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The sense of coherence in imagined future narratives:

A qualitative analysis

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Abstract

Introduction. Many studies stress the importance of the sense of coherence (SOC) as they present evidence that viewing the world as *coherent* − manageable, comprehensible and meaningful - benefits mental health and quality of life through promoting coping strategies, decreasing anxiety, depressive symptoms and increasing life satisfaction. As the SOC is known to be a protective factor for mental health and little is known about its determinants, it presents a concept that requires further exploration in order to improve mental health promotion. A future-oriented outlook and an anticipation of the future concerning all three components comprehensibility, manageability and meaningfulness are inherent features of the SOC. As a result, enhancing the SOC requires the ability to imagine the own future. One concept that was introduced lately is *narrative futuring*. This concept is characterized by the imagination of an ideal future by means of storytelling. A narrative futuring practice appears to be a suitable tool in order to assess the SOC while incorporating a future-oriented approach. This study aims to explore which global orientation in terms of the components of the SOC is brought to the task of narrative futuring and in which individual ways the future is imagined.

Method. 53 letters from the future, written by social workers in the context of a narrative futuring workshop in the UK, are analyzed qualitatively in reference to the components of the SOC. The utterances are rated with regard to the quantity of their occurrence as well as their level of reference. Additionally, general characteristics are estimated and any salient findings that seem relevant in order to assess the SOC and the future narratives appropriately are coded and regarded within the results. Finally, the emerging narrative styles in which the participants approach the future are carved out.

Results. All of the analyzed letters display at least one component of SOC. Among the three components, manageability accounts for the strongest appearance, followed by comprehensibility and finally meaningfulness. Throughout the letters a variation was found concerning the level of reference and different patterns of order and style emerged.

Conclusion and discussion. The participants seemed fully capable of imagining an ideal future. The results reveal that components of the SOC take a crucial role in imagined and ideal future narratives. Narrative futuring seems to be a useful tool to reflect on one's own SOC while covering and satisfying a wide range of individual differences among participants. Not only offers it the possibility to assess the components of the SOC in broader terms. Due to the reflective nature of the task, the SOC might even be enhanced, as reflective processes are considered to be strengthening factors of the SOC.

Samenvatting

Inleiding. Een groot aantal studies onderstrepen het belang van de sense of coherence (SOC) door aan te tonen dat het beschouwen van de wereld als coherent – manageable, comprehensible en meaningful – een positief effect heeft op mentale gezondheid en kwaliteit van leven door het verbeteren van coping strategieën, verminderen van angst, depressieve symptomen en het verhogen van levenstevredenheid. De SOC wordt dus beschouwd als een beschermend factor voor mentale gezondheid, maar is er weinig bekend over de determinanten. Vandaar is een verdere exploratie van de SOC vereist om mentale gezondheid te kunnen bevorderen. Een toekomst-gerichte uitkijk en een anticipatie van de toekomst zijn inherente karakteristieken van de SOC. Het verhogen van de SOC vereist dus de capaciteit om de eigen toekomst te kunnen verbeelden. Het concept narratieve toekomstverbeelding houdt de imaginatie van een ideale toekomst met behulp van verhalen in. Een oefening uit de narratieve toekomstverbeelding zou een geschikt instrument kunnen zijn om de SOC te exploreren en tegelijkertijd een toekomst-gerichte aanpak te integreren. Deze studie onderzoekt zowel de globale oriëntatie in termen van de SOC, die gebruikt wordt om een toekomst te verbeelden en op welke manier deze toekomst wordt omschreven.

Methode. 53 brieven vanuit de toekomst, die geschreven zijn van hulpverleners in de context van een narratieve toekomstverbeelding workshop in de UK, worden kwalitatief geanalyseerd met betrekking tot de drie componenten van de SOC. De uitspraken worden geclassificeerd aan de hand van hun kwantiteit en level van referentie. Additioneel worden algemene karakteristieken van de brieven onderzocht en er wordt rekening gehouden met opvallende bevindingen. Tot slot worden de te voorschijn komende narratieve stijlen van toekomstbenadering uitgewerkt.

Resultaten. Alle geanalyseerde brieven laten ten minste een component van de SOC zien. Hierbij is de component manageability het vaakst aanwezig, gevolgd van comprehensibility en uiteindelijk meaningfulness. Verder werd een grote variatie gevonden wat betreft zowel het level van referentie als de verschillende patronen van stil en volgorde.

Conclusie en discussie. De participanten bleken volledig in staat om een ideale toekomst te verbeelden. De resultaten tonen aan dat de componenten van de SOC een belangrijke rol innemen wat betreft de narratieve imaginatie van een ideale toekomst. Narratieve toekomstverbeelding blijkt een nuttig instrument te zijn om op de eigen SOC te reflecteren en voldoet tegelijkertijd aan een grote variatie van individuele verschillen in stijl. Niet alleen maakt het de exploratie van de SOC mogelijk, maar bevordert mogelijk de SOC door zijn reflexieve processen, die beschouwd worden als versterkende factoren.

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1. Introduction

Exploring the appearance of the sense of coherence in imagined, specific and ideal future scenarios offers the possibility to investigate how people cope with upcoming critical life events in future scenarios. Not only the strength of the sense of coherence determines the ability to cope with critical life events successfully, also *resilience* prepares the individual for these events or upcoming problems. Between the concepts of resilience, sense of coherence, hardiness, purpose in life, and self-transcendence, theoretical and empirical overlaps have been found, which are regarded as inner strength (Lundman et al., 2010). As Almedom et al. (2007) utilized the sense of coherence in order to assess resilience in quantitative terms, the sense of coherence (scale) may be regarded to as an operationalization of resilience. Although n*arrative futuring* is considered a health promotion instrument aiming at fostering resilience, research on its effects is still lacking. An exploration of the sense of coherence within future narratives could shed light on resilience, coping and the role and process of narrative futuring.

1.1. The Sense of Coherence

The sense of coherence is a recent concept finding its place in the salutogenic theory. This new approach stresses the importance of expanding well-being and mobilizing resources for health further, beyond the absence of illness. It represents a shift from the dominating illness oriented and narrow medical, pathogenic approach to an integration of the health oriented, salutogenic approach. The salutogenic theory was developed by Aaron Antonovsky in the late 1970's, as he established interest in health fostering factors and well-being among holocaust survivors. His theory forms a response to pathogenic theory and has brought "revolutionary changes" concerning the study on health, as now the idea of health also includes resources that are to be mobilized in the individual (Rivera et al., 2013). More recently, the salutogenic approach was utilized as a theoretical framework including various concepts from different disciplines to be introduced as a model for health-promoting interventions (Eriksson and Lindström, 2006, 2008). One central concept in the salutogenic approach is the sense of coherence, which is considered a salutogenic disposition and determines the characteristics that are necessary in order to cope with critical life events successfully (Antonovsky, 1987).

