appendix 4/section 5.7). It is therefore expected that personalisation was not sufficiently within the design of the web application.
3) Evidence was found for some bias in the results related to personalisation. In lesson 7 users had to fill in their motto coupled with a picture. This means that personalisation was integrated in the lessons and makes it impossible for users to get around it. We suspect that this has influenced the results of adherence for the designs in which personalisation was integrated.
4) Remarkable and inexplicable are the differences in the average amount of log-ins caused by getting the high or low variance of personalisation (5.4). The *high* variant of personalisation lead to the *lowest* amount of log-ins on the web application per week. The *low* variant of personalisation lead to the *highest* amount of log-ins per week. This was particularly notable because the high variant included the assignments in which personalisation was integrated and which were not possible for the users to skip.

The real impact of personalisation was in advantage difficult to measure for this study, and was caused by the design of the experiment (methods). The manipulation personalisation was balanced, but not full factorial. This means that all possible combinations of manipulations were integrated in designs as explained in chapter IV, section 3. This could be done, since the integration of these manipulations (or manipulation of the feature) were relatively small. According to Fernandez et al. it is not possible to give a unambiguous realisation of personalisation, there is no 'one size fits all' [67]. Following Fernandez, from the phone interviews of this study can also be derived that the realisation of personalisation is complex. During the lessons, the specific needs were subject to change. In the beginning, users wanted to see simple extraction of information like their name. At the end, some users wanted a reflection of the input they had given in assignments. Also Oinas-Kukkonen contains this [18] by pointing out that persuasive technology, never can be neutral and should be able to adapt changes in preferences, demands and needs of individual users. However, in the light of this study, this effect of personalisation cannot be proved. More research is needed in which way goals of the programme can be achieved by users, and to find out how these results can be connected to personal preferences.

The confusion of the manipulations tailoring and personalisation

The evaluation of the impact of specific persuasive manipulations on adherence within Web based application is difficult since the manipulations are not uniquely defined. There is a potential bias in the interpretation of the manipulations tailoring and personalisation. According to Letho, tailoring is the content of the web page that should meet the potential needs, interests, personality and usage context of the user [17]. Personalisation is the system that has to offer personalized content, based on personal

information [17]. Although, the results of the systematic review from Fernandez et al. [67] shows, that personalisation is a term with different meanings in different domains, and based on many different characteristics. Oinas-Kukonnen refers with personalisation to the lay out and the order of information on the studied website [18]. Stretcher is talking about the personalisation of the source (organization that offers the programme) with the use of a picture and text written in a friendly, personal matter as 'our' team' and 'we' [20]. In our view, it seems that all these definitions are in accordance. According to us, personalisation is about the integration of preferences, by the user or the system, like the color of the page. Tailoring is the adaption of the perception of the user, or interests. The user should get the feeling that it is about and for him. It can be seen that the separation between both manipulations is very arbitrary, since personalisation can be seen as a part of tailoring. In this study, the difference between both manipulations is also not clear. Tailoring is approached as the way and extent in which users can identify themselves with the programme with the use of success stories. These stories were based on user characteristics given by users themselves: age, name, married state, work and most important complaints for participating in the course. Personalisation was the integration of personal elements as name and motto. Both are strongly related to each other, and it seems to be that tailoring is the collective term. Tailoring can be achieved with, for instance, personalized content of the web page, eventually automatically adjusted. In that case, information of a user is used to determine what specific content a user will receive, matching their needs and preferences.

Sub question 1: What is the relevance of the persuasive manipulations to keep using the online treatment?
The results of this study do not provoke further reflection.

Sub question 2. What are the differences and similarities in the weights of the manipulations by users who did receive a specific type of manipulation from those that did not?
The results of this study do not provoke further reflection.

Sub question 3. Do the different manipulations have an influence on the amount of completed lessons?
The results of this study do not provoke further reflection.

Sub question 4. What are the usage patterns for different combinations of manipulations as represented by the eight different designs and the different variances of the manipulations?

- No specific pattern can be seen in the usage patterns for the different combinations of designs based on getting or not getting a manipulation (5.4 figure 19-20). The number of log-ins is decreased as the weeks passed and at random times, a decrease or increase can be seen in the number of log-ins in comparison with the previous week. Because no specific pattern in these decreasing and increasing of log-ins could be observed, no connection with the content of the lessons could be made. This form of usage patterns is not new, Nijland et al. [25] and Glasgow et al. [68] have shown similar patterns. The study of Nijland focuses on patterns of a two years treatment, the study of Glasgow is talking about usage patterns of a treatment that lasted 4 months. The usage patterns of short term treatments are useful to get an insight in the effect of more frequent or intensive added support or contacts, needed to substantially increase usage equal or above intended usage. Individualized reminders might enhance usage but would also add costs and staff time [68, 69].

Sub question 5. What is the attrition pattern of Voluit Leven and is there a connection with manipulations?

- In the present study, tangible and intangible observable advantages in completing the treatment or continuing to use, caused attrition and decline in usage [22]. Eysenbach has mentioned these proposed factors as affecting the shape of the attrition curves [22]. But the clearly sigmoid curve Eysenbach describes for attrition cannot be found in this study. It is a constant attrition with a constant (lineair) proportion of users that stopped using the web-application (5.6). The differences between this study and the one from Eysenbach, is that Eysenbach talks about adherence to the lessons (appendix 1) and this study about adherence to the technology (part II of the results). Because adherence to the technology has never been so specifically studied, these curves cannot be compared to other studies. When looking at attrition curves related to adherence to the lessons, this constant attrition is more common [22, 63]. This gives us reasons to assume that there are no differences in attrition patterns between adherence to the lessons and adherence to the technology. More empirical evidence is needed to determine this effect.
- Specific for this study is the great amount of users (26 of the 239) that stopped using the intervention in week 4 (5.6 figure 28). This week interrupted the constant amount of users that stopped using the intervention each week. Reasons for this striking observation were found by us in *the structure of the treatment*. Until week 3, users had worked on gaining insights into physical

pain, this can be confrontational (appendix 8). Until here, no solutions were given or results of the treatment can be seen, and this is just what users want to feel (telephone interviews and [22]). Besides this, the content of week 3 was the longest of all weeks (appendix 8). Users had to read a lot of information and exercises had to be made. According to us, the *content of the treatment* of week 3 can also have an influence. In week 2 and 3 the users had to fill in a diary. For several reasons, users did not feel encouraged to use the diary: users noticed it too late, the users were no 'writing types', it asked too much time from the user because an update is needed every day. In short, it was not the way they worked (telephone interviews, appendix 4). The influence of *external events* cannot be clearly identified as a cause [22]. The period of the specific decline-weeks was from April 11th up to April 22th. In the Netherlands this is not a vacation period or a public holiday. It was difficult to find this pattern of attrition in other articles, because most articles concerned a treatment that lasts for months instead of weeks [10, 22]. Reasons for attrition did not become clear out of the telephone interviews, because none of the drop-outs has signed in for an interview.

Sub question 6. Do users give other factors as an explanation for their non-usage, that were not related to the persuasive manipulations?
The results of this study do not provoke further reflection.

Evaluation of methods

In this part of the discussion, a reflection is given of the research methods that were used. Firstly, findings in this study were reasons to discuss the research method. Secondly, selection bias is discussed which emphasized the small range of the study population for which the results are valid.

Findings

- ***Building of the experiment***

In the building of the experiment can be seen that all designs have more than one manipulation. The effect of one manipulation is much easier to determine if designs also were integrated with one manipulation in the high or low variance. With the use of the experiment as is done in this study, it is always possible that a higher/lower adherence and attrition are caused by the influence of multiple factors. It was not possible to prove the individual effect of manipulations. In the future this can be overcome by integrating more designs through balancing all included factors or, by the integration of designs with just one manipulation.

- ***Integration of manipulations in the assignments***

Manipulations were integrated in the assignments. This results in users that must use the manipulation instead of using the manipulations when it is needed. Then, the effect the manipulation had on adherence is not measurable. Further research should focus on manipulations that are not integrated in the assignments, but are independent of each other. Also Nijland et al. highlighted this [25].

- ***Conditions of the assessment AHP***

One of the conditions of AHP is that the criteria, manipulations, should be independent from each other. In this study this is not happened. Personal feedback and automatic response are both forms of feedback and for that reason not distinctive. The same happens with tailoring and personalisation. Both manipulations had almost the same description and distinctiveness was low. It could be that this has resulted in noise in the outcomes of the questionnaire (5.2). The results do not show this very clear, only the high inconsistency level of personalisation: 0,42 (all other inconsistency levels ranged from 0,241 up to 0,305).

Selection bias

- The majority of the users are female (70.7%) and highly educated (78.7%) (5.1 table 8). This high amount of females can have two reasons. A study of the RIVM shows that more females are suffering from depression: in 2007 4,9% of the men and 7,4% of the females [70]. Secondly, females are more likely to enroll themselves for an online treatment. The results of this studies corresponds with a lot of other recent published articles: Mohr et al. found that 81% of all users were female [31], Meyer et al. found 76% female users [63] and Warmerdam found 71% female users [71]. Moreover, a selective enrollment of women may have occurred through the recruitment of the users through an advertisement in Dutch newspapers. Relatively many highly educated people (188/239= 79 %) have registered for the treatment. This does not match the national prevalence of depression [72]. Depressive disorders are most common among low educated: 7.6% of the adult population between 18 and 64 years old with only primary school education. Although, these educational differences in the prevalence of depressive disorders are

not significant. This applies to both male and female. Also the study of Warmerdam [71] included a lot of highly educated females, while recruitment there took place through banners on general websites.

- An aspect that can have an impact on the adherence measures is the selection of users. The included users have registered themselves through an advertisement. This means that the users are intrinsically motivated. Literature has shown that this has a direct positive influence on adherence and attrition [64]. Further research should be conducted, preferably with users that do not have to register but were, for example, recruited via a general practitioner. Nevertheless, these results provide an insight in the influence of persuasive manipulation, which were integrated in designs with more manipulations, on adherence beyond the current literature.
- A selection bias occurred by using the convenience sample for the recruitment of users for the telephone interviews. Users could enroll themselves for the interviews. None of these users was a discontinuous user or non-user. It attracted users who were already motivated and had a specific level of intention to use.

Recommendations

This study ends with recommendations that are based on the results of this study, the reflection of the literature of these results and the recommendations users gave in the telephone interviews for the improvement of Voluit Leven. This will be done with the following classification: recommendations for future research focused on persuasive technology and recommendations specific for the content of Voluit Leven,

Development of future persuasive web based applications

- Persuasive technology can never be neutral [18] as is highlighted in the discussion. Technology should be able to adapt changes in preferences, demands and needs of individual users. This study also shows that every user, at different moments in time, have different needs and preferences. It is almost impossible to make one design for that great variety of users. The technology must have the possibility to handle with all kinds of people. This means that the design of e-health technologies is attuned to the users at several times during the treatment and not only at the start of the treatment. The technology must be constantly re-designed, also during use. An option can be that users fill in a short questionnaire three times during the 12-weeks course which asks for their needs. On the base of this the system should integrate the appropriate manipulation. However, research is needed if users are able to identify their needs, in what way and how this should be translated into specific manipulations.
- The influence of one or two manipulations on adherence remains underexposed in the literature. Mostly, several manipulations are integrated in web based applications. Out of this research it becomes clear that the tested combinations of manipulations did not have an influence on adherence. But it is still not clear which individual manipulation can have an influence on adherence. Future research should focus on the influence of individual manipulations. Based on the outcomes of this study, we have made a priority triangle as can be seen in figure 31. Users evaluate personal feedback as the most important, future research should focus on this. Automatic response and text messages are evaluated as less important but can have an influence if the quality of the messages/response is high (clear description in table 46). These priorities are useful for manipulations as defined in this study. As an additional consideration it should be taken that the manipulations are not integrated in the assignments but are independent.

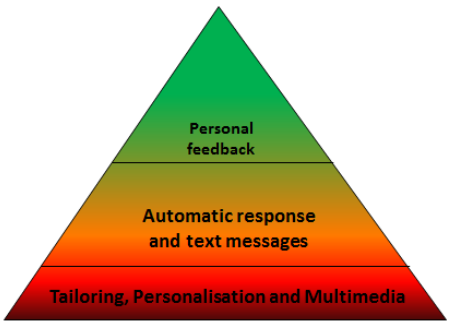


Figure 31. Manipulation priorities for future research

- Some problems of selection bias caused by the intrinsic motivation of users could be prevented if further research is conducted with users that do not have to register. An option for this could be recruitment via a general practitioner.
- We suspect that there are no differences in attrition patterns between adherence to the lessons and adherence to the technology. More empirical evidence is needed to determine this effect.

Content of Voluit Leven

During the telephone interviews, also some recommendations of the users became clear. These are highlighted for the content of Voluit Leven:

- Users want more interaction. People regretted it that they were not able to respond on the feedback that they received. Other literature did show this need also [25].
- The print button should be more visibly integrated in the design. Users want to print lessons and feedback but did not find visible options for this.
- The reaction button was not used. Users did feel barriers, they did not want to harass other people or users, we they did not know if the question they had should be asked there.
- The typeface was perceived as too small.
- The amount of text on one page was narrowly displayed. The whole page was not used. A result of this was that users had to scroll too much.
- The diary was little used. Users did not feel the need for it.
- A lot of interviewed users asked for a reminder training. At this moment, much of the problems were solved and users had learned exercises to deal with problems in daily life. Within a few months a relapse can occur and to going through the same exercises can help. For example a repeat of the essential parts of the treatment.

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APPENDICES

APPENDIX 1

Analysis of six articles in definitions of adherence

Table 1. Definitions of adherence, attrition, drop-out en non-usage and research methods and instruments

No.	Author (article, year)	Definition with clarification		Focus according to the author (adherence to the technology / adherence to the lessons)	Focus according to myself (adherence to the technology or adherence to the lessons)	Research Method	Research instrument
1	Eysenbach [22] *Law of attrition* (2005)	Adherence	Exploration of attrition	Aderence to the technology or lessons is not specific mentioned. Attrition curves are mentioned: - proportion of users who do not dropout but who are no longer using the application, plotted over time - proportion of users who are lost to follow up over time	The focus is on adherence to the lessons Substantiating: Usage and dropout are measured as following the research protocol or non-usage. Usage is not explained. Not using the intervention can be 'not finishing the lessons' and 'not using all parts of the application'. In the rest of the article is nothing mentioned about the use of specific parts of the application so there could be assumed that adherence to the lessons is mentioned.	-Report of raw attrition proportions at *different points (longitudinal) in time* illustrated in attrition curves (logarithmic or sigmoid) - Relative risk of dropping out or stopping the use of an application	Survival analysis methods: - Kaplan Meier analysis - proportional hazards regression analysis
		Attrition	Dropout attrition: Phenomenon of losing participants to follow up e.g. participants do not return to fill in follow-up questionnaires Non-usage attrition: Phenomenon of non-usage				
		Dropout	Not mentioned				
		Usage	Not mentioned				
		Non-usage	Not using or infrequent using the intervention				

Appendix 1- Adherence scheme

No.	Author (article, year)	Definition with clarification		Focus according to the author (adherence to the technology / adherence to the lessons)	Focus according to myself	Research Method	Research instrument
2	Christensen [14] *Adherence in internet interventions for anxiety and depression* (2009)	Adherence	The extent to which individuals experience the content of the Internet intervention	Measured in two separate parts: adherence and dropout. Adherence to the treatment Represented as number of log-ons and number of completed exercises. Dropout rates Represented in participants who failed to complete post-treatment or follow-up assessments once they had been accepted into the trial	Another classification but both parts are related to adherence to the lessons. Substantiating None of the specific elements of the applications are given or measured in the article. All measurements that are done, are related to finishing the lessons/course or not. There could be assumed that adherence to the lessons is mentioned.	Measuring at four specific *moments* in time with the sub classifications: - no show - early dropout - late dropout - early completers	In general three methods: - correlation and regression analysis to find a link between personal , service delivery and demographic factors and adherence - post-test questionnaires to analyses persons perception - experimental manipulations of variables to be causal in promoting adherence
		Attrition	Dropout attrition: Loss of participants from the trial Non-usage attrition: Lack of exposure to website materials				
		Dropout	Individuals who fails to complete the research trial protocol associated with an Internet intervention				
		Usage	Not mentioned				
		Non-usage	Participants' lack of exposure to the website material				

Appendix 1- Adherence scheme

No.	Author (article, year)	Definition with clarification		Focus according to the author (adherence to the technology / adherence to the lessons)	Focus according to myself	Research Method	Research instrument
3	Neve [24] *Dropout, Nonusage Attrition … Weight Loss Program (2010)*	Adherence	Not mentioned	Adherence to lessons or technology is not mentioned. Finding predictors for non-usage attrition represented in attrition rates is the overall goal of the study.	The focus of this research is a combination of adherence to the technology and adherence to the lessons. Substantiating Dropout attrition represents users that were finishing the course, or not. This is the adherence to the lessons. Non-usage attrition is about the use of the specific part of the program/technology that should be used. It can be assumed that the adherence to is meant.	Usage: logged in, entries in diary, posts to forum and or weighed in. These where *measured continually or longitudinal* Dropout attrition Membership of the program, data enrolled and the data membership ends Non-usage attrition Only users who completed subscription, non-user if they stopped using features Non-usage and dropout attrition is measured at two *moments* in time, after 12 weeks of the course and at the end of the course. Not all features were tested (log-in is also considered as a feature	Statistical tests like t-test, chi-square tests and Cox proportional hazard regression analysis
		Attrition	Dropout attrition: participants who do not complete the study/program Non-usage attrition: participants who stop using the website				
		Dropout	Not mentioned				
		Usage	Not mentioned				
		Non-usage	Not mentioned				

Appendix 1- Adherence scheme

No.	Author (article, year)	Definition with clarification		Focus according to the author (adherence to the technology / adherence to the lessons)	Focus according to myself	Research Method	Research instrument
4	Kelders [23] *Effectiveness of a web-based intervention aimed at … users and usage (2011)*	Adherence	Central point, not defined only a theoretical framework of the WHO is called without definitions.	Adherence to technology: the model of the WHO is aimed to adherence to the lessons and not the technology. Adherence to the technology is represented in non-usage and intention to use Gain insights in the differences between users and no-users to make a step forward to decrease attrition.	Adherence to the technology	Intention to use: At *two moments* in time measured, before and after the intervention period Usage: *Longitudinal* during the whole intervention, Every log-on for each participant	- Online questionnaires (pre- and posttest) - Usage: log-files (number of times logged in) Statistical tests: ANOVA, Pearson's $\chi 2$, regression analysis, Z-score, Wilcoxon signed rank test
		Attrition	Central point, not defined only a theoretical framework of the WHO is called without definitions.				
		Dropout	Central point but not clarified Only mentioned that the group of dropout and non-users are overlapping but not are not the same.				
		Usage	Central point but not clarified				
		Non-usage	Central point but not clarified				

Appendix 1- Adherence scheme

No.	Author (article, year)	Definition with clarification		Focus according to the author (adherence to the technology / adherence to the lessons)	Focus according to myself	Research Method	Research instrument
5	Nijland [25] *Factors influencing the use of a web application … a longitudinal study (2011)*	Adherence Attrition Dropout Usage Non-usage Non-usage dropout	Not mentioned Central point but not clarified Not mentioned Central point but not clarified Not mentioned Central point but not clarified	Adherence to lessons or technology is not mentioned The aim of the study is to explore factors that influence long term use in : - Patterns of use: Continuity of use Degree of activity - Reasons for non-usage - User profiles	The focus of this research is adherence to the technology. Substantiating: The aim of the study was to find features that influence usage and in which usage patterns this results. This is about the influence that the different parts of the design have on influence. Also user profiles and reasons for non-usage are taken into account. It is the broad view.	Usage Usage patterns over 2 years, *longitudinal* Usability test At *one moment*, after three months of usage Survey At *one moment*, at baseline E-mail At *one moment*, one year after initial use	Mixed- methods - usage of the features: log files - reasons for non-usage: usability tests, interviews, content analysis of email messages - user profiles: survey Statistical tests

Appendix 1- Adherence scheme

No.	Author (article, year)	Definition with clarification		Focus according to the author (adherence to the technology / adherence to the lessons)	Focus according to myself	Research Method	Research instrument
6	Wanner [26] *Comparison of Trial Participants … Regarding Adherence, Attrition, and Repeated Participation (2010)*	Adherence	The extent to which individuals use the content of the Internet intervention	Adherence to the lessons or technology is not mentioned. It is called adherence in general. Adherence: - number of pages viewed -proportion of visits that results in starting a module - the proportion of visits when at least 3 minutes were spent in a module - the proportion of visits when at least one tailored feedback message was received - time spent in the modules Attrition: - duration of a single visit (first visit and longest visit) as the base of the non-usage attrition curve	Adherence and attrition are both focused on adherence to the lessons. Substantiating: All specific parts of the adherence and attrition results in outcomes about how much pages are viewed for how long. Nothing is said about which specific part of the intervention is used and if all parts are used. It is the small view.	Measuring at six *moments* in a six year period (longitudinal) with six one year time periods.	- Internet registration program, no further specification given - Statistical tests like t-tests, Wilcoxon-Man Whitney test and chi-square tests for the creation of non-usage attrition curves and comparisons between 2 test groups - Logistic regression
		Attrition	Phenomenon of stopping using the intervention Non-usage attrition: Whether individuals discontinue use of an Internet intervention				
		Dropout	Not mentioned				
		Usage	Not mentioned				
		Non-usage	Not mentioned				

Appendix 1- Adherence scheme

	Author	Definition	Measurements moments	Method	Adherence to lessons/technology
1	Eysenbach	Drop out attrition Non usage attrition	Attrition Curves, l**ongitudinal**	Survival analysis methods (regression and Kaplan Meier)	Adherence to the lessons
2	Christensen	Adherence to the treatment Dropout rates	**Four moments** in time (log files and adherence and dropout rates)	Regression analysis Questionnaires Experimental manipulations	Adherence to the lessons
3	Neve	Drop out attrition Non usage attrition	**Longitudinal** (log files) **Two moments** in time (non -usage and drop out attrition)	Log files Membership registration	Adherence to the lessons Adherence to the technology
4	Kelders	None Central points	**Longitudinal** (log files) **Two moments in time** (Survey)	Log files Survey	Adherence to the technology
5	Nijland	None Central points: attrition, usage and non-usage drop out	**Longitudinal** (log files - usage patterns) **One moment in time** (usability test, survey and e-mail)	Log files Interviews Content analysis E-mail messaging Survey	Adherence to the technology
6	Wanner	Adherence Attrition Non usage attrition	Attrition curves at **six moments, longitudinal**	Internet registration program Statisical tests Regression analysis	Adherence to the lessons

Appendix 1- Adherence scheme

APPENDIX 2

AHP Questionnaire in Dutch

In de vragenlijst hieronder staan enkele factoren die van invloed kunnen zijn op uw motivatie om gebruik te blijven maken van de web applicatie Voluit Leven.

