

# -Master thesis-

*“Making sense of the future;  
an explorative approach to identify  
personal meaning in future narratives  
within a clinical population”*



July 2015

Johannes Knüwer

Student Number: 1118978

10 EC Masterthesis

University of Twente

First Supervisor: Dr. A.M. Sools

Second Supervisor: Dr. L.C.A. Christenhusz

**UNIVERSITY OF TWENTE.**

## Abstract

**Background:** In the past two decades there has been a considerable increase of attention towards the concept of personal meaning as a possible facilitator for mental health and well-being. Research indicates that a lack of personal meaning in life is related to several psychological complaints, while the obtainment of personal meaning can help people to cope with stressful life events and promote personal growth. It is therefore thought that helping people to create personal meaning has great promises for psychological therapy approaches. Still, there are some limitations in the methodological considerations of how to approach the concept of meaning in a therapeutic context. Though there are models that could potentially be used for the identification of sources and functions of meaning, there is a lack of indications of how to transfer these models into therapy. As it is assumed, that meaning is created on the base of a narrative structure, the prospective method ‘letters from the future’ provides an interesting new medium for narrative research that potentially allows insights into the different aspects of personal meaning that are particularly important for the writer and can possibly be applied in clinical practice.

**Objective:** The objective of this explorative research was to investigate how and to what extend personal meaning can be identified on the basis of the narrative prospective medium ‘letter from the future’.

**Methods:** This study is based on a qualitative thematic analysis, in which the differentiation of meaning domains by Dittmann-Kohli & Westerhof (2000) and the ‘4 needs for meaning’ model by Baumeister (1991) were used as identification models on the content of the 43 prospective letters of a group of psychiatric patients. The implementation of the two models was conducted by using the included distinctive indications as orientation for the coding of the content of the prospective letters. By applying this approach it was possible to identify the different ‘domains of meaning’ and ‘needs for meaning’ that were present in the 43 ‘letters from the future’.

**Results:** The general implementation of the two used identification models was successful as both models provided a multitude of findings in close to all of the examined letters from the future. With respect to the differentiation of meaning domains, five of the six domains of the original model occurred frequently in the majority of the examined letters. The domains of ‘Social cohesion’ and ‘Activities and will for accomplishment’ were with findings in 41, respectively 37 of the 43 prospective letters the most apparent domains of meaning; the domain of ‘Existential meaning’ was only identified in two letters. Regarding the division of the ‘4 Needs for meaning’, the model allowed the identification of all four included ‘Needs’ in about 20 to 30 letters. The allocation of codes was thereby often highly interpretive; the occurrences of the four categories were further strongly linked to the temporal orientation of the individual letters.

**Conclusion:** The general findings of this research indicate that the ‘letter from the future’ approach is a feasible tool for the identification of personal meaning in a clinical setting, that provides useful insights into the different facets of meaning that are important to the individual writers. Though more existential sources of meaning could not be identified in the prospective letters, it is assumed that the differentiation of meaning domains has some potential of becoming an integral element in the identification of personal meaning in future narratives. Due to several shortcomings in its applicability, the division of the ‘4 Needs for meaning’ is rather unsuited to be implemented on the content of the prospective letters.

## Samenvatting

**Achtergrond:** In de afgelopen twee decennia heeft het concept van de persoonlijke zingeving een aanzienlijke toename van aandacht gekregen omdat aangenomen werd dat het positieve uitwerkingen op geestelijke gezondheid en welzijn heeft. Onderzoek wijst erop dat een gebrek aan persoonlijke zingeving in het leven gerelateerd is aan verschillende psychische klachten, terwijl het creëren van persoonlijke zingeving mensen kan helpen om met stressvolle gebeurtenissen in het leven om te gaan en tegelijk persoonlijke groei bevordert. Het wordt daarom aangenomen dat het helpen van mensen om persoonlijke zingeving te creëren grote beloften heeft voor psychologische therapie benaderingen. Toch zijn er nog steeds enkele beperkingen in de methodologische overwegingen van hoe persoonlijke zingeving in de therapie transferereerd kan worden. Hoewel er modellen zijn die gebruikt kunnen worden om de verschillende bronnen en functies van persoonlijke zingeving te identificeren weet men nog steeds niet hoe deze modellen in de therapie moeten worden ingezet. Omdat aangenomen wordt, dat persoonlijke zingeving op basis van een narratieve structuur gecreëerd wordt lijkt de prospectieve methode 'brieven vanuit de toekomst' een interessant nieuw medium voor narratief onderzoek te zijn. De brieven maken het mogelijk om inzicht in de verschillende aspecten van persoonlijke zingeving te verkrijgen die bijzonder belangrijk voor de schrijver zijn en kunnen eventueel in de klinische praktijk worden toegepast.

**Doelstelling:** Het doel van dit exploratief onderzoek was om te onderzoeken hoe en in welke mate persoonlijke zingeving kan worden geïdentificeerd aan de hand van het prospectief narratieve medium 'brief vanuit de toekomst'.

**Methoden:** Dit onderzoek is gebaseerd op een kwalitatieve thematische analyse, waarin de differentiatie van zingevingsdomeinen van Dittmann-Kohli & Westerhof (2000) en het "4 Needs of meaning" model van Baumeister (1991) als identificatiemodellen gebruikt werden, om de inhoud van de 43 brieven van een groep psychiatrische patiënten te analyseren. Door de indicaties van beide modellen als oriëntatie voor het coderen te gebruiken konden zowel de verschillende "domeinen van zingeving" als ook de "Needs" geïdentificeerd worden die in de 43 letters van de toekomst aanwezig waren.

**Resultaten:** De toepassing van de twee gebruikte identificatie modellen was succesvol omdat beide modellen tot een veelvoud van vondsten in bijna alle onderzochte brieven van de toekomst geleid hebben. Met betrekking tot de differentiatie van zingevingsdomeinen kwamen vijf van de zes domeinen van het oorspronkelijke model vaak terug in de meeste onderzochte brieven. De domeinen 'Social cohesion' en 'Activities and will for accomplishment' waren met bevindingen in 41, respectievelijk 37 van de 43 brieven de meest gevonden domeinen van zingeving; het domein van 'existential meaning' werd alleen in twee brieven geïdentificeerd. Met betrekking tot de '4 Needs of meaning' konden alle vier 'Needs' van het model in ongeveer 20 tot 30 brieven geïdentificeerd worden. De toewijzing van de codes was hierbij vaak zeer interpretatieve; de aanwezigheid van de vier categorieën waren verder sterk verbonden met de temporele oriëntatie van de prospectieve brieven.

**Conclusie:** De algemene resultaten van dit onderzoek tonen aan dat de brieven vanuit de toekomst benadering een toepasbaar hulpmiddel is om persoonlijke zingeving in de klinische praktijk te identificeren. Het levert nuttige inzichten in de verschillende facetten van persoonlijke zingeving die het meest belangrijk zijn voor de individuele schrijvers. Hoewel de meer existentiële bronnen van zingeving niet in de brieven geïdentificeerd konden worden, wordt aangenomen dat de differentiatie van zingevingsdomeinen het potentiaal heeft om een substantieel onderdeel in de identificatie van persoonlijke zingeving in de toekomstbrieven uit te maken. Vanwege diverse tekortkomingen in de toepasbaarheid, kan geconcludeerd worden dat het '4 Needs for meaning' model ongeschikt is voor de identificatie van persoonlijke zingeving in de prospectieve brieven.

*“You’ve always been open for new things.  
So don’t hesitate and just dare the next steps.  
It will never be the same as it has been before.  
It will only get better.”*

(Excerpt from a ‘letter from the future’ of a psychiatric patient)

**Foreword:** First of all, the author of this paper would like to thank the first and second supervisor Dr. A.M. Sools and Dr. L.C.A. Christenhusz for their commitment and guidance throughout the course of this research. Furthermore, the author would like to thank his friends and family who were a great support and made the intense phases of the research process more endurable.

# Table of contents

<b>1. Introduction</b>	<b>6</b>
1.1. A shift towards meaning	6
1.2. Theoretical background	7
1.3. Approaches to identify personal meaning	10
1.4. A narrative approach to identify personal meaning	15
<b>2. Method</b>	<b>17</b>
2.1. Background	17
2.2. Research Design	17
2.3. Participants	18
2.4. Data analysis	19
2.4.1. <i>Analysis of meaning domains</i>	20
2.4.2. <i>Analysis of 'needs for meaning'</i>	21
<b>3. Results</b>	<b>23</b>
3.1. General features of the letters	23
3.2. Derived findings in the analysis of meaning domains	23
3.2.1. <i>Findings in the domain 'Social cohesion'</i>	24
3.2.2. <i>Findings in the domain 'Activities and will for accomplishment'</i>	25
3.2.3. <i>Findings in the domain 'Individuality and self reflection'</i>	26
3.2.4. <i>Findings in the domain 'Physical Integrity'</i>	27
3.2.5. <i>Findings in the domain 'Material basis of existence'</i>	28
3.2.6. <i>Findings in the domain 'Existential meaning'</i>	28
3.2.7. <i>Adaptations for the coding of meaning domains</i>	29
3.3. Derived findings in the analysis of the '4 needs for meaning'	31
3.3.1. <i>Findings in the category 'Need for efficacy'</i>	31
3.3.2. <i>Findings in the category 'Need for Self-worth'</i>	32
3.3.3. <i>Findings in the category 'Need for Purpose'</i>	33
3.3.4. <i>Findings in the category 'Need for value'</i>	34
3.3.5. <i>Adaptations for the coding of needs for meaning</i>	35
<b>4. Discussion</b>	<b>37</b>
4.1. General findings	37
4.2. Identified domains of meaning	38
4.3. Identified 'Needs for meaning'	40
4.4. Clinical implications	42
4.5. Limitations	43
4.6. Recommendations for future research	44
4.7. Conclusion	44
<b>5. References</b>	<b>45</b>
<b>6. Appendix</b>	<b>49</b>

# 1. Introduction

## 1.1. A shift towards meaning

In the past two decades there has been a considerable increase of attention in the sector of health care sciences towards the way in which people create personal meaning in their lives. While the concept of personal meaning has mainly been a topic in the domain of existential philosophy in the past, health research and psychology now do show a great interest into this field. This new interest can be ascribed to a shift from the pathological orientation of the human condition towards a more positive view on human development in times of diseases and psychological stress (Reker, 2000; Westerhof & Bohlmeijer, 2010).

With the rise and the establishment of positive psychology as a serious scientific approach around the year 2000, the concept of mental health has undergone a fundamental redefinition. While the scientific understanding of mental health was merely determined by the absence of psychological problems, contemporary aspects integrate the presence of emotional, psychological and social well-being as crucial conditions for mental health (Bohlmeijer, 2012; Keyes, 2002). Following the renewed definition of the World Health Organization, mental health is now defined as “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” (WHO, 2001).

In this context, positive psychologists refer to the so called two continua model, in which it is assumed that mental illness and mental health are two related but distinct dimensions (Keyes, 2002). New positive psychological treatment approaches, as the Acceptance and Commitment Therapy or the Solution Focused Brief Therapy, therefore show a different focus on the promotion of mental health compared to the more traditional therapeutic models. The primary goal is no longer set on the elimination of suffering and the reduction of psychological complaints, but on the promotion of human capabilities (Bohlmeijer, 2012; Hayes, Louma, Bond, Masuda & Lillis, 2006; Bannink, 2005).

One of the central concepts within these new integrative treatment approaches is the creation of personal meaning in life, which involves the obtainment of meaningful goals and a sense of purpose in life, and the experience of continued growth and development as a person (Ryff & Singer, 2008). Recent investigations provide strong indications, that the obtainment of personal meaning is an important psychological construct in the promotion of mental health and well-being and the adaptation to changing life events (Westerhof & Bohlmeijer, 2010). It has been found that people, who experience personal meaning in life show greater

commitment and autonomy in the creation and pursuit of personal goals and attain higher levels of psychological well-being. Further findings indicate that strong sources of meaning can help people to cope with stressful life situations and to accept and bear psychological suffering (Reker, 2000, Westerhof & Bohlmeijer, 2010).

In addition, it is supposed that a lack of personal meaning makes people more susceptible for developing serious psychological disorders. Experiences of loss and personal problems can interfere with people's visions and expectations of the future and force them to adapt to new sources of meaning. Depending on a person's life situation, such sources are, however, often not directly available and may result in feelings of despair and helplessness (Reker, 2000; Westerhof & Bohlmeijer, 2010). Meaninglessness in life could be associated to numerous psychological problems, including depression, suicidal thoughts, different types of anxiety disorders, drug abuse and alcohol dependence (Harlow, Newcomb & Bendler, 1986; Reker, 2000; Reker & Wong, 1988; Waisberg & Porter, 1994).

