

Make me Happy

Usability, Mindfulness and Acceptance of the Intervention Geluk en Zo

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Abstract

Acceptance and Commitment Therapy (ACT) is seen as an alternative approach for pain treatment, focusing on the promotion of overall well-being, not a reduction of pain. The present article evaluated the usability and effectiveness of a short term self help intervention based on ACT, named 'Geluk en Zo'. A total of 18 participants from the dutch population completed questionnaires over the concepts of mindfulness and acceptance at prior and after the intervention. In addition, interviews over the perceived usability were held, as the intervention is currently under development. No clinical relevant improvements on both concepts mindfulness and acceptance were found. In contrast, reported user experiences were promising; the intervention was regarded as positive and effective by the participants. Further more, participants provided constructive feedback and essential suggestions for the further development of the intervention. Given these findings, Geluk en Zo seems to have potential in the prevention of mental illness or treatment of pain.

Samenvatting

Acceptance en Commitment Therapie (ACT) is een alternatieve benadering voor patiënten met chronisch pijn. De focus ligt op het bevorderen van het algemeen welbevinden en niet op de reductie van pijn. Het huidige onderzoek evalueert de gebruikservaringen en effectiviteit van een korte termijn zelf hulp interventie gebaseerd op ACT, genoemd Geluk en Zo. Een totaal van 18 participanten, getrokken van de Nederlandse populatie, voltooid vragenlijsten over de concepten van mindfulness en acceptatie voor en na de interventie. Daarnaast werden er interviews over de gebruikservaringen afgenomen, omdat de interventie op dit moment nog in ontwikkeling is. Er werden geen klinisch relevante verbeteringen van mindfulness en acceptatie gevonden. In tegenstelling, zijn de gerapporteerde gebruikservaringen veelbelovend; de interventie werd door de participanten als positief en effectief beschouwd. Daarnaast gaven de participanten constructieve feedback en suggesties voor verdere ontwikkelingen van de interventie. Gezien deze bevindingen lijkt Geluk en Zo potentie te hebben in de preventie van geestesziekte of de behandeling van pijn.

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Introduction

Mental health is more than the absence of psychopathology. The World Health Organization has defined mental health as „*a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community*“ (WHO 2005, p.2). For a long time, mental health was defined as the lack of mental illness, such as depression or anxiety. Following this approach, there was no dimension of positive mental health. A more recent and modern approach studies mental health beyond pathological outcomes, suggesting that mental health is more than the absence of mental illness. The Two-Continua Model holds that mental illness and mental health are related, yet distinct dimensions (Westerhof, & Keyes, 2010). The model demonstrates that one continuum indicates the presence of mental illness, the other indicates the presence of mental health. Representative surveys suggest that the presence of mental health can be seen as a complete state, not only the absence of mental illness (Keyes, 2005; Westerhof, & Keyes, 2008). To promote positive mental health can prevent against mental illness (Keyes, Dhingra, & Simoes, 2010), providing a kind of buffer that will decrease the impact of future negative life impacts (Keyes, Dhingra, & Simoes, 2010). Acceptance and Commitment Therapy is a psychological treatment that aims at improving positive mental health through teaching protective psychological skills.

Acceptance and Commitment Therapy

Acceptance and Commitment Therapy (ACT) is a major therapy used in the promotion of mental health, which belongs to the family of behavioral and cognitive therapies (Hayes, Strosahl, & Wilson, 1999; Forman & Herbert, 2009). ACT has its roots in cognitive therapies and its more recent extensions of the cognitive-behavioral therapy (CBT). ACT is derived from the Relational Frame Theory (RFT), which is a psychological theory about human language and cognition, rooted in the philosophy of functional contextualism (Hayes, Hayes, Reese, & Sarbin, 1993). ACT sets the focus on a behavioral change in order to improve mental health, not on a reduction of symptoms, like in CBT. According to McCracken & Vowles (2014, p.181), behavioral changes are „*designed to be applicable to a broad range of psychological problems*“. Behavioral change through ACT is

widely tested and seems to be effective mostly on people suffering from negative life circumstances as depressive symptoms or pain (Keyes, Dhingra, & Simoes, 2010, Veehof et al. 2016).

Several ACT interventions aimed at behavioral change have generally shown medium-sized average effect-sizes (McCracken, & Vowles, 2014), amongst other things on clinical depression, pain intensity, chronic pain, distress, anxiety, psychotic symptoms, physical well-being and quality of life (Trompetter, Bohlmeijer, Veehof, & Schreurs, 2014; Bohlmeijer, Fledderus, Rokx, & Pieterse 2011; Zettle, & Hayes, 1987; Branstetter et al., 2004; Veehof., Oskam, Schreurs, & Bohlmeijer, 2011; Buhrman et al. 2013; McCracken, Vowles, & Eccleston, 2005; Bach, & Hayes, 2002). According to Hayes and colleagues (2006), inside ACT, short, medium and long-term goals get tackled in order to change the behavioral repertoire towards the desired direction (Fletcher, & Hayes, 2005; Harris, 2010). According to Veehof, Oskam, Schreurs & Bohlmeijer (2010), the results of a systematic review and a meta analysis suggest, that ACT is as effective as CBT.

ACT is divided up into different aspects. The ACT-model can be divided into six core processes, which are aimed at improving the daily functioning of a person (Hayes, Villatte, Lewin & Hildebrandt, 2011). These six core processes get summarized in the Psychological Flexibility Model (*Figure 1.*) (Hann & McCracken, 2014). Hayes and colleagues define psychological flexibility as the „*ability to contact the present moment more fully as a conscious human being, and to change or persist in behavior when doing so serves valued ends.*“ (Hayes et al., 2006, p. 7). All six core processes are highly interrelated (Fletcher, & Hayes, 2005) and build up on each other (Hayes et al., 2006).

Acceptance means to actively being aware of ones feelings, and to privately accept them instead of wanting to change their frequency or form (Fletcher, & Hayes, 2005). *Cognitive defusion* means to view thoughts as thoughts and not as a reflection of reality, that have to be literally true (Hayes et al., 2006). *Contact with the present moment* means to observe and describe the present, without judging or interpreting the situation someone is in (Hayes et al., 2006). This makes it possible to get in a more direct contact with the environment. *Self as Context* describes the ability of the self to take different points of reference and perspectives. To be aware of different perspectives of the self allows a detachment of ones conceptualized self, which has regulatory power on ones behavior. *Values* that lead to purposive action are necessary to develop in a desired life direction, (Hayes et al. 2006). Through a new contact of what one wants in life, it becomes possible to discover and eliminate maladaptive thoughts and emotions to replace them by revised values. Last but not least, *committed action* means to effectively act according to ones chosen values.