Not only Antonovsky's statement, as stressed in the systematic review by Eriksson and Lindström (2005), emphasizes that the way people view their lives and essence of existence has a crucial impact on mental health. Nowadays, many studies support the importance of the sense of coherence (SOC) as they present evidence that viewing the world as *coherent –* manageable, comprehensible and meaningful - benefits mental health and quality of life through promoting coping strategies, decreasing as well anxiety as depressive symptoms and

increasing life satisfaction (Hannöver et al., 2004). How these effects are obtained is not yet clarified, as research on SOC-promoting factors is not sufficient (Rivera et al., 2013). The sense of coherence became prominent in several fields as sociology, medicine, psychology and public health through the rise of the salutogenic theory (Rivera et al., 2013). It can be described as a global orientation concerning the world and the individual environment (Eriksson & Lindström, 2005). The sense of coherence implies viewing the world as coherent in general rather than depending on a specific situation or a given context (Almedom et al., 2007). The focus lays on the question raised by Antonovsky of how people are able to manage stress effectively and stay well at the same time. The assumption is that the sense of coherence plays a crucial role concerning this question (Antonovsky, 1984).

The sense of coherence encompasses three interrelated yet distinct components, called comprehensibility, manageability and meaningfulness (Eriksson & Lindström, 2005; Antonovsky, 1987). These components are described as follows: *Comprehensibility* is the cognitive component, which reflects 'the extent to which one perceives the stimuli that confront one, deriving from the internal and external environments, as making cognitive sense, as information that is ordered, consistent, structured, and clear, rather than as noise – chaotic, disordered, random, accidental, inexplicable'; the instrumental component *manageability* can be described as 'the extent to which one perceives that resources are at one's disposal which are adequate to meet the demands posed by the stimuli that bombard one' and the motivational component *meaningfulness* expresses 'the extent to which one feels that life makes sense emotionally, that at least some of the problems and demands posed by living are worth investing energy in, are worthy of commitment and engagement, are challenges that are ''welcome'' rather than burdens that one would much rather do without,' (Antonovsky, 1987). According to Antonovsky (1987, 1993) each component viewed individually seems insufficient and therefore a holistic view on the sense of coherence encompassing all components is relevant.

Antonovsky (1987) originally viewed the sense of coherence as a rather stable feature, which remains relatively constant after the age of 30 years. Although a number of studies confirm this assumption as stated by Eriksson and Lindström (2005), some studies support the idea that the sense of coherence indeed can be modified. Super et al. (2015) propose empowerment as well as reflective processes to have the ability to strengthen the sense of coherence through fostering the understanding of a stressful situation as well as an identification of available resources. Furthermore, Lambert et al. (2009) found an association between gratitude and an increased sense of coherence through the process of positive

reframing. Streb, Häller and Michael (2014) showed that increasing resilience, and particularly the sense of coherence seem to be promising in reducing posttraumatic stress disorder (PTSD) symptom severity among high risk individuals. Consequently, the sense of coherence seems to be modifiable. As the sense of coherence is known to be a protective factor for mental health and little is known about its determinants (Lambert et al., 2009), it presents a concept that requires further exploration in order to identify fostering factors and improve mental health promotion.

1.2. The role of narrative psychology and futuring

Although not explicated in salutogenic theory, a future-oriented outlook and an anticipation of the future concerning all three components comprehensibility, manageability and meaningfulness arguably are inherent features of the sense of coherence. A future orientation high in terms of the sense of coherence is characterized by a feeling of meaning and purpose concerning the personal life in the future as well as considering activities in the future as rather fascinating than boring. Furthermore, it is marked by a deep trust in the fact that there will be a supportive social surrounding and friends to count on available to the individual in the future. Finally, a feeling of certainty and consistency concerning what will happen in the future is a feature of an orientation that is high in terms of the sense of coherence. As a result, enhancing a sense of coherence requires the ability to imagine the own future in the ways that are mentioned above. Mental flexibility is promoted when an individual is capable of imagining the future (Lombardo, 2006), whereas the inability is often associated with not only the symptomatology (Sools, Tromp & Mooren, 2015), but also with the development of depression (Korn et al., 2014). For this reason, the ability to imagine the future should be on behalf of health promotion. As behavior is strongly shaped by future expectations (Adler, 2012), research aiming at explaining these effects is recommended. Although the sense of coherence has been examined concerning various concepts as stressed by Almedom et al. (2007) such as mortality, quality of life and health, studies on the sense of coherence incorporating a future-oriented time perspective are lacking so far.

One concept that was introduced lately and may offer the opportunity of a future-oriented research on the sense of coherence is *narrative futuring*. According to Sools and Mooren (2012), this concept is characterized by the imagination of an ideal future by means of storytelling. It represents "the future-oriented counterpart of life-review" with the ability of enhancing encouragement and reflection on life (Sools, Tromp & Mooren, 2015). Furthermore, narrative futuring is considered to bear motivating and organizing effects concerning the world we live in (Sools & Mooren, 2012), which may support the surrounding

world to appear more *comprehensible* and *manageable* in terms of the sense of coherence. Narrative futuring aims at fostering *resilience* (Sools & Mooren, 2012), which prepares the individual for critical life events or upcoming problems, therefore resembling the concept of the sense of coherence strongly. Resilience represents "a dynamic process of maintaining positive adaptation and effective coping strategies in the face of adversity" (Allen et al., 2011). A variety of research on resilience has been conducted, thereby identifying factors of influence summarized by Randall et al. (2015) as physical health, regulation of emotion, the educational level, mental fitness, personality traits, social networks, and cultural or spiritual resources. Despite the great amount of research, Randall et al. (2015) emphasize "the *narrative* factors that may also feed resilience" and therefore may be of importance concerning the research on resilience. The assumption is that narratives display a specific form, characteristic or way, which is consistent with the individual range of resilience of the writer (Kenyon, Bohlmeijer & Randall, 2010) conferred to as the *'grammar of resilience'* (Ramsey & Blieszner, 2013). Consequently, this raises the question if the strongly resembling concept of the sense of coherence may be approached in a similar manner. A final notion that associates successful coping with futuring is the concept of *possible selves*: Possible selves represent self-images of the individual in the future and determine the path of development. By integrating stressful life events into the possible selves repertoire, coping can be enhanced (Barreto & Frazier, 2012).

A narrative futuring practice is the task of writing a "letter from the future", which originally forms a part of a course directed at promoting resilience (Bohlmeijer, 2007). The main task is the imagination of an ideal future, which can be viewed as a critical life event that has to be anticipated and reflected on. Sools, Tromp and Mooren (2015) refer to the "letter from the future" as a prospective reflection instrument. This practice could turn out to be a challenge for the individual. By being confronted with the task of writing a letter from a point in a desired and idealistic future that seems remarkably distinct from the present situation, the individual is not only required to be able to imagine a future, but further to anticipate this "critical life event" and the own role or the individual way to "cope" with the given scenario. Viewed in this light, the practice "letter from the future" appears to be a suitable tool in order to assess the sense of coherence while incorporating a future-oriented approach. Furthermore, exploring the structure in terms of order and style of the narratives arguably adds clarity concerning not only coping, but the individual manner of approaching an ideal future.