Dit zijn de factoren:

- ***Persoonlijke feedback*** de reactie die u ontvangt op een gemaakte opdracht van een begeleider. U krijgt een begeleider toegewezen, hij/zij kan uw gemaakte opdrachten inzien en zal u persoonlijke feedback geven.

- ***Automatische respons:*** u ontvangt een reactie op een opdracht die wel is afgestemd op uw gegeven antwoorden, maar niet gegeven wordt door een persoonlijke begeleider.

- ***SMS***: het ontvangen van 3 sms berichten per week die bedoeld zijn als motivatie om de opdrachten te voltooien. Bijvoorbeeld: 'We verzetten ons vaak tegen pijnlijke emoties. Doordat je met deze les bent begonnen, ben je al bereid hiermee aan de slag te gaan!'

- ***Multimedia***: bij de oefeningen gebruik maken van geluid, afbeeldingen en bewegende plaatjes (video's). De inhoud van de les verandert hierdoor niet.

- ***Identificatie***: de toevoeging van persoonlijke verhalen aan de website. Met de persoonlijke verhalen worden korte teksten bedoeld, geschreven vanuit het perspectief van een deelnemer van de cursus. De tekst gaat in op de redenen van deelname aan de cursus en de positieve invloed die de cursus op de deelnemer had.

- ***Personalisatie***: de mogelijkheid om de beginpagina/startpagina aan te passen aan uw persoonlijke voorkeuren. Bijvoorbeeld de achtergrond, muziek, antwoorden op belangrijke vragen die te zien zijn en de vermelding van uw naam.

Let op! Het is mogelijk dat u niet alle factoren zult herkennen. Probeert u zich dan voor te stellen hoe belangrijk de factor voor u zou* kunnen *zijn.

Op de volgende pagina staan telkens twee van deze factoren tegenover elkaar.

Wilt u aangeven welke factor voor u van belang is om gemotiveerd te blijven om Voluit Leven gedurende de hele cursus te gebruiken? Als u beide factoren even belangrijk klikt u dan op 'geen voorkeur'. **Probeer het antwoord 'geen voorkeur' zoveel mogelijk te vermijden. Ook al voelt u maar een hele lichte voorkeur voor een factor, kies dan toch deze factor in plaats van 'geen voorkeur'.**

Voorbeeldvraag: Welke van de 2 factoren is voor u het meest van belang om Voluit Leven gedurende de hele cursus te blijven gebruiken?

Stel u vindt het ontvangen van 'persoonlijke feedback' belangrijker dan het ontvangen van een sms 3 keer per week, klik dan op het bolletje voor persoonlijke feedback.

Stel u vindt beide factoren even belangrijk, klik dan u op het bolletje voor 'Geen voorkeur'. Probeer dit antwoord zoveel mogelijk te vermijden!

Kunt u daarna aangeven in welke mate u deze factor belangrijker vindt? Klik op het bolletje naast het cijfer dat het beste bij uw mening past.

Deze cijfers lopen van 1 tot en met 9 zoals u in tabel 1 kan zien.
Een 1 betekent dat beide factoren voor u even belangrijk zijn. Heeft u bij de keuze van de factoren 'geen voorkeur' aangeklikt? Klik dan op het bolletje links naast het cijfer 1.
Een 9 betekent dat u de factor van uw voorkeur extreem veel belangrijker vindt dan de andere factor die genoemd wordt. Let op: per vraag mag u maar 1 bolletje aanklikken.

De betekenis van deze cijfers staat hiernaast in de tabel.

Voorbeeldvraag: En in welke mate?

Stel u vindt persoonlijke feedback *veel belangrijker* dan het ontvangen van sms'jes, dan klikt u op het bolletje links naast de vijf. Stel u vindt persoonlijke feedback en sms even belangrijk, dan had u het bolletje links naast de 1 moeten aanklikken. Alle 30 vragen van de vragenlijst staan hieronder in tabel 2 weergegeven. Dit zijn alle paarsgewijze vergelijkingen zoals beschreven in de Methods.

Tabel 1. Waarden van de gatellen 1 tot 9 met betrekking tot de tweede vraag 'En in welke mate?'

Waarde	Definitie
1	Even belangrijk
3	Iets belangrijker
5	Veel belangrijker
7	Erg veel belangrijk
9	Extreem belangrijker
2,4,6,8	Tussenliggende waarden

Tabel 2. All questions of the AHP questionnaire

Vraagnummer	*Paarswijze vergelijking*
1	Automatische response of SMS
2	En in welke mate?
3	Automatische response of multimedia
4	En in welke mate?
5	SMS of multimedia
6	En in welke mate?
7	Automatische respons of identificatie
8	En in welke mate?
9	SMS of identificatie
10	En in welke mate?
11	Multimedia of identificatie
12	En in welke mate?
13	Automatische respons of personalisatie
14	En in welke mate?
15	SMS of personalisatie
16	En in welke mate?
17	Multimedia of personalisatie
18	En in welke mate?
19	Identificatie of personalisatie
20	En in welke mate?
21	Automatische respons of persoonlijke feedback
22	En in welke mate?
23	SMS of persoonlijke feedback
24	En in welke mate?
25	Multimedia of persoonlijke feedback
26	En in welke mate?
27	Identificatie of persoonlijke feedback
28	En in welke mate?
29	Personalisation of persoonlijke feedback
30	En in welke mate?

APPENDIX 3

Categorization of open question

Table 1: Users that give an correct answer to the question (40% of total amount of users)

N (%)	Category	Example
39 (34%)	Feeling progression or effect	*I get the feeling that there is indeed something changed, that it works.* *I feels that it helps, that the (possibility of) progress is noticeable.*
20 (17%)	Tools/handles for daily life	*That it provides practical tools, methods and insights.* *To get tools to make life more manageable.*
14 (12%)	Time investment	*That I can finish the course in my own time between work and study.*
12 (10%)	Content is connected to practical situation	*I would like to learn something that I can practically apply.*
9 (8%)	Clear exercises and goals	*Meaningful questions* *Pause for thought questions*
8 (7%)	Continuity, regularity, triggers	*Regular trigger to be stimulated to continue*
7 (6%)	Motivation	*It motivated me when I have the liberty to do it when I want, what to do is clear, effective and that I did enjoy it.*
3 (2%)	Feedback	*From time to time get a response on assignments I have made*
3 (2%)	Accessible methods	*Easily accessible*
2 (2%)	Technical problem	*That the online part works*

Table 2 : Users that did not understand the question (5% of total amount of users)

N (%)	Category	Example
11 (5%)	No understanding of question	*I do not understand the question*

Table 3: Users that answer the question: 'What do you want to achieve with the online course? (55% of total amount of users)

N (%)	Category	Example
87 (66%)	Help	*I hope to learn how to deal with my feelings of sadness that suddenly attacked me. I have been trying to be aware of (and to live with) these feelings, but they surprise me from time to time. With the help of this online course, I hope to deal with this.*
44 (34%)	Insight behavioral feelings	*It is important that I understand my emotions and learn how I can express my emotions without the interest without losing out of sight myself and my relatives.* *I would like to understand my own feelings and the way I look at things. I also might get more insight into how differently things might deal with certain circumstances.*

APPENDIX 4

Telephone interviews (in Dutch)

Interview 1

User ID: 814
Design 2, Continuous user, High active, 12 weken, cursus afgerond

Inleiding

Wat is uw algemene indruk van de cursus?
Interessant, zag er goed uit.
Wat vond u minder goed aan de website?
Ik kan hem nu niet meer oproepen, dat is jammer. In het begin moest ik erg wennen aan wat er allemaal moest gebeuren. Als je een week begon had je van die icoontjes en dan was er een oefening. In het begin was ik dan bij de vragen en daar moest ik dan over nadenken en toen bleek de laatste dag dat daar nog van alles achter stond. Dat moest ik dan afraffelen. Ik wilde daar graag lang over nadenken. De oefening moest ik dan eigenlijk een week lang doen en dat kon dan niet meer. Ik kon niet verder springen dus dan was ik daar te laat mee.
Wat was belangrijk voor u om de cursus/website te blijven gebruiken? (handvatten open vraag)
Ik vond de cursus best interessant. Dat motiveerde.
Wat waren uw beweegredenen om deel te nemen aan de online cursus? (intrinsieke motivatie)
Ik heb 2.5 jaar therapie gehad, lang geleden, dat was heel intensief. Maar op een gegeven moment komen problemen terug. Ik had de cursus via de Libelle gevonden en mijn huisarts bevestigde dat het goed was voor mij. Daarom ben ik het gaan doen.
Bleef u gedurende de gehele cursus even enthousiast om de les van die week af te ronden? Nam dit af? Waarom wel/niet? Wat was de oorzaak hiervoor?
Ja. Het enige vervelende was dat de laatste week samen viel met de week van mijn vakantie. In les 8 werden bepaalde dingen gesteld en toen heb ik geen tijd aan de oefeningen kunnen besteden. Dat vond ik erg jammer. Ik had eigenlijk eerder willen beginnen.

Gebruik

Wanneer gebruikte u de website (momenten, ritme van gebruik)
Op zondag, later werd dat maandag.
Hoe vaak heeft u de site gebruikt (voldoet dit aan inteded usage? Waarom wel/waarom niet?)
Een aantal keer per week. In sommige weken elke dag, om alles terug te lezen en dergelijke. Toch om alles goed in te prenten, de herhaling had ik nodig.
Zijn er perioden dat ze hem niet gebruikt hebben? (oorzaak ?)
Alle weken heb ik hem gebruikt, alleen de laatste twee weken niet.
Wanneer hebben ze de cursus afgerond? (lukte dit binnen 12 weken? Waarom wel/niet?)
Ik heb de cursus afgerond maar had graag aan het eind meer tijd gehad. Ik vond de week vaak net even te kort. Je kan niet verder als je de vragen niet beantwoord hebt, maar dat lukte me niet altijd zoals ik eigenlijk zou willen.
Waren er weken dat u het moeilijk vond de cursus vol te houden? Wanneer was dit? Waarom?
Zou ik zo niet meer weten uit mijn hoofd. Er waren wel veel dingen die moesten gebeuren. Lag ook aan hoe mijn eigen situatie was en zeker niet aan de opzet van de website of de inhoud van de cursus.
Welk onderdeel van de website vond u toen het meest prettig/stimulerend om te gebruiken?
Dagboek. Niet echt gebruikt. Ik kwam dan halverwege de les erachter dat ik het moest gebruiken en dan was het te laat. Op een gegeven moment waren er specifieke opdrachten, dan gebruikte ik het wel. De andere weken niet.
Reactieknop heb ik niet gebruikt. Was een beetje een 'onduidelijke' knop. Ik had een inhoudelijk vraag en dat mocht niet. Wat moest ik daar dan mee? Uiteindelijk vragen gesteld via de homepage, en dan contact.
Heeft u elementen gemist in de website die u wel hadden kunnen stimuleren? Zoals?
Je krijgt elke week een reactie, maar ik had wat meer een individuele reactie gewenst. Je kon geen vragen stellen. Een mail sturen of iets kon niet. Dat had ik wel graag terug willen zien.

Manipulaties

Hoe zou u graag feedback ontvangen? Wanneer? Van wie??
Ik had graag wat meer uitleg willen hebben. Het heeft even geduurd voordat ik doorhad dat ik feedback kreeg. In de 3de week kreeg ik het pas door. De feedback was gericht op wat er gebeurd was.

In eerste instantie vond ik het persoonlijk genoeg maar later wilde ik graag meer specifiekere antwoorden. Meer gericht op wat ik zelf heb getypt en mijn vragen die ik graag beantwoord wilde hebben. Dit gevoel kreeg ik in de tweede helft steeds meer. De foto die erbij zat had zeker een meerwaarde voor mij.

Hoe vond u het om SMSjes te ontvangen?. Heeft u dit als motiverend of juist als storend ervaren? Waardoor kwam dit? Waren ze niet persoonlijk genoeg? Kwamen ze te 'dwangmatig' over?

Vond ik erg leuk. Vooral in het begin. Ze waren wel motiverend. De één was aardiger (paste beter bij mij) dan de ander maar dat kan ook wat minder.

Heeft u de succesverhalen gelezen? Voelde u na het lezen van het verhaal overeenkomsten tussen uzelf en de persoon die zijn/haar verhaal doet? Waardoor werd dat veroorzaakt? Waren ze voor u waardevol om de cursus te blijven gebruiken? Waren ze 'persoonlijk' genoeg?

Ik heb ze gelezen maar verder eigenlijk niets. Ik had er niet zoveel binding mee. Maar het moet wel blijven. Het maakt het luchtiger.

Slot

Vind u het geschikt om dergelijke cursussen via internet te doen?

Mogelijk niet voor iedereen. Je kan het in je eigen tempo doen.

Welke eisen zou u stellen voor het meedoen aan dergelijke online cursus?

Geen idee. Dat kan ik zo niet zeggen.

Zou u er voor willen betalen? Hoeveel?

Ik weet het niet. Ik heb dan denk ik toch liever persoonlijk contact.

Algemene opmerkingen

Het persoonlijke aandacht mocht meer, dat vond ik jammer. Even makkelijk een vraag stellen.

Wat ik jammer vind is dat het account is afgesloten. Ik had het prettiger gevonden als ik er nog even bij kon. Het is toch alweer twee maanden geleden. Ik had de site liever voor me gehad.

Interview 2

User ID: 818
Design 4, Continuous user, High active, 12 weken, cursus afgerond

Inleiding

Wat is uw algemene indruk van de cursus?

Prettig, Goed. Allereerst omdat het bij me aansloot, de vraag. Het was goed opgezet.

Wat vond u minder goed aan de website?

In het begin dacht ik dat het heel algemeen was. Maar op een gegeven moment sloot het toch aan bij de dingen die ik zei en dacht (mijn eigen problematiek). Nu weet ik dat daar ICT trucjes voor zijn, maar het was persoonlijk genoeg voor mij. Ik was huiverig voor of het wel persoonlijk genoeg was. Ik verwachte algemene antwoorden, dat viel hard mee.

Wat vonden u storend in/aan de website?

De 1ste oefening was een dame die de opdracht had ingesproken, bij de tweede opdracht een man. Hier stoorde ik mij aan. Maar ik weet niet waarom. De klank van de stem van de vrouw was heel zacht en duidelijk. Ik moest erg wennen aan de stem van de man. Maar toen ik er eenmaal aan gewend was ging het beter. Ik had wel liever de vrouw gehad.

Wat waren uw beweegredenen om deel te nemen aan de online cursus? (intrinsieke motivatie)

Ik had problemen thuis en wilde voor mezelf rustige nachten te krijgen en beter slapen om overdag beter te functioneren. Ik was zwaar gemotiveerd om aan de cursus deel te nemen om voor mezelf rust te creëren.

Bleef u gedurende de gehele cursus even enthousiast om de les van die week af te ronden? Nam dit af? Waarom wel/niet? Wat was de oorzaak hiervoor?

In week 4 was er een keer een moment dat ik dacht: is dit wel wat voor mij. Werd veroorzaakt doordat ik er niet genoeg voor open stond.

Gebruik

Wanneer gebruikte u de website (momenten, ritme van gebruik)

Rond 10uur 's morgens of juist 's avonds. Zelden 's middags. Er waren perioden dat ik het dagelijks deed omdat ik vaak alle lessen/inhoud moest herhalen. Was heel verschillend gedurende de weken.

Hoe vaak heeft u de site gebruikt (voldoet dit aan inteded usage? Waarom wel/waarom niet?)

Per week: 5 keer. Ik had de tijd niet nodig om de lessen af te ronden maar om alles te herhalen, wat stond er in het lesprogramma. Om het te kunnen opslaan moet ik het vaker lezen.

Zijn er perioden u de website niet heeft bezocht? (oorzaak ?)

Nee, zijn er niet geweest.

Wanneer hebben ze de cursus afgerond? (lukte dit binnen 12 weken? Waarom wel/niet?)

Binnen 12 weken. Het was niet moeilijk om dat binnen deze tijd te doen. Maar ik had er ook baat bij.

Waren er weken dat u het moeilijk vond de cursus vol te houden? Wanneer was dit? Waarom?

Week 5 of 6. Daar werd het moeilijk. Bij een therapeut zeg je niet makkelijk af. De stress nam thuis heftig toe en ik kon geen tijd voor mezelf maken waardoor het aantal keren dat ik de cursus bezocht minder werd. Lag niet aan de cursus. Alleen kan een programma dergelijke moeilijkheden niet oppakken.

Welk onderdeel van de technologie vond u toen het meest prettig/stimulerend om te gebruiken?

Dagboek, soms heel veelvuldig, soms niet. Werkte prettig.
Overzicht hielp goed, hoever je was met de les
Terug kunnen kijken naar gedane lessen was heel goed.
Terug kunnen kijken naar wat ik heb ingevuld en waar wil ik aan wilde werken was heel goed.

Heeft u elementen gemist in de website die u wel hadden kunnen stimuleren? Zoals?

Nee, ik heb geen aanvulling.

Manipulaties

Hoe zou u graag feedback ontvangen? Wanneer? Van wie??

Deze manier vond ik prettig.
Was persoonlijk genoeg. Foto die zichtbaar was, was voldoende
Wat ook erg goede feedback was, was de feedback bij de opdrachten: 'Goed zo, doorgaan'
'Is dit wat je bedoeld?' Dat heb ik als heel positief ervaren

Hoe vaak heeft u de feedback die u ontving gelezen? Was dit aan het begin vaker dan aan het eind? Waarom wel/niet?

Ik wachtte op een reactie of ik echt verder kon. Ik kreeg die bevestiging. Of dat ik nog dingen meer/anders moest doen.

Zou dit vervangen kunnen worden door automatisch afgestemde feedback?

Ik vond het prima zo. Er was ruimte om extra vragen te stellen (in de zin van: reageren op de feedback) maar heb ik maar 1 keer gedaan. En wat ik toen vroeg was niet feedback gerelateerd.

Heeft u de Multimedia gebruikt? Waarom wel/niet?

Niet gebruikt. Geen reden waarom niet gebruikt. Kan me niet herinneren dat ik ze heb gezien.

Heeft u de succesverhalen gelezen? Voelde u na het lezen van het verhaal overeenkomsten tussen uzelf en de persoon die zijn/haar verhaal doet? Waardoor werd dat veroorzaakt? Waren ze voor u waardevol om de cursus te blijven gebruiken? Waren ze 'persoonlijk' genoeg?

Sommige spraken me aan, anderen helemaal niet. Waren wel persoonlijk genoeg. Geen verklaringen hiervoor

Slot

Vind u het geschikt om dergelijke cursussen via internet te doen?

Ik dacht dat het niks was, maar ben er van terug komen. Het was een positieve ervaring. Alleen de *privacy* heb ik mijn twijfels over. Dit heeft echter geen gevolgen gehad voor mijn openheid. Ik heb nog wel nagevraagd of het echt privacy 'dicht' was. Bij een instituut op internet zal ik niet meedoen met de cursus, voordat ik van alles heb nagevraagd bij de KvK. Bij de huisarts zal ik het wel geloven, mits ik meer uitleg krijg.

Welke eisen zou u stellen voor het meedoen aan dergelijke online cursus?

Ik gebruik zelf geen techneut, maar kon goed met de cursus omgaan. Iedereen zou het kunnen gebruiken.

Zou u er voor willen betalen? Hoeveel?

Ja, maar ik zou niet weten hoeveel. Ik heb er geen verstand van wat dat moet gaan kosten.

Heeft u nog tips voor de ontwerpers van de cursus en de website?

Veel moeite gehad om de oefeningen op Mp3 te zetten. Ik begreep niet waarom niet.

Aanvullende opmerkingen

Het was een gebruiksvriendelijke website waarmee het erg prettig werken was.

Interview 3

User ID: 866
Design 6, Continuous user, High active, 17 weken, cursus afgerond

Inleiding

Wat is uw algemene indruk van de website?
Heel oppervlakkig heb ik de cursus gevolgd, ik weet dan ook niet of ik echt goede reacties geef.
Wat vond u goed aan de website?
Overzichtelijk was het wel. Het was werkbaar.
Wat vond u minder goed aan de website?
Niets eigenlijk. De cursus bevalt mij wel. Ik had niet veel toeters en bellen nodig op de website.
Bleef u gedurende de gehele cursus even enthousiast om de les van die week af te ronden? Nam dit af? Waarom wel/niet? Wat was de oorzaak hiervoor?
Ja hoor, echt wel.