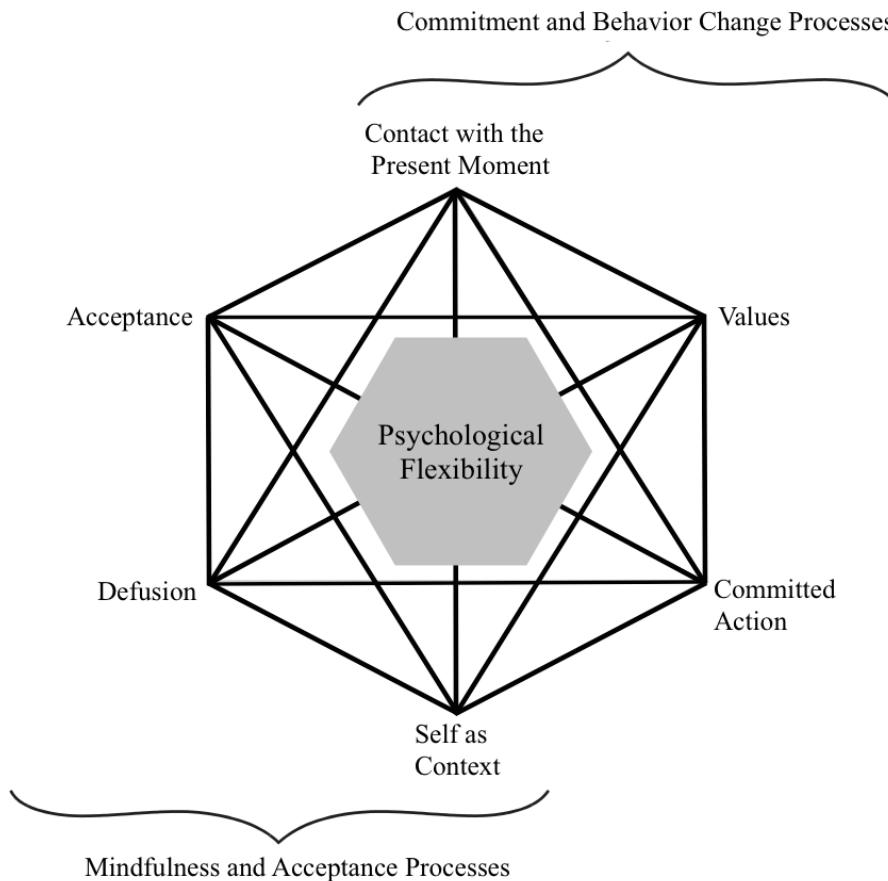


Figure 1. Psychological Flexibility Model with categories

Four of the six core processes from the Psychological Flexibility Model actually serve as a definition of Mindfulness, an overarching construct ACT is build on (Fletcher, & Hayes, 2005). The core processes *acceptance*, *cognitive defusion*, *contact with the present moment* and *self as context* can be organized in the *mindfulness and acceptance processes* category, which makes one part of the Psychological Flexibility Model. The other part of the model is the *commitment and behavior change processes* category and includes the processes *contact with the present moment*, *values*, *self as context* and *committed action*. Because every psychological activity involves contact with the present moment and the self as a context, these two processes can be found in both categories. Summarized, ACT is a behavioral and cognitive intervention, that includes an acceptance and mindfulness, as well as a committed and behavior change processes, to increase the psychological flexibility of a person.

The Intervention Geluk en Zo

For the purpose of research in the field of health promotion, acceptance and mindfulness, the present paper will evaluate the currently developed preventive intervention ,Geluk en Zo‘ (eng.: ,Happiness and Things Like That‘). Geluk en Zo is a dutch short-term self-help intervention, consisting of several pen and paper exercises that examine how one copes with positive as well as negative events in life. Through examining the importance of how to interpret events in place of concentrating on the events themselves, Geluk en Zo tries to increase the well-being of the participant through applying the concepts of ACT; more specific the Psychological Flexibility Model. As illustrated in the model (*figure 1*), the intervention strives for a shift from acceptance (top left corner) towards committed action (bottom right corner). This approach towards committed action includes an implicit impact of mindfulness and an explicit role of acceptance, which both play an important role in several exercises. Through bringing the participant closer to suitable ways of coping with reality, an increase in the psychological flexibility is emphasized, which in turn is closely related to an increase of the overall well-being and quality of life (Veehof., Oskam, Schreurs, & Bohlmeijer, 2011). Geluk en Zo is derived from two other successful ACT-based programs, named *Live through the Fullest* and *Living with Pain*. The latter has indicated significant positive effects on depression, pain intensity and psychological inflexibility in chronic pain patients (Trompetter, Bohlmeijer, Veehof, & Schreurs, 2014). These two interventions are 9-12 weeks long, with approximately three hours of time investment per week. The Geluk en Zo program aims at similar significant effects, while being less time consuming. Geluk en Zo is therefore reduced to total time of two weeks with a weekly effort of approximately 90 minutes. The newest version of Geluk en Zo was recently reduced in complexity, after reported problems in understanding several complex exercises. In order to simplify the program on the basis of present feedback, the explicit aspect of mindfulness was removed. Nevertheless, as daily exercises presuppose an implicit use of mindfulness, a positive effect is anticipated despite its removed content. In addition, the core aspect acceptance will be studied, as the preventive intervention Geluk en Zo is based on an acceptance based approach.

To give the possibility of further adjusting later versions of the program, an interview over the perceived usability will be held. This interview will be based on the aspect of *Perceived Usefulness*, derived from the Technology Acceptance Model (TAM). TAM was proposed by Davis in 1986 and has been widely tested, empirically proven to successfully predict 40% of a system use (Legris, Ingham, & Collette, 2003). According to Davis (1989), the most essential predictive

determinant of system use is perceived usefulness. Perceived usefulness means the extent to which a person thinks a certain technology or system helps to perform a better job, or „*the degree to which a person believes that using a particular system would enhance his or her job performance*“ (Davis, 1989, p.320). If the perceived usefulness is high, a person believes in the existence of a positive relation between system use and performance. Applied to the intervention Geluk en Zo, four factors of perceived usefulness, named *work more quickly*, *usefulness*, *effectiveness* and *makes job easier* seem most suitable and meaningful for the present investigation. The factors try to estimate if the intervention as a technology is perceived useful. Here has to be noted, that the intervention Geluk en Zo is going to be developed into a computer application (short: app) for mobile phone or tablet use. This will simplify the process of participation enormous. The yield to categorize the present intervention as a technology is therefore adequate.