In summary, overall results of contemporary research indicate a strong connection between the experience of personal meaning and mental health. Therefore, it can be suggested that helping people to create meaning in their lives is a crucial factor in the prevention and treatment of psychological disorders. The general role of positive psychological approaches in mental health promotion, however, still is marginal. As these models are relatively new, the scientific evidence supporting the effectiveness of such approaches is limited. At present these approaches are mainly used in adjunction with traditional therapy forms (Suddendorf & Corballis, 2007). In order to support positive psychological therapy models, it is important to gain more detailed insights into the processes of how people create personal meaning within their lives and how to transfer this knowledge into a therapeutic context. In the following, this paper will give an overview about the most important theories within this domain.

## **1.2. Theoretical background**

The creation of personal meaning in life is a process in which important experiences are placed within a broader frame, by relating them to different aspects of one's life and integrating them into the course of time. Following the definition of Westerhof and Kuin (2008), the creation of personal meaning is 'a psychological process, in which people assign meaning and direction to their lives and place it into a broader perspective in interaction with their socio-cultural environment'. By doing so, people seek two things: Firstly, a sense of coherence and understanding, and secondly, a sense of purpose and direction in life (Reker, 2000; Westerhof & Kuin, 2008).

The existing literature on personal meaning thereby often differentiates between the ‘sense **of** life’ and the ‘sense **in** life’. While the ‘sense of life’ describes how a person makes sense of his or her experiences by classifying and arranging them into one’s life story, the ‘sense in life’ is a more goal-directed term; it describes people’s ability to strive for and achieve specific goals and plans in their lives and the way in which the pursuit of these goals creates meaning by itself (Kuin & Westerhof, 2007; Westerhof & Bohlmeijer, 2010).

With regard to the ‘sense **of** life’, the processes of integrating one’s personal experiences into a meaningful pattern are complex and the existing theories vary in their descriptions of these processes (Westerhof & Bohlmeijer, 2010). Following Battista and Almond (1973) we use our past experiences to build up a framework that helps us to see our lives from a wider perspective, from which we can derive a set of life goals or life-view. Antonovsky (1987) stated that making sense of one’s life demands a sense of ‘comprehensibility’. In order to obtain meaning from their daily experiences, people need to feel that the stimuli, deriving from their internal and external environment are structured, predictable and explicable. From a more cognitive psychological perspective, Reker and Wong (1988) described the processes of making sense of one’s life as an interaction between ‘differentiation’ and ‘integration’ processes. In this context, differentiation is about the versatility of our meaning structure; we create meaning on the basis of many different elements and sources in order to interpret our daily experiences from various perspectives. Integration describes a person’s ability to link these different elements to a coherent whole, instead of separated fragments (Reker & Wong, 1988).

Though closer scientific insights on how the described processes of making sense take place are limited, possible explanations can be derived from the field of narrative psychology. Narrative psychology exists since the 1980’s and investigates the way, in which people create meaning in their lives by constructing stories about themselves and their personal history (Zock, 2006). The major assumption that underlies this scientific discipline is that we give form to our inner self and our environment, and interpret our experiences on the basis of a narrative structure: By integrating our experiences into storylines, we create a narrative identity that helps us to organize and connect these past experiences to a structured and coherent whole in place of chaos (Singer, 2004; Sools et al., 2013; Polkinghorne, 1988). It is thereby assumed that meaning is created, organized and stored in narrative terms; the creation of our own life story helps us to link our past experiences with future expectations and to incorporate our own values and disparate roles into a meaningful pattern (McAdams, 1993). This ‘narrative competence’ is a creative, constructive process that enables us to give



direction to our lives, to define the role of our own person and to anticipate future outcomes (McAdams, 1997; Singer, 2004; Sools & Mooren, 2012).

The ‘sense **in** life’, in some cases also referred to as ‘purpose in life’ comprises the processes of finding meaningful goals and giving one’s life a specific direction. People need to experience that the efforts they make in their lives have some worth (Antonovsky, 1987). It is thereby assumed that having and striving for specific goals is more important for the creation of personal meaning, than the actual achievement of these goals. Reker and Wong (1988) speak in this context of the ‘motivational component’ of meaning. As all our actions are mainly driven by our motivation to derive at a wished state, achieving it only gives us a brief satisfactory feel; we must then form new goals, in order to maintain the feeling of meaningfulness (Frankl, 1978; Reker & Wong, 1988).

A further important aspect is, that the goals we set for ourselves are realistic and attainable. Depending on our own estimations, we need to believe that we have the possibilities and capabilities to achieve our self defined goals; if we lack this believe due to too high demands on ourselves, this often results in feelings of hopelessness and depression (Antonovsky, 1987; Selm & Dittmann-Kohli, 1998). In addition, Vincent, Boddana and MacLeod (2004) found that the more specific our desired images of the future are, the greater is our feeling of control and thus also our positive affect.

Further indications for the importance of future goal-setting can be derived from research that has been concerned with future imagination in general. Following the works of Adler (1974) our images of the future have a greater effect on our behavior than the experiences we made in our lives, which contradicts the long lasting presumptions of psychoanalytic theories, that our actions are mainly driven by the past. According to Bloch (1979), thinking about the future is important for the creation of hope and forms the basis of future-oriented and committed actions. These claims are supported by more contemporary studies that focus on the various positive effects of future imagination on mental health and well-being. It has been shown that the ability to imagine one’s own future is significantly related to increased degrees of optimism, happiness and creative thinking (Blackwell et al. 2012; Chiu, 2012; Meevissen, Peters & Alberts, 2011). The imagination of future states seems to help people generate positive emotions in stressful life situations, which makes them more resilient in times of social crisis and thereby promotes mental health and well-being in general (Allemand et al. 2012; Chiu, 2012; Sools, Mooren & Tromp, 2013). Further findings indicate that a positive view on the future is related to increased levels of self-confidence and better social functioning (Simons, Vansteenkiste, Lens & Lacante, 2004).

Possible explanations for the positive effects of future goal-setting can be derived from Melges model of ‘anticipatory control cycles’, in which emotions play an important role: A present emotional state affects the way in which a person imagines the future; if these visualized future images interfere with existing future plans and goals, this interference has in turn an impact on a person’s emotional state (Melges,1982). Thus, if we estimate the goals we set for ourselves as realistic and attainable, this leads to a feeling of control and results in a positive emotional state. Lacking this perceived control leads to negative expectations of future outcomes, which again results in negative emotions (Melges, 1982). Based on his model, Melges (1972) assumed further discernible relations between specific pathological problems and problems in the perception of the future. According to Melges, diverse disease patterns are characterized by specific individual discrepancies in time-perception. He concluded, inter alia, that patients with anxiety disorders visualize their future as ambivalent and threatening, while depressive patients perceive their inner future as meaningless and empty. Following Melges, the creation of more positive future images and meaningful goals is therefore a crucial factor in the prevention and therapy of psychological diseases and should make up a more significant part in general treatment approaches (Melges, 1972).

### **1.3. Approaches to identify personal meaning**

Considering the found relations between personal meaning and mental health from a therapeutic point of view, it may be suggested that there is great potential in positive psychological approaches that integrate the creation of personal meaning into treatment. Still, gaining deeper insights into the individual facets of meaning that are potentially relevant for individual treatments is usually linked to long processes of therapeutic sessions and even then, therapists are trained to focus on the aspects of meaning that correspond to their personal competences and are directly related to the promotion of mental health (Leget, 2013). It therefore seems reasonable to create assessment procedures that put a stronger focus on unique and personal facets of a patient’s meaning system and are less interested in deriving universal implications about therapeutic indications.

A considerable number of researchers have tried to systematically assess the different sources of meaning that people utilize within their lives. Due to the variety of research types and the different theoretical backgrounds on which these studies are based, there is also a great variation in the findings and an ongoing discussion about the importance of different sources of meaning. Love, financial security, religion, creativity, freedom, pleasure and personal growth are some of the terms that have been found to be sources of personal meaning (Reker, 2000; Westerhof & Bohlmeijer, 2010).

In order to investigate and assess the concept of meaning more empirically, numerous scales and tests have been developed that focus on both elemental and more existential sources of meaning. The most prominent are the Purpose of Life Scale (PIL) (Crumbaugh & Maholick, 1964), the Life Regard Index (LRI) (Battista & Almond, 1973) and the Constructed Meaning Scale (ML) (Fife, 1995). Still, many of the existing scales lack validation due to a weak theoretical background or inconsistency in the investigated components of personal meaning. Furthermore, most of the scales give information about whether or not there is meaning within the life of a person, but give no indication about how and where people gain sources of meaning within their lives (Reker, 2000; Westerhof & Bohlmeijer, 2010). It is also arguable that a too excessive objectivation and classification of personal meaning could result in an incomplete image of a person's internal condition. By trying to assess the sources of meaning that are relevant to a person by means of psychological scales, important values and goals could unintentionally be left out, overly reduced or not noticed at all, while others get overemphasized (Bohlmeijer, 2013; Leget, 2013).

Possible indications for a more qualitative assessment of meaning sources can be derived from the works of Dittmann-Kohli and Westerhof (2000), who both spent several years studying the different sources of meaning that a person uses during his lifespan. Integrating their own findings into what is known through the existing literature they developed a model, in which the various sources of meaning can be divided into six mayor domains of meaning.

The first domain is the domain of 'Individuality and self-reflection' and comprises sources of meaning that are connected to a person's ability to reflect on one's own functionality. Sources of meaning within this domain are feelings of contentment and pleasure, but also the experience of personal growth, self-acceptance and autonomy. The second domain of meaning sources deals with the 'physical integrity' of a person. People can derive meaning by reflecting on their own body as an entity, that corresponds to the own expectations. This encompasses the experience of health and vitality, but also satisfaction with ones outer appearance. The third domain comprises sources of meaning that form our 'material basis of existence'. The domain incorporates sources of meaning that are linked to the fulfillment of human basic needs such as the acquisition of money, properties and consumption goods, the general living conditions of a person, but also the need for security and shelter. 'Activities and the will for accomplishment' form the fourth domain of meaning. This encompasses working activities and other achievement-oriented actions, but also casual and recreational activities as hobbies and relaxation. Furthermore the domain comprises

reflections on one's own performance, productivity and creativity during the execution of these activities. The fifth domain is the domain of 'social cohesion'. People are able to derive meaning from interactions with their social surrounding, but also from reflections of their own role within society. Love, intimacy, harmony, sociality and relationships with others fall into this domain, as well as political and societal participation and the striving for power and status (Dittmann-Kohli & Westerhof, 2000).

As the five mentioned domains of meaning depict more elemental sources of meaning that people can utilize within their everyday lives, there is one last, more abstract category that is often referred to as 'existential meaning'. This category incorporates sources of meaning as values, ideals and motives that are deeply internalized and persistent over time. Sources of meaning that are based on cultural traditions and religious convictions can also be counted to this domain (Dittmann-Kohli & Westerhof, 2000; Westerhof & Bohlmeijer, 2010).

Table 1.: *Differentiation of meaning domains by Dittmann-Kohli & Westerhof (2000)*

Meaning domains	Domain specific sources of meaning
1 <sup>st</sup> domain <i>'Individuality and self reflection'</i>	<ul style="list-style-type: none"> <li>- Pleasure</li> <li>- Contentment</li> <li>- Personal growth</li> <li>- Self-acceptance</li> <li>- Autonomy</li> </ul>
2 <sup>nd</sup> domain <i>'Physical integrity'</i>	<ul style="list-style-type: none"> <li>- Health</li> <li>- Vitality</li> <li>- Contentment with own body and outer appearance</li> </ul>
3 <sup>rd</sup> domain <i>'Material basis of existence'</i>	<ul style="list-style-type: none"> <li>- Acquisition of property</li> <li>- Acquisition of money</li> <li>- Feeling of security</li> </ul>
4 <sup>th</sup> domain <i>'Activities and will for accomplishment'</i>	<ul style="list-style-type: none"> <li>- Performance</li> <li>- Productivity</li> <li>- Creativity</li> <li>- Work activity</li> <li>- Rest and relaxation</li> <li>- Recreational activities</li> </ul>
5 <sup>th</sup> domain <i>'Social cohesion'</i>	<ul style="list-style-type: none"> <li>- Good relationships with others</li> <li>- Sociability</li> <li>- Love</li> <li>- Intimacy</li> <li>- Support and encouragement</li> <li>- Altruism</li> <li>- Societal and political participation</li> <li>- Power and reputation</li> </ul>
6 <sup>th</sup> domain <i>'Existential meaning'</i>	<ul style="list-style-type: none"> <li>- Humanistic and/or religious convictions</li> <li>- Cultural traditions</li> <li>- Values and ideals that are persistent over life-span</li> </ul>

Further indications for a qualitative assessment of personal meaning can be derived from models that focus more on the different functions of making sense. Baumeister and colleagues spent many years studying the concept of meaning and gradually concluded that there are four main ‘needs for meaning’ that people develop throughout the course of their lives. It is thereby assumed, that a person who satisfies all four of these needs regards the own life as sufficiently meaningful, whereas being unable to satisfy one or more of them is related to feelings of distress and emptiness (Baumeister, 1991; Baumeister & Wilson, 1996). The distinctions in Baumeister’s model are as follows.