From a narrative psychologist's point of view, storytelling could offer a possibility to study the sense of coherence for various reasons: Storytelling is considered as constitutive of identity (McAdams, 2001), especially when confronted with critical life issues or in the face of problems (Bohlmeijer, 2007). This process of identity construction might be manifested through components of the sense of coherence present in the story. According to Bruner (1990), storytelling is also known to have the ability to give meaning to life. As one component of the sense of coherence is meaningfulness, research aiming at exploring the appearance of meaningfulness related utterances within the story is plausible. Regarding the notion expressed by Adler (2012) that "personal narratives explain what a life means to the person living it; they reveal the ways in which the individual makes sense out of his or her experiences", one might expect that the narratives are also rich in terms of the component meaningfulness of the sense of coherence. *Agency* is a theme, said to have one of the strongest appearances throughout life stories (Adler, 2012) and shares commonalities with as well meaningfulness as manageability as comprehensibility, all three components of the sense of coherence. The theme of agency is bounded to an individual sense of meaning and purpose by particularly addressing the autonomy of the individual, as well as achievement, mastery, and the individual ability to influence the course of life (Adler, 2012). In this respect, not only meaningfulness in terms of sensemaking is an aspect of agency, but manageability seems also of strong presence within the concept of agency. Comprehensibility is reflected by the aspect of establishing and having a purpose in life, which again finds its place within the theme of agency. As a result, agency builds a strong argument for the exploration of the sense of coherence within narratives.

1.3.   Research questions

Taking the future-oriented approach to research on the sense of coherence, the raising questions are if the individual is able to imagine an ideal future and perceives it as comprehensible, manageable and meaningful and therefore whether a high SOC orientation can be associated with narrative futuring. As narrative futuring is a recent concept, sufficient research in this field of interest is still lacking. Although the sense of coherence has been investigated concerning a variety of theories and concepts (Almedom et al., 2007), neither have its determinants been explored sufficiently (Lambert et al., 2009), nor has research on the sense of coherence taken a future-oriented approach. The aim of this qualitative study is to explore the individual occurrence of components of the sense of coherence in narratives of imagined and ideal future scenarios. The case study used for this research endeavor involved imagining a future that is marked by a world in freedom, nonviolence, without a monetary

system, but life in abundance. This highly idealistic imagined future was created by social workers and narratively expressed in form of a letter on paper during the workshop *The Future Now Experience*. The produced narratives form the objects of analysis in this study. The analysis is partly based on the items of the SOC-scale developed by Antonovsky (1979), but does not make use of them in a quantitative manner. This study focuses on the qualitative analysis of the occurrence of the three components and its intensity in the narratives. By this means, the aim is to explore if and how a sense of coherence plays a role in the imagination of an ideal future.

The aim of this study it to gain insight in the relationship between the sense of coherence and narrative futuring. This knowledge could lead to new ideas on how to use the sense of coherence to guide narrative futuring practice, or the other way around to use narrative futuring to enhance the sense of coherence. On a practical level, ideas on optimizing instructions concerning narrative futuring workshops might be derived. As narrative futuring may exert a positive effect on mental health, the question arises through which mechanisms this effect is obtained. The assumption is that the individual imagines the ideal future in a manner that is strongly marked by a sense of coherence. To allow for an analysis that includes the individual forms of approach not only in terms of the sense of coherence, an investigation of the structure of the narratives, expressed through order and style, may be contributing.

In order to explore the above mentioned ideas and assumptions, the following research questions are formulated:

1)   Which global orientation, as expressed in the three components of the sense of coherence, do social workers in the UK bring to the task of imagining an ideal future?

2)   How do social workers in the UK imagine and express an ideal future?

2. Method

2.1. The workshop the FutureNow Experience

The written data was obtained during a workshop that is narrative based: The FutureNow Experience was conducted on the November 20, 2015 at a "Festival of Community Psychology: Creativity, Collaboration and Community" located in Manchester, UK. The workshop took place at the beginning of the first day of the festival and had a total duration of one hour. The research has been approved by the ethics committee of the faculty of behavioural sciences. The participation in the workshop was voluntary. The aim of this workshop is to foster the imagination of an ideal future on the individual and the community level. Originally, the assignment of writing a letter from the future formed a section of a course aiming at nurturing resilience (Bohlmeijer, 2007).

Participants. Approximately 70 - 80 persons took part in the sessions. The persons visiting the community psychology festival predominantly share the same field of work, as most of them were community psychologists themselves. Other visitors share at least the interest in this field, therefore most participants were familiar with psychology and/or highly educated. The age of the participants varied from 18 to about 70 years. Furthermore, both men and women attended the workshop with slightly more women than men. Most of them were English, some were Spanish. Among the participants, no information about mental or physical illness is known.

Procedure. A few days in advance of the festival the visitors received an email with information about the workshop and contact details of the researchers. Additionally and before partaking in the workshop they were provided with handouts containing further information. As a result, an informed consent seemed obsolete.

The task of imagining an ideal future should be realized with the help of a letter from the future that is to be written by the participant right after a short introductory mindfulness practice given by the instructor. The first task of writing the letter involves materials like the letter paper, pens and carbon paper, which is attached to the letter paper beforehand the festival in order to give the participant the choice to take the letter home and still use the written data for research purposes. The participant has the option to address the letter towards the self or any other person. Furthermore, it is in the decision of the participant from which point in the future the letter is written. The participant's task is to write the letter about a future, in which all wishes and desires have become real. The timeframe for this task is 15 to 20 minutes. The instructor adds four prescribed conditions to the task: The imagined future is marked by 1) living a life in abundance, 2) a world in freedom, where there are no masters

and no slaves, and in 3) peace and nonviolence, finally the world has also 4) no monetary system anymore. These particular conditions were added, because of the central topics of the festival: Creativity, collaboration and community. Finally, red dot stickers should be provided to enable the participants to mark products, which are not intended to be objects of research. The letters produced within this workshop are the objects of analysis in this study. Moreover, the data is handled in a confidential manner and processed anonymously.

2.2.   Analysis

In this study, the future narratives derived from the workshop the *FutureNowExperience* are thematically and qualitatively analyzed in reference to the three components of the sense of coherence. This is done with the help of the items used in the Sense of Coherence scale developed by Antonovsky explained in the next paragraph. Moreover, a structural analysis is conducted in order to explore, how the social workers imagine and express the ideal future.

Objects of the qualitative analysis were 53 letters of a total amount of 63 letters. As four letters were composed in the Spanish language and six letters were undecipherable, they were excluded from analysis. As some letters were grammatically incorrect or not adequate concerning the wording, it seems that these letters were composed by non-native speakers. The letters nevertheless appeared to be fully understandable, therefore they were not excluded from analysis.