Research questions

In order to further develop the self help intervention Geluk en Zo, the present paper will investigate two topics. First, it will be studied how participants experience the usability of the intervention,. Second, it will be studied if the intervention has an effect on the concepts of mindfulness and acceptance. Three research questions were formed:

1. *How do participants experience the usability of the intervention, concerning perceived usefulness?*
2. *What is the effect of the intervention Geluk en Zo on the concept of mindfulness of the participants?*
3. *What is the effect of the intervention Geluk en Zo on the concept of acceptance of the participants?*

As the intervention is still under constant development, the aspect of perceived usefulness makes a core aspect of the present research paper, in order to further improve the intervention. It is expected that the perceived usefulness is reported being adequate and solid. Additionally, reports of crucial change proposals are expected. To get feedback from experiential participants is a crucial point in developing a user friendly and person directed self help intervention. The intervention also requires a certain level of paying attention to and evaluation of ones daily behavior, which describes an implicit use of mindfulness. Despite the removal of making use of explicit mindfulness and despite the shortening of the intervention, significant changes in mindfulness and acceptance are expected after participating in the program.

Methods

Design

A questionnaire survey design and an interview survey design were used. Participants completed measures in the form of several questionnaires on two occasions: shortly before the beginning of the intervention (T0) and shortly after completing the intervention (T1). Additionally, a semi-structured interview about the usability was held shortly after the intervention.

Participants

In total, 19 participants volunteered their time for the study (*table 1*). All were recruited via a convenient sampling between March and April 2016 and participated in the intervention Geluk en Zo in April 2016. The sample was heterogenous, meaning age categories, levels of education and sex. To be included in the study, every participant had to be 18 years at least and expert in the dutch language, since the intervention and the questionnaires were written in Dutch language. Exclusion criteria were current psychological diseases of any kind, on the basis of an assessment made by the participants themselves, respectively.

Table 1: Demographical Data Participants

Age category		Educational Level		Sex	
< 30	10	VMBO	2	female	12
30-40	1	HAVO	2	male	7
41-50	4	VWO	7		
51-60	1	MBO	1		
> 60	3	HBO	2		
M	37,79	WO	5		
SD	20,47				

Procedure

Before the intervention was carried out, the researchers got permission by the ethical commission of the University Of Twente. First, participants were given a participant number, in order to combine given data with data on later occasions. Then, the participants were informed that they were to be given several questionnaires, to be filled out on laptop through following the presented instructions.

They were informed that there were no right or wrong answers to any of the questions, but that the researchers were interested in their opinions and beliefs. An informed consent with information regarding privacy and purpose had to be accepted in order to start on the questionnaires. After filling in the questionnaires, a printed informed consent form was given to the participant, with informations regarding the development, content and goals of the intervention, as well as contact details on how to reach the researchers in the case of any upcoming questions or comments (*Appendix A*). After the informed consent was signed by participant and researcher, the instruction book and exercise book were handed to the participant. Then, the content of the program was introduced to the participant by going through the instructions and illustrating the exercises among the exercise book. Also, the participant was informed, that he or she would be the only one having access to the filled out exercise book, that it stayed completely private at any time of the study. After eventual questions were answered, the participant was ready to start the intervention on his or her own. After one week, a short reminder asking to keep carrying out the program was sent per email. No further accompaniment was needed for completing the intervention. Shortly after finishing the intervention, the participant and researcher came together again. The same questionnaires got filled out by the participant. Last but not least, an interview over general aspects and the perceived usefulness of the intervention was held. The audio of the interview was recorded.

The Intervention

The intervention Geluk en Zo consisted of an instruction book and an exercise book. The instruction book had all necessary instructions that were needed to fill out the exercises. The exercise book consisted of the exercises themselves and blank place to fill them out (*table 2*). The exercises inside the intervention Geluk en Zo aimed at showing the participant how and why they were acting in different situations. A basic step inside the intervention was the organization of everyday behavior in three categories: which behavior was carried out due to a routine, which to *move away* from something and which to *move towards* something. To move away from something was seen to foster the overall psychological inflexibility of a person. Seen from the perspective of the Psychological Flexibility Model, to move away from something could have been applied to every core process of psychological inflexibility.

The program consisted of ten exercises, divided up into four steps. The categories to move away and to move towards were described and illustrated in the first step (exercise 1 and 2, respectively), where prospects of towards and away behavior for the next week got written down. In

Table 2: Exercises of the Intervention

Week Step	Exercise	Content & Goal	Psychological Flexibility	Time Investment
Week 1 Step 1	Exercise 1: Where do I want to move away from?	Identifying thoughts, situations and feelings one wants to avoid.	Mindfulness <i>and</i> Acceptance	30-45 minutes
Step 1	Exercise 2: Where do I want to go, what is valuable and important?	Identifying what is important for ones life and what is worth doing. Where one wants to go towards and what is valuable and important.	Values	30-45 minutes
Step 2	Exercise 3: What am I doing and what do I think of that?	Observing and understanding what one is doing over a longer time period. Identifying away and towards behavior.	Contact with the present moment <i>and</i> Committed Action	4x 1-2 minutes each day for 2-3 days
Week 2 Step 3	Exercise 4: Experiencing towards behavior	Observing and concluding what happens if one is doing something valuable and important.	Values <i>and</i> Contact with the present moment	10 minutes
Step 3	Exercise 5: State of things	Summarizing exercise 3 in numbers. Getting insight in the quantity of towards and away behavior.	Acceptance	20 minutes
Step 3	Exercise 6: Conclusions	Drawing conclusions on the basis of exercise 5.	Acceptance <i>and</i> Values	10 minutes
Step 3	Exercise 7: The profit of towards behavior	Understanding what and why certain behavior is worth doing in order to move towards.	Acceptance, Defusion, Values <i>and</i> Committed Action	15 minutes
Step 3	Exercise 8: Is moving away from something helping?	Understanding when avoiding or moving away from something is not helping, especially in unavoidable cases.	Acceptance <i>and</i> Defusion	20 minutes
Step 3	Exercise 9: Conclusions	Drawing conclusions on the basis of exercise 8.	Acceptance <i>and</i> Values	10 minutes
Step 4	Exercise 10: Doing what has to be done	Consciously choosing for behavior towards importance.	Committed action <i>and</i> Contact with the present Moment	4x 1-2 minutes each day for 7 days

step 2 (exercise 3, respectively), the everyday behavior got identified through writing down actual behaviors on several random times throughout the day. These behaviors then got categorized into one category. Furthermore, a first estimation about character and reason of the behavior got written down in form of nine statements on a 5-point Likert-scale, ranging from 1 (absolutely not true) to 5 (absolutely true). The third step (exercises 4-9, respectively) consisted out of an evaluation from the statements in the first two steps. Here, the balance between the different behavior categories were discussed and tried to understand. Conclusions were derived. In the fourth and last step (exercise 10, respectively), it was tried to carry out purposeful and important behavior on the basis of the previously derived conclusions. This behavior again got identified through writing down actual behaviors in the same way described in step 2, with the only difference to state if the actual behavior is purposive or not (instead of an estimation through rating several statements). Last but not least, the program ended with a retrospection of the last two weeks.