Gebruik

Wanneer gebruikte u de website (momenten, ritme van gebruik)
In de middag. Het afmaken deed ik dan meestal 's avonds.
Hoe vaak heeft u de site gebruikt (voldoet dit aan inteded usage? Waarom wel/waarom niet?)
3 keer per week.
Zijn er perioden dat ze hem niet gebruikt hebben? (oorzaak ?)
Soms een week niet. Maar dat kwam dan door situatie bij mezelf zoals een defecte computer en vakantie.
Wanneer hebben ze de cursus afgerond? (lukte dit binnen 12 weken? Waarom wel/niet?)
Ja, ik heb hem afgerond. Dacht eerst van niet, maar het is gelukt. Niet te veel stof, was goed te behappen in de tijd die er voor stond (12 weken).
Waren er weken dat u het moeilijk vond de cursus vol te houden? Wanneer was dit? Waarom?
In het begin waren de lessen moeilijk. Maar ik kon het goed behappen.
Welk onderdeel van de technologie vond u toen het meest prettig/stimulerend om te gebruiken?
Niet gebruikt. Geen poes pas.
Heeft u elementen gemist in de website die u wel hadden kunnen stimuleren? Zoals?
Nee

Manipulaties

Hoe zou u graag feedback ontvangen? Wanneer? Van wie??
Omdat het gericht is op uzelf? Foto zichtbaar?
Feedback was prima. Ik had interactie met degene die feedback gaf. Dat was heel leuk. Ik voelde me echt serieus genomen. De inhoud was goed. Er was keurig ingespeeld op meningen.
Hoe vaak heeft u de feedback die u ontving gelezen? Was dit aan het begin vaker dan aan het eind? Waarom wel/niet?
Ja bijna direct. Ik was wel benieuwd.
Heeft u SMS ontvangen?. Heeft u dit als motiverend of juist als storend ervaren? Waardoor kwam dit? Waren ze niet persoonlijk genoeg? Kwamen ze te 'dwangmatig' over?
Ik vond ze wat storend. Niet altijd op een ongelukkig moment, maar het was niet echt iets voor mij. De inhoud was heel oppervlakkig, gewoon een herhaling van de lessen. Het hielp me niet. Het moet niet alleen dan, maar dat moet altijd. Ik ga me er dan aan ergeren. Echt motiverend was het ook al niet. Had eigenlijk niet gehoeven. Ik zag het meer een automatisme vanuit de universiteit. Daarom trek ik me er ook niks van aan. Was lang niet persoonlijk genoeg.
Heeft u de succesverhalen gelezen? Voelde u na het lezen van het verhaal overeenkomsten tussen uzelf en de persoon die zijn/haar verhaal doet? Waardoor werd dat veroorzaakt? Waren ze voor u waardevol om de cursus te blijven gebruiken? Waren ze 'persoonlijk' genoeg?
Nee, interesseerde me niet.

Slot

Vind u het geschikt om dergelijke cursussen via internet te doen?
Je hebt niet direct persoonlijk contact, maar ik had wel een goede interactie met mijn begeleider. Maar daar zat wel eigen initiatief achter. Als je in een zaaltje zit heb je meer interactie. Het heeft duidelijk twee kanten.
Zou u er voor willen betalen? Hoeveel?
Ja, als het noodzakelijk is en ik het perse zou willen dan wel. Ik zou het niet zo goed weten. Daar moet ik een nachtje over slapen.
Heeft u nog tips voor de ontwerpers van de cursus en de website?
Ik vond het goed werkzaam, eerst wel wennen. Er zat niet een overdadige vorm van informatie in, dat vond ik heel positief. Toch soms met iemand praten is vanuit mijn kant toch een tip. Zoals ik nu met u doe en dat twee keer gedurende de cursus had mij erg geholpen.

Interview 4

User ID: 902
Design 2, Continuous user, low active, 12 weken, cursus afgerond

Inleiding

Wat is uw algemene indruk van de cursus?
Goed. Ik zou het een 8 geven.
Wat vond u goed aan de website?
Lay out was mooi.
Wat vond u minder goed aan de website?
Letters waren vrij klein. En vrij veel tekst. Ik vind het fijn als ik niet hoef te scrollen, dat moest ik nu wel veel. Daarnaast hadden er wel meer dingen van mij gevraagd mogen worden, meer interactief. Aanklikken of ik voor A of B kies is veel eenvoudiger weer te geven dan dat ik echt gevoelens moet opschrijven. Mag wel interactiever.
Wat vond u storend in/aan de website?
Niets.
Wat waren uw beweegredenen om deel te nemen aan de online cursus? (intrinsieke motivatie)
Ik zat niet lekker in mijn vel. De huisarts had me doorverwezen omdat ik nogal down was. De cursus was aangeraden door het RIAGG. Aan het einde van de gesprekken die ik daar kreeg kon ik toen deze cursus gaan doen.
Bleef u gedurende de gehele cursus even enthousiast om de les van die week af te ronden? Nam dit af? Waarom wel/niet? Wat was de oorzaak hiervoor?
Ik was zeker enthousiast, dat bleef de gehele cursus eigenlijk wel zo, ook omdat het heel laagdrempelig is. Ik vind het jammer dat het afgelopen is. Ik ben altijd bang voor terugval en daarom heb ik bijvoorbeeld de MP3 oefeningen opgeslagen op mijn Ipod zodat ik deze later nogmaals terug kan kijken.

Gebruik

Wanneer gebruikte u de website (momenten, ritme van gebruik)
Ik deed dat altijd op zondagavond, elke week.
Hoe vaak heeft u de site gebruikt (voldoet dit aan inteded usage? Waarom wel/waarom niet?)
Gemiddeld 1 a 2 keer per week. Vooral na de oefeningen over dagboeken logde ik wat vaker in maar dat was lang niet alle weken.
Zijn er perioden dat u hem niet gebruikt heeft? (oorzaak ?)
Nee.
Wanneer hebben ze de cursus afgerond? (lukte dit binnen 12 weken? Waarom wel/niet?)
Ja, dit was goed te doen binnen de 12 weken. Het was niet te veel tekst of iets dergelijks. Alleen het scrollen wat ik eerder al noemde irriteerde mij nogal eens.
Waren er weken dat u het moeilijk vond de cursus vol te houden? Wanneer was dit? Waarom?
In het begin was het erger dan het eind. In het begin was het best wel heftig. Maar ik zag al snel resultaat wat stimuleerde.
Welk onderdeel van de technologie vond u toen het meest prettig/stimulerend om te gebruiken?
Dagboek. Best vaak gebruikt, vooral in de buurt van de oefeningen. 3 a 4 weken ongeveer.
Reactieknop. Niet gebruikt, ook niet nodig gehad.
Heeft u elementen gemist in de website die u wel hadden kunnen stimuleren? Zoals?
Nee ook niet.

Manipulaties

Hoe zou u graag feedback ontvangen? Wanneer? Van wie??
De feedback die ik ontving was erg onpersoonlijk. Te algemeen. Het sloot niet aan bij wat ik getypt had. De foto deed mij niks, u had het idee dat de foto van iemand anders kon zijn. De tekst paste eigenlijk beter binnen de opdrachten, had als aanvulling gekund. Ik vond het eigenlijk geen feedback.
Hoe vaak heeft u de feedback die u ontving gelezen? Was dit aan het begin vaker dan aan het eind? Waarom wel/niet?
Ik heb het wel gelezen gedurende alle weken.

Hoe vond u het om SMSjes te ontvangen?. Heeft u dit als motiverend of juist als storend ervaren? Waardoor kwam dit? Waren ze niet persoonlijk genoeg? Kwamen ze te 'dwangmatig' over?
Ik vond het echt leuk. Ze motiveerden me echt. Af en toe waren ze te algemeen, maar het stoorde me niet. Het mocht af en toe ook wel wat grappiger. Meer uitdrukkingen die een positieve insteek hebben maar niet zo serieus zijn.
Heeft u de Multimedia gebruikt? Waarom wel/niet?
De MP3 hadden echt een meerwaarde. De rest heb ik niet echt gebruikt.
Heeft u de succesverhalen gelezen? Voelde u na het lezen van het verhaal overeenkomsten tussen uzelf en de persoon die zijn/haar verhaal doet? Waardoor werd dat veroorzaakt? Waren ze voor u waardevol om de cursus te blijven gebruiken? Waren ze 'persoonlijk' genoeg?

Nee ook niet gelezen. Het interesseerde me niet. Ik was al druk genoeg met mezelf. Bewust heb ik ze overgeslagen.

Slot

Vind u het geschikt om dergelijke cursussen via internet te doen?

Ja vind ik heel geschikt. Maar ik vind wel dat er begeleiding moet zijn. Op zichzelf staand is het niet genoeg, er moeten gesprekken aan gekoppeld. Zodat je ergens op terug kan vallen.

Welke eisen zou u stellen voor het meedoen aan dergelijke online cursus?

Je moet gemotiveerd zijn om er vanaf te komen. Ik heb eigenlijk een jaar lang depressief geweest en eerst moet je er bewust van zijn. Je moet willen veranderen. Bewustwording van de problematiek is essentieel.

Zou u er voor willen betalen? Hoeveel?

Ja, zeker. Maar dan moet het wel vergoed worden door mijn zorgverzekeraar. De gesprekken worden nu wel vergoed, de cursus niet. Dan zou ik toch kiezen voor de gesprekken. Als het zo is dat ik eerst een paar gesprekken moet doen en dan de cursus gratis krijg, dan zal ik alsnog de cursus helemaal gaan volgen.

Heeft u nog tips voor de ontwerpers van de cursus en de website?

Nee ik vond het heel mooi en rustig. Kleine lettertype maar dat stond ook wel weer mooi.

Interview 5

User ID: 906
Design 7, Continuous user, High active, 12 weken, cursus afgerond

Inleiding

Wat is uw algemene indruk van de cursus?
Zinvol, leuk om te doen. Met veel enthousiasme. Duidelijk, meestal niet te moeilijk: de lessen niet en het werken met de technologie niet. Voor een heel groot publiek toegankelijk.
Wat vond u minder goed aan de website?
Technische elementen vaak. Ik kon niet alles openen. Toen al gemeld.
Wat waren uw beweegredenen om deel te nemen aan de online cursus? (intrinsieke motivatie)
Ik had het idee dat als ik wat meer handvatten zou krijgen ik dan beter dingen zou kunnen hanteren: onrust en angst.
Bleef u gedurende de gehele cursus even enthousiast om de les van die week af te ronden? Nam dit af? Waarom wel/niet? Wat was de oorzaak hiervoor?
Niet altijd 100% maar over het algemeen wel. Ik ben er wel even uit geweest voor vakantie maar dat gaf geen problemen.

Gebruik

Wanneer gebruikte u de website (momenten, ritme van gebruik)
Heel wisselend. Wanneer ik er zin in had.
Hoe vaak heeft u de site gebruikt (voldoet dit aan inteded usage? Waarom wel/waarom niet?)
Ruw geschat 2 a 3 keer per week.
Zijn er perioden dat ze hem niet gebruikt hebben? (oorzaak ?)
Buiten de vakantie om niet.
Wanneer hebben ze de cursus afgerond? (lukte dit binnen 12 weken? Waarom wel/niet?)
Binnen 12/13 weken is goed gelukt.
Waren er weken dat u het moeilijk vond de cursus vol te houden? Wanneer was dit? Waarom?
Nee, eigenlijk niet. Sommige opdrachten waren lastig omdat ze te confronterend waren, maar ik zag wel in dat het in mijn eigen belang was.
Welk onderdeel van de technologie vond u toen het meest prettig/stimulerend om te gebruiken?
Dagboek: nauwelijks. Waarom weet ik eigenlijk niet.
Reactieknop: aangezien ik niet weet wat de knop betekent weet ik wel zeker dat ik hem niet gebruikt heb (kan nu niet meer terug naar het account)

Manipulaties

Hoe zou u graag feedback ontvangen? Wanneer? Van wie??
Omdat het gericht is op uzelf? Foto zichtbaar?
De feedback was prettig op deze manier. Ik kon het vaak terug lezen en dergelijke. Het was persoonlijk alleen overenthousiast. Ik kreeg het idee dat ik nooit wat fout kon doen. Beetje minder positief mag wel. Foto voegde voor mij niets toe.
Hoe vaak heeft u de feedback die u ontving gelezen? Was dit aan het begin vaker dan aan het eind? Waarom wel/niet?
Altijd gelezen en geen verschil aan het begin en eind. Ik was benieuwd naar de inhoud en bleef daarom gemotiveerd.
Hoe vond u het om SMSjes te ontvangen?. Heeft u dit als motiverend of juist als storend ervaren? Waardoor kwam dit? Waren ze niet persoonlijk genoeg? Kwamen ze te 'dwangmatig' over?
Ja, ik vond ze grappig. En motiverend. Het was een leuke herinnering. Voor mij waren ze persoonlijk genoeg. Soms werden dan ook mijn woorden herhaald. Het is (volgens mij) niet zo dat iedereen eenzelfde SMSje krijgt.
Heeft u de Multimedia gebruikt? Waarom wel/niet?
Heb ik gebruikt. Voegde wat toe dat ik beter bij de les werd gehouden.
Heeft u de succesverhalen gelezen? Voelde u na het lezen van het verhaal overeenkomsten tussen uzelf en de persoon die zijn/haar verhaal doet? Waardoor werd dat veroorzaakt? Waren ze voor u waardevol om de cursus te blijven gebruiken? Waren ze 'persoonlijk' genoeg?
Ja ik heb ze gelezen. Was stimulerend en kon goede overeenkomsten vinden. Ik had geen lotgenotencontact dus dit is wel een mooie aanvulling. Ik kon me goed in de verhalen inleven.

Slot

Vind u het geschikt om dergelijke cursussen via internet te doen?
Ik vind het heel geschikt. Zou heel erg toegankelijk moeten zijn. De drempel is heel laag. Daarnaast is het heel ongemerkt te doen. Je zou aan niemand hoeven te vertellen dat je de cursus volgt.
Welke eisen zou u stellen voor het meedoen aan dergelijke online cursus?
Niet te zware problematiek zoals psychoses. Dan moet er directe begeleiding opstaan. Het is meer voor de gewone man die meer diepgang zoekt.
Zou u er voor willen betalen? Hoeveel?

Ja, maar ik zou niet weten hoeveel, 500 euro zou wel heel veel zijn. Wil je het toegankelijk houden moet je daar rekening mee houden.

Heeft u nog tips voor de ontwerpers van de cursus en de website?

Nee. Ik ben heel enthousiast op dit moment. Ik vond het heel mooi dat de theorie werd afgewisseld met illustraties en dergelijke. Was heel makkelijk leesbaar.

Interview 6

User ID: 951
Design 5, Continuous user, High active, 17 weken, cursus afgerond

Inleiding

Wat is uw algemene indruk van de cursus?
Goed. Ik heb wel veel eraan gehad. Heeft me nieuwe inzichten gegeven.
Wat vond u goed aan de website?
De manier waardoor je door de vragen geleid werd , ik ben geneigd eerst te lezen. Dat kon nu niet. Eerst invullen, dan verder. Ik werd echt gedwongen er mee bezig te zijn.
Wat vond u minder goed aan de website?
Degene die reageerde op mijn mail leek heel standaard. De antwoorden.
Wat vonden u storend in/aan de website?
Eigenlijk niets.
Wat was belangrijk voor u om de cursus te blijven gebruiken? (handvatten open vraag)
Ik wilde er veel uit kunnen halen, inzichten eruit halen. Ik zat er echt op te wachten.
Wat waren uw beweegredenen om deel te nemen aan de online cursus? (intrinsieke motivatie)
Omdat ik veel last had van negatieve emoties, met name op het werk. Ik ben op zoek geweest naar een andere invulling van mijn werk, ik was geïnteresseerd in het mindfullness. Nieuwsgierig en wat doet het werkelijk met je emoties.
Bleef u gedurende de gehele cursus even enthousiast om de les van die week af te ronden? Nam dit af? Waarom wel/niet? Wat was de oorzaak hiervoor?
Ja, ik vond niet alle oefeningen even leuk maar bij sommige oefeningen had ik het gevoel door mezelf in de maling genomen te worden. Dat voelde niet prettig maar verstoorde toch niet mijn enthousiasme. Vond het wel interessant.

Gebruik

Wanneer gebruikte u de website (momenten, ritme van gebruik)
Zonder ritme, was stemmingsafhankelijk.
Hoe vaak heeft u de site gebruikt (voldoet dit aan inteded usage? Waarom wel/waarom niet?)
3 tot 4 keer per week.
Zijn er perioden dat ze hem niet gebruikt hebben? (oorzaak ?)
Nee.
Wanneer hebben ze de cursus afgerond? (lukte dit binnen 12 weken? Waarom wel/niet?)
De week die voor een les stond was eigenlijk heel kort. Ik kreeg meer ruimte. Ik heb uiteindelijk de cursus wel kunnen afronden maar ik had 3 weken vakantie ertussen gehad.
Waren er weken dat u het moeilijk vond de cursus vol te houden? Wanneer was dit? Waarom?
Nee. Soms kost het meer tijd om het te laten bezinken waardoor ik minder vaak achter elkaar inlogde maar moeilijk was het niet nee.
Welk onderdeel van de technologie vond u toen het meest prettig/stimulerend om te gebruiken?
Dagboek. Heb ik niet veel gebruikt. Ik begin er vaak aan om dingen van me af te schrijven maar het werkt niet in een dagboek.
Reactieknop. Ik heb hem één keer gebruikt maar geen reactie op gehad.
Heeft u elementen gemist in de website die u wel hadden kunnen stimuleren? Zoals?
Nee, kan ik zo niet zeggen.

Manipulaties

Hoe zou u graag feedback ontvangen? Wanneer? Van wie??
Omdat het gericht is op uzelf? Foto zichtbaar?
De feedback had wel iets persoonlijker gekund. Het standaard antwoord kon ik niet zo heel veel mee. De foto maakte het wel iets persoonlijker. Ik weet niet of ik het gemist zou hebben als het niet zo was maar het maakt het persoonlijker.
Hoe vond u het om SMS te ontvangen?. Heeft u dit als motiverend of juist als storend ervaren? Waardoor kwam dit? Waren ze niet persoonlijk genoeg? Kwamen ze te 'dwangmatig' over?
Soms vond ik ze leuk, soms te kinderlijk. Ze hadden duidelijke raakvlakken met de lesstof en soms was het echt een reminder soms was het niet ideaal. Ik heb me er niet aan gestoord.
Heeft u de Multimedia gebruikt? Waarom wel/niet?
Ik heb ze allemaal bekeken. Op sommige momenten vroeg ik me af waarom het niet in tekstverband stond. Ze waren niet storend maar het was weinig sprankelend. Het is één richtingsverkeer. Het had eigenlijk niet gehoeven.
Heeft u de succesverhalen gelezen? Voelde u na het lezen van het verhaal overeenkomsten tussen uzelf en de persoon die zijn/haar verhaal doet? Waardoor werd dat veroorzaakt? Waren ze voor u waardevol om de cursus te blijven gebruiken? Waren ze 'persoonlijk' genoeg?
Niet gebruikt. Had totaal geen meerwaarde. Vond het niet interessant hoe het met anderen gaat. Gaat zo over jezelf, dan wil je dat niet. Als je weerwoord hebt steek je er meer

Slot

Vind u het geschikt om dergelijke cursussen via internet te doen?

Is sterk afhankelijk van de grote van de problematiek. Voor mij was het zeker geschikt. Maar het komt niet echt dicht bij je. Sommige dingen raken je maar hebben niet echt een confrontatie opgeleverd zoals : nu ben je aan het vermijden (zwakke punt).

Zou u er voor willen betalen? Hoeveel?

Het is het meest reëel dat je er uiteindelijk voor betaald. Ben ik bereid? Ja, ik heb er uiteindelijk wel van geleerd.

Heeft u nog tips voor de ontwerpers van de cursus en de website?

Een printversie. Ik wist niet dat/of ik aan het eind een printversie zou krijgen maar aan het eind kreeg ik toch nog wel een samenvatting. Dan had ik niet alles tussendoor hoeven te printen. Ik wil het graag terug zien, dat kon ik nu niet doen.

Algemene opmerkingen

Ik ben benieuwd wat hier uit gaat komen.

Interview 7

User ID: 955
Design 8, Continuous user, High active, 17 weken, cursus afgerond

Inleiding

Wat is uw algemene indruk van de cursus?
Gaf een goed indruk.
Wat vond u goed aan de website?
Uiterlijk. Kleuren. Schermen stonden niet te vol.
Wat vonden u storend in/aan de website?
Niet altijd kon ik vinden wat ik zocht. Een aantal keren had ik een hoofdstuk afgesloten en toen kreeg ik geen reactie. Daarna kon ik dan niet meer inloggen. Via een e-mail kreeg ik dan de feedback een week later. Erg storend!
Wat waren uw beweegredenen om deel te nemen aan de online cursus? (intrinsieke motivatie)
Eigen motivatie. Het leek mij wel iets.