2.2.1. The Sense of Coherence Scale

To investigate the sense of coherence Antonovsky originally developed the sense of coherence (SOC) scale, which is also known as the Orientation to Life Questionnaire, by analyzing interviews of survivors of the holocaust (Antonovsky, 1979, 1987). The SOC-scale consists of 29 items, which are to be scored on a seven-point semantic differential Likert-scale and is utilized in many subjects of research as coping with ageing and unemployment or retirement, serious terminal illness and other critical life events across culture and language (Almedom et al., 2007). The wide range of usage and several psychometric studies on the scale have proven the satisfying reliability and validity of the scale (Eriksson & Lindström 2005; Langius-Eklöf & Samuelsson 2009; Rivera et al., 2013). The Sense of Coherence scale serves as a tool for the analysis in this study. The definitions of the themes of analysis are based on the items used in the Sense of Coherence Scale.

2.2.2. Themes

The three components of the sense of coherence are generally coded, when the items from the SOC-scale (see Appendix for reference) are uttered in the narratives or when the utterance overlaps with the definitions of the components given by Antonovsky as stated in the

introduction of this paper (see p. 5 for reference). As these definitions given by Antonovsky are of abstract character and the manner of coding should be as replicable as possible to enable respectable interrater reliability, the themes and the manner of coding are explained in more detail and with examples in the following paragraph.

Comprehensibility (+) is coded when a statement or advice is uttered that expresses a perception of the internal or external world as being ordered, consistent, structured, explicable or clear. This can be found in the expression of feeling understood by other persons or knowing persons and their behavior very well, sometimes even to the extent that actions of others can be foreseen or estimated. It can also be uttered through an overall impression of the world as being consistent or clear. Comprehensibility also refers to the perception of situations the writer encounters as familiar or explicable and knows what to do in the given moment or when facing a difficult problem where the answer seems to be completely clear to the writer. Comprehensibility also applies concerning the perception of feelings or ideas of the writer to be consistent, clear and have a right to exist. An example that expresses comprehensibility is thus *"We will reach a point in history soon when it will not be possible to sustain the planet and life unless we change everything about the way we consume and treat each other. It will come when we least expect it"*.

Comprehensibility is coded with a (+), when the expression points into the direction of consistency, whereas comprehensibility is coded with a (-), when the opposite is expressed, as confusion, mixed feelings or the idea of being misunderstood by surrounding individuals.

Manageability (+) refers to the perception of resources being available to the individual in order to meet the demands of life at any given moment. Manageability encompasses the confidence of satisfying the requirements of everyday life in cooperation with other individuals. In other words, manageability reflects the perception of trustworthiness and loyalty of the persons surrounding the writer and with whom he collaborates and counts on in a given life situation. Furthermore, viewing the world in a way that is marked by acceptance of unpleasant or even painful events as a part of life, as well as a feeling that displays confidence concerning problem-solving are aspects of manageability. An overall impression of being treated fairly by the surrounding world and a deep trust in a good world and in the own capabilities with regard to facing difficulties and keeping control are coded as parts of manageability. Examples are *"A better life for the future is achievable"* or *"If you need anything, just ask the first person you meet"*.

Manageability is coded with a (+) in case the utterance displays a tendency towards trust in a good world with its individuals and the idea of being treated fairly by the surrounding. High

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manageability is marked by a confidence in the means the individual receives from this world in order to cope appropriately with the demands of life. Mistrust or disappointment by fellow human beings or a feeling of being punished by the world and a general negative outlook on the own luck and the ability to face difficulties in an effective way are indicators to code manageability with a (-).

Meaningfulness (+) refers to the individual's feeling and belief of life to make sense in an emotional way and to the extent that problems and demands can be seen worth the energy to be invested in order to maintain life. This theme is all about sense-making of the individual itself, its life with related activities and the surrounding world. Meaningfulness is coded, when an utterance displays a feeling of interest in and caring about what is going on around the individual and life in general. Furthermore, to the individual life seems to have clear goals and purpose and a feeling of endorsement is nurtured when thinking of the own existence and place in the world. Considering the world as fascinating and finding pleasure in daily activities and projects are features of meaningfulness, as well as regarding those activities in general as meaningful. An Example that displays an utterance of meaningfulness is *"Life has changed, and I am in a happy place, looking forward, excited to see the new you tomorrow."*

All written expressions, uttered in the form of a statement or an advice and pointing into the direction of meaningfulness rather than meaninglessness concerning activities, surrounding world or the own existence are coded with a (+). Coding a statement with a (-) is indicated when life is considered as completely routine, activities seem boring and painful or when interest in the surrounding clearly lacks or the own existence is questioned by the writer.

2.2.3. Steps of analysis

The steps of analysis are taken as follows:

1) At first, the general characteristics as average length, usual contents and addressing are estimated in order to enable the interpretation of results to be contextual and as appropriate as possible.

2) With regard to the definitions of the three components of the sense of coherence and their dispositions (+) or (-), all utterances that fit these definitions are selected, coded and ascribed to the concepts in the same manner. This is done for each letter separately. The coded utterances may vary in length from one up to three sentences, if all sentences refer to the same component with either the (+) disposition or the (-) disposition. Approximately 90 % of the text fragments in the future narratives were coded in this manner.

3) As the next step, each expression of a component is rated according a rating system explained later in this section. The utterances are rated with regard to the quantity of their occurrence as well as their level of reference and are further provided with a sequential number. For a detailed overview of the manner of coding and rating them according their occurrence, sequence and level of reference, see table 1.

4) Any salient utterances or findings that seem relevant in order to assess the sense of coherence and the future narratives appropriately are coded and regarded within the results.

5) Additionally, a subjective evaluation and differentiation between the emerging styles of writing the letters is given in order to approach the individual way in which the task is accomplished. Finally, recurring patterns throughout the letters are collected and described. These patterns may involve the recurring mention of a specific topic throughout the letters or a typical order in which the information is presented.

Table 1

Coding scheme with an example of coding of one letter

Comprehensibility				Manageability				Meaningfulness			
(+)		(-)		(+)		(-)		(+)		(-)	
Occ.	level	Occ.	level	Occ.	level	Occ.	level	Occ.	level	Occ.	Ref.
2	1			1	1						
				3	1						
				4	1						

2.2.4. Rating method

In order to further specify the components of the sense of coherence within the written future scenario, a rating system was incorporated in the analysis. The expression was on the one hand rated by the quantity of its occurrence and on the other hand rated concerning its level of reference. The level of reference was incorporated, as the topics of the workshop stressed collaboration and community. By means of rating the statements according its reference, the possibility was given to distinguish between an individual sense of coherence and a community sense of coherence within the narratives.

If the mentioned component concerns the external world as for example statements including "you", "the people", "they" or "humanity" or is stated as a factual description, like "Food is plentiful." or as an advice "Fight for your dreams" it refers to the first level and is rated accordingly with a (1). In the case that the narrative is explicitly directed to the writer

himself, as for example through the addressee "dear past me", statements that include the word "you" concern in content the individual and are therefore assigned to level (2). A rating of level (2) is appropriate, when the component is uttered in reference to the writer on a personal, individual level. Examples are statements including "I", "for me", "to myself" or "my life". If the component is uttered on a community based level and expressions concern the surrounding world including the writer, the component is rated with a (3). Statements including words like "we" and "our" are examples. For an overview of the three levels, see table 2.