The first category is the ‘Need for value’, which refers to ‘people’s motivation to feel that their actions are right and good and justifiable’ (Baumeister, 1991, p.36). It describes peoples striving for reliable criteria of right and wrong, that can be used to make moral choices and to define one’s own actions as good or bad. Every individual confers meaning on actions and events by linking them with the own abstract standards of right and wrong, that have been formed throughout the course of one’s life. These standards are usually formed with respect to the normative demands of a person’s social surrounding; that is to say we need to feel that our actions are accepted, positively valued or justifiable in the eyes of people that share the same culture as we do (Baumeister, 1991; Baumeister & Wilson, 1996).

The second need in Baumeister’s model is the ‘Need for self-worth’ and describes people’s need to ‘make sense of their lives in a way that enables them to feel that they and their lives have positive value’ (Baumeister, 1991, p.44). People must find some means for signifying them as commendable or admirable persons, which usually implies some positive affirmations of the own personal attributes and properties. This positive affirmation can be based on the appraisal of the social surrounding, but also on one’s own self-reflective evaluations. The ‘Need for self-worth’ further implies that people seek for stable properties that allow them to stand out from other people and to regard themselves as superior to others (Baumeister, 1991).

Following the further distinction of Baumeister’s model, people have an inner ‘Need for purpose’, which means that people endow current events and activities with meaning by interpreting them as steps towards desirable outcomes. Such purposive connections between present and wished future states can be build, though the presumed purposes ‘do not ever have to be realized or achieved in actual fact’ (Baumeister, 1991, p.33). Most people have several main purposes in their lives, such as acquiring a home and financial savings, raising a family, etc. Based on these purposes, people create an integrative framework that can be used as a guideline for important decisions and actions (Baumeister & Wilson, 1996).

Furthermore, people seek to satisfy their ‘need for efficacy’, which refers to a sense of control over the ongoing events in one’s life. According to Baumeister, a meaningful life is defined by more than just goals and values; ‘you must also feel that you have some capability to achieve these goals and realize these values’ (1991, p.41). In order to satisfy this need, people need to believe that their own actions and efforts have an effect on external events and that desired goals and positive ends are reached, due to one’s own active contribution (Baumeister, 1991; Baumeister & Wilson, 1996).

*Table 2: Division of ‘Four needs for meaning’ by Baumeister (1991).*

Category	Indications for categorization
‘Need for value’	<ul style="list-style-type: none"> <li>- Positive judgments about morality of own actions</li> <li>- Fulfillment of own moral standards</li> <li>- Fulfillment of social norms</li> <li>- Positive appraisal of the own person/actions by social surrounding</li> </ul>
‘Need for self-worth’	<ul style="list-style-type: none"> <li>- Positive affirmation of the self in general</li> <li>- Positive affirmation of personal attributes</li> <li>- Positive affirmation of own achievements</li> <li>- Feeling of superiority to others</li> </ul>
‘Need for Purpose’	<ul style="list-style-type: none"> <li>- Reflection of own actions as steps towards desirable outcomes</li> <li>- Interpretation of (past) activities in relation to positive future states</li> <li>- Interpretation of past/present/future events as being purposive</li> </ul>
‘Need for efficacy’	<ul style="list-style-type: none"> <li>- Believe that own actions have an impact on external events</li> <li>- Feeling of control over own life-situation</li> <li>- Feeling of capability to achieve personal goals and realize values</li> <li>- Believe that external events allow realization of personal goals and values</li> </ul>

Both the differentiation of meaning domains by Dittmann-Kohli and Westerhof (2000) and the division of ‘four needs for meaning’ by Baumeister (1991) are based on scientific evidence and widely acknowledged by contemporary researchers that work in the field of sense-making. More than in other models, the included differentiations can be used as potential indicators for a systematic assessment of personal meaning. A problem is that both models are more explanatory. Thus, they are mainly based on research in healthy populations and give no clear indications on how to transfer the included differentiations into a therapeutic context. Though both models could potentially be used as guidelines for therapeutic interviews, such an approach would be too time- and labor-intensive, considering that the therapeutic success of working on concepts of meaning is till now not sufficiently verified. What is needed is a medium that allows insights into the respective facets of meaning that are relevant for a patient and in addition gives room for the implementation of identification models.

#### **1.4. A narrative approach to identify personal meaning**

Summarizing the above, we know that people create meaning in their lives in order to make sense of their past experiences and to create future goals that determine their further actions in life. It is thereby assumed that the integration of our past experiences happens on the basis of a narrative structure that helps us to link past experiences with future goals and plans. The overall results of contemporary research in the field of meaning give strong indications, that helping people to create meaning in their lives is beneficial for the promotion of mental health. Still, there are some methodological limitations in how to approach the concept of meaning in a therapeutic context. Though there are models that can potentially be used for identifying sources and functions of meaning that form important components for treatment, there is a lack of indications of how to transfer these models into therapy.

As it is assumed that meaning is created, organized and stored in narrative terms, a possible solution for the faced problems could be to approach the concept of meaning by means of a narrative medium. Narrative psychology as a research field is concerned with analyzing life-stories, in order to gain information about the identity of a person. These stories can be analyzed in spoken or in written form; the focus is thereby set on how a person creates an own subjective reality that represents his very personal perspective, instead of the depiction of real events. Analyzing this subjective reality provides insights into a person's inner motives, goals, values and fears (Bruner, 1990; Polkinghorne, 1988, Zock, 2006). Additionally, narrative interventions can be used as therapeutic tools in the promotion of mental health and well-being. Several studies that worked with narrative interventions have shown that telling and writing stories about one's life have positive effects on reducing depressive symptoms, processing negative emotions and therefore promoting mental health in general (Sools et al., 2013).

Though the temporal orientation of narrative research is mainly retrospective, contemporary researchers point out the potential of the so called 'narrative foreclosure' as a therapeutic intervention. That is to say that people create stories about a possible future self, in order to create future goals and plans. At present, there is hardly any empirical evidence about the effectiveness of anticipating the future by means of expressive writing, but it is assumed that narrative foreclosure facilitates a person's resilience to stressful live events and promotes positive mental health and well-being (Sools & Mooren, 2012; Sools et al. 2013).

Based on this assumption, the Dutch life story lab started the 'letters from the future' project in 2011. Within this project, participants are asked to vividly imagine a particular situation that is situated at a self chosen point in future time. The chosen situation should

thereby be positively evaluated, as personal wishes, dreams and other positive changes have hypothetically been realized within the period between the present situation and the chosen future situation. The respondents are then asked to write a letter from this imagined situation to a self chosen person in the present (Sools & Mooren, 2012). Though the letters from the future project was formerly invented and used as an intervention method for people with low-level depression, the prospective letters can also be used as a research instrument that aligns with a hermeneutic-interpretive approach (Sools & Mooren, 2012; Sools, Tromp & Mooren, 2015). As the specific situations that are described in the letters depict a future that is wished and desirable, it may also be assumed that they reflect a writer's very personal plans and goals and therefore give insights into important aspects of personal meaning.

The objective of the underlying study is to investigate how and to what extend personal meaning can be identified on the basis of the narrative prospective medium 'letter from the future'. In an explorative approach, it will be tried to assess sources and functions of personal meaning within the 43 letters from the future of a group of psychiatric patients by implementing both the differentiation of meaning domains by Dittmann-Kohli & Westerhof (2000) and the 'Four needs for meaning' by Baumeister (1991) as identification models on the content of the prospective letters. It will thereby be tried to give answer to the three following research questions:

- 1) *Which 'domains of meaning' can be identified in the prospective letters?*
- 2) *Which 'needs for meaning' can be identified in the prospective letters?*
- 3) *What clinical implications can be derived from the results of this explorative study?*

Based on the findings of this research, this article will present an evaluation of whether or not the prospective method 'letters from the future' is a feasible tool for the identification of personal meaning in a clinical setting. By doing so, this study attempts to contribute to the existing body of knowledge on how the creation of personal meaning can be transferred into therapy models.



## **2. Method**

### **2.1. Background**

With the objective to investigate models, processes and intervention outcomes of narrative psychological interventions, researchers of the University of Twente founded the Dutch life story lab in 2012. One of the major research programs of the Dutch life story lab is the ongoing ‘letters from the future’ project, which was started in December, 2011. The letter from the future exercise has been developed as an adaptation from a storytelling exercise that has been used as a tool for the promotion of mental health in several Dutch intervention settings (Bohlmeijer 2007). As a medium for narrative research, the future narratives are particularly interesting because the short form of the letters allow a faster way of data collection and analysis than life story interviews, which are usually the main source for narrative psychological research. There is currently no empirical evidence on the effectiveness of the letters from the future exercise as an intervention tool for mental health promotion, which is why the focus of the Dutch life story lab is contemporarily directed on gaining insights into relationships between the content, structure, form and audience of the prospective letters and psychological well-being (Sools & Mooren, 2012). For a more detailed elaboration on the letters from the future project see Sools and Mooren, 2012. The specific instructions for writing a letter from the future are shown in appendix 1.

### **2.2. Research design**

This research is based on the 43 letters from the future that were collected in the course of the master thesis research of Preen (2013). The letters were collected in a German psychiatric institution in the period between December 2012 and January 2013. The institution in which the data collection was conducted is specialized in the treatment of anxiety and affective disorders, obsessive compulsive disorders, psychotic disorders, personality disorders and disorders connected to substance abuse. The letter exercise was done in group sessions; the participants were thereby constantly supervised by Preen and at least one psychologist, in order to prevent any risks and to attend and support the participants while writing the letters. After they finished their individual letters, the participants were asked to fill in a questionnaire that asks several demographic features, as well as the Mental Health Continuum-Short Form (MHC-SF), which is a psychometric self-report questionnaire, that measures aspects of positive mental health. The results from the MHC-SF are not taken into consideration within this study; the demographic features of the 43 respondents are displayed in the following section.

### 2.3. Participants

Table 3.: *Demographic features of respondents (n=43).*

Demographic features	Category	Number
Age	- 16-25	9
	- 26-35	7
	- 36-45	8
	- 46-55	16
	- 56-65	3
	- 66-75	0
Gender	- Male	23
	- Female	20
Nationality	- German	42
	- Austrian	1
	- Other	0
Family status	- Single	10
	- Single with children	5
	- Married / living with a companion	8
	- Married / living with a companion with children	15
	- Living with parents	4
	- Else	1
Educational background	- High educational background (College, University, Post-academic)	8
	- Medium educational background (Vocational Education)	6
	- Low educational background (Preparatory vocational education)	25
	- No educational qualifications	1
	- Else/ No information on e.b.	3
Diagnosis	- Anxiety disorder/ OCD	1
	- Psychosis	2
	- Depression	10
	- Depression & Personality disorder	7
	- Depression & Anxiety disorder/ OCD	11
	- Addiction & Chronic Pain Disorder	1
	- Depression & Anxiety disorder/ OCD & Personality disorder	5
	- Depression & Addiction & Anxiety disorder/ OCD	1
	- Depression & Anxiety disorder/ OCD & PTSD	1
	- Depression & Addiction & Personality Disorder	1
	- Depression & Addiction & Anxiety disorder/ OCD & Personality disorder	1
	- Not knowing	2
Number of diagnoses	- 1	13
	- 2	19
	- 3	8
	- 4	1
	- Not knowing	2

From the 43 participants that took part in this study, 23 were male and 20 female. With a number of 16 the majority of the participants fell into the age group of 46 to 55, three participants were older than 55, the other 24 participants were evenly distributed over the younger age groups, ranging from 16 to 45. Except for one participant with Austrian nationality all of the participants were German. Regarding their family status, 23 participants

stated to live in a relationship with a partner, 15 of these also had children. From the 19 participants that stated to be single, 10 lived alone, 5 had children and 4 lived with their parents. A notable characteristic of the participant group is that the majority (n=25) had a low educational background, 6 of the participants had a medium educational attainment level, while 8 participants had a higher educational background, meaning they obtained or were working on a college or university degree. Referring to the individual diagnoses of the 43 participants, most of them reported to have one (n=13) or two (n=19) diagnosed mental disorders, 8 participants reportedly had 3 diagnoses and one participant stated to have 4 diagnoses. The most frequent diagnoses were depression (n= 10), but also a combination of depressive symptoms with an anxiety disorder/OCD (n=11) or with a personality disorder (n=7).