Measures

It has to be noted that an additional researcher investigated other aspects of the intervention Geluk en Zo. Therefore, participants also answered two other questionnaires (MHC-SF and ELS) and several questions inside an interview, which were not part of this study.

FFMQ

The FFMQ (Five Facet Mindfulness Questionnaire) consists out of 39 items and measures five facets of mindfulness: *observe* (8 items), *describe* (8 items), *actaware* (8 items), *nonjudge* (8 items) and *nonreact* (7 items) (Baer et al., 2006). Participants were asked to rate several statements on a 5-point Likert scale ranging from 1 (never or very rarely true) to 5 (very often or always true). An example of a statement could be: „*I am good in finding words for describing my feelings*“. Scores per facet range from 8 to 40 (except nonreact, which ranges from 7 to 39). All facet scores are then summed up to a total score, with a higher total score indicating more mindfulness. The dutch FFMQ was developed by translation and back-translation of the original english version and has shown an adequate test-retest reliability as well as construct validity in a sample of 141 patients with fibromyalgia (Veehof, ten Klooster, Taal, Westerhof, & Bohlmeijer, 2010). The sub scale nonjudge is also suited to measure acceptance. The FFMQ had a good Cronbach's Alpha on the first occasion (,86) and an acceptable Cronbach's Alpha on the second occasion (,73).

AAQ-II

The 10-item AAQ-II (Acceptance and Action Questionnaire-II) is invented to assess acceptance and experiential avoidance, more precisely the ability to accept aversive internal experiences, like negative emotions, thoughts or feelings (Jacobs, Kleen, de Groot, & A-Tjak, 2008). Participants were asked to rate several statements on a 7-point Likert scale, ranging from 1 (never true) to 7 (always true). An example of a statement could be: „*I am scared of my feelings*“. A total score commuted out of the individual items is ranging from 10 to 70, with higher scores indicating a higher degree of general acceptance and less experiential avoidance. The Dutch version of the AAQ-II has shown good construct validity in general populations (Jacobs, Kleen, de Groot, & A-Tjak, 2008). A reliability analysis for this study revealed that the AAQ-II had a good Cronbach's Alpha on the first occasion (.83) and an acceptable Cronbach's Alpha on the second occasion (.74).

The Interview

An interview over general aspects and the perceived usefulness was held after completing the intervention. The interview consisted out of nine main questions and 15 subordinate questions, which were meant to get asked if more details on the corresponding topic were desired (*Appendix B*). All questions were prepared by the researcher. Three general questions covered the opinions over the title of the intervention, recommendations for improvements and comments of any kind. The user experience with regard to usefulness was based on the aspect of *perceived usefulness*, derived from the Technology Acceptance Model (TAM).

Analyse

One participant dropped out without giving any reasons. All analysis were therefore made with the remaining 18 participants.

The present paper investigated two topics of the developed intervention Geluk en Zo. First, how participants reported the perceived usefulness of the intervention and second, if the intervention had an effect on mindfulness and acceptance.

The interview over the perceived usefulness was qualitatively analyzed with the computer program ATLAS.ti, version 7. This program allows it to code various participants statements according to corresponding topics, in order to simplify the qualitative analysis of the interviews. Therefore, the audio recordings of the interviews got transcribed and embedded into Atlas.ti. Any personal information was anonymized to guarantee the privacy of each participant. Next, the

participants statements over the intervention got classified along the following codes: *title*, *experiences with the intervention*, *effectiveness*, *time investment* and *suggestion*. These were the core aspects determining perceived usefulness the interview was based on. The process of setting these codes was done in a top-down process by the researcher. Next, various subcodes got assigned to the main codes (*Appendix C*). For this process, all statements derived from two interviews (Respondent 1 and 2) were analyzed and formed into several subcodes based on their character. Each subcode belonged to one of the main codes. This was done in a top-down process. Finally, statements of the leftover interviews were assigned to the subcodes via a bottom-up approach. Each statements core content was estimated and then categorized into one or more subcodes. One statement could be assigned to several subcodes, if several interpretations of the content were possible or the statement contained information suitable for more than one subcode.

Statements assigned to the code *title* summarized participants opinions over the title of the intervention. Subcodes in the *experience with the intervention* code were the ones where participants reported general opinions, feelings, experiences and estimations over the intervention. Statements assigned to the code *effectiveness* were about the effectiveness of improving the overall well-being and the experienced outcome of the intervention. Also, suggestions for improvement of the intervention got included in the study. The related question from the interview aimed at any suggestions of the participants they wished to be improved in later versions of the intervention. Closely related to the *suggestion* code is the last question over general comments of the intervention, which not only includes suggestions but remarks of any kind. Any statements which did not fit into one of the above mentioned categories were dismissed, as they had no additional value for the present investigation.

The process of forming statements into various subcodes which then in turn were assigned to the main codes was done by two researchers, in order to reach a common ground on the character of the statements. This included the combination of related terms (for example *beautiful*, *pretty* and *good-looking*) into one subcode representing them all. Following, each researcher coded one interview on his own, giving the basis for an inter-rater-reliability analysis. The inter-rater-reliability analysis *Cohen's Kappa* revealed an adequate value of 0.74, which means that both researchers have a sufficient degree of agreement on coding the interviews.

To find any effect of the intervention regarding the questionnaires that got filled in by every participant before (pretest, t(0)) and after (posttest, t(1)) the intervention, they were analyzed with 22nd version of the statistics program SPSS (Statistical Program for Social Sciences). First,

preliminary calculations (recoding of negative formulated items), reliabilities (Cronbach's Alpha) and the means of both AAQ-II and each sub code of the FFMQ were calculated. As the AAQ-II and the FFMQ were widely tested being valid and reliable, no items were excluded for further analysis. Then, it was calculated if the data of both AAQ-II and FFMQ on both occasions (t0 and t1) were normally distributed. This was done through a measure of symmetry (Skewness) and a measure of whether the data was heavily- or light-tailed relative to a normal distribution (Kurtosis). A Skewness and Kurtosis value between -1 and 1 (under consideration of the standard deviations of both values) states that the data is normally distributed. The mean age and standard deviation of the participants were calculated. As the data was normally distributed, a paired sample T-test was carried out in order to find an effect of the intervention on the AAQ-II and each of the sub scales of the FFMQ.

Results

User Experiences

Title

Table 3: Title - total number of subcodes mentioned in all interviews

Subcodes for „Title“	n (Statements)	n (Respondents)
positive	17	10
not clear/ vague	9	7
suitable	8	6
not suitable	5	4
negative	4	4
clear	1	1

Concerning the title of the intervention Geluk en Zo, most participants regarded it being positive. In total, 17 positive statements were made from ten participants. Comments ranged from „*Good, clear.*“ (Respondent 11), „*It is light. It [...] represents a cheerful spirit.*“ (Respondent 14), to „*fun and challenging title*“ (Respondent 15). Still, also nine statements were made about the title not being clear, but rather vague: „*Geluk en Zo is a little vague*“ (Respondent 13), or: „*I think the title*

does not cover the whole spectrum [of the intervention].“ (Respondent 17). Eight participants described the title as suitable, five reported the opposite.