Table 2

Scale of levels

Level	Reference	Example statements
(1)	Referring to external world	They; the people; humanity; imperative sentence
(2)	Referring to the person/individual	I; for me; to myself; something "feels"
(3)	Referring to the community/external world including the person/individual	We; our

3. Results

3.1. General characteristics of the letters

Of the analyzed letters 48 letters were composed including a salutation or a notion about the recipient of the letter, whereas five letters appeared to be shapeless concerning these aspects. The most commonly used addressee was the person self, a friend or family member as children or parents of the participant, some narratives were also directed at the whole community, named citizens or to the past in general without referring to specific persons. Almost all letters involved a description of the future to some point. Additionally, in many narratives a description of the participant's daily life encompassing specific activities in the future could be found. The first impression of the letters indicates a hopeful and pleasurable character concerning the realization of the anticipated future. The length of the letters varied from 61 words up to 433 words per letter. Most of the letters appeared to count 100 to 200 words.

3.2. The components

All of the analyzed letters display at least one component of the sense of coherence. Among the three components, manageability accounts with 122 times for the strongest appearance, comprehensibility is mentioned 102 times within the letters and meaningfulness is referred to 96 times. The (+) utterances and fragments outweigh the (-) components to a huge extent concerning all three components of the sense of coherence. When the (-) expression of a component was coded, often the next fragment included the mention of the same component in its (+) expression, confuting the former utterance. Moreover, all components were most frequently uttered on level (1), thus referring to the external world. Concerning the individual level (2) and the community level (3) the appearances varied. Throughout the letters, different manners of style emerged. Some of them were mainly composed on the community level, combining the self and the external world, others directed at the external world, without a deep reference to the own role in this world, some reflecting the internal world to a large proportion, only related to the person. However, mainly variations of the styles were found, levels varied per component or throughout the course of events outlined in the letters. For a detailed overview per letter, see Table 6 in the Appendix.

Comprehensibility. The (+) utterance of the component comprehensibility was found at least once in 49 letters, whereas the (-) utterance of this component was found in 11 letters. The component was mostly mentioned referring to the external world (1) of the participant, counting 50 times. Almost equivalent are level (2) and (3) of comprehensibility as level (2) occurs 27 times and level (3) 25 times throughout the letters. Up to 5 times per letter

comprehensibility could be found with an average of 1.84 in the (+) expression and 1.1 in the (-) expression. For an overview of the appearance of comprehensibility, see Table 3.

Manageability. Up to 8 times per letter the component manageability was found with an average of 2.33 in its (+) expression and 1.0 in the (-) expression. It appeared in 49 letters in its (+) utterance and the (-) utterance was found in 8 letters. Predominantly the component was expressed concerning the external world, as it corresponds to level (1) 56 times, followed by 48 times on the community level (3) and 18 times on the individual level (2). For an overview of the appearance of manageability, see Table 3.

Meaningfulness. Meaningfulness appeared in its (+) expression at least once in 46 letters with an average of 2.07, whereas its (-) expression was spotted in one letter. This component was mentioned up to 4 times per letter. Concerning the levels of reference, meaningfulness was 47 times rated as level (1), followed by 34 times for the individual level (2) and finally the community level (3) was rated 15 times. For an overview of the appearance of meaningfulness, see Table 3.

Table 3
Appearance of the three components in the future narratives

	Comprehensibility + / -	Manageability + / -	Meaningfulness + / -
Level 1	47 / 3	50 / 6	47 / 0
Level 2	18 / 9	17 / 1	33 / 1
Level 3	25 / 0	47 / 1	15 / 0
total	90 / 12	114 / 8	95 / 1

3.3.   Salient findings

During the phase of coding, some utterances seemed salient concerning the concept of the sense of coherence in imagined future scenarios. One example of such an utterance is *"No wars, no disagreements, but to be honest I sometimes miss a good heated discussion over a bottle of wine!"*. This utterance seems relevant, because it does not only imply components of the sense of coherence, but further puts them in relation to one another and entails a personal perception and evaluation of this relation on the part of the participant. One could argue that in terms of the three components, to this participant a rise in comprehensibility and manageability results in a decline of meaningfulness. In other words, although the world is more *structured and clear* as there are no disagreements between people anymore and humanity has *managed* to obtain peace, the participant now misses a former pleasurable (daily) activity in the shape of a discussion.

One central and often recurring theme throughout the letters is the concept of sharing. From sharing stories, sharing food, to literally sharing "everything" and feeling interconnected with the surrounding world, the concept of sharing was referred to 31 times throughout the letters. Often, sharing offered a solution to the writer or in other words, the possibility to realize the imagined ideal future, and sharing was seen as a non-neglectable component of this future, as for example in this statement *"Sharing is the principal way of thinking"*. Sharing was many times referred to as the *brigde* to the future, exemplified by these statements: *"People started sharing on a grand scale & this brought people together – I don't own my house, I share it in a co-operative with others. And I'm still a psychologist, but learning, helping & caring is a shared responsibility with other people."* or *"I think we need to share more & pod our recourses and our skills and talents so that everyone can feel valued and able to contribute."*. In one letter, even the identity seemed to be shared with the community through a feeling of interconnectedness, as exemplified here: *"Everything is in harmony. I'm in harmony with my surrounding the universe. If I can say 'I' because it doesn't feel as the 'I' being separate from the rest. There is connection with everything"*.

The way the component *manageability* manifested throughout the letters also seemed salient: the component was not only restricted to the feeling of being capable to meet the demands of life, but it reached further to higher aims such as making the world a better place, realizing "utopia", a better reality, or establishing and maintaining peace in the world, as exemplified here: *"So joyful and so motivated to see new experiences and it is great when the world fosters, nurtures these qualities in everyone, so that we all create and share a better reality."*. As a result, the participants felt responsible for not only their own life, friends and relatives, but for the welfare of the entire world. This is richly illustrated by this letter:

"Dear self,

You have reached your earth destination and purpose. You have strived so hard to get here and I want to acknowledge this part of you. You have created your future by being mindful of your thoughts and how they create intention. Within your life you have created abundance of every living thing by only taking what you need in life and leave things & food for others. This has created abundance for all – food – love - beauty for everyone. Everyone feels and knows they are accepted by each other. They know this because they can feel it and see it with your actions and interactions. It is a world of equality, where each person, animal, tree & flower are respected for what they are and bring to live – themselves. Their beauty shines through. This has created a world where no one/nothing feels oppressed or 'less than'

another. There is no power of superiority. It involves everyone working to gather for the good of all supporting each other and being aware of this.

You have created a world where money is not needed because people/animals/the environment just takes what is needed – nothing more.

There is abundance for all."