## **2.4. Data analysis**

From the original 43 participants that took part in this study, three participants did not finish writing their letters, due to reasons of fatigue or weariness with the exercise. Though it was decided to include these three unfinished letters in the analysis, one letter had to be excluded as its shortness and gaps in the content gave no room for an implementation of the used analysis methods.

The analysis of the prospective letters is based on a qualitative thematic assessment approach, using the division of meaning domains by Dittmann-Kohli and Westerhof (2000) and the ‘four needs for meaning’ model of Baumeister (1991) as sensitizing concepts. Each of the respective concepts is based on a validated scientific background and gives indications on how to differentiate between specific aspects of personal meaning. In this research it was tried to implement these models on the 43 letters from the future, by using the included distinctive indications as orientation for coding. A separate analysis was conducted for both concepts; the allocation of codes was thereby conducted by one researcher, using pen and paper methods.

As mentioned before, the two used sensitizing concepts are more explanatory models, which means that they are not designed for the implementation on a narrative medium. The definitions in the literature are in most cases vague and non-specific, which is why several adaptations and specifications were made during the course of the two analyses. The specific methodical procedures of the two respective analyses are described in the following

### 2.4.1. Analysis of meaning domains

The first analysis that was conducted was the differentiation of meaning domains, using the model of Dittmann-Kohli and Westerhof (2000) as sensitizing concept. The implementation of this model was conducted by subdividing every sentence in all of the 43 letters into components of content and then coding these components on the basis of the six meaning domains. The domain specific sources of meaning that are listed in the original model provided orientation during the process of analysis, by using them as indications for the allocation of codes. By applying this approach it was possible to allocate codes to a great proportion of the individual letters. In fact, components in the letters that allowed no coding of any of the respective domains were in most cases limited to short passages that included general descriptions of the fictitious place and time in which the letter was written, retrospective descriptions of events that happened in the past or formalities as letter heads, greetings and farewells.

A problem that arose during the implementation of this method is that some of the named sources are defined more broadly than others; a clear distinction between the respective domains of meaning was therefore often not possible. In order to avoid overlaps and to derive more cogent results on the occurrence of the six respective domains, it was decided to limit the coding to statements in which the respective indications of each domain are explicitly accentuated. A doubled coding was only used in cases that gave strong indications for more than one of the six meaning domains. Several specifications were made for each of the six categories, whenever ambiguities arose. Based on these specifications it was possible to create a coding scheme that allowed a more distinctive and therefore also more reliable allocation of codes.

In order to give an example of the used method of coding, the excerpts of two of the 43 letters from the future with the respective codes for the found components of content are presented in Table 4. A more detailed description of the allocated codes and the specifications that were made during the coding phase follows in the result section.

Table 4: Exemplary excerpts from the coding of meaning domains.

Excerpt	Coded domain
Letter 11: “[...] I finally managed to get my life back, I have contact with my old circle of friends and do a lot of sports and I leave the door without any fears. I haven’t had any lows for a long time now and I just live my life.”	Individuality and Self-reflection Social cohesion Activities and will for accomplishment Physical integrity Individuality and Self-reflection
Letter 14: “You bought a small house, close to your parents. Your daughter sees her grandmother and grandfather regularly. After your stay in [Name of clinic] you quickly found a therapist and 2013 you began your schooling. [Name of boyfriend] has always kept supporting you. Your future will be beautiful. Look forward to it!”	Material basis of existence Social cohesion Physical integrity Activities and will for accomplishment Social cohesion Individuality and Self-reflection

#### 2.4.2. Analysis of ‘needs for meaning’

The second analysis that was conducted aimed at identifying the ‘4 Needs for meaning’ that come forth from the model of Baumeister (1991). Compared to the first sensitizing concept, the model of Baumeister is defined more broadly. The four included categories are less distinctive and lack concrete examples for the coding, which is why the implementation of this model demanded a more interpretive analysis that takes a more holistic view on the content of the 42 letters. As the letters from the future generally describe a future, in which personal wishes and desires have already been fulfilled, it was assumed, that the four specific ‘needs’ are not represented as such in the letters, but could be identified in sections in which the individual writers reflect on personal achievements and positive changes that lead to the described future situation. Indications for the coding of the four categories were in most cases not explicitly formulated, which is why the conduction of the second analysis required a precise understanding of Baumeister’s model and the underlying categorization.

While the identification of meaning domains was operated on the base of individual sentences and the underlying components of content, the identification of needs for meaning was based on a gradual interpretation of the texts in the letters that takes the context of the potential findings into account. In order to ensure a consistent allocation of codes, the texts in the letters were examined multiple times. Passages that held potential indications for the coding were marked during the first run and revised or defined more precisely over the further

course of the examination. Same as in the first analysis, all made specifications were noted and transferred to the original model of Baumeister. By doing so, it was again possible to create an adapted version of a coding scheme that held robust indications and allowed a transparent and comprehensible orientation for the coding of the four categories.

The sections that were eventually coded in the four domains covered in most cases multiple sentences or whole paragraphs; overlaps in the coded sections were therefore in some cases not avoidable. Furthermore, an allocation of codes was only possible in parts of the texts, which is to say that, depending on the letter, there were often longer passages that fell into none of the four categories. In order to give an example of the used method of coding, the excerpt of one of the 42 letters and the respective allocated codes are presented in Table 5. Problems that occurred during the coding phase and the respective made specifications will be described in detail in the result section.

Table 5: Exemplary excerpt from the coding of the ‘4 needs for meaning’.

Excerpt	Coded category
Letter 42:	
“Dear [Name of the Writer], sunny greetings from the future. To be precisely: From the year 2015! A lot of things have happened in the last two years.	No coding
Your stay in the clinic was the first step on a long, arduous way. I know how much strength it cost you and hard it was for you at times.	Need for purpose
I am even more proud, due to the fact that you obviously made it! With the relocation in the beginning of last year and the new job you opened a great new chapter in your life.	Need for efficacy
And to be honest: Your flat mates are just great. Living alone had its own benefits and sometimes they do annoy you, but then again you guys have so much fun together.	No coding
And the guys?! Of course, there have been one or two. And though it maybe wasn't THE relationship of your dreams till the end of all times, you still got into it, you dared something! And of course everyone can see that you do more sports now, even though the six-pack has still yet to come.	Need for value
But it is not essentially about that. You seem so much more... satisfied. And happier. And you also radiate that feel to others. You also became much opener, which is wonderful! [...]	Need for self-worth

### 3. Results

#### 3.1. General features of the Letters

The instructions for writing a letter from the future allowed the participants freedoms in the structural design and the content of their individual letters. Therefore the 43 letters varied with respect to their form and length, their temporal orientation and the chosen points in future time, from which the individual letters were written. As stated before, the participants were free to choose the person addressed in their individual letter from the future; 31 participants thereby chose to write a letter to themselves, while 12 participants addressed people from their personal environment. Five of these 12 letters were directed to spouses, three participants addressed their own children. Further addressees were close friends, grandchildren and, in one case, the mother of a participant.

The mean of used words in all 43 letters was 230,14 words, with a standard deviation of 158,71 words. Four participants wrote more than 500 words, with the maximum of words laying at 660; the shortest letter, one of the unfinished ones, was only 31 words long. Though the general instructions of the exercise were to write a letter from a specific imagined situation, three participants gave their letter the form of a list of personal wishes and goals, which they wanted to fulfill in an undefined future time. As the three respective letters still allowed the appliance of the two analysis methods, it was decided to include them in the further course of the study.

#### 3.2. Derived findings in the analysis of meaning domains

The implementation of the model of Dittmann-Kohli and Westerhof (2000) allowed the identification of at least one of the six domains of meaning in all of the 42 included letters. By dividing the text into components of content, it was possible to identify multiple meaning domains within individual sentences and paragraphs of the respective letters. The adapted coding scheme thereby allowed a clear allocation of codes in the majority of cases. In the following, the findings of the six respective meaning domains will be described separately in more detail, in order of the frequency of occurrences in the overall letters.

Table 6: *Frequency of meaning domains in the letters (n=42)*

Domain of meaning	Number of letters in which Domain could be identified
<i>'Social cohesion'</i>	41 (98%)
<i>'Activities and will for accomplishment'</i>	37 (88%)
<i>'Individuality and self reflection'</i>	35 (83%)
<i>'Physical integrity'</i>	32 (76%)
<i>'Material basis of existence'</i>	21 (50%)
<i>'Existential meaning'</i>	2 (5%)

### 3.2.1. Findings in the domain 'Social cohesion'

The domain of 'Social cohesion' was with findings in 41 of the 42 letters (98%) the most frequently encountered domain of meaning. The proportion of content, that was coded in this domains varied strongly over the letters; while the social surrounding was in some letters merely mentioned in one or two sentences, other letters had a strong focus on topics as family, friends and how the relations with these people changed over time. Most of the participants wrote about their partners and children. Topics were thereby joint activities, changes in the family situation and the support and help of family members during the course of the disease. Finding a new partner was a topic in 13 letters, often followed by descriptions of the new partner's characteristics or how the life with the new partner looks like.

Other subjects that could be found in multiple letters were reflections on the own confidence and functioning in social situations and how these attributes changed over time. As stated before, 12 participants directed their letters not to themselves but to persons from their personal environment. In the respective letters, the domain of social cohesion was latently present throughout the whole text; the writers often gave detailed descriptions of changes in the life of the addressed person, as for example the first employment of the own children or how the own partner enjoys his retirement. Though such paragraphs also held elements from the other meaning domains, it was decided to code them to the domain of 'Social cohesion', because the social factor seemed to be most important and therefore also meaningful for the writer. The following exemplary statements give an impression of the overall findings within this domain.



Table 7.: Exemplary statements, coded in the domain of ‘Social cohesion’.

*“You also have [...] a second wife. Your son has a family of his own and earns enough money to live with it.” (L.2)*

*“You are confident, not bound to other people, but you still maintain relationships to people that are important to you.” (L.4)*

*“You are not alone anymore. Many kind people support you, give you a hand. Give you room to make your own mistakes without any judgments.” (L. 12)*

*“The kids come today, with the little ones and we will have dinner and tell us about our daily experiences.” (L.15)*

*“And now I can go to our class reunion and I don’t have to hide like some kind of loser.” (L.27)*

### 3.2.2. Findings in the domain ‘Activities and will for accomplishment’

Statements, coded in the domain ‘Activities and will for accomplishment’ could be identified in 37 of the 43 letters (88%) and formed a substantial part of the general content of the letters. Descriptions of working activities, also including educational and academic work, were a central subject that could be found in 22 letters. Vacations, travels and recreational times were a topic in 18 letters, with often detailed and vivid descriptions of the imagined activities. Other mentioned activities were sports and personal hobbies, but also the execution of duties and responsibilities that have previously been avoided, such as repair and clean-up works or visiting family members and old friends.

Besides descriptions of activities, the fourth domain encompasses reflections on a writers own productivity and performance, as well as statements about pursuing and achieving personal goals. Such statements could often be found at the beginning or the end of a letter; they included reflections on everything that has been accomplished within the period of the present and the imagined future time, but also encouragements to persevere and to realize the imagined scenario.

More than in other domains, the fourth domain not always allowed a distinct coding, as the coded statements often included elements from other domains. Strong links could be found with the domain of ‘Individuality and self-reflection’, as working and recreational activities were in most cases followed by positive evaluations, such as contentment with the new job situation or enjoyment of the holiday experiences. The domain ‘Activities and will for accomplishment’ was further strongly connected to the domain of ‘Social cohesion’. This was particularly the case, when activities were done together with other persons or bound to a social context. In such cases, the coding was based on the focus of content of the text, that is to say, whenever an activity itself stood in the focus of the respective statement, the

component was coded in the domain ‘Activities and will for accomplishment’; when the focus was set on spending the time with another person and the activity was of somewhat secondary importance, the component was coded in the domain ‘Social cohesion’.