Gebruik

Wanneer gebruikte u de website (momenten, ritme van gebruik)
Willekeurig. Er zat geen ritme in mijn gebruik.
Hoe vaak heeft u de site gebruikt (voldoet dit aan inteded usage? Waarom wel/waarom niet?)
Per week gebruikte ik de hem 3 a 4 keer.
Zijn er perioden dat ze hem niet gebruikt hebben? (oorzaak ?)
Nee.
Wanneer hebben ze de cursus afgerond? (lukte dit binnen 12 weken? Waarom wel/niet?)
Ik heb de cursus op tijd afgerond, was goed binnen de 9 weken te doen. Geen probleem mee gehad.
Waren er weken dat u het moeilijk vond de cursus vol te houden? Wanneer was dit? Waarom?
Ja die weken waren er zeker. Ergens in de 5de of 6de week had ik de moed opgegeven. Ik kreeg de indruk dat mindfullness mij niet lag. En een aantal keren (3x) dat ik een week moest wachten op de feedback. Dat was heel vervelend.
Welk onderdeel van de technologie vond u toen het meest prettig/stimulerend om te gebruiken?
Informatie die steeds binnen kwam vond ik prettig.
Oefeningen vond ik goed werken.
Dagboek in het begin gebruikt, later niet meer. Heb geprobeerd me er aan te houden maar na 3 weken heb ik er niks meer in geschreven. Dit kwam door mezelf, ik ben niet zon schrijven.
De reactieknop heb ik 1 a 2 keer gebruikt.
Heeft u elementen gemist in de website die u wel hadden kunnen stimuleren? Zoals?
Kan ik me zo niet herinneren.

Manipulaties

Hoe zou u graag feedback ontvangen? Wanneer? Van wie??
Omdat het gericht is op uzelf? Foto zichtbaar?
Feedback op zich was goed. Alleen zou ik dat liever anders hebben.. Het leek op een grote afstand te staan. Ik kon geen vragen stellen, ik kreeg het maar eens per week. En als je dan net een keer te laat op de knop had gedrukt moest je een week wachten. Sowieso zou ik het vaker willen ontvangen. Van wie maakt mij dan niets uit. Alleen mis ik het persoonlijk contact wel. Ik mis gebaren en uitdrukkingen, de foto heeft hierin niets toegevoegd.

Hoe vaak heeft u de feedback die u ontving gelezen? Was dit aan het begin vaker dan aan het eind? Waarom wel/niet?
Gedurende de weken heb ik de feedback constant gelezen. Dit was aan het begin of eind niet anders.

Heeft u het als prettig ervaren dat u een eigen motto kon invoeren en een eigen afbeelding daaraan kon toevoegen (personalisatie)? Waarom wel/niet? Zou het u meer motiveren voor gebruik als dit uitgebreider was geweest?
Had wel weg kunnen blijven. Ik heb het niet gebruikt. Motto was aan het eind niet meer van mij. Ik schreef wat op, maar het betekende eigenlijk niets meer. De afbeelding heb ik niet gebruikt.
Heeft u de succesverhalen gelezen? Voelde u na het lezen van het verhaal overeenkomsten tussen uzelf en de persoon die zijn/haar verhaal doet? Waardoor werd dat veroorzaakt? Waren ze voor u waardevol om de cursus te blijven gebruiken? Waren ze 'persoonlijk' genoeg?
Ik heb ze gelezen. Sommige verhalen waren erg op mij gericht, andere minder. Ze waren wel waardevol om de cursus te blijven gebruiken. Dit kwam doordat enkele verhalen echt overeen kwamen met mijn situatie, ik kon me erbij inleven. Bij andere verhalen dacht ik ook wel eens: waar moet dit heen.

Slot

Vind u het geschikt om dergelijke cursussen via internet te doen?
Nee, zeker niet. Door alles wat hierboven staat eigenlijk. De communicatie valt weg. Dat heb ik echt gemist. Ik ga zoiets dergelijks wel nog een keer doen maar dan niet via internet. En wat ik gemerkt heb is dat ik

persoonlijke dingen invul en daarna kreeg ik dan feedback en dan had ik dingen opgeschreven die anders werden geïnterpreteerd. Dan kan ik geen reactie meer daarop geven. Dat mis ik.

Heeft u nog tips voor de ontwerpers van de cursus en de website?

Navigatie was niet helemaal ideaal. Soms drukte je op de knop en dan kwam je ergens anders dan dat ik dacht.

Interview 8

User ID: 960
Design 2, Continuous user, High active, 12 weken, cursus afgerond

Inleiding

Wat is uw algemene indruk van de cursus?
Heel goed. Zowel cursus als website.
Wat vond u goed aan de website?
Dat je rubrieken kon terugvinden. Snel overzicht ervan. Overzichtelijke site
Wat vond u minder goed aan de website?
Dagboek. Niet opgeslagen teksten moesten telkens opnieuw worden ingetypt. Vooral bij het heen en weer klikken tussen de pagina's. Dagboek functie dan ook niet gebruikt.
Wat vonden u storend in/aan de website?
Moest erg wennen aan de cursus. Ik kon er vrij makkelijk vertrouwt mee te raken maar omdat ik de computer wel dagelijks voor mijn werk gebruik maar verder niet is het erg wennen.
Wat waren uw beweegredenen om deel te nemen aan de online cursus? (intrinsieke motivatie)
Inhoudelijk aan de slag met emotionele zaken en hoe het therapeutische element aangeboden zou worden via internet. Nieuwsgierig naar de ervaring. En ook gedeeltelijk om wat aan de persoonlijke problematiek te doen. Daarnaast hoef ik er zo geen moeite voor te doen (reistijd). Het wordt aangeboden vanuit de universiteit (betrouwbaarheid), en het is anoniem.
Bleef u gedurende de gehele cursus even enthousiast om de les van die week af te ronden? Nam dit af? Waarom wel/niet? Wat was de oorzaak hiervoor?
Ik bleef gedurende de hele cursus enthousiast omdat ik alles wilde doorwerken. Ervaren hoe dat zou zijn.

Gebruik

Wanneer gebruikte u de website (momenten, ritme van gebruik)
Meestal 's avonds. Als een week klaar was, was ik nieuwsgierig, soms verschilde de dag dat ik verder kon, dan was ik best teleurgesteld. In het weekend gebruikte ik de website meer.
Hoe vaak heeft u de site gebruikt (voldoet dit aan inteded usage? Waarom wel/waarom niet?)
3 a 4 keer. Dat was voldoende om alle lesstof door te nemen. Ik heb wel moeite gehad met het vasthouden van informatie. Terug bladeren naar voorgaande lessen erg noodzakelijk aan het eind van de cursus. Hoeveelheid informatie viel mee, goede opbouw alleen te veel om direct op te nemen.
Zijn er perioden dat ze u de cursus niet gebruikt heeft? (oorzaak ?)
Ja, vakantie.
Wanneer heeft u de cursus afgerond? (lukte dit binnen 12 weken? Waarom wel/niet?)
De cursus lukte me prima binnen 12 weken. De vragenlijst aan het eind lukte alleen niet.
Waren er weken dat u het moeilijk vond de cursus vol te houden? Wanneer was dit? Waarom?
Niet specifiek weken die het moeilijk maakten. Aan het eind was er meer discipline was wel nodig.
Welk onderdeel van de technologie vond u toen het meest prettig/stimulerend om te gebruiken?
De oefeningen.
Automatische feedback: Was oke. Naar het eind toe had ik er echter steeds minder mee. Het werd steeds meer een automatische beantwoorder, dat gevoel kreeg ik heel sterk aan het eind. Te weinig gericht op de specifieke inhoud die ik geef. De feedback hoeft niet persoonlijker ingericht te worden met video's of foto's. De inhoud van de tekst was gewoon niet genoeg op mezelf gericht. Kwam niet goed binnen op deze manier. Het voordeel was dat ik het gevoel kreeg dat niet al mijn feedback 'beoordeeld' werd waardoor het anoniem voelde. Dit gaf mogelijkheden om meer open te zijn.
Heeft u elementen gemist in de website die u wel hadden kunnen stimuleren? Zoals?
Nee (kon ze niets bedenken)

Manipulaties

Hoe vond u het om SMSjes te ontvangen?. Heeft u dit als motiverend of juist als storend ervaren? Waardoor kwam dit? Waren ze niet persoonlijk genoeg? Kwamen ze te 'dwangmatig' over?
Ja de SMS waren er grappig, prettig en gaven een leuke 'herinnering' op momenten dat je minder met de cursus bezig was. De inhoud sloot goed aan bij de behoeften. Positief over SMS.
Heeft u de Multimedia gebruikt? Waarom wel/niet?
Video's heb ik niet gebruikt. Dat is te moeilijk voor mij, te technisch. Voldoende aan de geluidsopnames.
Heeft u de succesverhalen gelezen? Voelde u na het lezen van het verhaal overeenkomsten tussen uzelf en de persoon die zijn/haar verhaal doet? Waardoor werd dat veroorzaakt? Waren ze voor u waardevol om de cursus te blijven gebruiken? Waren ze 'persoonlijk' genoeg?
Ik heb ze in het begin gelezen maar niet echt aandacht aan besteed. De tekst sloot niet aan, niet persoonlijk gericht (lage variant ontvangen). Ik voelde me niet aangesproken, vooral later in de cursus niet meer. Ergens vanaf les 5 was dat.

Slot

Vind u het geschikt om dergelijke cursussen via internet te doen?

Ja, heel prettig om te doen. Ik zou het anderen aanraden.

Welke eisen zou u stellen voor het meedoen aan dergelijke online cursus?

Geen heftige problematiek, daar is de cursus niet geschikt voor.

Zou u er voor willen betalen? Hoeveel?

Ik zou er best voor willen betalen. Om de toegankelijkheid hoog te houden moet je er niet te veel voor vragen. Ongeveer 75 euro.

Heeft u nog tips voor de ontwerpers van de cursus en de website?

Symbolen bij fragmenten om zaken vast te houden. Nu veel tekst. Overeenkomstige elementen verduidelijken met symbolische illustraties zou mij daarbij helpen. Je moet veel lezen nu. Daar zitten nog wel mogelijkheden.

Eigen opmerkingen

Leuke cursus om te doen, goed opgezet. Via internet aan deze problemen werken, werkt prima.

Interview 9

User ID: 963
Design 2, Continuous user, low active, 7 weken voltooit

Inleiding

Wat is uw algemene indruk van de cursus?
Redelijk. Niet dat ik heel enthousiast was. Het is al aardig weer weggezakt. Het ging soms wat teveel in op een bepaalde gebeurtenis die niet leuk was.
Wat vond u goed aan de website?
Lettertype. Website had kleine letters.
Wat was belangrijk voor u om de cursus te blijven gebruiken? (handvatten open vraag)
Dat ik dacht 'ik wil het gebruiken'. Puur mijn eigen motivatie.
Wat waren uw beweegredenen om deel te nemen aan de online cursus? (intrinsieke motivatie)
Ik wilde graag een positievere insteek in mijn leven. Niet zo negatief overal over denken. Ik was ook echt gemotiveerd.
Bleef u gedurende de gehele cursus even enthousiast om de les van die week af te ronden? Nam dit af? Waarom wel/niet? Wat was de oorzaak hiervoor?
Soms niet, korte tijd om de cursus af te ronden.

Gebruik

Wanneer gebruikte u de website (momenten, ritme van gebruik)
Overdag, willekeurig.
Hoe vaak heeft u de site gebruikt (voldoet dit aan inteded usage? Waarom wel/waarom niet?)
Denk vier a vijf. Om alles goed te doorlopen zou het wel iets vaker moeten. Denk wel elke dag.
Wanneer hebben ze de cursus afgerond? (lukte dit binnen 12 weken? Waarom wel/niet?)
Alleen de laatste weken niet.
Waren er weken dat u het moeilijk vond de cursus vol te houden? Wanneer was dit? Waarom?
Nee, door de lessen zelf soms.
Welk onderdeel van de technologie vond u toen het meest prettig/stimulerend om te gebruiken?
Dagboek. Vond ik wel prettig, voegde iets toe. Juist omdat je dan makkelijk en snel dingen kwijt kunt. Juist dan wordt je gestimuleerd. Alles snel overzichtelijk.
Reactieknop. Niet gebruikt, het is me niet opgevallen dat die er was.
Heeft u elementen gemist in de website die u wel hadden kunnen stimuleren? Zoals?
Nee eigenlijk niet. Ook niets overbodig.

Manipulaties

Hoe zou u graag feedback ontvangen? Wanneer? Van wie??
Omdat het gericht is op uzelf? Foto zichtbaar?
Ik vond het vrij oppervlakkig en voor de hand liggend. Het was echt een automatische antwoorder. Ik heb er eigenlijk niets aan gehad.
Hoe vaak heeft u de feedback die u ontving gelezen? Was dit aan het begin vaker dan aan het eind? Waarom wel/niet?
Ik heb het eigenlijk wel gelezen, maar dan kon ook niet anders omdat ik er gewoon niet omheen kon.
Heeft u de succesverhalen gelezen? Voelde u na het lezen van het verhaal overeenkomsten tussen uzelf en de persoon die zijn/haar verhaal doet? Waardoor werd dat veroorzaakt? Waren ze voor u waardevol om de cursus te blijven gebruiken? Waren ze 'persoonlijk' genoeg?
Nee. Ik weet eigenlijk niet waarom niet. Ik heb ze niet bewust gezien.

Slot

Vind u het geschikt om dergelijke cursussen via internet te doen?
Ja.
Welke eisen zou u stellen voor het meedoen aan dergelijke online cursus?
Geen.
Zou u er voor willen betalen? Hoeveel?
Jawel. Zou ik hier eerder voor betalen dan voor een psycholoog? Nee dan zou ik toch naar de psycholoog gaan. De combinatie lijkt mij helemaal ideaal.
Heeft u nog tips voor de ontwerpers van de cursus en de website?
Nee, iets groter lettertype of iets dergelijks maar verder niet.

Interview 10

User ID: 986
Design 5, Continuous user, High active, 17 weken, cursus afgerond

Inleiding

Wat is uw algemene indruk van de cursus?
Ik vond het prima. Goede indruk.
Wat vond u goed aan de website?
Was duidelijk kon alles vinden.
Wat vond u minder goed aan de website?
Niks opvallends.
Wat was belangrijk voor u om de cursus te blijven gebruiken? (handvatten open vraag)
Ik vond de inhoud heel goed, kon het gelijk gebruiken.
Wat waren uw beweegredenen om deel te nemen aan de online cursus? (intrinsieke motivatie)
Ik was heel nieuwsgierig naar mindfullness. Ik was sceptisch dat de universiteiten dat naar zich toe trekken. Ik dacht, ik ben nieuwsgierig. Hij kwam op het goede moment. Hij was praktische opgebouwd. Naderhand vond ik het eigenlijk best goed.
Bleef u gedurende de gehele cursus even enthousiast om de les van die week af te ronden? Nam dit af? Waarom wel/niet? Wat was de oorzaak hiervoor?
Ja. Dat kwam doordat ik zelf ook zo ben. Het was steeds een hele logisch stap, het ging eigenlijk vanzelf.

Gebruik

Wanneer gebruikte u de website (momenten, ritme van gebruik)
In het weekend en aan het eind van de week.
Hoe vaak heeft u de site gebruikt (voldoet dit aan inteded usage? Waarom wel/waarom niet?)
Toch wel 3 keer.
Zijn er perioden dat ze hem niet gebruikt hebben? (oorzaak ?)
Ja, misschien dat het een weekje is voorgekomen hoor. Als er in de familie wat was of iets dergelijks maar verder niet.
Wanneer hebben ze de cursus afgerond? (lukte dit binnen 12 weken? Waarom wel/niet?)
Ja ik heb hem afgerond, was goed te doen binnen de 12 weken die er voor stonden.
Waren er weken dat u het moeilijk vond de cursus vol te houden? Wanneer was dit? Waarom?
Nee.
Welk onderdeel van de technologie vond u toen het meest prettig/stimulerend om te gebruiken?
Dagboek. Heb ik niet gebruikt, misschien één keer maar het is niets voor mij.
Reactieknop. Ik kan het me wel herinneren, maar ik had geen behoefte er aan.
Heeft u elementen gemist in de website die u wel hadden kunnen stimuleren? Zoals?
Nee.

Manipulaties

Hoe zou u graag feedback ontvangen? Wanneer? Van wie??
Ik vond het prima. Alleen heb ik zelf al veel gedaan dus was niet nieuw. Het was persoonlijk genoeg.. was best knap. Het voegde voor mij echt iets toe.
Hoe vaak heeft u de feedback die u ontving gelezen? Was dit aan het begin vaker dan aan het eind? Waarom wel/niet?
Keek er echt naar uit. Las het altijd direct.
Personalisatie (indien van toepassing). Heeft u het als prettig ervaren dat u een eigen motto kon invoeren en een eigen afbeelding daaraan kon toevoegen? Waarom wel/niet? Zou het u meer motiveren voor gebruik als dit uitgebreider was geweest?
Dat vond ik heel erg leuk. Dat maakte het meer mijn ding. Elke keer als ik het fotootjes zag dacht ik: zo wil ik het graag hebben.
Hoe vond u het om SMSjes te ontvangen?. Heeft u dit als motiverend of juist als storend ervaren? Waardoor kwam dit? Waren ze niet persoonlijk genoeg? Kwamen ze te 'dwangmatig' over?
Mijn ervaring was wel leuk om éven weer wat te lezen maar ze zijn standaard. Het is goed om je bij de les te houden. Ik hoefde ze niet persoonlijker, ik had er zo genoeg aan.
Heeft u de Multimedia gebruikt? Waarom wel/niet?
Ja, heb ik allemaal bekeken. Ik was wel een beetje ongeduldig, had de neiging om door te spoelen. Was te veel informatie om in een filmpje te doen.
Heeft u de succesverhalen gelezen? Voelde u na het lezen van het verhaal overeenkomsten tussen uzelf en de persoon die zijn/haar verhaal doet? Waardoor werd dat veroorzaakt? Waren ze voor u waardevol om de cursus te blijven gebruiken? Waren ze 'persoonlijk' genoeg?
Ik vond het leuk en kon me er goed in inleven. Was vergelijkbaar met mezelf. Waren zeker persoonlijk.

Slot

Vind u het geschikt om dergelijke cursussen via internet te doen?

Zelf heb ik het idee dat mensen graag meer gesprekken van mens tot mens willen. Voor mij was het wel echt geschikt. Per mens verschillend. Ik vind het moeilijk in te schatten hoeveel mensen er gebruik van maken.

Welke eisen/competenties zou u stellen voor het meedoen aan dergelijke online cursus?

Internetvaardigheden: alles is praktisch goed te doen. Ik heb ook wel vriendinnen die er echt niet aan moeten denken.

Zou u er voor willen betalen? Hoeveel?

Ja, denk het wel. Ik heb geen idee hoeveel.

Heeft u nog tips voor de ontwerpers van de cursus en de website?

Als ik er zo aan terug denk heb ik het idee dat het allemaal best veel grijstinten zijn. Ik zou wel graag meer kleur hebben. Iets meer vrolijkheid. Mag wel meer kleur, iets aantrekkelijker.

Interview 11

User ID: 989
Design 2, Continuous user, High active, 17 weken, cursus afgerond

Inleiding

Wat is uw algemene indruk van de website?

Verzorgd. Het is al een tijd geleden dus lastig terughalen. Was een prettige cursus om mee te werken.

Wat vond u goed aan de website?

Dat ik het ook begreep. Ik werk niet graag met computers, maar ik voelde geen weerstand. Wat heel erg mooi was, was feedback. De feedback leek heel persoonlijk. Dat viel mij echt op. Het geeft een gevoel alsof ik gezien wordt terwijl het alleen maar een computer dingetje is.

Wat vond u minder goed aan de website?

In het begin, inlogcode telkens opzoeken. Automatisch code onthouden werkte niet. Steeds dat gezoek stoorde mij.

Er waren wel specifieke lessen die ik echt heel leuk vond, maar ik denk niet dat het mijn problemen echt zou op kunnen lossen (toelichting zie beweegredenen).

Wat was belangrijk voor u om de cursus te blijven gebruiken? (handvatten open vraag)

Het hield mij nieuwsgierig. Soms ging het te snel, soms te langzaam. Ik wilde wel meer weten. Het was erg goed opgebouwd qua inhoud. Soms kon ik alleen niet het tempo zelf bepalen. Soms had ik juist meer tijd nodig omdat het veel stof tot nadenken gaf. Dan voelde ik mij opgejut. Het niet kunnen bepalen van versnelling en vertraging is lastig. Maar ik snap ook wel dat het nodig was.

Wat waren uw beweegredenen om deel te nemen aan de online cursus? (intrinsieke motivatie)

Nieuwsgierig hoe je iets als een ervaringsleer kunt aanbieden via site zonder persoonlijk contact. Ik had zo mijn twijfels maar was best verrast aan het eind dat het toch wel werkt.

Bleef u gedurende de gehele cursus even enthousiast om de les van die week af te ronden? Nam dit af? Waarom wel/niet? Wat was de oorzaak hiervoor?

Enthousiast niet helemaal. De weerstand is er soms omdat het toch dicht bij komt. Maar ik bleef er wel mee bezig.

Gebruik

Wanneer gebruikte u de website (momenten, ritme van gebruik)

's avonds. Geen ritme.

Hoe vaak heeft u de site gebruikt (voldoet dit aan inteded usage? Waarom wel/waarom niet?)

Zat per week verschil in, afhankelijk van de agenda en de diepgaandheid van de stof.

Zijn er perioden dat ze hem niet gebruikt hebben? (oorzaak ?)

Nee, ik heb alle oefeningen altijd gedaan. De site prikkelde mij wel. Dit werd veroorzaakt door mijn eigen nieuwsgierigheid. Ik ging er echt voor, wilde het ontdekken dus moest ook echt de inspanning leveren.

Wanneer hebben ze de cursus afgerond? (lukte dit binnen 12 weken? Waarom wel/niet?)

Het is gelukt hem af te ronden, maar ik weet niet hoe lang. Twee keer kreeg ik een aansporing om door te werken. 11 weken schat ik dat ik erover gedaan hebt.

Waren er weken dat u het moeilijk vond de cursus vol te houden? Wanneer was dit? Waarom?