Time Investment

Table 4: Time Investment - total number of subcodes mentioned in all interviews

Subcodes for „Time Investment“	n (Statements)	n (Respondents)
takes normal/neutral time	15	12
takes little time	14	10
takes much time	10	5
difficult to find time	5	5

Regarding the subjective time investment for completing the intervention, participants generally reported that the intervention asked for an average time investment, with a total of 15 statements made by twelve respondents. Ten participants reported, that the intervention was little in time investment: *„It was not like you were busy for hours. Once you started, it was finished quickly.*“ (Respondent 9). In contrast, five participants estimated their time investment for the intervention being high, reflected in ten statements. Three participants indicated, that the intervention took longer than they had estimated beforehand: *„It took longer than I thought. And it was more intensive than I had previously thought.*“ (Respondent 3), *„It cost me much more time than I thought before beginning.*“ (Respondent 7). Five participants reported, that it was difficult to find the time for the intervention: *„That was sometimes really tough, when you were very busy“* (Respondent 9).

Experiences with the Intervention

An analysis of the intervention in the eye of general experiences of the intervention revealed that twelve out of 18 participants made at least one positive comment about their experience with the intervention. 33 comments were counted in total, including for example *„...I really liked it.*“ (Respondent 16), *„very pleasant“* (Respondent 14) and *„...very nice intervention to work with.*“ (Respondent 2). These mostly aimed at the intervention in general and one or more specific steps, but also the development throughout the intervention: *„You get more energy and you get more positive and happy.*“ (Respondent 8).

Table 5: Experiences with the Intervention - total number of subcodes mentioned in all interviews

Subcodes for „Experiences with the intervention“	n (Statements)	n (Respondents)
positive/nice/special	33	12
experienced pressure	12	8
interesting	10	7
negative/not nice	7	6
instructive	6	5
experienced resistance	5	4
problems with motivation	4	3
confronting	1	1

Despite the intervention being completely voluntarily and the given possibility to stop at any time, eight participants experienced a certain degree of pressure through following the intervention and reported them in twelve statements. This not only included the compliance of instructions („*I have to live up to the fixed time intervals [step 2&4]*“ (Respondent 17)), but even more often (in eight statements) the feeling to have to keep the ‚agreement of participation‘: „*...because I have to...*“ (Respondent 13). 7 negative comments were made from various participants, for example „*I did not like it.*“ (Respondent 7), or „*...you are always busy with it.*“ (Respondent 13). Negative remarks often paired with the reported pressure.

Seven respondents regarded the intervention being interesting. This counted for participation in general, as well as specific exercises, like respondent 1 described: „*Mostly the moving away and moving towards part was very interesting filling in, and also to experience the difference*“. Additionally, six comments yielded at the instructiveness of the intervention: „*[It was] very instructive for me.*“ (Respondent 13). Five comments described an inner resistance against fulfilling the exercises.

Usability

Table 6: Usability- total number of subcodes mentioned in all interviews

Subcodes for „Usability“	n (Statements)	n (Respondents)
awareness/insight/reflection	51	14
usable/effective	36	15
not usable/not effective	34	12
difficult	20	11
not practical	10	7
tool/aid	10	8
lack of continuation/support	8	6
practical	4	4
not difficult/easy	4	4
improvement in mindfulness	1	1

The analysis revealed that most participants gained insight in, and awareness of, their everyday behavior. This process of reflection was mentioned 51 times throughout 14 interviews. They reported that the intervention has led to a certain kind of awareness, insight, reflection, or a combination of them. „*It [the intervention] was useful, because I got more aware of things. It is always good to get more aware of the things you do, so it was useful.*“ (Respondent 17). This process of realization frequently went together with an awareness of overall well-being, „*This also may be the positive thing, that I got more aware of my well-being.*“ (Respondent 19) and insight in everyday behavior, for example „*I think it [the intervention] is a good manner to reflect on your own behavior, to find out how satisfied you are with yourself.*“ (Respondent 2), or „*...you get more insight in your thinking and doing.*“ (Respondent 3).

Rather balanced is the total number of statements on the effectiveness of the intervention. While 36 comments from 15 participants described the intervention being an effective way for improving the overall well-being, 34 comments from twelve participants stated the opposite. Comparing both effective and not effective statements reveals that many respondents reported that the intervention was not able to help them personally improving on their well-being. But, at the same time, they could imagine the intervention being an effective way in improving the well-being

of a person in general. This especially included people in need or with a certain help question. „*My overall impression is, that it [the intervention] can and will be a valuable for someone with problems. But I am happy.*“ (Respondent 19), „*[Effective] for myself? No. [...] But probably for people who have problems, they will have benefits from it...*“ (Respondent 4). Still, other participants regarded the intervention as not being effective in either way: „*I think that this intervention [...] is really not effective enough.*“ (Respondent 18).

Eleven respondents stated, that they experienced the intervention being difficult, reflected in 20 statements, for example „*I experienced it [the intervention] as very difficult*“ (Respondent 6). Other participants stated that the intervention was harder then expected after the pre-accession from the researcher: „*When you asked me to participate, it seemed to be a very easy task, but two weeks later it seemed to be much more difficult*“ (Respondent 7). This result matched with the note by several participants, that the intervention also took way more time than expected after the pre-accession.

A majority of eight out of ten comments about the intervention not being practical were about the unhandiness of instruction and exercise book. People complained that it was not always possible to bring these everywhere: „*I found that especially difficult, thats why I did it [...] at the end of the day, so I did not have to carry the book with me all the time*“ (Respondent 6). Ten comments described the intervention as a possible tool or aid for improving the well-being or overall awareness of a person: „*It [the intervention] is some kind of auxiliary, a facilitator.*“ (Respondent 5). Eight statements pointed out the lack of either continuation or support during participation: „*The intervention was too short.*“ (Respondent 18). Concerning the lack of support, participants were informed beforehand, that they could approach the researchers with questions at any time, comments however mostly pointed out the lack of emotional and face-to-face support: „*For me it requires more, you have to understand people personally. To see if difficult patterns come up, difficult things. That requires much love, care and attention. Something you can't possibly reach with such a paper.*“ (Respondent 16).