Table 8.: *Exemplary statements, coded in the domain of ‘Activities and will for accomplishment’.*

<i>“Now you can go to the sauna and swim and do other great things” (L.2)</i>
<i>“You are active in the working world, but also in the world of your hobbies and honorary posts.” (L.4)</i>
<i>“I will enjoy the silence of the lake for a time now and listen to the noises of the nature. In a little while I will walk over to the house and prepare everything for a nice little supper.” (L.15)</i>
<i>“We go to dinners regularly and we travel. Sometimes we enjoy the sun and the sea and other times we ride up into the mountains.” (L. 16)</i>
<i>“Till now you made a strong performance and you will do so in the future, of that I am sure!” (L.33)</i>

### 3.2.3. Findings in the domain ‘Individuality and self reflection’

The domain ‘Individuality and self reflection’ constituted a central and frequently occurring component in a great majority of cases. Several of the included indications were latently present in virtually all of the 42 analyzed letters; by limiting the coding to statements in which the underlying topics as contentment, personal growth and happiness were explicitly accentuated, the derived findings were restricted to 35 letters (83%) that included clear statements of ‘Individuality and self reflection’.

Statements that were coded in this domain contained in most cases reflections on the writers recovery of positive feelings and control over the own life situation, with reference to a past in which these things have been absent. Personal growth could be identified in statements about changes in the personal characteristics and overcome fears, doubts and sorrows of the past. With respect to overcome personal problems, it was not always easy to judge, whether the named fears and worries were part of a diagnosed mental disorder or not. Statements that referred to the course, duration and prognosis of a medical or mental disease were generally coded to the second domain of ‘Physical Integrity’. In order to allow a clear distinction between the first two domains, a differentiation between ‘non-clinical’ personal problems and problems that are caused by a medical or mental disease was added in the adapted coding scheme. That is to say, descriptions and illustrations of personal fears and worries that gave clear indications that the named problems originated from a diagnosed (mental) disease were coded to the domain ‘Physical integrity’.

Table 9.: Exemplary statements, coded in the domain of 'Individuality and Self reflection'.

*"You finally found yourself and regained control over your life." (L.3)*

*"You move freely and unconcerned in every direction and after your own will." (L.4)*

*"Despite everything I haven't changed in most things and I am proud of that." (L.11)*

*"[...] you developed several positive attributes, for example strength, patience with yourself, self-confidence and control over your anger." (L.13)*

*"I have learned to listen to my inner voice and to hit my emergency brakes at the right time. I enjoy life with all its ups and downs." (L.34)*

### 3.2.2. Findings in the domain 'Physical integrity'

The domain of 'Physical Integrity' could be identified in 32 (76%) of the 42 letters. Similar to the findings in the domain of 'Individuality and Self reflection', statements that fell in this domain were mostly descriptions of an improved state of health in the imagined future situation, in comparison with the past and present condition of the writer. A topic that was addressed in many of the coded statements was the present stay in the clinic and how it helped the writer in the course of his or her recovery. These statements were often followed by reassuring words and encouragements, that the writer is progressing well and capable to overcome his or her disease. In some cases, the writers were aware that they would probably not fully recover from their condition and depicted a future in which they learned to endure and deal with pain, fears and other symptoms, connected to their respective diagnoses. Further subjects that fell in this domain were the withdrawal of drugs and the discontinuation of medication and pharmaceuticals.

Table 10.: Exemplary statements, coded in the domain of 'Physical Integrity'.

*"Alcohol, drugs and cigarettes play no role in your life anymore [...]." (L.4)*

*"Thanks to new operational methods I feel physically well again." (L.5)*

*"I learned to listen to my body and to avoid major physical strain." (L.20)*

*"I wanted to thank you [...], that you didn't have any relapses[...]and that you grew more patient, regarding your disease and recovery; that you understood that everything takes it's time." (L. 25)*

*"Your time in the clinic has helped you on the path, which you follow for precisely two years now, disciplined and successful." (L.33)*

### 3.2.3. Findings in the domain ‘Material basis of existence’

The domain ‘Material basis of existence’ could be identified in 21 (50%) of the letters. The findings were in most cases restricted to single sentences, in which the writer describes the new home that he lives in. Descriptions of the garden could be found several times; six writers chose it as the imagined place from which their letter from the future was written. The acquisition of a pet, in most cases a dog, was also mentioned in multiple letters; though it may be argued that a pet is a social being, it was decided not to count statements about pets to the domain of social cohesion, as they were always mentioned in the context of other acquired goods or descriptions of living conditions.

Further topics that could be counted to this domain were the acquisition of a car, new furniture for the house and purchasing in general. Financial security was a subject in three letters, but only mentioned briefly and always in the context of the (re-)acquisition of a job. Though work was generally an often occurring topic in the 42 letters, the focus was mostly set on working activities and therefore coded in the fourth domain ‘Activities and will for accomplishment’.

Table 11.: Exemplary statements, coded in the domain of ‘Material basis of existence’.

<i>“I ride a nice vehicle.” (L.5)</i>
<i>“I planted a nice garden, with lots of space for my dog; I created a beautiful new home.” (L.7)</i>
<i>“We [...] got a job and now we make enough money to buy ourselves nice new things.” (L.13)</i>
<i>“I enjoy staying in our [...] nicely decorated house, [...].” (L.17)</i>
<i>“You [...] bought a beautiful villa at one of the nicest places on earth.” (L.21)</i>
<i>“With the relocation in the beginning of last year and the new job you opened a great new chapter in your life.” (L.42)</i>

### 3.2.6. Findings in the domain ‘Existential meaning’

The sixth domain, the domain of existential meaning, could be identified within two (5%) of the 42 letters. With regard to the description in the original model, the domain of existential meaning was the most abstract of the six domains and provided only few indications for the coding. Though statements about religious beliefs and ideological orientations were thought to be a clear indication for existential meaning, only one letter included a short reference to the Christian god, which was accordingly coded in the sixth domain. The second finding in the domain of existential meaning was a paragraph in one letter, in which the writer reflects on his own life and describes how his experiences lead to a

change in his personal views and values, with reference to materialistic goods and social bonds. Though personal values were generally a topic in many letters, this specific section had a unique philosophical character, in terms of the internalization of the named personal values for which it was coded to the sixth domain. The two paragraphs, coded in the domain of existential meaning are displayed below, in Figure 6.

Table 12.: Exemplary statements, coded in the domain of ‘Existential meaning’.

*“You live a life that corresponds to your own person. Though most people think that it is not the right thing for you to do. I am not interested in material possessions anymore [...]. Of course, money makes life more comfortable and easier, but you can’t buy inner balance, real love, real friends und physical health with it. [...] I don’t want to be an interiorly impoverished human being that has only scratched on the surface of life, without having seen the abysses, because you just learn what it’s like to be human if you know them too.” (L.8)*

*Stay true to yourself and be faithful. And keep your trust in the dear god, who was close to you, -whether you felt it or not- and who took care of you.” (L.25)*

### 3.2.7. Adaptations for the coding of meaning domains

Several of the made adaptations for the coding of the six meaning domains were already mentioned throughout the text. In general it can be said that most adaptations were derived from cases in which a distinct coding was not possible during the first read and a wider interpretation of the indications of the original model was demanded. The original indications were thereby complemented by examples and subcategories, in order to capture all of the facets and indications of the respective domains that were encountered during the analysis. The adapted coding scheme for the identification of meaning domains is presented in table 13.

Table 13: Adapted coding scheme for the identification of meaning domains.

Domain of meaning sources	Content, coded in the respective domains
1 <sup>st</sup> domain <i>'Individuality and self reflection'</i>	<ul style="list-style-type: none"> <li>- Statements about general contentment with life situation</li> <li>- Statements about feelings of happiness, pleasure and general well-being (non-clinical)</li> <li>- Self-reflective statements about personal growth and control over own life situation</li> <li>- Statements about (overcome) personal difficulties, fears, doubts and sorrows (non-clinical)</li> <li>- Self-reflective statements about personal strengths (e.g. calmness, patience, control over own emotions)</li> <li>- Statements about feelings of autonomy, independence and self-determination</li> <li>- Statements about self-acceptance, self-worth and self-esteem, regarding the own personality and character</li> </ul>
2 <sup>nd</sup> domain <i>'Physical integrity'</i>	<ul style="list-style-type: none"> <li>- Statements about health status, vitality and physical well-being</li> <li>- Statements about course, duration and prognosis of medical and/or mental disease</li> <li>- Statements about self-acceptance and satisfaction, regarding medical/physical/psychological condition</li> <li>- Statements about (overcome) fears, emotional states and thoughts that are caused by medical and/or mental disease</li> <li>- Statements about (non-)usage of drugs and medication</li> <li>- Statements about medical and/or psychological treatments</li> <li>- Self-reflective statements about consciousness of own body and health</li> <li>- Statements about self-acceptance and satisfaction, regarding (the outer appearance of) the own body</li> </ul>
3 <sup>rd</sup> domain <i>'Material basis of existence'</i>	<ul style="list-style-type: none"> <li>- Statements about (acquired) goods, belongings, money and property (e.g. house, garden, car, pets)</li> <li>- Descriptions of living conditions</li> <li>- Statements about feelings of financial and/or existential security</li> <li>- Statements about the (re-)acquisition of a job/profession</li> </ul>
4 <sup>th</sup> domain <i>'Activities and will for accomplishment'</i>	<ul style="list-style-type: none"> <li>- Statements about recreational activities (e.g. hobbies, sporting activities, relaxation, getting rest)</li> <li>- Statements about work activities (also academic/educational work)</li> <li>- Statements about travels and vacations</li> <li>- Statements about actions and activities, that have personal value (e.g. fulfillment of duties, visits, repair or clean-up work)</li> <li>- Self-reflective statements about own productivity, creativity, performance and accomplishments</li> <li>- Statements about pursuing and achieving personal goals</li> </ul>
5 <sup>th</sup> domain <i>'Social cohesion'</i>	<ul style="list-style-type: none"> <li>- Descriptions of own social environment (e.g. family, friends, colleagues, acquaintances)</li> <li>- Statements about actions and activities, performed by persons in social environment</li> <li>- Self-reflective statements about own social functioning and status</li> <li>- Statements about feelings of love, intimacy and social harmony</li> <li>- Statements about social activities (e.g. activities with friends and family, political and societal participation)</li> <li>- Statements about social independence and self-reliance</li> </ul>
6 <sup>th</sup> domain <i>'Existential meaning'</i>	<ul style="list-style-type: none"> <li>- Statements about (changes in) important personal values, ideals, motives and views, that are deeply internalized and affect ways of personal thinking and acting (e.g. cultural traditions, religious convictions, views and insights over own course of life)</li> </ul>

### 3.3. Derived findings in the analysis of the ‘4 needs for meaning’

In total, the implementation of the model of Baumeister (1991) was possible in 40 of the 42 examined letters. In addition to the one letter, that was excluded in advance, two more letters were found that gave no indications for a division in any of the four categories. With respect to the frequency of occurrences of the four categories (Table 9.), all of them could be identified in around 20 to 30 letters; their appearance was thereby partly dependent on the temporal orientation of the letters. The first two categories were found more often in letters that had a strong emphasis on descriptions of the imagined future situations and were generally more future-oriented, while the third and the fourth category were found more often in letters, that took a retrospective view on past events and drew comparisons between the factual and the imagined present state of the writer. As before, the findings in the respective categories will be discussed separately in the following sections.

Table 14: *Frequency of the ‘4 needs for meaning’ in the letters (n=40)*

Category	Number of letters in which category could be identified
‘Need for efficacy’	27 (68%)
‘Need for self-worth’	26 (65%)
‘Need for purpose’	21 (53%)
‘Need for value’	19 (48%)

#### 3.3.1. Findings in the category ‘Need for efficacy’

With occurrences in 27 letters (68%), the ‘Need for efficacy’ was the most apparent of the four categories of Baumeister’s model. The derived findings within this domain can be divided into two major parts: Firstly, sections were categorized, in which the future self reflects on all the goals and achievements that have hypothetically been realized in the period between the present and the imagined future self. Such sections comprised a great number of topics, such as the own recovery, the resumption of work, finding a new partner, regaining control in life and the fulfillment of wishes as travels and acquired goods. By listing these achievements, the writers ensured themselves, that the own wishes and desires are realistic and can be carried out within a specific timeframe.