Ja, in het midden, tweede helft van het midden. Bij les 6 of 7.

Welk onderdeel van de technologie vond u toen het meest prettig/stimulerend om te gebruiken?

Dagboek. Niet gebruikt. In het begin wel maar ik ben eigenlijk helemaal geen schrijftype. Ik vond het wel mooi dat het erin zat maar was niets voor mij.

Reactie knop heb ik gebruikt voor de vraag naar het inloggen.

Heeft u elementen gemist in de website die u wel hadden kunnen stimuleren? Zoals?

Heeft met verwachtingspatronen te maken. Ik had geen verwachtingen dus heb ook niets gemist.

Manipulaties

Hoe zou u graag feedback ontvangen? Wanneer? Van wie??

Omdat het gericht is op uzelf? Foto zichtbaar?

De foto liet het persoonlijk zijn, het leek een persoonlijke interactie terwijl ik wist dat het een computer interactie was.

Hoe vaak heeft u de feedback die u ontving gelezen? Was dit aan het begin vaker dan aan het eind? Waarom wel/niet?

Elke keer, was standaard begin van de volgende les alleen kan me er niet veel van herinneren wat de inhoud precies was. Ben er nooit door geraakt geweest. Het was heel algemeen. Ik was verrast door de persoonlijkheid maar ik heb mij er persoonlijk nooit door aangesproken gevoeld dat komt doordat de stof zelf mij inzicht gaf. Qua inzicht kan het weg gelaten worden maar qua betrokkenheid heb ik het wel nodig. Aanmoediging en stimulans voelde prettig. Ik zal het er absoluut niet uitlaten en ook niet veranderen. Voor het doorzetten nodig, voor inzicht niet. Het is wel een verfijning van de site. Er kijkt zogenaamd iemand mee.

Hoe vond u het om SMSjes te ontvangen?. Heeft u dit als motiverend of juist als storend ervaren? Waardoor kwam dit? Waren ze niet persoonlijk genoeg? Kwamen ze te 'dwangmatig' over?

Ik heb ze gelezen maar vond het vooral een leuk kleurplaatje. Het was niet motiverend. Het is maar net hoe je in elkaar zit. Waren algemene kreten en ik denk dat het wel motiverender was als het meer op mijzelf gericht was. Waren wel leuke zinnen om even bij stil te staan maar wel algemeenheden.

Heeft u de succesverhalen gelezen? Voelde u na het lezen van het verhaal overeenkomsten tussen uzelf en de persoon die zijn/haar verhaal doet? Waardoor werd dat veroorzaakt? Waren ze voor u waardevol om de cursus te blijven gebruiken? Waren ze 'persoonlijk' genoeg?

Nee. Het sprak mij niet aan. Het voegde niets toe. Ik had gewoon geen interesse. Het leidde mij af van mijn eigen ding. Misschien ga ik twijfelen over mijzelf qua antwoorden geven. Ik ging mezelf vergelijken met anderen. Ik heb het expres zo gelaten.

Slot

Vind u het geschikt om dergelijke cursussen via internet te doen?

Ja. Als het niet bij je past stop je halverwege wel. Het is heel algemeen en veilig, je wordt er niet door losgelaten doordat het te heftig raakt. Het is een veilige manier om te kijken hoe je met je gedachtes omgaat.

Welke eisen zou u stellen voor het meedoen aan dergelijke online cursus?

Ik zou geen eisen stellen. Als ze de oefeningen niet doen houdt de kennis overdracht al op. Je krijgt dan een andere diepgang. Veel tijd aan besteden krijg je er ook meer uit.

Zou u er voor willen betalen? Hoeveel?

Achteraf gezien, qua inhoud, opbouw en dergelijke: ik ken werkboeken voor 25 euro die me hetzelfde bieden. Dan voegt internet niets toe. En dan kan ik wel mijn eigen tempo bepalen. De feedback en SMSjes vallen dan weg maar dat is een ondersteuning die je als toegevoegde waarde kan zien van de site ten opzichte van het boek.

Heeft u nog tips voor de ontwerpers van de cursus en de website?

Het inloggen. Ik vond het leuk met alle verschillende ingangen, met of zonder muziek enzovoort. Het was mooi opgebouwd inhoudelijk gezien. Ook toegankelijk voor mensen die slecht met computers kunnen. Alleen toegankelijkheid belemmerd. Daar zou ik op af kunnen haken (inlogproblematiek). Begeleidend schrijven erbij had er eigenlijk bij gemoeten. Voor de makers is het zo vanzelfsprekend.

Interview 12

User ID: 1006
Design 1, Continuous user, High active, 17 weken, cursus afgerond

Inleiding

Wat is uw algemene indruk van de cursus?

Wel goed. In het begin had ik wat moeite met het dagboek. Daar heb ik weinig mee gedaan. Ik wist niet wat ik daar mee moest. Blijft alles bewaard of juist niet.

In het begin was het even wennen omdat dingen weg waren of zoek waren.

Wat vond u goed aan de website?

Ik vond het gewoon duidelijk en overzichtelijk. Je moet er een beetje aan wennen. Ik ben wel positief. Ik werk niet vele met computers maar was goed te doen.

Wat vond u minder goed aan de website?

Het printen ging niet zo gemakkelijk. De print kreeg ik maar voor de helft. Dat werkte dus niet. En ik kon de oefeningen op de website niet goed terug vinden. Daar zat een blokkade om het vaker te gaan herhalen.

Wat waren uw beweegredenen om deel te nemen aan de online cursus? (intrinsieke motivatie)

Bleef u gedurende de gehele cursus even enthousiast om de les van die week af te ronden? Nam dit af? Waarom wel/niet? Wat was de oorzaak hiervoor?

Soms kon je de les achter elkaar af ronden maar het probleem was hier de oefeningen. Ik ga dat uit mezelf niet herhalen. Eén heb ik niet begrepen, iets over een stappenplan. Ik bleef wel enthousiast. De hele cursus leek redelijk geprogrammeerd maar dat was wel prettig.

Gebruik

Wanneer gebruikte u de website (momenten, ritme van gebruik)

Het was heel wisselend maar wel altijd overdag, 's ochtends. Niet in het weekend.

Hoe vaak heeft u de site gebruikt (voldoet dit aan inteded usage? Waarom wel/waarom niet?)

2 a 3 keer. Dat was juist het makkelijk. Als je tijd en ruimte had ging je verder. En je moest tijd hebben voor de opdrachten.

Zijn er perioden dat ze hem niet gebruikt hebben? (oorzaak ?)

Nee hoor. Ik kreeg toch een reminder, dat stimuleerde wel.

Wanneer hebben ze de cursus afgerond? (lukte dit binnen 12 weken? Waarom wel/niet?)

Ik heb hem afgerond binnen 12 weken. Het boekje werkte nooit, de cursus wel. Wat motiveerde= Het is ingebeeld en je kan stukjes doen wanneer je zelf wilt. Ik denk toch de feedback.

Waren er weken dat u het moeilijk vond de cursus vol te houden? Wanneer was dit? Waarom?

Dat kwam wel eens voor maar dat kwam door mijn eigen bedrijvigheid.

Welk onderdeel van de technologie vond u toen het meest prettig/stimulerend om te gebruiken?

Dagboek zie hierboven.

Reactieknop. Nee, dat heb ik nooit gedaan. Hij viel niet genoeg op. Zat die knop er dan?

Heeft u elementen gemist in de website die u wel hadden kunnen stimuleren? Zoals?

De oefeningen blijven niet hangen. De CD erbij leveren zou voor mij dingen oplossen. Dat zou stimuleren om ze na de cursus ook nog af te ronden. De tekst en de informatie blijft ook niet hangen. Dat moet je terug kunnen zien. Dat kun je nu niet. Of een vervolgcursus, een onderhoudsbeurt. Een vervolg hierop.

Manipulaties

Hoe zou u graag feedback ontvangen? Wanneer? Van wie??

Omdat het gericht is op uzelf? Foto zichtbaar?

Ik vond het grappig dat het geprogrammeerd was. Als je dat antwoord geeft, krijg je die reactie, bij een ander antwoord een andere reactie. Maar ik vond het niet storen. Als ik A zeg krijg ik dit, als ik B zei kreeg ik dat. Ik had door dat het algemeen was. Ik vond het wel prettig en heeft me echt gestimuleerd.

De foto voegde echt wat toe. Dat heb je in een boek niet. Het lijkt meer fysiek en dat motiveert me beter.

Hoe vaak heeft u de feedback die u ontving gelezen? Was dit aan het begin vaker dan aan het eind? Waarom wel/niet?

Altijd.

Personalisatie (indien van toepassing). Heeft u het als prettig ervaren dat u een eigen motto kon invoeren en een eigen afbeelding daaraan kon toevoegen? Waarom wel/niet? Zou het u meer motiveren voor gebruik als dit uitgebreider was geweest?

Ja dat vond ik wel leuk. Daar moet je over nadenken. Ik vond het stimuleren.

Hoe vond u het om SMSjes (indien van toepassing) te ontvangen?. Heeft u dit als motiverend of juist als storend ervaren? Waardoor kwam dit? Waren ze niet persoonlijk genoeg? Kwamen ze te 'dwangmatig' over?

Die hielden me bij de les. Dat heeft ook te maken met dat je even weg bent. Dit heb je ook niet in een boek. Dat motiveerde me wel. Die stimuleerden mij erg.

Heeft u de Multimedia gebruikt? Waarom wel/niet?

Ja, die heb ik allemaal gekeken. Ik vond het echt een toevoeging.

Heeft u de succesverhalen gelezen? Voelde u na het lezen van het verhaal overeenkomsten tussen uzelf en de persoon die zijn/haar verhaal doet? Waardoor werd dat veroorzaakt? Waren ze voor u waardevol om de cursus te blijven gebruiken? Waren ze 'persoonlijk' genoeg?

Die vond ik leuk. Ik had er veel herkenning in. Ze waren wel stimulerend en prettig om te lezen. Ik kon duidelijk herkenning. Van elke week was er maar 1, had wel meer gemogen. Je krijgt dan de bevestiging en je weet dat het voor anderen ook zo is.

Slot

Vind u het geschikt om dergelijke cursussen via internet te doen?

Ik vind het heel geschikt. Ik was er heel enthousiast over en raad het mensen echt aan. Het is echt leuk om te doen. Je hoeft niet perse down of depressief te zijn. Het is op een niveau waar iedereen wat aan heeft. Het is heel geschikt en juist via internet. Ik vind het ontzettend goed. Het is vrij drempelloos.

Zou u er voor willen betalen? Hoeveel?

De mondelinge cursus die ik nu ga volgen (naar aanleiding van deze online cursus) is ongeveer 300 euro. Dan heb ik het er niet voor over.

Ik denk dat je meer mensen bereikt via internet dan via een afspraak in de praktijk.

Heeft u nog tips voor de ontwerpers van de cursus en de website?

Nee, niet echt. Zie hierboven voor meer. De oefeningen moet je je eigen maken, dat doe je niet in één cursus. Daar is meer discipline voor nodig. Al is het maar korte introductie en de oefeningen: het vasthouden is het probleem. De oefeningen, daar gaat het om.

Opmerkingen

Ik ben ook enthousiast over de inhoud. Mensen beseffen echt dat ze stil moeten staan bij waar ze mee bezig zijn.

Interview 13

User ID: 1020
Design 5, Continuous user, High active, 12 weken, cursus afgerond

Inleiding

Wat is uw algemene indruk van de cursus?

Er was goed over nagedacht en hij was goed verzorgd. De volgorde was goed waarin dingen werden aangeboden en binnen ieder onderwerp. Duidelijk begin, midden en eind.

Wat vond u goed aan de website?

Net als de cursus helder en overzichtelijk. Alles was goed terug te vinden. Maar het is wel heel anders dan een boek. Door de frequentie en de herhaling. De feedback veroorzaakt dit verschil maar in kleine mate. Doordat hier iedere week iets kwam moest ik meer over nadenken. Elke week een nieuw hoofdstuk maakte het waardevol voor mij.

Wat vond u minder goed aan de website?

Een paar knopjes die ik niet begreep. Zat links op de pagina, ik denk mijn favorieten. Er zat meer op dan ik nodig had, had minder gemogen.

Wat was belangrijk voor u om de cursus te blijven gebruiken? (handvatten open vraag)

De opbouw van de cursus. Ik werd nieuwsgierig, vooral aan het begin. Dit bleef de hele cursus zo.

Gebruik

Wanneer gebruikte u de website (momenten, ritme van gebruik)

Voornamelijk aan het einde van de week.

Hoe vaak heeft u de site gebruikt (voldoet dit aan inteded usage? Waarom wel/waarom niet?)

Ik denk een keer of 3. Dit was goed te doen.

Zijn er perioden dat ze hem niet gebruikt hebben? (oorzaak ?)

Nee, ik heb hem iedere week gebruikt. Dat kwam doordat de website zelf mij daartoe aanmoedigde. Door de mailtjes die ik steeds ontving. Ik kreeg herinneringen.

Wanneer hebben ze de cursus afgerond? (lukte dit binnen 12 weken? Waarom wel/niet?)

Binnen 12 weken. Dit was goed te doen.

Waren er weken dat u het moeilijk vond de cursus vol te houden? Wanneer was dit? Waarom?

Eigenlijk de eerste weken. De meditatie oefeningen liggen mij niet zo. Naarmate het verder kwam werd het interessanter. Ik kreeg wat meer om over na te denken. Zon type ben ik, ik wil graag iets om over na te denken. De opdrachten waren niet confronterend.

Welk onderdeel van de technologie vond u toen het meest prettig/stimulerend om te gebruiken?

Dagboek. Heb ik niet gebruikt. Voor zon dagboek moet je de cursus vaker gebruiken dan ik deed. Dan moet je echt op maandag en woensdag inloggen en alles intypen. Dat vraagt dat je het meer bijhoudt.
Reactieknop. Die ben ik verderop in de cursus gaan gebruiken. Functie was eerst onduidelijk en ik wilde niemand lastig vallen. Ik had het gewoon eens geprobeerd en de reactie was positief. De functie van de knop was mij niet helemaal duidelijk. Ik wist niet wat mensen wilden weten van mij. Daar kwam ik alleen achter door hem te gebruiken. Het bleek dat iemand toch geïnteresseerd was in mij.

Heeft u elementen gemist in de website die u wel hadden kunnen stimuleren? Zoals?

Nee. Ik vond hem heel compleet. Ik heb niet eerder zulke cursussen gedaan. Alleen het gesprek heb ik wel gemist. Het contact met een psycholoog heb ik wel nodig. Ik zat zelf heel erg aan het stuur en dat was goed omdat heel duidelijk was beschreven wat ze van mij verwachten. Je moest zelf actie ondernemen. Hij kwam voor mij op het goede moment.

Manipulaties

Hoe zou u graag feedback ontvangen? Wanneer? Van wie??

Omdat het gericht is op uzelf? Foto zichtbaar?

Als ik reageerde werd de feedback persoonlijker. Er werd precies aangehaakt op wat ik zei. Maar ik wilde iemand niet lastig vallen. De feedback heeft een meerwaarde gehad om mij aan te moedigen. Ik vond het niet te positief, moet niet kritischer. Ik hou wel van het positieve. Nu krijg je geen kans om een reactie te geven dus dan moet het zeker niet te negatief zijn.

Hoe vaak heeft u de feedback die u ontving gelezen? Was dit aan het begin vaker dan aan het eind? Waarom wel/niet?

Ik heb het altijd gelezen voor ik verder ging met de nieuwe cursus.

Personalisatie (indien van toepassing). Heeft u het als prettig ervaren dat u een eigen motto kon invoeren en een eigen afbeelding daaraan kon toevoegen? Waarom wel/niet? Zou het u meer motiveren voor gebruik als dit uitgebreider was geweest?

Nee, heeft mij niets gedaan. Ik heb wel een afbeelding toegevoegd maar kan me niet herinneren dat ik hem heb terug gezien.

Hoe vond u het om SMSjes te ontvangen?. Heeft u dit als motiverend of juist als storend ervaren? Waardoor kwam dit? Waren ze niet persoonlijk genoeg? Kwamen ze te 'dwangmatig' over?

Ik vond ze niet motiverend. Ze waren eigenlijk overbodig. Ze waren compleet onpersoonlijk. Ik had ze kunnen uitzetten maar heb ik bewust niet gedaan, wilde graag alles zien. Andere opzet zou ook niet helpen. Ik dacht zo wel genoeg aan de cursus.

Heeft u de Multimedia gebruikt? Waarom wel/niet?

Ja allemaal. Ze waren heel goed. En voegden absoluut wat toe. Het is de sprekende psycholoog. De meneer sprak mij meer aan. Waarom weet ik niet goed.

Ervaringsverhalen.

Ja, ik heb ze altijd gelezen. Ze spraken me aan. Ik vond ze wel erg positief maar prima verder.

Slot

Vind u het geschikt om dergelijke cursussen via internet te doen?

Voor mij was hij op dit moment geschikt. Maar dat zou lang niet altijd zo zijn.

Welke eisen zou u stellen voor het meedoen aan dergelijke online cursus?

Heel duidelijk aangeven van te voren dat je niet te zware problematiek. Sommige mensen zouden echt meer baat hebben bij persoonlijk contact.

Zou u er voor willen betalen? Hoeveel?

Ja, maar dan zou ik wel wat ervaringen willen lezen.

Opmerkingen

Ik vond het functioneel en diende het doel waar het voor was. Ik vond het echt een goede cursus. Ik heb het er ook veel over gehad naar anderen toe. Het is goed om je hoofd om je hoofd 1 of 2 keer per week naar dingen te zetten die er echt te doen. Frequentie per week was perfect.

Interview 14

User ID: 1151
Design 6. Verder geen gegevens van bekend.

Inleiding

Wat is uw algemene indruk van de cursus?
Heel positief. De veranderingen waren enorm.
Wat vond u goed aan de website?
Ik heb er niet echt op gelet omdat ik steeds bezig was met de les.
Wat vond u minder goed aan de website?
Je kreeg vaak een automatische mail of je de les wilde inleveren terwijl dat al gebeurd was.
Wat was belangrijk voor u om de cursus te blijven gebruiken? (handvatten open vraag)
Ik zag verbetering en dat wilde ik ook graag zien op de punten van les 1 en 2. Ik werd gaande weg gemotiveerd. Rond week 3 a 4. Na week 6 a 7 kon ik pas aangeven wat er echt veranderde.
Wat waren uw beweegredenen om deel te nemen aan de online cursus? (intrinsieke motivatie)
Heb ik al eerder opgegeven.
Bleef u gedurende de gehele cursus even enthousiast om de les van die week af te ronden? Nam dit af? Waarom wel/niet? Wat was de oorzaak hiervoor?
Nee, na les 2 a 3 zakte ik in. Kwam echt door mezelf, niet door de cursus.

Gebruik

Wanneer gebruikte u de website (momenten, ritme van gebruik)
Dagelijks. Vrij snel nadat ik mij de website eigen had gemaakt. Dit ging echter snel.
Hoe vaak heeft u de site gebruikt (voldoet dit aan inteded usage? Waarom wel/waarom niet?)
Zijn er perioden dat ze hem niet gebruikt hebben? (oorzaak ?)
Ik heb hem noodgedwongen een keer niet kunnen gebruiken doordat ik feedback niet kreeg. Daarover had ik contact gehad. Mijn begeleider mailde dat ze geen tijd had. Daardoor raakte ik wel uit mijn ritme.
Wanneer hebben ze de cursus afgerond? (lukte dit binnen 12 weken? Waarom wel/niet?)
Ik heb alles afgerond en aan het eind was het steeds beter te doen. In het begin 5 a 6 dagen nodig om een les af te ronden, aan het eind echter niet meer. Je kreeg routine. Aan het eind mocht het tempo zelfs wel omhoog.
Welk onderdeel van de technologie vond u toen het meest prettig/stimulerend om te gebruiken?
Dagboek. Te weinig gebruik van gemaakt. Zeg ik achteraf. Het had wat meer in herinnering gebracht kunnen worden. Even wat aandacht als zoals een berichtje met: 'houd u uw dagboek bij'. Het had me echt kunnen helpen.
Reactieknop. Alleen voor technische elementen.
Heeft u elementen gemist in de website die u wel hadden kunnen stimuleren? Zoals?
Niet dat ik mij nu zo op kan komen. Ik was genoeg gestimuleerd. Meer zou misschien weer overdadig zijn.

Manipulaties

Hoe zou u graag feedback ontvangen? Wanneer? Van wie??
Omdat het gericht is op uzelf?
De feedback vond ik heel goed. Mijn complimenten voor degene die dat heeft gedaan. Het was alleen niet altijd helemaal goed Nederlands. Toch heel wat type fouten. De persoon die het gaf was voor mij goed. Het tijdstip waarop het in de lessen was ingebouwd was prima, alleen soms kreeg ik het te laat en dat stoorde. Aan het begin zei hij dat hij vrijdag en zaterdag feedback zou sturen maar daar hield hij zich niet aan. De inhoud was prima.
Hoe vaak heeft u de feedback die u ontving gelezen? Was dit aan het begin vaker dan aan het eind? Waarom wel/niet?
Ja ik las het eerst globaal en dan printe ik het en ging het beter.
Hoe vond u het om SMSjes te ontvangen?. Heeft u dit als motiverend of juist als storend ervaren? Waardoor kwam dit? Waren ze niet persoonlijk genoeg? Kwamen ze te 'dwangmatig' over?
De ene sprak me meer aan dan de andere. Ze waren niet altijd motiverend. Maar dat lag eraan of het mij aansprak. Dat deden ze meestal niet omdat ze heel algemeen waren gehouden.
Heeft u de succesverhalen gelezen? Voelde u na het lezen van het verhaal overeenkomsten tussen uzelf en de persoon die zijn/haar verhaal doet? Waardoor werd dat veroorzaakt? Waren ze voor u waardevol om de cursus te blijven gebruiken? Waren ze 'persoonlijk' genoeg?
Weinig. Ik had er geen behoefte aan. Het ging om mezelf en niet om anderen. Het was allemaal succes, succes. Daar zat ik niet op te wachten.