Suggestions

Table 7: Suggestion- total number of subcodes mentioned in all interviews

Subcodes for „Suggestion“	n (Statements)	n (Respondents)
make an application (app)	10	6
make intervention longer	8	4
Layout	6	3
more clarity in the exercises	6	4
wording	3	2
change the title	2	2
other terms for moving away/moving towards	2	1
do not score routine behavior	1	1

The question inside the interview asking for any suggestions revealed clearly, that participants emphasized the possibility of the intervention being an application (app) on the mobile phone or tablet. As several participants complained about having to carry the book(s) and a pen with them all day or setting the alarm on their mobile phone manually, suggestions for a mobile version seem understandable: „*Imagine this [the intervention] could be on your phone. That would be way easier!*“ (Respondent 13), „*...a less stressful manner to use it [the intervention], for example an app, that would be essential for success [of the intervention].*“ (Respondent 6). Eight statements from four participants suggested to make the intervention longer, in order to be (more) effective. Other recommendations aimed at improving the layout of the instruction and exercise books („*adjust things to make it more obvious*“ (Respondent 6)), as well as more clarity in the exercises themselves: „*...I think that is important, that it [the intervention] gets more concrete.*“ (Respondent 5).

Effect of the Intervention

A measure of symmetry (Skewness) and a measure of whether the distribution was heavy or light-tailed relative to a normal distribution (Kurtosis) revealed, that the data is normally distributed (*table 8*). All values of both the Skewness and Kurtosis analysis range between -1 and 1, taking the standard deviation into account.

Table 8: Distribution of the AAQ-II and the FFMQ on t(0) and t(1)

Questionnaire	Test	t(0)	SD	t(1)	SD
AAQ-II	Skewness	.72	.54	.52	.54
	Kurtosis	.23	1.04	-.72	1.04
FFMQ	Skewness	.00	.54	-.63	.54
	Kurtosis	-.18	1.04	2.38	1.04

A correlational analysis was carried out (Pearson Correlation), in order to find any significant correlations between both the means of AAQ-II and FFMQ on both occasions t(0) and t(1). The test revealed a strong positive correlation between pre and post test of the AAQ-II ($r = .74$). Additionally, it showed a very weak negative correlation between pre and post test of the FFMQ ($r = -.06$). Descriptive statistics revealed a decline of the mean scores of the FFMQ between t(0) and t(1) (*table 9*). The sub scales of the FFMQ were further analyzed (*table 10*). While two sub scales (Observe & Nonreact) remain similar in means, two others (Act with Awareness & Nonjudge) decline drastically.

Table 9: Descriptives of the AAQ-II and the FFMQ on t(0) and t(1)

		N	min	max	M	SD
AAQ-II mean	t(0)	18	1.60	4.50	2.73	0.77
	t(1)	18	1.50	3.80	2.68	0.61
FFMQ mean	t(0)	18	2.88	4.54	3.56	0.47
	t(1)	18	2.17	3.71	3.06	0.33

Table 10: Descriptives of the FFMQ's five sub scales on t(0) and t(1)

FFMQ sub scale	t	N	min	max	M	SD
Observe	t(0)	18	2.25	5.00	3.82	0.77
	t(1)	18	2.00	5.00	3.87	0.77
Describe	t(0)	18	2.20	4.60	3.58	0.65
	t(1)	18	2.80	3.80	3.18	0.27
Act with Awareness	t(0)	18	2.20	4.80	3.76	0.67
	t(1)	18	1.20	4.60	2.34	0.66
Nonjudge	t(0)	18	2.40	4.40	3.30	0.63
	t(1)	18	1.40	3.80	2.66	0.63
Nonreact	t(0)	18	2.20	4.60	3.39	0.67
	t(1)	18	2.00	4.60	3.43	0.64

As the data was normally distributed, a paired sample T-test was conducted (*table 11*). The test revealed clinical relevant differences of the FFMQ between t(0) and t(1). This indicates a negative effect of the intervention on the five facets the FFMQ measured ($FFMQ_{t(17)}=3,55$; $p < .05$). Additionally, the test revealed a nonsignificant difference between the two measures of the AAQ-II ($AAQ-II_{(17)}=0,36$; $p = .72$). The results from the paired sample T-test indicate, that the intervention had no effect on the given answers of AAQ-II between pre and post test.

Table 11: Paired Sample T-Test of the AAQ-II and the FFMQ

Questionnaire	N	df	t	Sig. (2-tailed)
AAQ-II	18	17	.36	.72
FFMQ	18	17	3.55	.00
<i>Observe</i>	18	17	-.61	.55
<i>Describe</i>	18	17	2.68	.02
<i>Act with Awareness</i>	18	17	4.62	.00
<i>Nonjudge</i>	18	17	2.56	.02
<i>Nonreact</i>	18	17	-.41	.69

Discussion

First goal of the present study was, to find out how the intervention Geluk en Zo was experienced by the participants, regarding the perceived usability. The second goal of investigation aimed at finding any significant effects of the intervention, concerning the concepts of acceptance and mindfulness.

The qualitative analysis of the interviews about the user experiences was promising. The intervention seemed to leave a good impression on the participants. A vast majority of the participants regarded the title as positive. Some participants criticized the title as being too vague and unclear. Most participants described their experience with the intervention as positive. Concerning the usability, the participants especially emphasized the process of reflection, insight and awareness they went through during the intervention. These processes seemed to stand out the most according to most participants statements. They regarded the intervention as an effective tool or aid in reaching these goals. Concerning the subjective effectiveness of the intervention Geluk en Zo, the results were contrasting. A similar number over both effectiveness and non effectiveness were reported during the interviews. In addition, several participants reported the intervention being difficult. Others experienced a certain degree of pressure or resistance during participation. Suggestions mainly addressed the possibility of further developing the intervention into an app for mobile and tablet use. Other participants recommended to make the intervention longer in time. The overall picture of the qualitative analysis of the intervention speaks in favor of the first research question: participants experienced the usability of the intervention as positive, concerning the perceived usefulness.

These results back up the underlying theories the intervention Geluk en Zo is built on. As reported experiences went beyond the scope of just the perceived usability, conclusions can also be applied to underlying theories of the intervention Geluk en Zo. ACT is one of the interventions main aspects, with the goal to focus on the relationship between someone and his or her thoughts and emotions (Hayes, Follette, & Lineham, 2004). This process could be linked to various reports of participants, for example participants getting more aware of thoughts and emotions, resulting in an improvement on psychological flexibility. The analysis revealed that the reported effects correspond with the goal inside ACT to find this relationship between thoughts and emotions in a way that participants could notice, acknowledge and accept them. This improvement of awareness can also be connected to the mindfulness approach. Through using an implicit mindfulness approach inside the intervention, it was anticipated that participants could get closer to themselves,

obtaining self-knowledge and defined life goals (Harris, 2010). Statements of participants, who reported a gain in self-knowledge during the interviews can be interpreted as an improvement on this concept of mindfulness, despite mindfulness not being explicitly present in the intervention.