Secondly, sections were categorized, in which the writer explicitly encourages the present self to count on the own capabilities, in order to achieve desired goals that have not (fully) been realized in neither the present nor in the imagined future situation. Though the imagined future self has apparently not achieved these often undefined ultimate goals, he is in

the position to ensure the present self that these goals lay within reach and that striving for them is worthwhile. The two most central topics within such sections were the further course of the own recovery and the reallocation of a job.

Table 15.: Exemplary statements, coded in the category ‘Need for efficacy’

*“I found a business, in which I like to work and when I come home from work I am relaxed and in a good mood. My panic attacks are as good as gone. When you read this letter, I hope that it gives you some courage for the future.” (L.7)*

*„I am working pretty hard on myself right now and I am sure that the in- and outpatient therapy will help me, so that I can overcome my mental disease.” (L.8)*

*“You will have to integrate your creative side into your work now, but I am sure that you will manage to do so, without any problems.” (L.17)*

*“You did it. It has been a long way and it hasn’t always been easy, but now you reached your desired destination. You have seen a lot of the world, you traveled a lot and met the most different kinds of people and cultures. With the man of your dreams at your side.” (L.21)*

*“You and your renter found a way to insulate the walls. And even the attic has been built up. You created your own working space, like you always wanted it to be.[...] You lost some weight, you got your food intolerance and your irritable colon under control and now you will never have to wear ‘pants’ anymore.” (L.25)*

### 3.3.2. Findings in the category ‘Need for self-worth’

The need for self-worth could be identified in 26 (65%) of the letters. Among the four categories it is the one with the most specific indications for the categorization and therefore allowed a distinct allocation of codes in the majority of cases. Sections, coded in this category were mostly positive affirmations of the own person. The writers often drew comparisons between the present and the imagined future self and thereby reflected on personal weaknesses and boundaries and how they learned to overcome or to accept these weaknesses as part of their own person.

One important element that occurred in most of the identified letters in this category was the recovery of happiness and enjoyment in life. New or recovered personal attributes, as optimism or resilience to stress were also a subject that was assessed in multiple letters. Such statements were often linked to accentuations of general contentment with the new life situation and satisfying feelings about the future self that is described in the letters. Though Baumeister named superiority to others as an indication for the need for self-worth, the feeling of normality and equality to others seemed more important to the participants, as statements of such feelings were also found in a number of letters.



Table 16.: Exemplary statements, coded in the category 'Need for self-worth'

*"You're done with hanging in front of your PC all the time, searching for 'contacts' and trying to get over with the day." (L.6)*

*"You have learned to treat yourself better [...], to see the strengths in your weaknesses and the weaknesses in your strengths and so you created an inner balance, for you and only for you." (L.12)*

*"You are a beautiful human being, so positive and full of optimism and vitality, I really appreciate that!" (L.17)*

*"I became a positive thinking person. I now enjoy the small pleasures in life that haven't been important to me in the past. My health has also become very important to me." (L.22)*

*"You seem so much more... satisfied. And happier. And you also radiate that feel to others. You also became much opener, that is wonderful!" (L.42)*

### 3.3.3. Findings in the category 'Need for purpose'

In the original model of Baumeister the need for purpose is defined as the interpretation of the current actions in relation to positive future states and desirable outcomes; the purposive connection thereby links events that are separated in time. Because these desired states and outcomes have already been realized within the depicted future state, the 'Need for purpose' becomes apparent in statements that reflect the past and actual present states of the writer as steps towards the wished situation that is depicted in the letters. Sections that included such statements were found in 21 (53%) of the 40 categorized letters. As said the occurrence of the respective categories was dependent on the temporal orientation of the letters; this was most obvious in the category 'Need for purpose', as most findings were derived from letters in which a retrospective view on past events had a significant proportion of the content.

Most of the findings in this domain were derived from descriptions of the course and duration of the mental disease; the own recovery was the most central topic within this category and the writers often reflected on their own doubts and worries, regarding the permanence of the diseases. Overall, the resulted findings had many overlaps with the 'Need for efficacy', because the own capability to persevere and to achieve the desired state of health was an important element within the coded sections.

Sections that were also counted towards the 'need for purpose' were prospects and predictions of the further course of the future from the position of the imagined future. Some writers named future plans and described their next steps that will help them to achieve a specific goal in the further future.

Depending on the chosen point in time from which the letter was written, included topics were the further recovery of the writer, but also regaining structure in life by resuming work and finding a new place to live.

Table 17.: Exemplary statements, coded in the category ‘Need for purpose’

*“You have always been open for new things. So don’t hesitate and just dare the next steps. It will never be the same as it has been before. It will only get better.” (L.6)*

*“I will move out soon, right now I am searching for a flat in Bremen, because I want to continue my study. Finally I can use my powers to strive for things I really want.” (L.11)*

*“In 2007 you thought that within a year you would be ‘functional’ and well again... Who would have thought that things would take so long, but you feel good again and you experience an inner satisfaction that you could not have imagined before.” (L. 25)*

*“Do you remember, back then in 2012- all alone at Christmas Eve and the days that followed, it was just terrible. I am so glad that I had the strength to go to [name of clinic]. In the beginning I felt miserable with all the people around me, while I was too frightened and thought that nobody would like me. But what can I say: It is over. They could really help me there.” (L.29)*

*“It began in 2012 with sleep disorders and climaxed in strong fears and worries about the future. In January 2013 I went to a clinic to treat my depression. I slowly recovered and it took another whole year till I really felt better. Your mother was pregnant and I was worried, that I could not take care of you and your mother. But I never gave up and continued fighting and in the end I got my reward.” (L.35)*

### 3.3.4. Findings in the category ‘Need for value’

The need for value is described in statements, that reflect on a person’s feeling that the own actions are positively valued or justifiable, with respect to the own standards of right and wrong. As described before, these standards are usually formed on the basis of the normative demands of a person’s social surrounding. The coding of this category was done by detecting sections in the letters that provide information on the moral standards and the normative demands the individual writers experienced; such demands were sometimes more, sometimes less explicitly formulated. In total, 19 letters (48%) included sections that fell under the category of the ‘Need for value’.

General topics in this category were hard to assess, due to strong variations in the content of the derived findings. Some writers wished for the appreciation of one or more particular persons; these were in most cases family members, but also colleagues or superiors. Other writers reflected more globally on their role within society and how it changed over the course of time. Finding the way back into an ordered life, in which the welfare of the own person, the partners and family members is ensured was one topic that occurred in the majority of the identified letters. This comprises the acquisition of a well-paid job and the affordance of a house for the family, but also the withdrawal of drugs and medication. The

creation of new social bonds and the desire for appreciation, respect and trust was also a topic that appeared in multiple letters and gave clear indications for the first category.

Being part of and contributing to the society was another important subject that was coded to this category; three of the writers thereby accentuated their wish of not being a burden to others in the future. An increased self-confidence or changes in the personal views on judgments of the social surrounding were also addressed in multiple letters; typical for persons with an anxiety disorder, four participants thereby wrote about overcoming their fear of possible negative appraisal in public situations, connected to the extinction of panic attacks in the desired future state.

Table 18.: Exemplary statements, coded in the category 'Need for value'

*"I built up a circle of friends that understand me, who are there for me, when times are bad and with whom I laugh a lot." (L.7)*

*"It is not without reason that many people lament at the end of their lives, that they always lived the life of another person, instead of their own, which perhaps would not have been conform to social norms, but at least it would have made them happy [...]. You now live a life that suits your own person." (L.8)*

*"[...] You stopped thinking that you were left behind with no right to live autonomously, but you are actually responsible for others and the world surrounding you and them. And though they do not care what happens to you, you have no right to revolt or to refuse." (L.12)*

*"I also wanted to tell you, that where I am now I feel no more pain and I will not be a burden to you anymore." (L.23)*

*"It is nice to tell others proudly about what you have achieved till now [...]. All my fears and the feel of shame have disappeared, because I don't have to explain myself to others [...]. " (L.27)*

*"No boss that teases me, finally going shopping without panic that there are too much other persons. No fear of getting punished for mistakes [...]. " (L.32)*

### 3.3.5. Adaptations for the coding of needs for meaning

In comparison with the adapted coding scheme for the identification of meaning domains, the made adaptations during the analysis of 'needs for meaning' have a relatively small scope. While the implementation of this model demanded a lot of interpretation, a proper understanding of the underlying constructs was more important for a consistent allocation of codes than the specific indications of each category. Though it would have been possible to complement the indications of the original model with concrete examples, such amendments were deliberately not intended, as it was assumed that they would rather have misleading effects on a proper implementation of this model, than they would provide any help for the coder.

Several indications were added in each category, in order to grasp the further aspects of how to interpret the individual needs. Furthermore, the indications were widened in their temporal orientation, by adding past, present and future concepts of time into the coding scheme. This was particularly important with regard to the need for purpose, because the occurrence of this category was highly dependent on the time perspective of the underlying texts. The adapted coding scheme for the identification of ‘needs for meaning’ is presented in table 19.

Table 19: *Indications for the identification of the four ‘needs for meaning’.*

Category	Indications for coding
‘Need for value’	<ul style="list-style-type: none"> <li>- Positive judgments about own moral standards</li> <li>- Positive judgments about morality of own (past/present/future) actions</li> <li>- Fulfillment of social norms</li> <li>- Positive appraisal of the own person/actions by social surrounding</li> <li>- Contentment with ones role within society/the own social surrounding</li> <li>- Contentment with own family status</li> <li>- Contentment with own state of welfare</li> </ul>
‘Need for self-worth’	<ul style="list-style-type: none"> <li>- Positive affirmation of the self in general</li> <li>- Positive affirmation of personal attributes</li> <li>- Positive affirmation of own achievements</li> <li>- Contentment with course of life and the general life situation</li> <li>- Acceptance of personal boundaries and weaknesses</li> <li>- Feeling of equality/superiority to others</li> </ul>
‘Need for Purpose’	<ul style="list-style-type: none"> <li>- Reflection of own (past/present/future) actions as steps towards desirable outcomes</li> <li>- Interpretation of (past/present/future) activities in relation to positive future states</li> <li>- Statements about feeling that life has purpose</li> <li>- Interpretation of (past/present/future events as being purposive</li> <li>- Interpretation of past/present/future efforts as needed and useful</li> </ul>
‘Need for efficacy’	<ul style="list-style-type: none"> <li>- Believe that own actions have an impact on external events</li> <li>- Statements of (regaining) control over own life-situation</li> <li>- Feeling of capability to achieve personal goals and realize values</li> <li>- Believe that external events allow realization of personal goals and values</li> <li>- Reflections of past achievements</li> </ul>

## 4. Discussion

With the objective to investigate how and to what extend personal meaning can be identified on the basis of the narrative prospective medium ‘letter from the future’, this explorative study did an attempt on assessing important domains and functions of personal meaning within the 43 ‘letters from the future’ of a group of psychiatric patients. In order to make relevant statements about the occurrence and the importance of the identified domains and functions of meaning, the three following research questions were established:

- 1) *Which ‘domains of meaning’ can be identified in the 43 prospective letters?*
- 2) *Which ‘needs for meaning’ can be identified in the 43 prospective letters?*
- 3) *What clinical implications can be derived from the results of this explorative study?*

### 4.1. General findings

When discussing the derived results of this explorative study, a first thing that has to be taken into consideration is that the general research approach was based on the assumption, that the specific situations that are described in the prospective letters depict a future that is wished and desirable and therefore also meaningful for the individual participants of this study. On this account it was assumed that the general implementation of identification models for personal meaning on the content of the letters should provide valid results. Yet it was difficult to predict whether this would also be the case when the letters were written by a group of psychiatric patients, as various studies indicate that the presence of psychological problems negatively influences a person’s ability to visualize positive images of the future and to create realistic goals and future plans (Chiu, 2012; Melges, 1972; Sools et al., 2013).

In general, the overall results of this research indicate that the ‘letter from the future’ is a useful medium for the identification of personal meaning that allows interesting insights into different sources and functions of meaning that are important to the individual writers. Both of the implemented identification models led to a vast amount of findings in close to all of the examined letters, irrespective of individual differences in the length and the structuring of the content. Though both models were initially not designed for the implementation on a narrative medium, the included indications and examples generally allowed a feasible and successful transference of the included differentiations on the content of the prospective letters. The various adaptations and specifications that were made throughout the course of the analyses, as well as a precise understanding of the underlying theories made it possible to conduct a consistent and transparent allocation of codes that prevented most of the arising ambiguities.