Another notion on the occurrence of manageability is that it was used on level (3), the community and interconnected level to a great extent. This finding emphasizes the assumption that meeting the demands of life is a responsibility of not only the individual, but also the surrounding community. Cooperation is therefore indirectly stressed as an important feature to bring the desired future into being, as for example in this statement *"People meet to make decisions about the ecovillage and we are all learning how to negotiate as amicably and respectfully as possible. This is not always easy but we try to help each other accommodate to our foibles."* or *"The development of the psyche, soul, heart (spiritual development) is seen of central importance and our whole society and global family is working towards this".*

The (-) utterances of the components manageability and meaningfulness mostly refer to the past or the time between past and future, the so called *bridge.* A typical example that displays a (-) statement concerning the bridge is *"The journey wasn't easy though! Difficulties many times persistently obstructed the path."* and an example concerning the past is *"I just wish I hadn't wasted the first years of my life worrying about money, finding a job and what world my kids are going to grow into".* In contrast to these findings, the (-) expressions of the component comprehensibility concerned the future world more often, as for example *"This future is beyond what I am able to imagine but I'm sure that the world will continue to evolve organically".*

3.4. Letter styles

Due to a vast number of variations in style and structure of the letters, a clear statement about one or more typical letter styles is hardly possible. To get an impression of the diversity and still gain insight in recurring patterns a couple of different styles are exemplified and covered in the following.

Order of components. One recurring pattern that could be identified was the appearance of the components somehow separated and logically organized block by block. After the opening line the example letter below displays the component comprehensibility in the first paragraph, describing the future world and its circumstances in comparison to the time before.

Then, in the second paragraph a shift to the component of manageability can be observed, expressing that these circumstances enable the individual to meet the demands of life and that the surrounding with all its people offers anything in order to do so. In the final paragraph, the component of meaningfulness appears through an advice given by the writer to enjoy and open the eyes to the beauty of the future world.

"Dear Newby,

I am happy you are here now.

Today we have plenty of time to get to know each other and we will meet people from the neighborhoods and far away. We can let time go, without any plan. As you know, till a few years ago people used to worry too much about work and money. They claimed to be free, but they ended up in their offices 10h/day, like chickens in the cages.

So, I won't tell you what you can do, because you can actually follow your true spirit. If you need anything, just ask the first person you meet.

Enjoy the biological exuberance that surrounds you, and feel free to take the ecological airplane to have a look to "our" beautiful planet from the sky.

Truly yours, [Name]"

Order of levels. In addition to an order of components, an order of levels also seemed to recur more often in a particular style. After the opening line, the first paragraph concentrates on a description of the external world on level one without involving the role of the self. After this paragraph the writer puts himself in this external world by describing his individual life and activities in the future world on level two. As a result, he continues with a sentence on the community level three, where the self and the external world are combined within one statement *"We all teach each other something new every day"*. Afterwards, regret concerning the own behavior in the time before the imagined future is expressed on level two again.

"My dear cotravellers,

I wish you could all be here with me to experience what I live.

Everyone is free. They are in real touch with nature, themselves and others. There is so much love, happiness and creativity. No one complains about anything, as everyone leads a fulfilling life and feels content. Everyone produces their products and shares them with their neighbors. Everything is organic and healthy. There is no hostility or competition between people.

I myself live in a little house on the mountain and have a garden full of vegetables, fruits and beautiful flowers. I fetch wood in the winter to keep the fire going. I cook lovely food and invite people over – not just people I know, but mostly people I don't know, cause I feel connected with everyone around me. Every day I learn something new. I am involved in community projects where everyone takes part and contributes.
We all teach each other something new every day.
I just wish I hadn't wasted the first years of my life worrying about money, finding a job and what world my kids are going to grow into."

Descriptive style. Apart from particular orders concerning components of the sense of coherence and levels, different sorts of individual styles of writing also emerged throughout the analysis of the letters. The example below concentrates solely on a description of the future world without offering a resulting advice or an utterance concerning a feeling, an expression of gratitude, relief or any other kind of individual opinion. One could conclude this letter has a rather sober character, but still contains all components of the sense of coherence.

"To 2015 and all the people there,
In my year we have no technology and no need for security and hierarchy. We live in simple buildings with simple livings, living mainly of [...] around us. We share, and can travel to share but there is no need to undersell yourself and put yourself in difficult situations as everyone has enough. Everything that needs to be is high quality – time, food, shelter and space. People live with who they love and want to and everyone has a home. Buildings are no longer tall and made of glass, rather they are small – manageable structures the people maintain themselves. Trades like textiles, butchers are all local again and are paid a fair price through swapping goods. More animals are wild and therefore meat is free and not farmed. Art is expressed freely with love and all emotions from all ages & sexes."

Emotive style. In contrast to the sober and descriptive style, also letters displaying mainly emotions and individual opinions could be found. The letter below does not explicitly contain any description of the future world, but is directed inward and reflects inner thoughts, conflicts and feelings regarding life in the future world. Recurring concepts within this style are an expression of gratitude and relief.

"To you,
I once knew you every day, and although I still remember you, I am not there anymore.
I am me now, not you, and I am glad.

I was you, but not anymore. Life has changed, and I am in a happy place, looking forward, excited to see the new you tomorrow.

I keep this letter simple, a move away from the complex past, and wish you goodbye."

Metaphorical style. A character that was hardly found as a holistic style, but rather appeared fragmented in the letters is the appearance of metaphors and allegorical expressions. The letter below describes the bridge or the path to realize the desired future scenario with the help of an allegorical story. The writer does not explicitly give advice, describe the future world or share any opinion or feeling, but still the component manageability is a central theme of this letter.

"It was a time where people didn't want to hear on how their own inside conflicts so they provoke other people in some way to keep this secret safe, out of their mind, literally. Always was a perfect guilty out there that made this situation eternal. Provocation over provocation, was impossible to be in peace, there was always something inside everyone that move him to react against the badman. The badman was killed but there was a new killer. Until appeared a cut in the way.

A group from far away noticed that reaction change people for acting in the same way, like opening their eyes about what there was moving them. Their minds where open to understand their 'badman'. The badman kill all the group without defending of these. The badman thought about the meaning and wake up opening his eyes to his own difficulties and secrets. This was when the 'badman' started the revolution of peace."

4.   Conclusions and discussion

Overall, the participants seemed fully capable of writing about an ideal future while incorporating the given four conditions 1) life in abundance, 2) a world in freedom, where there are no masters and no slaves, 3) peace and nonviolence and 4) no monetary system in the imagination successfully. The results of this study reveal that components of the sense of coherence take a crucial role in imagined and ideal future narratives. Therefore, the first research question, of which global orientation in terms of the sense of coherence social workers in the UK bring to the task of imagining an ideal future, could be approached. The results indicate that the global orientation was rich in terms of the components of the sense of coherence comprehensibility, manageability and meaningfulness. The participants appeared to be approaching their ideal future as comprehensible, manageable and meaningful, while the emphasis on the components differed per narrative. The component manageability was present most often, followed by meaningfulness and finally comprehensibility. Another notion that is worth mentioning is that although the components are said to be highly interrelated (Antonovsky, 1987), the component manageability did not seem to require the component comprehensibility to be present. In contrast to the intuitive assumption that one first needs to understand the surrounding world in order to gain a feeling of being able to manage it, the results presented here seem to build the counterargument.