In contrast, the quantitative analysis of the questionnaires revealed a negative effect of the intervention on the results of the FFMQ and no effect on the results of the AAQ-II. Answering the second and third research question, it can thus be concluded that the intervention did not have the expected positive effect on either of the concepts. Previous research indicated alternate effects of ACT based interventions. On the one hand, a former version of the intervention Geluk en Zo was built on, named *Living with Pain* (Trompetter, Bohlmeijer, Veehof, & Schreurs, 2014), found no significant improvement on either positive mental health or mindfulness compared to a control group. But on the other hand, through bringing the participant closer to suitable ways of coping with reality, a significant increase in the psychological flexibility was revealed compared to participants in an expressive writing condition. Such significant improvement on psychological flexibility is related to an increase of the overall well-being and quality of life (Veehof., Oskam, Schreurs, & Bohlmeijer, 2011).

Examining the sub scales of the FFMQ, *describe*, *act with awareness* and *nonjudge* showed a significant decrease between t(0) and t(1). *Act with awareness* stood out especially, with a strong decrease in the mean scores of 1,42 points between both measurements. A possible explanation could be, that participants found out through the intervention, that they actually acted with less awareness than estimated on beforehand. The intervention then revealed a more detailed picture of their degree of acting aware, resulting in a personal alignment through the intervention. This alignment was then reflected in the scores on the second occasion. In addition, because all participants were chosen from a healthy sample without any psychological diseases, none of them had a request for help themselves. This could explain why participants regarded the intervention as effective in general, but not for themselves. This in turn could explain a lack of personal improvement on mindfulness and acceptance, as revealed through analysis of both FFMQ and AAQ-II. In a clinical sample, consisting of patients with health complaints, the intervention Geluk en Zo could be more likely to accomplish significant improvements.

More meaningfulness was put into the qualitative analysis of the interviews, compared to the results of the questionnaires. This method gave participants the extensive possibility to describe their subjective experiences in more detail. In contrast, the fixed questions from the AAQ-II and FFMQ were restricted in expressing these participants testimonials. Therefore, the qualitative

analysis provided the researchers with more clinically relevant information over the experience of the intervention, deriving at a more positive estimation of the interventions effectiveness.

Limitations

One point of concern is reported pressure. From all negative comments, twelve related to a certain degree of experienced pressure. On the one hand, participation in the study was completely voluntary. There was the given possibility to stop at any time. On the other hand, it seemed that people wanted to keep their agreement of participation; one assumption might be, that the researchers also had private relationships with the participants. As a consequence, drop out was not seen as an option for some participants, even if participation was not longer desired. This could have had negative effects on the results of the questionnaires. It is therefore advisable to emphasize the voluntarily nature of the study in an even greater degree to prevent such events.

Furthermore, three participants clearly pointed out that the intervention costed much more time than proposed by one of the researchers. It is of utmost importance to give a clear picture of the time investment for the study and not to down play the effort in order to persuade people to participate. To give inaccurate informations about the nature of the study can in turn have influence on the collected data.

A methodological restriction was a missing code in the suggestion category, that could have allowed to code statements not belonging to one of the subcodes. A created code for statements ,not further defined‘ could have provided a solution for this problem.

A lack of sufficient codes was also found in the main category *time investment*. An interview question yielded at the experienced time investment per step. Various participants gave subjective judgements of time needed for each of the four steps of the intervention. However, subcodes in the *time investment* category did not cover this accuracy. This led to a loss in accuracy of the participants statements. It is therefore advisable, to include more defined subcodes, especially if the interview asked for such accurate information.

Recommendations

One focus of investigation was, whether the title Geluk en Zo seemed suitable. As most comments made about the title were of positive character and described as interestingly arousing, it seems reasonable to keep it. Participants suggested to make the intervention longer in time, to be more effective. As the previous program Living with Pain was evaluated being too long, Geluk en Zo was

shortened to two weeks. However, research also indicates, that more time is needed to change an unwanted habit into more purposive behavior. As Lally, van Jaarsveld, Potts, and Wardle (2009) point out, between 18 and 254 days are needed to fully adapt to a new habit formation in everyday life, including a great variance on individual level. An intervention of two weeks could therefore be insufficient in accomplishing long lasting, positive effects on the overall well-being of a person. As many participants also regarded the intervention as time intensive itself, a new version could have a longer total time, while being less time consuming seen on a daily basis.

Seen from a methodological perspective, both code scheme and interview could be adapted to topics that came up during the study. To include more precise codes (for example for the main code time investments), or codes not further defined (for example for the main code suggestions), could utilize more informations from given data.

Follow-up studies could imply the current findings into an app version of the intervention Geluk en Zo. For example, carrying out the intervention on a mobile phone or tablet will be one of the further developing stages. As modern technology has found its way into the households of most people, a development into a digital version seems reasonable (Handel, 2011). This improvement was also proposed by several participants, who emphasized the possibility to carry out the intervention on their mobile devices. This goes together with several complaints over the pen and paper version not being practical.

To improve the mental health of a person is complex task with a broad field of possible approaches. To make use of an ACT approach has shown its effectiveness one more time, implied in the short-term self help intervention Geluk en Zo. To built up on recent findings in this area, including the present study and the possibilities of modern technology, can effectively improve the mental health of a person in need.

References

- Figure 1. Psychological Flexibility Model with Categories. Adapted from „Acceptance and Commitment Therapy and Contextual Behavioral Science: Examining the Progress of a Distinctive Model of Behavioral and Cognitive Therapy“ by Hayes, S., Levin, M., Plumb-Villardaga, J., Villatte, J., & Pistorello, J., 2013, *Behavior Therapy*, 44, 180–198. Copyright 2011 by the Association for Behavioral and Cognitive Therapies.
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Appendices

Appendix A - Informed Consent

Informatiebrief en Toestemmingsformulier

Informatiebrief

Beste deelnemer,

Wij vragen u mee te doen aan een wetenschappelijk onderzoek naar het effect en de gebruikerservaringen van een korte zelfhulpinterventie met als doel het welbevinden verhogen en je gelukkiger voelen. Middels deze brief willen we u meer informatie geven over het onderzoek en duidelijk maken wat deelname voor u inhoudt. Lees deze brief dan ook rustig door. Heeft u vragen of wilt u contact met ons opnemen kunt u ons bereiken via e-mail (r.m.groenewold@student.utwente.nl of m.k.schnieder@student.utwente.nl) of telefonisch (06-57991656).

Onderzoek

De interventie 'Geluk en zo' gaat over zelf zorgen voor je geluk. Vaak denken we dat we niet gelukkig kunnen zijn als we ons niet honderd procent goed voelen. Het noodlot treft ons echter allemaal wel eens. De verschillen zitten in hoe we omgaan met tegenslagen. De interventie is ontwikkeld om te ontdekken wat jou gelukkig maakt; je ontdekt jouw manieren van denken en doen die de moeilijke zaken van het leven vergroten en wat je belemmert om op te merken waar het echt om gaat in je leven.