It still is a justified question, whether the coded content of the letters truly reflects personal meaning or not. As stated in the literature, the meaningfulness of future goals and images is dependent on the attainability and the specificity of the desired future states (Antonovsky, 1987; Selm & Dittmann-Kohli, 1998; Vincent, et al., 2004). Transferring this knowledge on the content of the derived findings, it can be stated that the images of the future that the participants created in their prospective letters were sometimes more, sometimes less detailed. Still, the general content of the 43 analyzed letters gives the impression that the great majority of the writers were realistic, specific and modest in their future wishes and expectations. With major topics as the creation of a home and a family, the acquisition of a job and financial security the overall goals never expanded the common aspirations of the western standard of living; ahead of these goals stood in most cases the own rehabilitation from the present psychological diseases and the regaining of structure in life. As it is estimated that these goals lay in the realms of what is possible, it may also be claimed that they facilitate the writers' perceived control over the future and allow them to derive meaning and motivation from them (Antonovsky, 1987; Selm & Dittmann-Kohli, 1998). On this account it can be assumed that the 43 prospective letters provide valid insights into facets of meaning that are relevant to the underlying clinical population.

#### **4.2. Identified domains of meaning**

With regard to the first research question, it generally can be stated that, except for the sixth domain of 'existential meaning', all domains of meaning from the model of Dittmann-Kohli & Westerhof occurred frequently in the majority of the 42 analyzed letters. At least three of the six domains of meaning could be identified in each letter. The domains 'Social cohesion' and 'Activities and will for accomplishment' were with findings in 41 (98%), respectively 37 (88%) of the prospective letters the most apparent of the six meaning domains. Irrespective of whether they already had a partner or children, the majority of participants wrote about a future wherein they lived in a harmonious and well-functioning family and maintained social bonds with friends and family members. The acquisition of a job and the resumption of a useful occupation also had a high priority within the overall content of the letters; such functional activities were found to be even more important to the writers than recreational activities or hobbies. The high frequency in which these two domains were encountered is in line with the findings of the meta-analysis of Pinquart (2002), who analyzed relations between the experience of personal meaning and the demographic features of different age-groups in more than 70 studies. The findings of his study indicate that the degree

in which people experience meaning in life is highly dependent on the presence and quality of a social network and the acquisition of a useful occupation. As the actual present state of health of the participants hinders them in the performance of functional activities and restricts them in their social networks, it is also understandable that such sources of meaning are particularly relevant in the underlying clinical population. The importance of social bonds within the present set of prospective letters can also partially be explained through the relative age of the participant group. As found by Bode (2003), people of older age groups seem to attach more meaning to social bonds and their role within society than people from younger age groups. These findings are in line with the demographic features of the participant group in this study, considering that the majority of the participants in this study falls under the age groups of 46 years and older.

The domain of ‘Individuality and self-reflection’ was with findings in 35 letters (83%) the third most encountered domain of meaning; its frequent occurrence can thereby partially be explained by the general set-up of the letter from the future exercise. As previously described, the domain comprises statements of personal growth and contentment with one’s own life situation. The general instructions for writing a letter from the future were to write a letter from a positively evaluated scenario in which positive changes have already taken place. As this implies that the writer is also generally content with the imagined situation, it is not astonishing that such statements could be found in a great number of letters.

The domain of ‘Physical integrity’ could clearly be identified within 32 (76%) of the letters. All findings within this domain were somehow related to the medical history and the recovery of the writer, which is not surprising, seen that the participants wrote their letters from the future in a clinical setting. Although not all of the writers chose to broach the issue of their rehabilitation explicitly, the domain of ‘Physical integrity’ was latently present in close to all of the 42 analyzed letters, as the imagined future scenarios stood always in contrast to the present state of the participants, in which their diseases hinder them in the realization of most these images.

A somewhat surprising result was the scarce occurrence of the domain ‘Material basis of existence’. Even though the domain could still be identified in 21 of the prospective letters (50%), its proportion and frequency within the individual letters was marginal, compared to the other occurring domains of meaning, as the findings were in most cases restricted to single sentences. It is further notable that, though the participants could potentially have imagined a future full of wealth and luxury goods, the thematic emphasis in this domain was set on the acquisition of a home and financial security, which appears to be comparatively modest.

These findings are in line with the theoretical assumptions that people create future goals that are attainable and lay within the scope of their possibilities, in order to derive meaning from them (Antonovsky, 1987; Selm & Dittmann-Kohli, 1998). Considering the average age of the participants group, the results also support the findings of Westerhof (2010), who found that people from older age groups are less interested in material goods, but attach more meaning to sources as social bonds and health.

As mentioned, the domain of ‘Existential meaning’ was hardly ever present within the 42 analyzed letters from the future. The findings in this domain were restricted to only two letters (5%) and even in these cases a distinct allocation of codes was not possible without doubt. One possible explanation for the non-existence of existential meaning in the prospective letters could lay in the diminished importance of churches and other traditional institutions that have been important sources for making sense in the past. In contrast, people nowadays derive personal meaning from sources of their routine lives and activities (Baumeister & Muraven, 1996; Westerhof & Bohlmeijer, 2010). As such sources fall more likely under one of the other five domains this could probably explain the small scope of findings in the domain of ‘Existential meaning’. Furthermore, the concept of existential meaning is quite abstract, considering the general simplicity of the letter from the future exercise. The instructions for writing a letter from the future ask the participants to create and describe specific images of a wished future situation, but do not question them about persistent and internalized convictions and beliefs. Therefore it may be assumed, that the letter from the future is in its present form more suitable as a medium for the identification of more everyday sources of meaning than for the identification of existential meaning.

#### **4.3. Identified ‘Needs for meaning’**

With regard to the second research question, it was found that the model of Baumeister was implementable in 40 of the 43 prospective letters (93%) and generally allowed the identifications of all four of the included ‘Needs for meaning’. The ‘Need for efficacy’ and the ‘Need for self-worth’ were with findings in 27 (68%), respectively 26 (65%) of the prospective letters the most apparent functions of meaning. The ‘Need for purpose’ was identified in 21 letters (53%); the ‘Need for value’ was found in 19 letters (48%). The occurrences of the different functions or ‘Needs for meaning’ were generally not bound to specific topics or thematic emphases, but more fundamentally directed on the positive effects of striving for a wished future situations. The distribution of codes was thereby less variable than in the first model and only found in certain parts of the individual letters, as the coded



sections comprised in most cases multiple sentences and paragraphs. Though there were also letters that included codes of all four categories, most of the smaller letters only allowed the identification of one or two of the respective ‘Needs for meaning’. In part, the comparably small scope of findings may be attributed to the fact that the implementation of Baumeister’s model was highly interpretive and in most cases linked to long considerations of whether a sentence or paragraph should be coded or not. In order to derive more valid results, it was often refrained from an allocation of codes when the underlying sections held strong ambiguities. It is therefore arguable whether the derived findings are actually representative for the actual occurrences of the four categories or not.

In addition, the occurrence of the respective ‘Needs’ was strongly linked to the temporal orientation of the individual letters. Some of the examined letters had a stronger focus on the ‘present’ future that was depicted in the letters, while other letters changed in their temporal perspectives on future, present and past experiences of the writers. In these more retrospective letters the writers often drew direct comparisons between the actual and the imagined personal states and thereby gave more detailed insights into the changes that hypothetically happened between the two points of time, but they were also less detailed in the descriptions of the wished future situations. As reflections and interpretations of past achievements and efforts were major indications of the coding of the ‘Need for purpose’ and the ‘Need for efficacy’, this also explains why these categories occurred more often in such retrospective letters than the other two categories.

Similar to the meaning domain of ‘Individuality and self-reflection’, it may further be assumed that the amount of findings in the category ‘need for self-worth’ partially results from the general set-up of the letter from the future exercise. Indications for the coding of this domain were positive affirmations of the own person, actions and achievements; as the letter from the future exercise explicitly asks participants to send themselves a positive message, it is generally understandable that such positive affirmations appear in the letters. Still, a notable finding within this category is that though the indications for the identification of the ‘Need for self-worth’ include that people seek to regard themselves as superior to others, such feelings of superiority could not be identified within the 40 analyzed letters; in contrast the findings of this research indicate that feelings of equality and normality seemed rather important to the participants. As psychological problems often go in line with feelings of inferiority and a lack of self esteem, it may be assumed that the wish for equality is the clinical equivalent to the wish for superiority.

#### 4.4. Clinical implications

In answer to the third established research question of what clinical implications can be derived from the results of this explorative study, it can generally be stated that the ‘letter from the future’ exercise can successfully be conducted in a clinical setting and provides useful insights into the different facets of meaning that are important to the individual writers. The described future images and the different underlying topics are versatile and give concrete images of a person’s very personal goals and wishes for the future. Considering, that much of the focus of positive psychological treatment approaches is directed at the creation and fulfillment of meaningful goals, the prospective letters hold great potential in this field, as the conduction of both the exercise and the analysis of the content are fast and easy to be performed. Therefore it can be assumed that integrating the ‘letter from the future’ exercise into the therapeutic process can facilitate and accelerate the assessment of therapeutic objectives and provides useful starting points for psychological interventions.

Still, it may be argued that the current form of the general exercise and the included instructions is in some points not fitted for the implementation of identification methods for personal meaning. With respect to the differentiation of meaning domains, the letters provided a vast amount of findings in the five more elemental sources of meaning, but did not account for the more existential facets of meaning. This problem might be diminished by adapting the exercise instructions in the way that they should stimulate the participants more explicitly to write about their personal values or beliefs. With such adaptations, the model of Dittmann-Kohli and Westerhof could be implemented in its full scope, which would further increase its worth as an assessment tool in the context of future narratives.

Regarding the implementation of the model of Baumeister, the identification of the ‘4 Needs for meaning’ was highly interpretive and therefore strongly dependent on the subjective estimations of the coder. Despite the made adaptations and specifications in the coding scheme, the included indications did not always allow a clear distinction between the underlying categories; the categorization was also partly dependent on the temporal orientation of the future narratives and therefore not fully applicable on the whole set of letters. Though insights into the present ‘Needs for meaning’ are potentially very valuable, the amount of shortcomings in the implementation of Baumeister’s model lead to the suggestion that it is not sufficiently suitable for the identification of personal meaning in the prospective medium letters from the future.

#### 4.5. Limitations

Though this explorative study provides many interesting insights into the different domains and functions of meaning that are present in the letters from the future of psychiatric patients, the used methodological approach does include several limitations that potentially reduce the explanatory power of this research. A major limitation of the used methodological approach is that the coding of both domains and functions of meaning was conducted by only one single researcher and therefore highly dependent on the researcher's subjective estimations. Considering that the coding of both differentiation methods was often not clear and demanded a closer interpretation of the findings, it might be assumed that a second researcher would have resulted in a different allocation of codes. The reliability of the general findings of this research is therefore not assured, which is why they should be treated with some caution.

Further limitations result from the explorative character of this research. With the number of analyzed letters being restricted to 43, this study worked with a comparatively small sample size. The 43 participants thereby showed great varieties in their demographic features and psychological diagnoses, which makes it impossible to assess significant links between the different features of the underlying population and the occurrences of specific aspects of meaning. The lack of comparable data makes it further impossible to derive precise conclusions about which of the identified sources and functions of meaning are particularly important for participants of a clinical population.

Though this research provides precise numbers with account to the amount of letters in which the specific categories of the two models could be found, the frequencies of occurrences within individual letters are not taken into consideration within this research. This was a conscious decision that was taken for the reason that the findings were often not separable, as they partly consisted of listings or were interrelated to other findings. Still, a quantitative assessment of frequencies and proportions that the specific aspects of meaning constitute within the letters would provide more valid result with regard to the relative importance of these aspects and allow better comparisons to follow-up research. Considering, that the letter from the future has potential as an assessment tool for personal meaning in a clinical context, such quantitative data are essential and needed. For these reasons, the used identification methods need to be elaborated in the way, that they can also assess the frequencies and proportions of the derived sources and functions of meaning.