Slot

Vind u het geschikt om dergelijke cursussen via internet te doen?
Ik heb wel eens meer cursussen geweest maar het had iets dat het wel geschikt was. Deze gaf feedback, dat was zeker belangrijk. En een meerwaarde ten opzicht van de andere cursussen.
Welke eisen zou u stellen voor het meedoen aan dergelijke online cursus?
Daar ga ik niet over uitspreken.
Zou u er voor willen betalen? Hoeveel?

Dat ligt aan de inhoud en de kwaliteit van de cursus. Voor Voluit Leven wil ik dat zeker.

Heeft u nog tips voor de ontwerpers van de cursus en de website?

Als je de cursus aan het eind uitprint krijg je de lessen achter elkaar en daarna pas de feedback achter elkaar. Ik zou liever hebben: na les 1, de feedback van les 1. Nu stond het overal en nergens. Dat werkt ongemakkelijk.

Opmerkingen

De vragenlijsten vond ik niet erg duidelijk. Weinig vragen gingen over het effect en waren moeilijk om in te vullen. Sommige vragen waren totaal niet relevant voor gebruikers. Ik had een vragenlijst verwacht zoals u hem nu stelde. Ik vond het sowieso een prettig cursus!

Interview 15

User ID: 1155
Design 5, Continuous user, High active, 17 weken, cursus afgerond

Inleiding

Wat is uw algemene indruk van de cursus?
Heel goed. Ik ben heel positief.
Wat vond u goed aan de website?
Leuk vond ik de cockpit en dat je er zelf veel aan kon doen. Plaatje met eigen profiel. Je kon het gelukkig ook nog veranderen. En dat de lessen dan in een apart blokje staan was handig. Navigeren ging goed.
Wat vond u minder goed aan de website?
Ik vond af en toe de ervaringsverhalen minder goed (zie toelichting hieronder 'manipulaties')
Wat was belangrijk voor u om de cursus te blijven gebruiken? (handvatten open vraag)
Inhoudelijk is voor mij heel belangrijk geweest. Mailtje dat gestuurd werd (dat de les nog niet was afgerond) gaf soms nerveuse spanning maar het hielp wel om er mee verder te gaan.
Wat waren uw beweegredenen om deel te nemen aan de online cursus? (intrinsieke motivatie)
Ik zat in het dip en zag het toevallig op Twitter. En het moest niet te veel geld kosten. Ik was totaal niet vrolijk, zat niet goed in mijn vel. Wachten tot iemand je gaat helpen werkt niet. De cursus kwam als geroepen.
Bleef u gedurende de gehele cursus even enthousiast om de les van die week af te ronden? Nam dit af? Waarom wel/niet? Wat was de oorzaak hiervoor?
Naarmate het verder kwam wat minder. In het begin was het heel shockerend. Zo lang en vaak moet je aan jezelf werken. Dat was ik niet gewend. De tweede deel had ik graag langer over gedaan.

Gebruik

Wanneer gebruikte u de website (momenten, ritme van gebruik)
Willekeurig. Dat vond ik ook juist handig, niet vast zitten aan afspraken. Toch door de weeks 's avonds meestal.
Hoe vaak heeft u de site gebruikt (voldoet dit aan inteded usage? Waarom wel/waarom niet?)
1 of 2 keer. Soms 3 keer.
Zijn er perioden dat ze hem niet gebruikt hebben? (oorzaak ?)
Nee.
Wanneer hebben ze de cursus afgerond? (lukte dit binnen 12 weken? Waarom wel/niet?)
Ik heb hem afgerond maar vooral aan het eind was het erg krap. Ik zou graag de dubbele tijd ervoor gehad hebben.
Waren er weken dat u het moeilijk vond de cursus vol te houden? Wanneer was dit? Waarom?
Aan het eind waren er moeilijke opdrachten bij wat het moeilijk maakte het vol te houden. Denkprocessen wijzigen viel me zwaar. In het begin was het heel makkelijk. In het middenstuk wist ik het een beetje. Aan het eind kom je in een transformatie en zware oefeningen.
Welk onderdeel van de technologie vond u toen het meest prettig/stimulerend om te gebruiken?
Dagboek. Ik kon niet nagaan of iemand het had gelezen. Dat gaf onzekerheid. Feedback en vragen stellen liep soms door elkaar. Ik heb hem niet gebruikt eigenlijk. Ik schrijf al de hele dag dus het was niet nodig voor mij. Antwoorden geven op alle vragen vond ik wel leuk maar ervaringen en gevoelens opschrijven was niet mijn stijl.
Reactieknop heb ik niet gebruikt.
Heeft u elementen gemist in de website die u wel hadden kunnen stimuleren? Zoals?
Nee.

Manipulaties

Hoe zou u graag feedback ontvangen? Wanneer? Van wie??
Feedback was goed op deze manier. Ik vond het wel persoonlijk maar ik had wel het idee dat het een trucje is. Ik schreef iets op en de reactie was niet uitdagend en meestal te positief. Het was wel te betuttelend, alsof het niet gemeend was. Toen had ik er ook niks meer aan.
Hoe vaak heeft u de feedback die u ontving gelezen? Was dit aan het begin vaker dan aan het eind? Waarom wel/niet?
Ik heb het wel altijd gelezen. Nieuwschierigheid.
Personalisatie. Heeft u het als prettig ervaren dat u een eigen motto kon invoeren en een eigen afbeelding daaraan kon toevoegen? Waarom wel/niet? Zou het u meer motiveren voor gebruik als dit uitgebreider was geweest?
Ja, zeker. Moeilijk maar leuk. Hadden wel meer elementen van mogen zijn.
Hoe vond u het om SMS te ontvangen?. Heeft u dit als motiverend of juist als storend ervaren? Waardoor kwam dit? Waren ze niet persoonlijk genoeg? Kwamen ze te 'dwangmatig' over?
Was heel motiverend. Was niet vergelijkbaar met de feedback maar ik vond het leuk om herinnering te krijgen.
Heeft u de Multimedia gebruikt? Waarom wel/niet?
Ik heb ze wel allemaal gezien. Soms wil ik sneller. Het is wel prettig en het moet er wel in. Het voegt wel iets toe. Ik denk dat als mensen een cursus via internet krijgen geeft het afwisseling en hoor ik soms wat anders.

Heeft u de succesverhalen gelezen? Voelde u na het lezen van het verhaal overeenkomsten tussen uzelf en de persoon die zijn/haar verhaal doet? Waardoor werd dat veroorzaakt? Waren ze voor u waardevol om de cursus te blijven gebruiken? Waren ze 'persoonlijk' genoeg?

Ik heb ze niet bekeken. In de laatste weken ze allemaal terug gelezen. Maar ze waren niet goed zichtbaar op de website. Beetje ondergeschoven. Het lichtte niet op of iets dergelijks. Ineens dacht ik: oh ja. Aandacht afgeleid ervan. De ervaringsverhalen liepen ook een week voor op de les waar ik was. Ik had het niet perse nodig, misschien had ik er meer aan gehad als ze beknopter waren geweest. Ikzelf had er niets aan. Ook omdat het in het zelfde sfeertje was als de feedback: heeeel positief, eigenlijk te positief. De situatie moet vergelijkbaar zijn. Maar bij vlagen dacht ik, die persoon past qua ernst niet bij mij, geen herkenning.

Slot

Vind u het geschikt om dergelijke cursussen via internet te doen?

Ja, is heel goed. Ik heb er veel van geleerd. In Noord Holland is een site voor jongeren die depressief zijn en dat werkt blijkbaar heel goed. In het begin was ik heel terughoudend maar die mening veranderde. Ik vond het veel leuker dan gedacht omdat de vraagstelling mij dwong om na te denken. Soms ging het wat snel (motto invullen enzo) maar toch dwing je de ontvanger en dat hielp mij heel goed. Er stond eigenlijk niets nieuws maar ik was me er niet bewust van. Maar ik wilde het niet bespreken met iemand (in een praktijk hulp zoeken) dus dit was een goede oplossing.

Welke eisen zou u stellen voor het meedoen aan dergelijke online cursus?

Mijn omgeving vond het allemaal heel raar, dergelijke cursussen via internet. Ik weet dat niet. Je moet enige vaardigheden om reflectie op jezelf te hebben. Mensen die zich inschrijven filteren zichzelf wel. Anders geef je je niet op. Opleidingsniveau is geen beïnvloedende factor, alhoewel mensen met een te laag niveau niet geschikt zijn. Ook moet je wel kunnen reflecteren op jezelf. Internetvaardigheden: basis is wel nodig maar uitleg in programma was duidelijk.

Zou u er voor willen betalen? Hoeveel?

Ik vind het wel geld waard maar ik doe zou het niet doen als het geld kost. Dan zou ik er niet voor willen betalen, dan zou ik liever naar een mens gaan.

Heeft u nog tips voor de ontwerpers van de cursus en de website?

Ik zou het veranderen in twee delen en dan tweede gedeelte iets meer tijd voor geven. En video's wat speelser, de mensen op de video's ogen er stijf. Zoek daarnaast ook nog naar een paar andere filmpjes net als het touwtjes.

Algemene informatie

Tekst hoeveelheid was goed opgesplitst. Was goed opgezet. Plaatje met touwtrekken staat me goed bij. Video waren erg leuk. Nog meer situatie uitbeelden in video's zou positief zijn. De website gaf de illusie dat ze speciaal op jou gericht zijn. Internet is een afstandelijk medium maar het is wel goed opgepakt zo en leuk om te doen. Internet krijgt een gezicht! Alles heeft me wel erg bezig gehouden.

APPENDIX 5

Activity patterns for 12 weeks group

			Weeknumber														
Activity degree	**User-ID**	**Design**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**Lessons completed 22-7 (weeknumber)**	**Amount of log-ins**	**Activity patterns**
H	814	2	1	6	6	7	5	5	5	6	4	3	1	1	10	50	C
H	960	2	1	3	4	4	3	3	3	6	4	3	1	1	10	36	C
H	1033	2	4	2	3	5	3	4	3	4	3	5	1	0	10	37	C
H	1060	2	1	5	2	3	3	2	1	2	2	3	2	1	10	27	C
H	1064	2	3	6	5	2	4	4	2	4	4	2	1	0	10	37	C
H	1096	2	2	7	6	7	7	6	5	5	4	4	4	1	10	58	C
H	822	3	2	4	4	5	4	0	2	1	2	1	2	2	9	29	C
H	862	3	1	6	4	3	2	2	4	2	2	2	0	0	10	28	C
H	882	3	1	5	5	1	3	3	4	1	3	1	0	2	7	29	C
H	889	3	1	3	4	6	5	1	5	3	0	1	0	2	9	31	C
H	925	3	3	3	4	3	2	4	3	3	1	2	3	1	10	32	C
H	953	3	1	4	5	3	2	4	1	3	2	3	1	1	10	30	C

Appendix 5- Activity pattern for 12 weeks group

H	1107	3	3	3	5	3	3	1	4	3	1	2	3	1	10	32	C
H	1176	3	1	2	2	2	5	3	4	4	3	3	4	0	10	33	C
H	1182	3	2	2	4	5	1	1	5	6	0	0	1	0	6	27	C
H	818	4	2	7	4	3	3	1	2	1	3	0	1	1	10	28	C
H	1181	4	3	6	4	2	3	3	2	4	3	1	1	1	10	33	C
H	961	5	1	2	3	4	3	4	4	0	4	4	1	4	10	34	C
H	1020	5	1	3	3	2	2	3	3	2	3	4	4	0	10	30	C
H	1035	5	2	2	3	4	1	5	4	2	2	4	4	1	10	34	C
H	1069	5	1	3	3	4	3	2	5	5	2	2	2	4	10	36	C
H	1129	5	5	4	4	1	3	3	1	3	1	0	2	0	9	27	C
H	1147	5	2	4	3	2	5	3	4	1	5	1	3	2	9	35	C
H	866	6	3	4	3	3	4	2	0	2	3	3	2	3	10	32	C
H	947	6	3	1	4	3	4	3	3	4	3	4	3	3	10	38	C
H	1150	6	3	7	5	6	4	3	5	5	5	2	2	2	10	49	C
H	1151	6	1	6	5	5	5	6	6	6	7	7	4	2	10	60	C
H	826	7	2	6	3	4	3	3	3	2	2	2	1	0	8	31	C
H	872	7	1	0	5	3	5	5	6	6	5	3	4	1	10	44	C
H	895	7	2	7	7	3	4	3	2	2	2	2	3	3	10	40	C
H	904	7	2	5	5	3	3	3	4	4	4	2	3	0	10	38	C
H	931	7	2	5	5	4	6	5	3	4	2	3	0	3	8	42	C
H	1021	7	2	3	3	4	4	3	5	4	5	7	4	3	8	47	C
H	1095	7	2	3	4	3	3	2	2	5	2	1	3	2	10	32	C

Appendix 5- Activity pattern for 12 weeks group

H	1104	7	1	3	5	7	2	3	2	2	3	2	3	3	10	36	C
H	1162	7	1	1	4	3	2	4	1	2	5	2	2	5	10	32	C
H	898	8	2	3	4	5	2	4	4	4	3	2	2	0	10	35	C
L	863	1	2	3	3	2	2	2	3	2	3	0	0	2	9	24	C
L	900	1	1	2	2	1	2	2	2	3	0	0	1	1	7	17	C
L	1024	1	2	2	1	0	1	1	2	1	1	0	0	1	7	12	C
L	1076	1	2	4	2	2	2	2	2	0	0	2	1	0	10	19	C
L	1172	1	1	1	3	0	3	4	1	2	1	1	2	0	10	19	C
L	892	2	3	4	2	5	1	3	2	0	0	1	0	1	7	22	C
L	920	2	3	3	3	3	2	4	2	3	1	1	0	0	8	25	C
L	963	2	1	1	3	2	1	1	2	2	2	1	3	0	9	19	C
L	975	2	3	1	1	4	1	1	2	0	1	1	0	1	4	16	C
L	984	2	1	2	1	2	1	1	2	1	2	1	1	1	10	16	C
L	1039	2	1	0	0	1	2	3	2	3	1	2	2	3	9	20	C
L	1119	2	1	3	2	2	2	2	3	1	0	1	0	0	9	17	C
L	1121	2	1	3	2	1	1	3	1	1	3	2	1	1	7	20	C
L	1001	3	2	2	2	2	2	1	3	2	2	2	0	1	9	21	C
L	1040	3	2	2	1	4	2	3	1	3	3	0	1	0	7	22	C
L	1123	3	5	1	1	1	4	1	1	1	1	2	1	0	10	19	C
L	1148	3	0	1	1	1	1	0	0	3	2	1	2	1	9	13	C
L	1158	3	3	2	1	2	2	3	2	2	2	1	0	0	10	20	C
L	1188	3	2	3	5	5	3	3	2	1	1	0	0	0	7	25	C

Appendix 5- Activity pattern for 12 weeks group

L	823	4	1	2	3	1	5	2	1	2	1	2	1	2	10	23	C
L	851	4	1	2	3	2	2	1	1	2	3	2	2	1	10	22	C
L	1065	4	1	4	2	2	2	1	0	1	0	0	1	2	8	16	C
L	1088	4	2	2	2	2	2	2	1	2	1	1	1	2	10	20	C
L	1093	4	1	4	2	1	1	1	1	1	2	1	1	0	10	16	C
L	1111	4	1	1	3	2	0	1	3	2	0	1	1	2	6	17	C
L	1124	4	1	3	2	2	1	3	1	2	2	2	1	2	10	22	C
L	833	5	1	1	2	1	2	1	4	0	0	4	1	2	9	19	C
L	886	5	2	1	2	2	2	2	1	1	1	1	1	1	5	17	C
L	1031	5	1	2	4	3	2	2	2	2	0	2	2	1	9	23	C
L	1141	5	1	1	1	1	0	2	2	0	1	2	1	1	8	13	C
L	958	6	1	1	2	1	2	1	1	1	1	1	0	0	7	12	C
L	810	7	1	2	2	2	4	1	3	1	2	1	0	0	9	19	C
L	812	7	1	1	2	1	2	2	2	1	0	2	0	1	6	15	C
L	827	7	1	3	2	3	2	2	2	2	2	0	1	2	7	22	C
L	962	7	1	2	1	1	1	1	2	2	2	1	0	1	8	15	C
L	970	7	2	4	4	3	2	2	2	1	1	2	2	0	10	25	C
L	981	7	1	0	1	2	1	2	2	1	1	1	1	3	6	16	C
L	988	7	1	1	1	1	1	0	5	2	2	2	2	4	6	22	C
L	998	7	3	4	4	3	3	3	2	0	2	1	1	0	6	26	C
L	1005	7	1	4	3	1	1	1	3	2	3	1	3	1	10	24	C
L	1110	7	1	2	2	3	4	2	2	2	1	1	3	1	10	24	C

Appendix 5- Activity pattern for 12 weeks group

L	840	8	2	3	2	2	4	5	1	2	1	0	0	0	7	22	C
L	1027	8	1	3	1	2	1	0	1	1	3	0	1	0	7	14	C
I	794	2	2	1	1	1	1	0	1	1	0	0	0	0	4	8	D
I	819	2	1	0	1	1	1	2	0	0	2	0	1	0	9	9	D
I	835	2	1	1	1	0	1	0	0	0	0	0	2	2	5	8	D
I	913	2	1	1	0	1	1	1	0	0	1	0	1	0	6	7	D
I	918	2	1	0	1	1	3	1	0	0	0	0	0	0	4	7	D
I	1014	2	3	2	3	3	1	1	0	0	0	0	0	0	5	13	D
I	1030	2	1	1	0	1	2	1	1	0	0	0	1	1	5	9	D
I	1075	2	2	0	2	0	1	3	1	0	0	0	0	0	5	9	D
I	1122	2	1	1	1	1	0	0	0	0	0	0	0	0	3	4	D
I	1126	2	2	3	3	2	0	1	0	0	0	0	0	0	4	11	D
I	813	3	1	1	0	0	0	1	1	2	2	1	1	0	5	10	D
I	853	3	1	2	3	2	0	3	1	1	0	0	1	0	6	14	D
I	1159	3	1	1	1	0	0	1	1	0	2	2	0	1	7	10	D
I	1178	3	1	1	0	1	0	1	0	1	1	1	0	1	9	8	D
I	799	4	1	0	1	1	0	0	0	0	1	0	0	0	5	4	D
I	841	4	1	1	2	0	2	0	1	0	0	1	0	1	9	9	D
I	949	4	2	2	2	2	4	1	1	0	0	0	1	0	6	15	D
I	1068	4	2	3	0	1	0	0	1	1	0	0	0	0	4	8	D
I	879	5	3	0	1	2	2	0	0	0	0	0	0	0	4	8	D
I	893	5	1	0	3	1	1	1	0	0	0	0	0	0	3	7	D

Appendix 5- Activity pattern for 12 weeks group

I	899	5	2	1	0	1	1	0	0	0	0	0	0	0	2	5	D
I	971	5	2	0	1	1	1	0	0	0	0	0	0	0	3	5	D
I	987	5	3	1	1	0	0	1	0	4	0	0	1	2	7	13	D
I	994	5	1	2	3	2	0	0	0	0	0	0	0	0	3	8	D
I	1050	5	2	2	1	1	0	0	0	0	0	0	0	0	3	6	D
I	929	7	1	2	1	3	1	0	0	0	0	0	0	0	3	8	D
I	974	7	1	2	0	1	1	0	0	0	0	0	0	0	4	5	D
I	1038	7	1	3	3	2	2	1	0	0	0	0	0	0	6	12	D
I	1078	7	2	1	0	1	0	1	0	0	0	0	0	0	4	5	D
I	1101	7	1	3	1	1	0	0	0	0	0	0	0	0	4	6	D
I	1108	7	1	1	2	2	0	1	1	0	0	0	0	1	3	9	D
I	1113	7	1	4	4	0	2	1	2	0	1	0	1	0	7	16	D
I	803	8	1	1	1	1	2	0	0	0	1	0	0	0	3	7	D
I	844	8	1	0	3	1	0	1	0	0	0	0	0	0	4	6	D
I	905	8	1	0	2	0	1	1	1	0	1	0	0	1	10	8	D
I	1009	8	1	1	0	0	1	0	0	1	0	1	1	0	4	6	D
I	1084	8	2	1	1	0	1	0	0	0	0	0	0	0	3	5	D
I	1112	8	1	0	1	2	0	1	0	1	0	0	0	1	3	7	D
I	938	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	1073	1	2	0	0	0	0	0	0	0	0	0	0	0	1	2	NU
I	1092	1	2	1	2	0	0	0	0	0	0	0	0	0	3	5	NU
I	786	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU

Appendix 5- Activity pattern for 12 weeks group

I	804	2	2	2	1	0	0	0	0	0	0	0	0	0	2	5	NU
I	834	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	952	2	2	1	0	0	0	0	0	0	0	0	0	0	3	3	NU
I	966	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	968	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	982	2	1	2	0	0	2	0	0	0	0	0	0	0	2	5	NU
I	1036	2	1	0	0	0	0	0	0	0	0	0	0	0	1	1	NU
I	1048	2	1	0	0	0	0	0	0	0	0	0	0	0	1	1	NU
I	1049	2	1	0	0	0	0	0	0	0	0	0	0	0	2	1	NU
I	1094	2	2	0	1	0	0	0	0	0	0	0	0	0	3	3	NU
I	1130	2	4	2	0	0	0	0	0	0	0	0	0	0	3	6	NU
I	1131	2	2	4	2	0	0	0	0	0	0	0	0	0	3	8	NU
I	825	3	1	0	0	0	0	0	0	0	0	0	0	0	1	1	NU
I	1011	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	1026	3	1	0	0	0	0	1	0	0	0	0	0	0	2	2	NU
I	1089	3	1	1	0	0	1	0	0	0	0	0	0	0	2	3	NU
I	1099	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	1114	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	1117	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	1133	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	1157	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	1169	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU

Appendix 5- Activity pattern for 12 weeks group

I	1187	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	857	4	1	0	0	0	0	0	0	0	0	0	0	0	1	1	NU
I	941	4	1	0	0	0	0	0	0	0	0	0	0	0	2	1	NU
I	1025	4	1	0	0	0	0	0	0	0	0	0	0	0	1	1	NU
I	1047	4	1	1	2	0	0	0	0	0	0	0	0	0	3	4	NU
I	1106	4	2	1	1	0	0	0	0	0	0	0	0	0	3	4	NU
I	1116	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	805	5	1	3	1	0	0	0	0	0	0	0	0	0	2	5	NU
I	807	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	859	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	914	5	0	0	0	1	0	0	0	0	0	0	0	0	2	1	NU
I	964	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	1072	5	1	0	0	0	0	0	0	0	0	0	0	0	1	1	NU
I	1098	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	1127	5	4	3	1	0	0	0	0	0	0	0	0	0	3	8	NU
I	1135	5	2	2	0	0	0	0	0	0	0	0	0	0	1	4	NU
I	1138	5	1	0	1	0	0	0	0	0	0	0	0	0	1	2	NU
I	1173	5	2	0	0	0	1	0	0	0	0	0	0	0	2	3	NU
I	1180	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	1183	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	792	6	2	0	0	0	0	0	0	0	0	0	0	0	2	2	NU
I	839	6	1	0	0	0	0	0	0	0	0	0	0	0	1	1	NU

Appendix 5- Activity pattern for 12 weeks group

I	917	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	924	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	993	6	1	2	0	0	0	0	0	0	0	0	0	0	3	3	NU
I	1059	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	1085	6	1	0	0	0	0	0	0	0	0	0	0	0	2	1	NU
I	1136	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	815	7	2	1	2	0	0	0	0	0	0	0	0	0	2	5	NU
I	1046	7	3	3	1	0	0	0	0	0	0	0	0	0	3	7	NU
I	1070	7	1	3	1	0	0	0	0	0	0	0	0	0	2	5	NU
I	1168	7	1	3	1	0	0	0	0	0	0	0	0	0	2	5	NU
I	1177	7	1	0	1	1	0	0	0	0	0	0	0	0	2	3	NU
I	1017	8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU
I	1100	8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NU

Appendix 5- Activity pattern for 12 weeks group

APPENDIX 6

Activity pattern for 17 week group

			Weeknumber																	
Activity degree	**User-ID**	**Design**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**Lessons finished (weeknumber)**	**Amount of log-ins**
H	933	1	2	2	3	4	4	1	0	0	1	2	5	3	4	2	3	2	0	16	38
H	1006	1	3	3	3	2	4	3	2	2	2	1	3	2	2	0	0	0	0	13	32
H	1055	1	1	2	2	4	2	2	2	4	0	3	3	5	2	0	0	0	0	13	32
H	850	2	2	3	3	5	3	1	3	4	3	3	2	0	0	0	0	0	0	14	32
H	989	2	4	4	1	1	2	2	2	3	2	1	4	2	1	0	0	0	0	15	29
H	1142	2	3	2	4	2	3	2	3	4	3	3	0	0	0	0	0	0	0	13	29
H	854	3	1	2	4	2	4	4	2	2	1	1	3	2	2	1	1	3	0	16	35
H	1149	3	2	5	3	4	2	3	2	0	3	4	1	3	1	0	0	0	0	14	33
H	1164	3	2	4	2	3	3	2	0	2	1	3	1	2	4	1	0	0	0	16	30
H	785	5	1	3	6	4	3	3	3	3	2	3	3	1	2	2	0	0	0	13	39

Appendix 6- Activity pattern for 17 weeks group

H	795	5	3	4	5	5	4	2	2	5	4	1	2	3	3	0	0	0	0	14	43
H	798	5	2	4	2	4	2	4	2	1	2	2	1	2	2	1	2	1	0	15	34
H	885	5	2	2	2	2	3	2	3	6	3	1	2	1	1	1	0	0	0	14	31
H	890	5	4	1	1	3	1	1	4	2	2	0	1	1	2	1	3	0	0	16	27
H	939	5	2	3	2	2	1	1	2	1	1	2	1	3	2	1	2	3	0	16	29
H	940	5	5	5	6	7	5	0	1	6	6	6	6	4	4	0	0	0	0	13	61
H	951	5	1	5	4	4	5	3	2	4	1	5	2	3	0	0	0	2	0	16	41
H	977	5	2	5	4	2	1	3	2	3	2	2	1	1	1	2	0	0	0	16	31
H	986	5	5	3	3	1	3	3	4	6	3	5	3	3	2	0	1	2	0	13	47
H	1109	5	3	1	2	3	1	0	2	2	3	2	4	4	0	0	0	0	0	15	27
H	1146	5	2	3	4	4	5	2	3	4	3	2	4	2	2	1	2	0	0	16	43
H	1154	5	1	2	1	2	2	3	2	2	1	2	3	3	2	1	0	0	0	14	27
H	1165	5	1	3	3	3	3	4	0	4	1	2	1	2	2	0	0	0	0	14	29
H	788	6	2	2	4	5	5	6	3	5	4	6	3	3	1	0	0	0	0	14	49
H	796	6	3	1	4	4	0	5	5	3	3	3	1	1	3	1	0	0	0	16	37
H	906	6	1	3	4	5	3	4	2	4	4	3	0	0	1	0	1	0	1	15	36
H	1015	6	1	5	2	3	3	3	2	3	2	2	3	2	2	3	0	0	0	14	36
H	1022	6	2	2	4	1	4	4	2	5	3	3	3	4	1	0	2	0	0	14	40
H	1118	6	3	2	2	2	2	3	2	1	2	2	1	2	2	1	0	0	0	14	27

Appendix 6- Activity pattern for 17 weeks group

H	877	7	3	5	4	4	4	3	3	4	2	2	2	3	3	2	0	0	0	13	44
H	932	7	2	3	3	2	4	2	2	1	2	3	0	2	0	1	1	0	0	15	28
H	979	7	3	2	2	5	3	0	3	2	2	1	2	1	0	0	1	0	0	16	27
H	881	8	2	3	5	7	5	2	5	3	4	2	3	2	2	0	1	0	0	13	46
H	955	8	5	3	4	2	2	3	2	4	3	3	4	4	1	2	0	0	0	14	42
H	972	8	1	4	6	6	3	6	5	6	6	5	2	6	3	3	1	1	0	13	64
H	983	8	1	2	1	3	3	0	3	2	2	3	3	3	1	0	0	0	0	16	27
H	995	8	2	3	4	4	2	3	3	3	3	2	2	1	2	3	0	0	0	14	37
H	1018	8	2	3	3	5	3	0	3	3	5	3	1	3	3	2	0	0	0	13	39
H	1102	8	3	3	6	3	3	3	4	3	3	4	2	2	1	2	0	0	0	14	42
H	1132	8	3	2	4	2	5	4	4	3	3	2	1	3	3	2	2	0	0	17	43
L	816	2	1	2	1	5	0	1	1	0	1	3	3	3	0	1	1	0	0	16	23
L	867	2	2	1	1	1	0	0	1	3	1	2	2	1	1	1	2	0	0	16	19
L	902	2	1	2	3	3	1	1	1	1	0	1	2	1	1	2	0	0	1	14	21
L	1061	2	1	0	1	1	0	1	1	2	1	1	2	0	1	0	1	1	0	16	14
L	923	3	2	2	1	0	1	3	2	2	0	0	1	2	2	1	0	0	0	16	19
L	959	3	1	2	1	2	1	2	4	3	1	2	2	0	1	0	0	0	0	13	22
L	1167	3	1	1	1	0	1	1	1	1	3	1	2	2	0	0	0	0	0	13	15
L	838	4	2	2	2	1	1	4	2	2	2	2	2	1	1	0	0	0	0	15	24

Appendix 6- Activity pattern for 17 weeks group

L	856	4	2	2	1	2	2	3	2	1	4	0	1	0	1	1	0	0	0	13	22
L	934	4	1	1	2	2	2	1	1	2	3	2	2	2	0	1	1	0	0	14	23
L	787	5	2	1	0	1	2	3	2	4	2	1	2	1	2	1	0	0	0	16	24
L	1023	5	2	0	1	1	1	0	1	3	2	3	2	2	1	1	0	1	0	15	21
L	1053	5	1	2	2	1	2	0	1	3	3	1	2	1	2	1	1	1	0	16	24
L	1125	5	3	2	3	2	2	1	3	2	2	1	1	1	3	0	0	0	0	14	26
L	1143	5	1	3	3	2	1	4	2	1	1	1	2	1	1	2	0	0	0	15	25
L	1155	5	2	3	2	3	2	2	0	2	2	0	1	1	2	0	0	0	0	15	22
L	1091	7	1	2	3	4	3	1	3	1	2	0	2	2	1	0	0	1	0	16	26
L	1090	8	2	4	2	1	3	1	3	1	0	2	2	2	2	1	0	0	0	13	26
I	985	4	0	0	1	1	1	0	1	1	1	1	0	1	1	1	0	0	0	14	10
I	1103	6	1	3	0	1	0	1	1	0	0	0	0	1	2	1	2	1	1	16	15

Appendix 6- Activity pattern for 17 weeks group

APPENDIX 7

Calculations of significance and correlations

Results section 1.0/ 2.0: Weights of the manipulations

Specification of table 16, 20-24

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Row average PF - Row average AR	,22518	,17957	,01600	,19351	,25684	14,076	125	,000
Pair 2	Row average PF - Row average SMS	,18066	,22077	,01967	,14173	,21958	9,186	125	,000
Pair 3	Row average PF - Row average MM	,20986	,22473	,02002	,17024	,24948	10,482	125	,000
Pair 4	Row average PF - Row average T	,20547	,21042	,01875	,16837	,24257	10,961	125	,000
Pair 5	Row average PF - Row average PS	,23929	,17777	,01584	,20795	,27063	15,109	125	,000
Pair 6	Row average AR - Row average SMS	-,04452	,17297	,01541	-,07502	-,01402	-2,889	125	,005
Pair 7	Row average AR - Row average MM	-,01532	,15369	,01369	-,04242	,01178	-1,119	125	**,265**
Pair 8	Row average AR - Row average T	-,01970	,14852	,01323	-,04589	,00648	-1,489	125	**,139**
Pair 9	Row average AR - Row average PS	,01411	,13516	,01204	-,00972	,03794	1,172	125	**,243**
Pair 10	Row average SMS - Row average MM	,02920	,20162	,01796	-,00635	,06475	1,626	125	**,107**
Pair 11	Row average SMS - Row average T	,02482	,19288	,01718	-,00919	,05882	1,444	125	**,151**
Pair 12	Row average SMS - Row average PS	,05863	,17211	,01533	,02829	,08898	3,824	125	,000
Pair 13	Row average MM - Row average T	-,00438	,16412	,01462	-,03332	,02455	-,300	125	**,765**
Pair 14	Row average MM - Row average PS	,02943	,16240	,01447	,00080	,05806	2,034	125	,044
Pair 15	Row average T - Row average PS	,03382	,11153	,00994	,01415	,05348	3,403	125	,001

Results section 3.0: Significance of the average amount of completed lessons

Specification of table 28

ANOVA

Les tot waaraan gekomen

Feedback	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3,978	1	3,978	,304	,582
Within Groups	3105,621	237	13,104		
Total	3109,598	238			

ANOVA

Les tot waaraan gekomen

Cues	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8,853	1	8,853	,677	,412
Within Groups	3100,745	237	13,083		
Total	3109,598	238			

ANOVA

Les tot waaraan gekomen

Multimedia	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,181	1	1,181	,090	,764
Within Groups	3108,417	237	13,116		
Total	3109,598	238			

ANOVA

Les tot waaraan gekomen

Identification	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6,770	1	6,770	,517	,473
Within Groups	3102,828	237	13,092		
Total	3109,598	238			

ANOVA

Les tot waaraan gekomen

Personalisation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6,139	1	6,139	,469	,494
Within Groups	3103,459	237	13,095		
Total	3109,598	238			

Results section 3.0: Manipulations versus low and high activity

Specification of table 33

Feedback versus Low and High

			Low or High		
			High Activity	Low Activity	Total
Feedback	Automatic	Count	25	88	113
		% within Feedback	22,1%	77,9%	100,0%
	Personal	Count	44	82	126
		% within Feedback	34,9%	65,1%	100,0%
	Total	Count	69	170	239
		% within Feedback	28,9%	71,1%	100,0%

Multimedia versus low and high

			Low or High		
			High Activity	Low Activity	Total
Multimedia	Basis	Count	28	77	105
		% within Multimedia	26,7%	73,3%	100,0%
	Elaborate	Count	41	93	134
		% within Multimedia	30,6%	69,4%	100,0%
	Total	Count	69	170	239
		% within Multimedia	28,9%	71,1%	100,0%

Sms versus low and high

			Low or High		
			High Activity	Low Activity	Total
SMS	No	Count	31	83	114
		% within SMS	27,2%	72,8%	100,0%
	Yes	Count	38	87	125
		% within SMS	30,4%	69,6%	100,0%
	Total	Count	69	170	239
		% within SMS	28,9%	71,1%	100,0%

Identification versus High – Low activity

			Low or High		
			High Activity	Low Activity	Total
Identification	Low	Count	45	106	151
		% within Identification	29,8%	70,2%	100,0%
	High	Count	24	64	88
		% within Identification	27,3%	72,7%	100,0%
	Total	Count	69	170	239
		% within Identification	28,9%	71,1%	100,0%

Personalisation versus High-Low activity

			Low or High		
			High Activity	Low Activity	Total
Personalisation	Low	Count	39	94	133
		% within Personalisation	29,3%	70,7%	100,0%
	High	Count	30	76	106
		% within Personalisation	28,3%	71,7%	100,0%
	Total	Count	69	170	239
		% within Personalisation	28,9%	71,1%	100,0%

Results section 3.0 Manipulation versus Continu Discontinu

Specification of table 33

Feedback * Continu_of_Discontinu Crosstabulation

			Continu_of_Discontinu			
			Continuous user	Discontinuous user	Non user	Total
Feedback	Automatic	Count	62	18	33	113
		% within Feedback	54,9%	15,9%	29,2%	100,0%
	Personal	Count	76	22	28	126
		% within Feedback	60,3%	17,5%	22,2%	100,0%
	Total	Count	138	40	61	239
		% within Feedback	57,7%	16,7%	25,5%	100,0%

Cues * Continu_of_Discontinu Crosstabulation

			Continu_of_Discontinu			
			Continuous user	Discontinuous user	Non user	Total
SMS	No	Count	68	22	24	114
		% within Cues	59,6%	19,3%	21,1%	100,0%
	Yes	Count	70	18	37	125
		% within Cues	56,0%	14,4%	29,6%	100,0%
	Total	Count	138	40	61	239
		% within Cues	57,7%	16,7%	25,5%	100,0%

Tailoring * Continu_of_Discontinu Crosstabulation

			Continu_of_Discontinu			
			Continuous user	Discontinuous user	Non user	Total
Tailoring	Basis	Count	55	21	29	105
		% within Beleving	52,4%	20,0%	27,6%	100,0%
	Elaborate	Count	83	19	32	134
		% within Beleving	61,9%	14,2%	23,9%	100,0%
	Total	Count	138	40	61	239
		% within Beleving	57,7%	16,7%	25,5%	100,0%

Identification * Continu_of_Discontinu Crosstabulation

			Continu_of_Discontinu			
			Continuous user	Discontinuous user	Non user	Total
Identification	Low	Count	85	27	39	151
		% within Identificatie	56,3%	17,9%	25,8%	100,0%
	High	Count	53	13	22	88
		% within Identificatie	60,2%	14,8%	25,0%	100,0%
	Total	Count	138	40	61	239
		% within Identificatie	57,7%	16,7%	25,5%	100,0%

Personalisation versus Continu of Discontinu Crosstabulation

			Continu of Discontinu			
			Continuous user	Discontinuous user	Non user	Total
Personalisation	Low	Count	75	21	37	133
		% within Personalisatie	56,4%	15,8%	27,8%	100,0%
	High	Count	63	19	24	106
		% within Personalisatie	59,4%	17,9%	22,6%	100,0%
	Total	Count	138	40	61	239
		% within Personalisatie	57,7%	16,7%	25,5%	100,0%

APPENDIX 8

Content of the lessons of Voluit Leven

Type of information/exercise	*Title of section/exercise (Dutch)*
Start of part I	**Onderzoeken hoe je nu met psychisch leed omgaat.**
Week 1: what I want with life?	
1. Theoretical knowledge:	Welvaart maakt (kennelijk) niet gelukkig
2. Theoretical knowledge:	Waarom geluk soms ongelukkig maakt (1)
3. Theoretical knowledge:	Een andere houding naar leed
4. Theoretical knowledge:	Voluit leven, wat is dat?
5. Theoretical knowledge:	Handvatten voor een bevredigend leven
6. Blanks excercise with feedback:	De rugzak met leed. *Overzicht maken van alles waar de cursist op dat moment 'last' van heeft.*
7. Blanks excercise:	De wondervraag *Formuleren wat voluit leven voor de cursist is als de problematiek uit vraag 6 niet zou bestaan.*
8. Blanks excercise:	Voluit Leven *Het leven dat de cursist het liefst wil leiden uitdrukken in een landkaart.*
9. Mindfullness excercise (meditation):	De bodyscan (dagelijks) *Nieuwe meditatieoefening: opmerkzaam worden van sensaties (gevoelens) in het lichaam.*
10. Theoretical knowledge:	Voordat je verder gaat...
11. Background:	Over mindfulness
Week 2: I'm (just) not there	
1. Theoretical knowledge	Inleiding
2. Theoretical knowledge with video:	Strategieën om leed te vermijden
3. Blanks excercise:	Hoe vermijd ik psychisch leed? *Bewustwording vermijding strategieën*
4. Blanks excercise:	Wat levert vermijden mij op? *Bewustwording van effecten op korte en lange termijn door maken eigen overzicht.*
5. Blanks excercise with feedback:	Dagboek pijnlijke momenten *Opschrijven van vermijdingsgedrag. Link naar dagboek op de site.*
6. Excercise:	Metafoor: de ongewenste gast *Lezen en inbeelden.*
7. Mindfulness excercise:	De afgelopen week

(blanks excercise) *Tips om meditatie vol te houden.*

8. Mindfulness excercise (meditation): Observeren van de ademhaling

Nieuwe meditatieoefening: opmerkzaam worden van de ademhaling.

Week 3. Do *not* use your mind

1. Theoretical knowledge : Inleiding
2. Theoretical knowledge De waarde van ons verstand
3. Theoretical knowledge Verstand als veroorzaker van psychische pijn
4. Theoretical knowledge Evaluatieve en dwingende gedachten
5. Theoretical knowledge De fusie van gedachten en werkelijkheid
6. Theoretical knowledge Oorzaken van onze drang naar controle
7. Theoretical knowledge Zinloze vragen die de vuile pijn vergroten
8. Theoretical knowledge Hoe ga jij met controle om?

Blanks excercise (with feedback) 8a. Twaalf stellingen.

Kiezen tussen a of b

Blanks excercise 8b. Gevolgen van jouw controlestrategie.

Beschrijven van oplossingen voor de problematiek uit les 1 die de cursist al heeft geprobeerd.

Blanks excercise 8c. Boodschappen van vroeger

Beschrijven hoe vroeger geleerd is met negatieve emoties om te gaan.

Blanks excercise 8d. Dagboek pijnlijke momenten en gedachten

Bijhouden van dezelfde elementen als in les 2 aangevuld met gedachten. Link naar dagboek op de site.

9. Mindfullness excercise (meditation) Bodyscan en ademhaling (afwisselend)

Combinatie van de oefening uit les 1 en les 2 eventueel met audio ondersteuning. Inclusief tips.

10. Blanks excercise: Metafoor touwtrekken
11. Theoretical background: Intermezzo
12. Theoretical background: Tot slot van week 3: Confucius

End of part I.

Je hebt het eerste deel Voluit Leven afgerond. Je hebt meer inzicht gekregen in hoe je omgaat met psychische pijn en bijbehorende emoties. Wanneer je hebt onderkend dat verzet tegen die pijn en controle niet effectief is om een meer zinvol en waardevol leven te leiden, heb je al een belangrijke stap gezet. *We hopen dat er een verlangen of besef van noodzaak is ontstaan om stappen te zetten om je leven nieuwe richting te geven en het vertrouwde los te laten.* In de volgende week zal je daarmee beginnen. Week 4 wordt daarom ook wel het sleutelhoofdstuk genoemd voor een waardevol leven.

Start of part II

Leren om het verzet tegen psychisch leed op te geven en leren te leven vanuit de zijns modus.

Week 4. Hello uncertainty: welcome.