Due to the qualitative nature of this study, a SOC-score in quantitative terms could not be estimated per letter. However, as the narratives display a high density of the components and the sense of coherence is a prominent feature, the findings at least not contradict the assumption of Sools and Mooren (2012) that a high SOC-score enables the individual to imagine and construct an ideal future rather than a low SOC-score. Consequently, future research aiming at testing this assumption, is recommended to additionally incorporate the sense of coherence scale (Antonovsky, 1979, 1987) as a quantitative measure.

Concerning the second research question of how social workers in the UK imagine and express an ideal future, the results display a large variation in the level of reference, order and style. The participants made use of all levels of reference, while sometimes maintaining a specific order concerning the levels as well as the components of the sense of coherence. Furthermore, three types of styles among the narratives emerged throughout the analysis: The descriptive style, the emotive style and the metaphorical style. Although different styles could be found throughout the narratives, a presence of a sense of coherence remained relatively steady among them. As a result of this finding, a specific manner of approaching the future is not required for a sense of coherence to be present in the narratives. In short, there is no

specific style, which reflects the sense of coherence more strongly than another. As the three styles appear to be utterly different from one another and in its nature resembling different components of the sense of coherence, it is plausible to assume that they would also display particular patterns concerning the components of the sense of coherence. The *cognitive* component comprehensibility and the *instrumental* component manageability share for example more commonalities with the somber, descriptive style than does the *motivational* component meaningfulness. In the case of the component meaningfulness, as it takes the "emotional perspective" (Antonovsky, 1987, 1993), it might be more appropriate to occur within a narrative written in an emotive style, whereas within the metaphorical style it seems hardly possible for any component of the sense of coherence to occur. These assumptions are disconfirmed by the findings of this study, thereby leaving the freedom of anticipating an ideal future through any approach completely over to the individual. In addition, the emotive style reflects the concept of gratitude, thereby promoting the task of narrative futuring as an instrument suitable to enhance the sense of coherence, partly through the process mentioned by Lambert et al. (2009). Gratitude has been associated with an increase in terms of the sense of coherence. Whereas Lambert et al. (2009) attribute this increase to the process of *positive reframing*, the future-oriented nature of this study rather concerns what one would call *positive anticipation*. If an increase of the sense of coherence may also be obtained through a feeling of gratitude that is elicited by the process of positive anticipation demonstrates a health promotion concern and should therefore be on behalf of future research.

One recurring pattern was the presence of the component manageability on the community level (3). This finding stresses the community sense among the social workers and fits the topic of the "Festival of Community Psychology: Creativity, Collaboration and Community". Furthermore, it draws attention to a new concept that was introduced lately as the community sense of coherence (CSOC), encompassing perceptions of the "own community and its potential as a source for protective factors and assets" (Elfassi et al., 2016). As this perspective mobilizes the community in order to enhance coping, the community sense of coherence should be addressed within the effort of mental health promotion and research. Furthermore, this recurring pattern emphasizes the need for the community in order to realize an ideal future, which further adds importance concerning an investigation of the community sense of coherence. In addition, this result indicates a *reflective process* regarding resources available to the individual in order to enhance coping, in the sense of Super et al. (2015). Consequently, the narratives display patterns of reflection, assumed to have the ability to strengthen the sense of coherence.

Whereas the narratives varied largely in shape and style, components of the sense of coherence seemed consistently present throughout all letters. Considering this rich presence of the sense of coherence across a large variation of style and order, the analysis of future narratives offers an opportunity to explore the many shapes of the components of the sense of coherence. Therefore, narrative futuring seems to be a useful tool to reflect on one's own sense of coherence while covering and satisfying a wide range of individual differences among participants. Not only offers the "letter from the future" the possibility to assess the components of the sense of coherence in broader terms. Due to the reflective nature of the task, the sense of coherence might even be enhanced, as reflective processes are considered to be strengthening factors (Super et al., 2015). If the sense of coherence indeed can be strengthened through the reflective processes during the task of narrative futuring, ideally represents a concern of future studies, as it demonstrates a concept that is of strong relevance in the field of mental health promotion. Research on this topic would on the one hand provide additional information on the modifiability of the sense of coherence and on the other hand on SOC-promoting factors, which are yet to be sufficiently researched.

As no letter was found without a component, one could argue that the components of the sense of coherence seem to be necessary in order to approach an idealistic future imaginatively. This finding could be the result of the nature of the task "letter from the future", as it already requires the individual to hold a certain sense of coherence in order to be able to imagine such an idealistic future that is far apart from the present world. The individual is confronted with the challenge to grasp or *comprehend* the imagined future world in order to describe it narratively. Furthermore, the individual needs to display features of manageability in order to write about the transitions in the course of time. The phrasing of an *ideal* future already implicates that this future should be *manageable* to obtain. Finally, it should be a desired future with all dreams have come true and wishes been fulfilled, which may already induce a sense of *meaning*, enthusiasm, fascination or gratitude. In respect of the ideas mentioned above, whether or not the individual is able to perform the practice "letter from the future" already provides information about the individual sense of coherence as well as information about depressive symptomatology or the development of depression as it has been associated with the inability of imagining a future (Korn et al., 2014; Sools, Tromp & Mooren, 2015). However, the relationship with psychopathology could not be assessed on the basis of this study, because of a lack of information on the mental health of the participants. For future research, additionally ascertaining data regarding this information among the

participants is recommended in order to draw conclusions concerning the associations between narrative futuring, the sense of coherence and psychopathology.

4.1.   Research strength and limitations

Due to the qualitative nature of this study, a broader and individual assessment of the sense of coherence was enabled. Not only could the many shapes of the components be captured throughout the narratives, also an insight on the subjective impression of the relation between these components could be referred to. As a result, the narrative approach leaves room for an individual expression of the sense of coherence in imagined future scenarios rather than it is possible with the items of the sense of coherence scale by Antonovsky (1979). In contrast to this advantage, the risk of losing the original definition and view on the sense of coherence as it was established by Antonovsky may become an issue. As this study tended to assess the components rather separately in the first place, it may have been insufficient in assessing the sense of coherence according to Antonovsky (1987, 1993), who advocated the holistic view on the sense of coherence and stressed that all components are relevant and need to be viewed together. As the components are highly interrelated (Antonovsky, 1987) and this study also shed light on the relations between the components, one could argue that a bigger picture could be obtained, which may satisfy the notion of Antonovsky. Whereas the sense of coherence scale (Antonovsky, 1979) is still problematic due to an impurity and the multifactorial nature of its items (Gana & Garnier, 2001), the narrative based approach offers a way to assess the components as well isolated as their relations to one another. However, within the scope of the qualitative analysis of the narratives the manner of coding and rating still requires optimization regarding the detection of frequency of the utterances. This effort is recommended to be made in future research, in order to facilitate drawing conclusions about order and relations of the components.