Dit onderzoek is er op gericht de effectiviteit van deze interventie te onderzoeken. Daarnaast zijn we geïnteresseerd in de ervaringen van gebruikers; middels een interview na afloop van de interventie proberen we te achterhalen hoe bruikbaar en nuttig de deelnemers de interventie vonden.

De training duurt twee weken en bestaat uit vier stappen. Eerst sta je stil bij wat je graag wilt in je leven en bij wat je probeert te vermijden. Vervolgens ga je door de dag heen registreren wat je doet en hoe dit voor je is. Tijdens stap 3 ga je nog eens stilstaan bij de gebeurtenissen van de eerste week. Stap 4 bestaat wederom uit het registreren wat je doet en of dat belangrijk voor je is. Stap 1 en 3 vragen ongeveer een uur tijd. Stap 2 en 4 doe je viermaal per dag en kosten ongeveer één a twee minuten per keer.

Na de eerste week zullen wij u nog een reminder per email sturen. Verder is het belangrijk om te weten, dat wij uw opgeschreven informatie van de interventie niet gaan bekijken. U bent dus de enige die het oefenboekje inziet. Na de interventie kunt u het oefenboekje behouden.

Vrijwilligheid en Privacy

Deelname aan dit onderzoek is geheel vrijwillig. U beslist zelf of u deelneemt aan het onderzoek. Besluit u om niet mee te doen bent u verder niets verplicht. Als u wenst te stoppen tijdens het onderzoek is dat op elk moment mogelijk, zonder opgave van reden.

Uw gegevens worden vertrouwelijk behandeld. De ingevulde vragenlijsten worden los van uw persoonlijke gegevens bewaard en na afloop van het onderzoek zullen al uw persoonlijke gegevens vernietigd worden. Alleen geanonimiseerde data zal bewaard worden.

Toestemmingsformulier

In te vullen door deelnemer:

Ik heb de boven genoemde informatie gelezen en begrepen. Ik kon aanvullende vragen stellen. Mijn vragen zijn genoeg beantwoord. Ik had genoeg tijd om te beslissen of ik meedoe. Ik weet dat deelnemen aan het onderzoek geheel vrijwillig is. Ik weet dat stoppen tijdens het onderzoek op elk moment mogelijk is, zonder opgave van reden. Ik weet dat mijn gegevens vertrouwelijk worden behandeld. Ik geef toestemming, mijn gegevens te gebruiken voor de doelen die in de informatiebrief staan.

Naam deelnemer: _____

Handtekening: _____

Datum: __/__/____

In te vullen door onderzoeker:

Ik verklaar hierbij dat ik de deelnemer volledig heb geïnformeerd over het genoemde onderzoek. Als er tijdens het onderzoek informatie bekend wordt die de toestemming van de deelnemer zou kunnen beïnvloeden, dan breng ik hem/haar waarvan tijdelijk op de hoogte.

Naam onderzoeker: _____

Handtekening: _____

Datum: __/__/____

Appendix B - The Interview

[wanneer gerapporteerd wordt dat een deelnemer moeite had met een bepaald aspect → alle vier stappen in de interventie uitvragen om]

1. Als titel voor de interventie is gekozen voor 'Geluk en zo'. Wat vind je van deze titel?
2. Hoe heb je het deelnemen aan de interventie ervaren de afgelopen twee weken?
3. Had je het gevoel dat je aan de hand van het instructieboekje de opdrachten goed kan doen?
 - a. Wat vond je van de beschrijving van de opdrachten?
 - b. Vond je de instructies begrijpelijk beschreven?
 - c. Hoeveel moeite kostte het om de opdrachten te begrijpen?
 - i. Verschilde dat tussen week 1 en week 2?
 - ii. Zo ja, waar lag dit aan?
4. Hoe heb je het invullen van de opdrachten ervaren?
 - a. Wat vond je van de opbouw van de opdrachten?
 - i. Zowel opdrachten zelf als opbouw tussen opdrachten
 - b. Waren de opdrachten overzichtelijk?
 - c. Hoe moeilijk vond je de opdrachten?
 - i. Zijn er specifieke opdrachten die je moeilijk vond? Zo ja, wat vond je moeilijk aan deze opdracht(en)?
 - ii. Hoe heb je dit opgelost?
 - d. Had je het gevoel dat de ervaringen uit de eerste week het makkelijker maakten om de laatste opdrachten te maken?
 - e. Heeft u problemen ervaren tijdens het invullen van de opdrachten en zo ja, wat voor problemen? Hoe heeft u deze problemen opgelost?
5. Hoe heeft u de tijdsinvestering van de interventie ervaren?
 - a. [eventueel doorvragen naar stappen 1 t/m 4]
6. In hoeverre heb je het gevoel dat deze interventie een goede manier is om te zorgen voor je eigen geluk?
 - a. Heb je het gevoel dat deze interventie het makkelijker maakt om te zorgen voor je eigen geluk?
7. In hoeverre heb je het gevoel dat deelnemen aan deze interventie voor jou nuttig was?
8. Heb je nog aanbevelingen voor het verbeteren van de interventie?
9. Heeft u verder nog opmerkingen?

Appendix C - Code scheme

Titel	Ervaring met Interventie	Uitkomst Bruikbaarheid	Tijdsinve stering	Begrijpelijk heid	Overzichtelijkh eid	Moeilijkheid van de opdrachten	Aanbeveling en
positief	Positief/ Leuk/ Bijzonder	Niet nuttig/ niet effectief	Kost veel tijd	duidelijk	toenemende moeilijkheid tussen opdrachten	moeilijk	routine gedrag niet scoren
negatief	Negatief/ Niet leuk	Nuttig/ effectief	Normaal, neutraal tijd	positief	Logische opbouw	makkelijk	meer eenduidighei d in de opdrachten
niet passend	Ervaren weerstand tijdens deelname	Lastig/ moeilijk	Kost weinig tijd	negatief	duidelijk	verwoording lastig/moeilijk	Interventie langer maken
duidelijk	Ervaren dwang tijdens deelname	Niet lastig/ Makkelijk	Moeilijk/ lastig om tijd te vinden	makkelijk	onduidelijk	verschil week ½ (leerproces)	App maken
Alternatie ve titel	Problemen met motivatie	Ontbreken van vervolg/steun		bondig	onlogisch/ moeite rode draad te vinden	Invullen van tabel stap 2 moeilijk	Titel veranderen
onduidelij k/vaag	Interessant	Tool/ hulpmiddel		Terminologi e vandaan/ naartoe moeilijk	positief	vandaan/naartoe moeilijk te bepalen	Formulering
Passend	Leerzaam	praktisch		Verwarrende / onduidelijke beschrijving	negatief	scoren routinegedrag moeilijk	Andere terminologie voor vandaan/ naartoe
	Confronterend	Niet praktisch			verwarrend		Lay-out
		Bewustwording / Inzicht/ Reflectatie					Ontbreken van vervolge n/of steun
		Verbetering in Mindfulness					