1. Theoretical background: Inleiding

2. Theoretical background: Wat is acceptatie?

3. Theoretical background: Emoties accepteren
   Theoretical background: 3a. Van schone pijn naar vuile pijn

4. Theoretical background: Ben je bereid het touw te laten vallen?

5. Theoretical background: Accepteren kun je leren

6. Theoretical background: Wat acceptatie niet is

7. Theoretical background: Wat wordt je antwoord?
   Theoretical background: 7a. Bereidheid is…
   Theoretical background: 7b. Ik ben als een herberg…
   Blanks excercise: 7c. Waarom ben je bereid?

   Noteren van bewustwording waarom het bereid zijn om psychische pijn te ervaren noodzakelijk is.

8. Blanks excercise: Geef je leed een naam

   Twee veelvoorkomende emoties een naam geven, bijv. Tante Ik Kan Het Niet of Meneertje Criticus. En gedachten daarna welkom heten met hun koosnaampje.

9. Theoretical background: Oefening: ruimte maken en toestaan wat er is (1)
   Mindfullness excercise: Ruimte maken en toestaan wat er is (2)

   Dagelijkse oefening: bewustwording van gevoelens en de reactie van het lichaam hierop.

10. Blanks excercise: Acceptatie in actie

    Actie/handeling die de cursist de laatste tijd heeft vermeden benoemen en uitvoeren.

11. Theoretical background: Metafoor: de worstelknop

    Excercise with feedback: 11a. Vervolg de Worstelknop: voorbeeld van verzet
    Dagelijks bewustwording voor de cursist wanneer deze constant opzoek gaat neet analyseren en redenen waardoor een bepaalde gebeurtenis heeft plaats gehad.

12. Theoretical background: Nietzsche: levenskunst

    (blanks excercise)

Week 5. The 'proefballonnetjes' of mind

1. Theoretical background: Inleiding: daar komt de denktrein!

2. Theoretical background: Andere manieren om met het verstand om te gaan
   Theoretical background: 2a. Woorden in ons hoofd, krachtig als werkelijkheid
   Theoretical background: 2b. Verteller van verleidelijke en bedrieglijke verhalen

3. Theoretical background (with video): Cognitieve defusie
   Blanks excercise: 3a. Defusie oefening 1

   Beschrijven van gedachten waar de cursist vaak last van heeft. Ruimte creëren tussen de gedachte en jezelf door de toevoeging van: ik heb de gedachte dat.

   Theoretical background (with feedback): 3b. Vervolg cognitieve defusie oefening 1
   Blanks excercise: 3c. Defusie oefening 2
   Gedachten van hierboven uitspreken alsof ze van iemand anders zijn dan de cursist.

4. Mindfulness excercise (meditation): Observeren van denken

   Bewust worden van 'denken'.

Metafoor: de waterval

5. Theoretical background: Metafoor: het landschap en de rugzak

Week 6. Wie ben ik nu eigenlijk?

1. Theoretical background: Inleiding
2. Theoretical background: De waarde van aandacht
3. Excercise: Het contrast: leven op de automatische piloot
4. Theoretical background: Zonder aandacht geen verandering
5. Theoretical background: De 'doe-modus' en 'zijn-modus'
6. Theoretical background: Accepteren én handelen
7. Blanks excercise: Het observerende zelf

Door middel van foto's moet de cursist nagaan wie hij was op verschillende momenten in het leven, hoe hij eruit zag , wat de stemming was en wat hem bezig hield.

Blanks excercise 7a. Oefening: foto's en levensloop (1)

Door middel van de foto's nagaan wat voor rollen de persoon heeft gespeeld.

Blanks excercise 7b. Oefening: foto's en levensloop (2)

Blanks excercise 7c. Vervolg oefening foto's en levensloop

Blanks excercise 7d. Metafoor: de hemel

De cursist kan zichzelf vergelijken met de altijd veranderende wolken en de hemel die altijd hetzelfde blijft..

Theoretical background: 7e. Het observerende zelf

8. Theoretical background: Wat hebben Jezus, Boedda, Confucius en Gandhi gemeen?
9. Mindfulness excercise (meditation): Verankeren

Gewaarwording van fysieke gevoelens.

10. Blanks excercise (with feedback): Oordelen

Leren kijken naar de wereld om ons heen door te oordelen of door te observeren.

Blanks excercise: 10a. Oefening: vergelijken

Bewust wording van momenten dat er negatief wordt vergeleken en wanneer dit bevredigend is.

Blanks excercise: 10b. 'Ik vergelijk constant!'

Bewustwording dat voluit leven alleen kan op basis van wezenlijke motivatie en waarden, los van wat andere doen of denken.

11. Theoretical background: Het ego als obstakel voor voluit leven
12. Intermezzo
13. A story from Chuang Tzu

End of part II

Ook het tweede deel van deze cursus heb je nu doorlopen. Je hebt geoefend met de belangrijkste voorwaarden voor voluit leven. Als het goed is, ben je in staat negatieve emoties en gedachten op te merken en er niet voor weg te lopen. Je laat je minder meeslepen door je verstand. Dat wil zeggen dat je je gedachten niet meer automatisch gelijkstelt aan de werkelijkheid. Je verstand is weer een dienaar geworden in plaats van een meester.
In het volgende en laatste blok ga je daarmee verder aan de slag. Door het maken van keuzes in je leven en je daaraan te

verbinden, krijgt het voluit leven steeds sterkere wortels en wordt het een weersbestendige boom

Start of part III **Onderzoeken wat belangrijke waarden zijn en die leren toepassen in het dagelijks leven.**

Week 7. Hoe wil je voluit leven?

1. Theoretical background — Inleiding
2. Theoretical background — Nogmaals de vraag: wat wil je van het leven?
3. Theoretical background — Wat zijn waarden (niet)?
4. Theoretical background — In contact staan met je waarden maakt je sterk
5. Blanks excercise (with feedback): — Bewustwording van je waarden: de mitsen en maren
6. Blanks excercise: — Oefening: overzicht levensdomeinen en waarden
7. Exercise: — Waarden ontdekken (1)

   De cursist moet één van de waarden hierboven kiezen en daarvoor gaan bedenken wat hij met het leven wil.

   Blanks excercise: — 7a. Oefening: waarden ontdekken (2)

   Beschreven vragen over deze waarden beantwoorden.

   Blanks excercise: — 7b. Oefening: waarden ontdekken (3)

   Beschreven vragen over deze waarden beantwoorden.
8. Blanks excercise: — Levensdomein
9. Blanks excercise: — Je motto of lijfspreuk

   Op basis van bovenstaande waarden een motto of lijfspreuk benoemen. (wordt weergegeven op de startpagina)
10. Mindfulness excercise: — Routineoefening met aandacht
11. Theoretical background: — Heidegger over authenticiteit

Week 8. Ervoor gaan

1. Theoretical background: — Inleiding
2. Blanks excercise (with feedback): — Acties bepalen

   Handelingen vastleggen waardoor waarden uit de les hiervoor uitgevoerd kunnen worden.
3. Blanks excercise (with video): — Mitsen en maren bepalen

   Bewustwording van tegenslagen die zich kunnen voordoen bij het uitvoeren van een actie.
4. Blanks excercise: — Op weg gaan - voer de acties uit
5. Mindfulness excercise: — Alles in één

   Alle mindfulness oefeningen uit de vorige lessen tegelijkertijd uitvoeren.
6. Blanks excercise: — Metafoor: de reisleider

   Inlevingsoefening.
7. Theoretical background: — Nietzsche: hoe te sterven zonder spijt?

Week 9. Ervoor blijven gaan

1. Theoretical background: — Inleiding

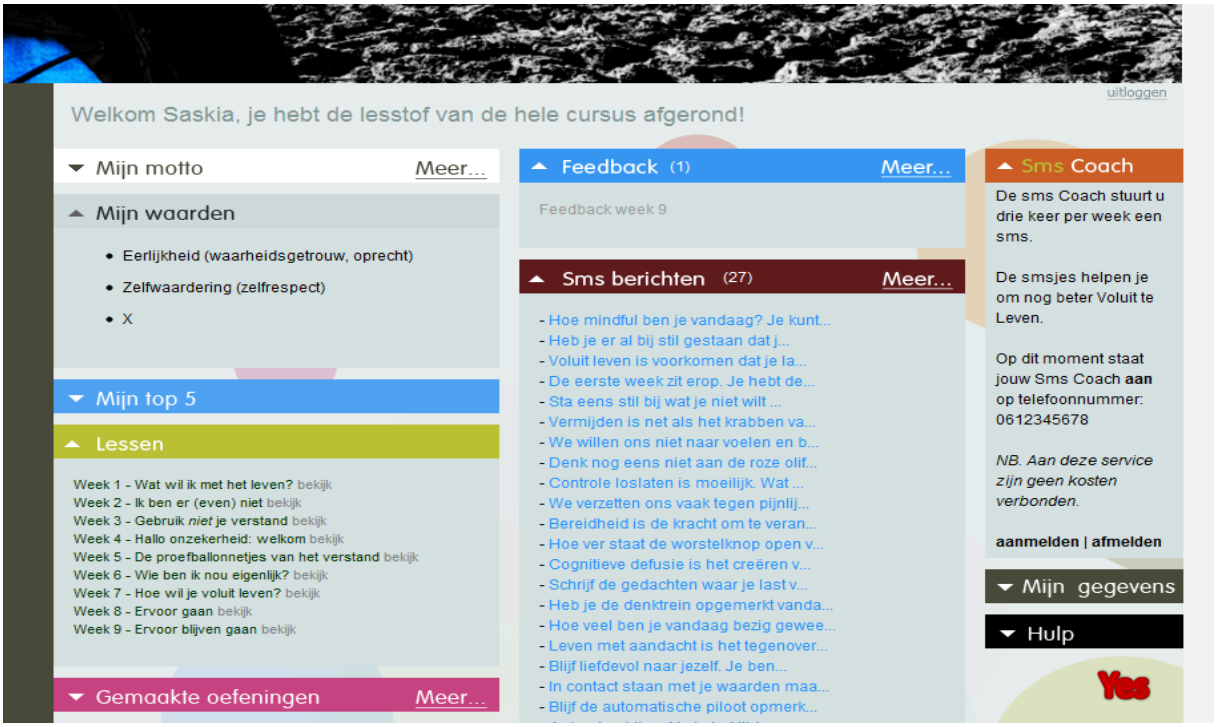
2.	Blanks excercise (with feedback) Theoretical background:	Oefening: ontwikkel je eigen levensfilosofie (1) 2a. Oefening: ontwikkel je eigen levensfilosofie (2)
3.	Theoretical background:	Metafoor: temper je verwachtingen
4.	Theoretical background:	Bereid je voor op de consequenties van een levenshouding
5.	Theoretical background:	Volhouden: je tweede natuur
6.	Theoretical backgrounde:	Voluit Leven in een notendop
7.	Blanks excercise: Blanks excercise:	Opdracht: checklist bij terugval (1) 7a. Opdracht: checklist bij terugval (2)
8.	Theoretical background:	Hoe nu verder?

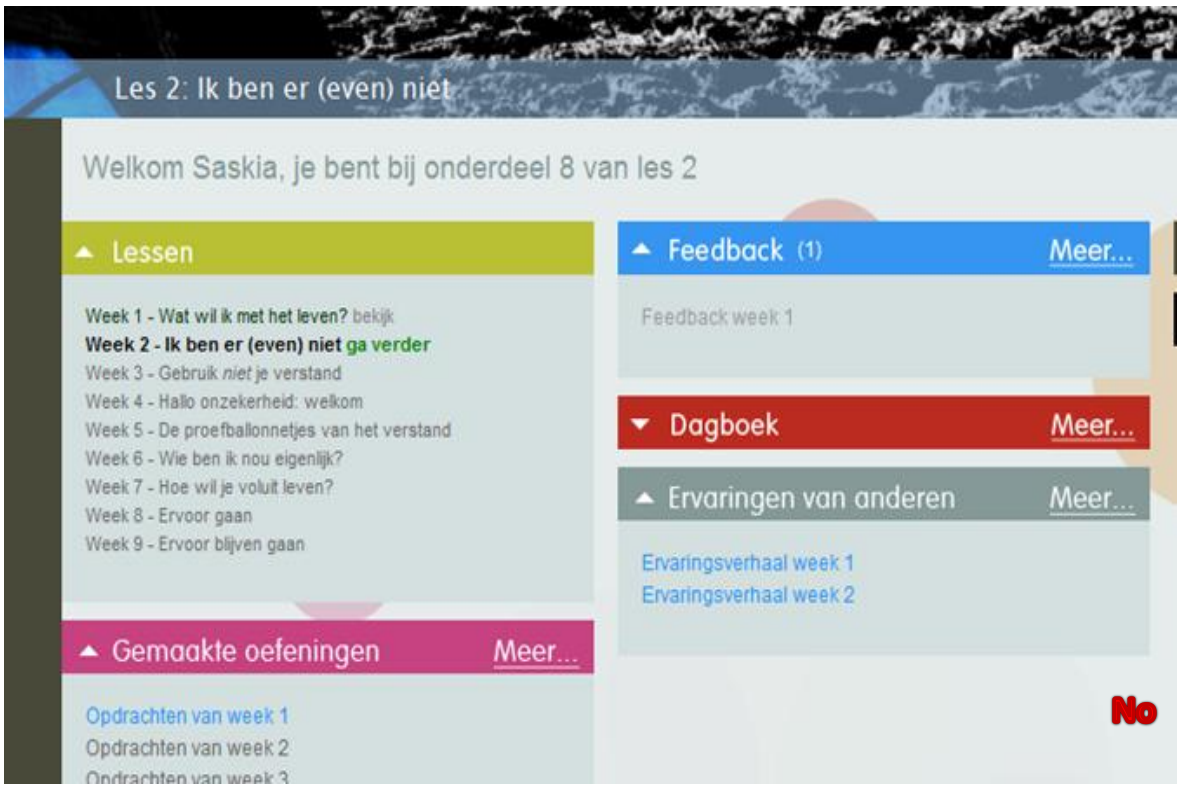
APPENDIX 9

Screenshots of the manipulations

Feedback

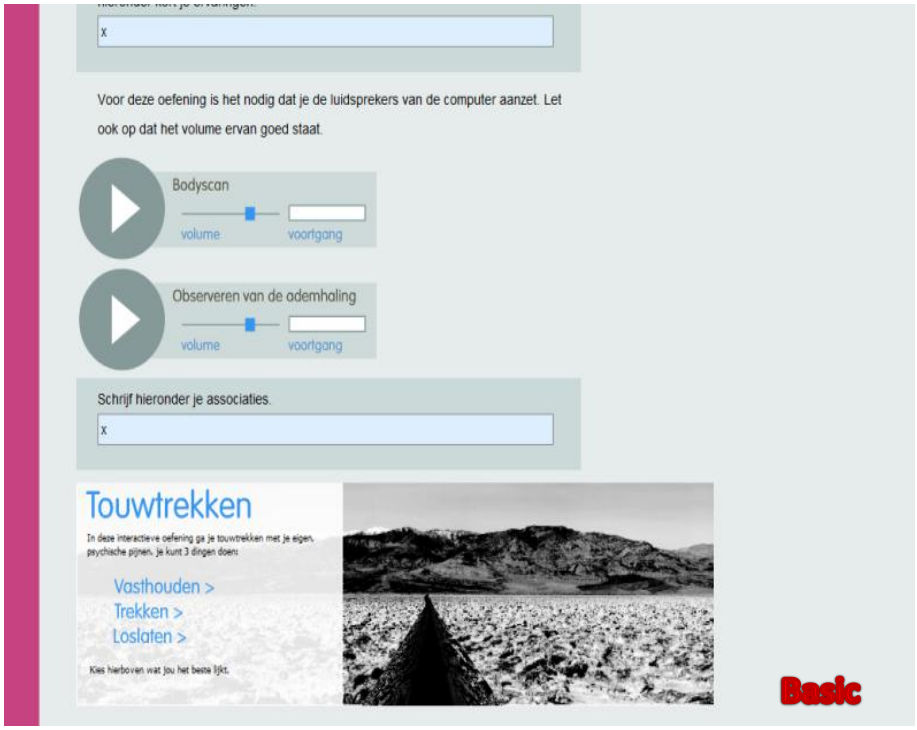
Text messages





Appendix 9- Screenshots of the manipulations of Voluit Leven

Multimedia

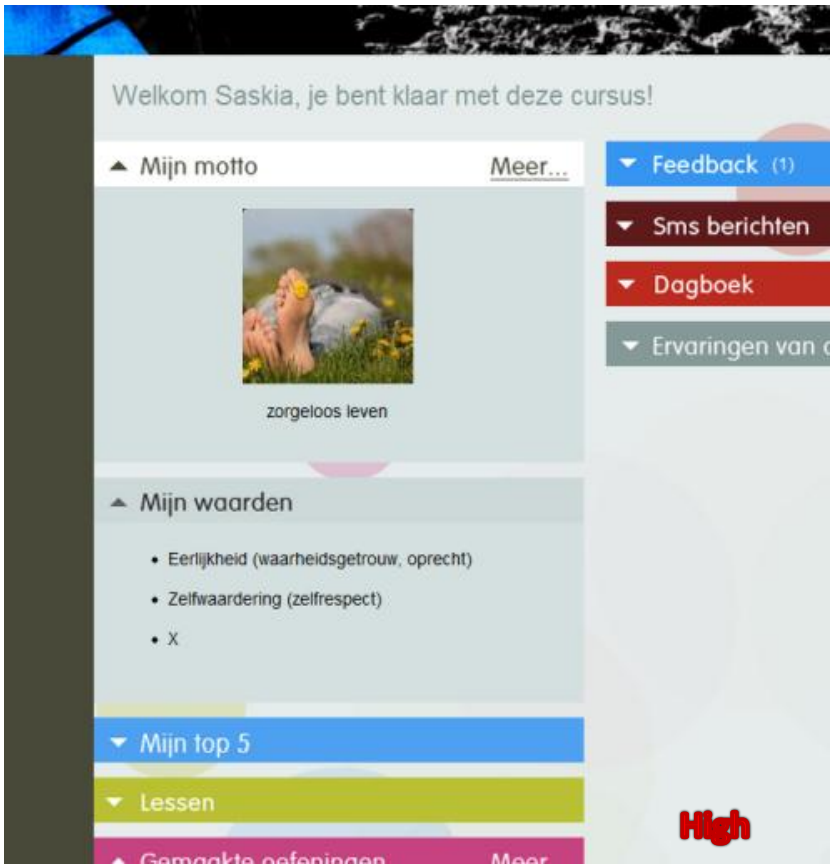

x
Voor deze oefening is het nodig dat je de luidsprekers van de computer aanzet. Let ook op dat het volume ervan goed staat.
Bodyscan
volume
voortgang
Observeren van de ademhaling
volume
voortgang
Schrijf hieronder je associaties.
x
Touwtrekken
In deze interactieve oefening ga je touwtrekken met je eigen, psychische pijnen. Je kunt 3 dingen doen:
Vasthouden >
Trekken >
Loslaten >
Kies hierboven wat jou het beste lijkt.
Basic


In de afgelopen week heb je geoefend met de bodyscan. Schrijf hieronder een paar ervaringen op.
x
Voor deze oefening is het nodig dat je de luidsprekers van de computer aanzet. Let ook op dat het volume ervan goed staat.
Observeren van de ademhaling
volume
voortgang
Wil je de mindfulness op je mp3-speler beluisteren, dan kan dat ook door hier met rechter muisknop te klikken en het mp3-bestand te downloaden door op 'Doel opslaan als' te klikken.
NB. in sommige browsers staat in plaats van 'Doel opslaan als' iets anders zoals: 'koppeling opslaan', 'link opslaan' of 'download gekoppeld bestand'.
Elaborate

Tailoring

Appendix 9- Screenshots of the manipulations of Voluit Leven

Personalisation



Appendix 9- Screenshots of the manipulations of Voluit Leven

APPENDIX 10

Categorization of telephone interviews outcome

Category	*Given answers*	*Amount of users*
Impression	Positive	10
	Neutral	5
	Negative	0
Motivation	Interest	3
	Much needed	9
	Unknown	3
Usage		
○ **moments**	Beginning of the week	2
	End of the week	3
	Each week on different moments	10
○ **times of logging in**	Less than intended usage (3 times a week)	2
	Equals intended usage	9
	More than intended usage	3
	Differs each week	1
○ **completing the treatment within 12 weeks or not?**	Yes	13
	No	1
	Did not complete it at all	1
○ **non usage**	Not, except holidays	10
	One week	0
	Unknown	5
Diary	Interesting	4
	Neutral	2
	Not interesting	7
	Unknown	2
Feedback button	Used one or two times	3
	User but did not get a response	1
	Not used	7
	Unknown	4
Impression of Feedback	Positive during beginning (AR; PF)	(5;2)
Automatic response- AR (n=7)	Positive during whole course (AR; PF)	(2;5)
Personal feedback- PF (n=8)	Neutral (AR;PF)	(4;1)
	Negative (AR;PF)	(3;0)
SMS (n=10)	Positive / fun	6
	Neutral	0
	Negative	4
Tailoring (n=14)	Positive	3
	Neutral	0
	Negative	11
Personalisation (n=5)	Positive	3
	Neutral	0
	Negative	2
Multimedia (n=8)	Positive	2

Appendix 10- Categorization of telephone interviews outcome

	Neutral	1
	Negative	5
Suitability of the internet	Good	9
	Not good	1
	Not for everyone	5
Requirements for users	None	5
	Internetskills	1
	Motivation	1
	Unknown	5
	Depression or anxiety not to serious	3
Willingness to pay	No estimation	1
	75-300 euros	3
General remarks	More personal contact / interaction	2
	Simplifying printing	2
	Navigation problems	2
	Larger front size	1
	More colors on the pages	1

Appendix 10- Categorization of telephone interviews outcome