#### **4.6. Recommendations for future research**

This explorative study is the first of its kind in the way that it uses a prospective narrative medium as the letter from the future as means for the identification of personal meaning. Therefore, general recommendations for future research can be made in the way that this research should in some form be replicated. The adaptations for the coding of meaning domains and ‘needs for meaning’ should provide some support for follow-up research, but it is highly recommended that the processes of coding should be conducted by more researchers, in order to get higher levels of reliability. Seen that this research worked with a comparatively small sample size in which the majority of the participants was in an older age group, future research should also include a larger sample size and a greater variety of demographic features. Furthermore, a conduction of a similar research with a set of letters of a non-clinical population should provide interesting comparative data that could be used to draw relevant conclusions about the facets of meaning that are particularly important in a clinical context.

#### **4.7. Conclusion**

The objective of this explorative study was to investigate how and to what extend personal meaning can be identified on the basis of the narrative prospective medium ‘letter from the future. In this regard, the overall findings of this study indicate that the letter from the future is a useful medium for the identification of personal meaning in clinical settings that provides valid insights into a person’s very personal goals and plans. With respect to the implementation of the two identification methods, it can be stated that although the identification of the 4 ‘Needs for meaning’ led to a multiplicity of results, the identification model of Baumeister holds several major limitations, which diminish its potential as an assessment tool for personal meaning in the prospective letters. Regarding the implementation of the differentiation of meaning domains, the letters from the future allow the identification of the more elemental ‘sources’ of meaning that people utilize within their everyday life, but do not account for more existential aspects of personal meaning. Still, the overall findings of this combinative approach provide useful insights into the versatility of a person’s meaning structure that largely correspond to the existing theories about personal meaning; it might therefore be suggested that the combination of the letter from the future as a narrative medium, and the differentiation of meaning domains as an assessment tool for personal meaning should be further elaborated as it has the potential of becoming an integral element in future investigations of personal meaning.

## 5. References

---

- Adler, A. (1947). *Menschenkenntnis*. Zürich: Rascher Verlag & Cie.
- Antonovsky, A. (1987). *Unraveling the mystery of health: How people manage stress and stay well*. San Francisco, CA: Jossey-Bass.
- Bannink, F.P. (2005). De kracht van oplossingsgerichte therapie: een vorm van gedragstherapie. *Gedragstherapie*, 38, 5-16.
- Battista, J., & Almond, R. (1973). The development of meaning in life. *Psychiatry*, 36, 409-427.
- Baumeister, R.F. (1991). *Meanings of life*. New York: Guildford Press
- Baumeister, R.F., & Muraven, M. (1996). Identity as adaptation to social, cultural, and historical context. *Journal of Adolescence*, 19, 405-416
- Baumeister, R.F., & Wilson, B. (1996). Life Stories and the Four Need for Meaning. *Psychological Inquiry*, 7(4), 322-325.
- Blackwell, S.E., Rius-Ottenheim, N., Schulte-van Maaren, Y.W., Carlier, I.V., Middelkoop, V.D., Zitman, F.G., et al., (2012). Optimism and mental imagery: A possible cognitive marker to promote wellbeing? *Psychiatrie Research*, 206(1), 56-61.
- Bloch, E. (1979). *Das Prinzip Hoffnung: Bd. 3*. Frankfurt am Main: Suhrkamp.
- Bode, C. (2003). *Individuality and relatedness in middle and late adulthood: A study of women and men in the Netherlands, East- and West-Germany*. Doctoral Dissertation, University of Nijmegen.
- Bohlmeijer, E.T. (2007). *De verhalen die we leven. Narratieve psychologie als methode. [The stories we live by. Narrative psychology as method]*. Amsterdam: Boom.
- Bohlmeijer, E. (2012). *Eudaimonia: voer voor psychologen. Pleidooi voor een heroriëntatie van de geestelijke gezondheidszorg*. Enschede: Universiteit Twente
- Bohlmeijer, E., Bolier, L., Westerhof, G.J., & Walburg, J. (2013). *Handboek positieve psychologie: Theorie, onderzoek en toepassingen*. Amsterdam: Boom.
- Bruner, J.S. (1990). *Acts of Meaning*. Cambridge (MA): Harvard University Press.
- Chiu, F.C. (2012). Fit between future thinking and future orientation on creative imagination. *Thinking Skills and Creativity*, 7(3), 234-244.
- Crumbaugh, J.C., & Maholick, L.T. (1964). An experimental study in existentialism: the psychometric approach to Frankl's concept of noögenic neurosis. *Journal of Clinical Psychology*, 20, 200-207.
- Dittmann-Kohli, F. (1995). Das persönliche Sinnsystem. Ein Vergleich zwischen frühem und spätem Erwachsenenalter. Göttingen: Hogrefe.

- Dittmann-Kohli, F., & Westerhof, G.J. (2000). The personal meaning system in a life span perspective. In G.T. Reker & K. Chamberlain (Eds.), *Exploring existential meaning: Optimizing human development across the life span* (pp. 107-123). Thousand oaks, CA: Sage Publications Ltd.
- Fife, B.L. (1995). The measurement of meaning in illness. *Social Science and Medicine*, 40, 1021-1028.
- Frankl, V. (1978). *De zin van het bestaan*. Rotterdam: Ad Donker
- Harlow, L.L., Newcomb, M.D., & Bentler, P.M. (1986). Depression, self-derogation, substanceuse, and suicide ideation: Lack of purpose in life as a meditational factor. *Journal of Clinical Psychology*, 42, 5-21
- Hayes, S.C., Louma, J.B., Bond, F.W., Masuda, A., & Lillis, J. (2006). Acceptance and commitment therapy: model, processes and outcomes. *Behaviour Research and Therapy*, 44, 1-25.
- Keyes, C.L.M. (2002). The Mental Health Continuum: From Languishing to Flourishing in Life; *Journal of health and Social Research*, 43, 207-222
- Kuin, Y., & Westerhof, G.J. (2007). Zingeving. In A.M. Pot, Y. Kuin & M.T. Vink (Eds.), *Handboek Ouderenpsychologie* (pp.175-190). Utrecht: Tjdstroom
- Leget, C.J.W. (2013). *Zorg om betekenis: over de relatie tussen zorgethiek en spirituele zorg, in het bijzonder in de palliatieve zorg*. Humanistics University Press.
- McAdams, D. P. (1993). *The stories we live by: Personal myths and the making of the self*. Morrow (NY): Guilford Press.
- McAdams, D.P. (1997). The case for unity in the (post)modern self: A modest proposal. In R.D. Ashmore & L.J. Jussim (Eds.), *Self and identity: Fundamental issues* (pp.46-78). New York, NY: Oxford University Press.
- McAdams, D.P. (2008). American Identity: The Redemptive Self. *General Psychologist*, 43, 20-27.
- Melges, F.T. (1972), Future oriented psychotherapy. *American Journal of Psychotherapy*, 26(1), 22-33.
- Melges, F.T. (1982). *Time and the inner future: A temporal approach to psychiatric disorders*. John Wiley & Sons.
- Pinquart, M. (2002). Creating and maintaining purpose in life in old age: A meta-analysis. *Ageing International*, 27, 90-114.
- Polkinghorne, D. (1988). *Narrative Knowing and the Human Sciences*. Albany (NY): State University of New York Press.
- Preen, D. (2013). *Hoe tikt jouw klok?: Een exploratief onderzoek naar de tijdsbeleving in narratieve toekomstverbeelding aan de hand van toekomstbrieven bij mensen met een psychiatrische achtergrond*. Universiteit Twente, Enschede.
- Reker, G.T. (2000). Theoretical perspective, dimensions, and measurement of existential meaning. In Reker, G.T. & Chamberlain, K. (Eds.), *Exploring existential meaning: Optimizing human development across the life span*, (pp.39-58). Thousand Oaks, CA: Sage

- Reker, G.T., & Wong, P.T.P. (1987). Aging as an individual process: Toward a theory of personal meaning. In J.E. Birren & V.L. Bengtson (Eds.), *Emergent theories of aging* (pp. 214-246). New York: Springer
- Ryff, C.D., & Singer, B. (2008). The contours of positive human health. *Psychological Inquiry*, 9, 1-28.
- Selm, M. van, & Dittmann-Kohli, F. (1998). *Meaninglessness in the second half of life*. Nijmegen: Uitgeverij KU Nijmegen.
- Simons, J., Vansteenkiste, M., Lens, W., & Lacante, M. (2004). Placing motivation and future time perspective theory in a temporal perspective. *Educational Psychology Review*, 16 (2), 121-139.
- Singer, J.A. (2004). Narrative identity and meaning-making across the adult lifespan: An introduction. *Journal of Personality*, 72, 437-459.
- Sools, A., & Mooren, J.H. (2012). Towards Narrative Futuring in Psychology: Becoming Resilient by Imagining the Future. *Graduate Journal of Social Science*, 9 (2), 203-226.
- Sools, A., Mooren, J. H., & Tromp, T. (2013). Positieve gezondheid versterken via narratieve toekomstverbeelding. In E. Bohlmeijer, L. Bolier, G. Westerhof, & J. A. Walburg (Eds.), *Handboek positieve psychologie. Theorie, onderzoek en toepassingen* (pp. 91-103). Amsterdam: Boom.
- Sools, A. M., Tromp, T., & Mooren, J. H. (2015). Mapping letters from the future: Exploring narrative processes of imagining the future. *Journal of health psychology*, 20(3), 350-364.
- Stillman, T.F., & Baumeister, R.F. (2009). Uncertainty, Belongingness, and Four Needs for Meaning. *Psychological Inquiry*. doi:10.1080/10478400903333544
- Suddendorf, T. & Corballis, M.C. (2007). The evolution of foresight: What is metal time travel, and is it unique to humans? *Behavioural and Brain Sciences*, 30 (3), 299-312.
- Vincent, J.P., Boddana, P., & MacLeod, A.K. (2004). Positive life Goals and Plans in parassuicide. *Clinical Psychology and Psychotherapy*, 11, 90-99.
- Waisberg, J.L., & Porter, J.E. (1994). Purpose in life and outcome of treatment for alcohol dependence. *British Journal of Clinical Psychology*, 33, 49-63.
- Westerhof, G.J. (2010). 'During my life so much has changed that it looks like a new world to me': A narrative perspective on identity formation in times of cultural change. *Journal of Aging Studies*, 24, 12-19.
- Westerhof, G.J., & Bohlmeijer, E.T. (2010). *Psychologie van de levenskunst*. Amsterdam: Boom
- Westerhof, G.J., & Kuin, Y. (2008). Persoonlijke zingeving en ouderen: Een overzicht van theorie, empirie en praktijk. *Psyche en Geloof*, 18, 118-135.
- World Health Organization (2001). *The World Health report 2001. Mental Health: New Understanding. New Hope*. Geneva, World Health Organization.

Zock, H. (2006). Leven van verhalen. De narratieve benadering in psychologie en pastoraat”, in: Ad van Heeswijk etc, *Op verhaal komen*. Religieuze biografie en geestelijke gezondheid, Tilburg: KSGV, 2006, pp.78-88.



## 7. Appendix

---

### Appendix 1.: Instructions for writing a letter from the future

*Taken from:*

<http://lifestorylab.levensverhalenlab.nl/site/Life%20stories/Writing%20instructions/>

### Instructions for writing the letter

The following suggestions are tips which give you an idea about the meaning of the letter. Feel free to use these instructions as a basis for writing the letter your own way. We recommend that you invent names for yourself and others, to make sure the letter cannot be traced back to you personally. Please make sure not to mention real names of others in your letter, because we want to protect their privacy, too.

### Where and When?

Imagine that you are travelling in a time machine.

Imagine where and when you are in the future.

When: you decide how far you want to travel in the future; this may be an hour, a day, a week, or even years later.

Where: you decide where you are travelling to; for example: a place in a particular country; in space; at home or your garden; in the city or in nature; a crowded or a deserted place; a colorful or a dull place; a noisy or quiet place; etc.

### What?

Imagine that a few positive wishes, changes and dreams in your life came true.

Tell your story **of a specific day, a specific moment or a specific event in that it comes clear how you have solved the problem or have found a good way of dealing with it.**

Describe whatever was most useful in order to make this event happen and how you look back on your life.

Feel free to use your full imagination: Remember that it is about the future which hasn't occurred yet and that it's a chance to think about what could happen.

### To Whom?

You decide to whom you want to write the letter.

- To your present self (You then give a wise, happy or other positive message to yourself)
- To another person (for example: your child or grandchild, friends, the next generation, etc.)

The letter has a maximum of 400 words.

Tip: First write the letter in Word and then copy/paste it on the site (to make sure that you do not accidentally lose your nicely written letter!).