A limitation of the present study is that some letters created within the workshop could not be included for analysis, because they were not provided for the purpose of research. Either the narrative was considered as too private to share or the participant was not able to imagine an ideal future are possible reasons for this withdrawal. The question arises what a narrative within this practice entails that is written by an individual that is not capable of imagining the future or if there would even be a narrative at all as the individual may have nothing to write about. The assumption is that this narrative would be low in terms of components of the sense of coherence. These questions should be addressed in future research to be able to get an insight concerning the integration of narrative futuring as a practice among individuals with depressive symptomatology. As this study mainly concentrated on the

concept of the sense of coherence in its original form while integrating levels of reference within the narratives in order to classify the utterances, future research aiming at exploring the actual community sense of coherence (CSOC) within future narratives is recommended, as it forms as recent concept that is already considered a protective factor (Elfassi et al., 2016).

4.2.   Final remark

As a conclusion of the above discussed results and ideas, narrative futuring seems to be a promising instrument for capturing the sense of coherence and thereby signs of resilience. Taking a future-oriented narrative based approach in the research on coping and resources promises not only insights regarding the individual ways of approaching critical life events in the future, but also information on health promoting factors regarding the task of narrative futuring. The "letter from the future" offers a guided reflection on one's own sense of coherence, while leaving the freedom of shaping this reflection in style and structure to the individual. This practice enables the development of agency and identity without any effort for classification.

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Appendix 1: Items of the sense of coherence scale listed per component

Comprehensibility.

1. When you talk to people, do you have the feeling that they don't understand you?
    Never - Always have this feeling

3. Think of the people with whom you come into contact daily, aside from the ones to whom you feel closest. How well do you know most of them?
    You feel that they're strangers - You know them very well

5. Has it happened in the past that you were surprised by the behavior of people whom you thought you knew well?
    Never happened - Always happened

10. In the past ten years your life has been:
    Full of changes without your knowing what will happen next - Completely consistent and clear

12. Do you have the feeling that you are in an unfamiliar situation and don't know what to do?
    Very often - Very seldom or never

15. When you face a difficult problem, the choice of a solution is:
    Always confusing and hard to find - Always completely clear

17. Your life in the future will probably be:
    Full of changes without knowing what will happen next – Completely consistent and clear

19. Do you have very mixed-up feelings and ideas?
    Very often - Very seldom or never

21. Does it happen that you have feelings inside you would rather not feel?
    Very often - Very seldom or never

24. Does it happen that you have the feeling that you don't know exactly what's about to happen?
    Very often - Very seldom or never

26. When something happened, have you generally found that:
    You overestimated or underestimated its importance - You saw things in the right proportion

Manageability.

2.   In the past, when you had to do something, which depended upon cooperation with others, did you have the feeling that it:

Surely wouldn't get done - Surely would get done

6.   Has it happened that people whom you counted on disappointed you?

Never happened - Always happened

9.   Do you have the feeling that you're being treated unfairly?

Very often - Very seldom or never

13.   What best describes how you see life:

One can always find a solution to painful things in life - There is no solution to painful things in life

18.   When something unpleasant happened in the past your tendency was:

"To eat yourself up" about - To say "ok that's that, I have to live with it" and go on

20.   When you do something that gives you a good feeling:

It's certain that you'll go on feeling good - It's certain that something will happen to spoil the feeling

23.   Do you think that there will always be people whom you'll be able to count on in the future?

You're certain there will be - You doubt there will be

25.   Many people – even those with a strong character – sometimes feel like sad sacks (losers) in certain situations. How often have you felt this way in the past?

Never - Very often

27.   When you think of the difficulties you are likely to face in important aspects of your life, do you have the feeling that:

You will always succeed in overcoming   the difficulties - You won't succeed in overcoming the difficulties

29.   How often do you have feelings that you're not sure you can keep under control?

Very often - Very seldom or never

Meaningfulness.

4.   Do you have the feeling that you don't really care about what goes on around you?

Very seldom - often or never

7.   Life is:

Full of interest - Completely routine

8.   Until now your life has had:

No clear goals or purpose at all - Very clear goals and purpose

11.   Most of the things you do in the future will probably be:

Completely fascinating - Deadly boring

14.   When you think about your life, you very often:

Feel how good it is to be alive - Ask yourself why you exist at all

16.   Doing the things you do every day is:

A source of deep pleasure and satisfaction - A source of pain and boredom

22.   You anticipate that your personal life in the future will be:

Totally without meaning or purpose - Full of meaning and purpose

28.   How often do you have the feeling that there's little meaning in the things you do in your daily life?

Very often - Very seldom or never

Appendix 2: Complete coding of the future narratives

Table 7

Appearance of the components per future narrative

letter	Comprehensibility (+) Occ.	level	(-) Occ.	level	Manageability (+) Occ.	level	(-) Occ.	level	Meaningfulness (+) Occ.	level	(-) Occ.	Ref.
002	1	2			2	3	7	3				
	3	3			4	1						
	5	1			9	3						
	6	1										
	8	3										
006	3	1	5	2	1	1	4	2				
					2	1						
					6	2						
012	2	1			6	3			1	2		
	3	1							7	2		
	4	2										
	5	1										
014	2	1			3	1			1	1		
	4	3			5	3			6	1		
					7	1			8	2		
015	4	3			2	1			1	1		
					3	3			5	3		
019			2	2	1	3			4	1		
					3	3						
020	4	3			1	3			2	1		
	5	1			6	3			3	2		
									7	3		
									8	1		
022	1	1			2	1						
					3	1						
					4	1						
023	1	2			3	3	6	1	4	2		
	2	3			5	3			7	2		
024					1	2			2	1		
					3	1			4	1		
					5	3						
025	1	2			3	2			2	2		
	5	1			4	1						
					6	1						
026	2	2			6	3			1	1		
	5	3							3	2		
									4	2		
027	1	2			4	2			2	2		
	3	2							5	2		
029	2	2	1	2	4	3			5	3		
	3	1							7	3		
	6	3										
030	1	3			2	3			6	1		
	4	1			3	1						
					5	1						
031	2	3			1	1			4	2		
	6	3			3	3			8	2		
					5	1						
					7	3						
					9	3						

ID												
032	3	3			1	2			2	3		
					5	1			4	1		
035	3	1	2	1	4	1			1	3		
					6	1			5	1		
									7	3		
036	2	3			1	2	4	1				
	6	1			3	3						
					5	3						
037	1	2			5	3			2	2		
	4	3							3	2		
									6	1		
038			2	2	4	1			1	2		
					6	3			3	2		
									5	1		
039	2	1			4	1			1	2	9	2
	5	2			6	2			3	1		
					8	3			7	2		
040	1	2			3	2						
	2	1										
041	4	1			3	3			1	1		
	7	1			5	1			2	3		
					8	3			6	1		
					10	3			9	1		
042	1	1			4	1			6	1		
	2	2			5	1			8	1		
	3	1			7	3						
044	2	3			1	1	4	1	3	2		
					5	1			6	1		
					7	1						
050	3	3			1	1			2	1		
	5	1			6	1			4	3		
									7	1		
055	2	1			3	1			1	1		
	5	1			4	1						
056	2	1			4	3	3	1	1	1		
									5	2		
057	2	2			3	2			1	2		
060	4	1	2	2	6	3			1	1		
	7	2	5	2	8	1			3	2		
									9	2		
061	1	3			3	1			5	1		
	2	1			4	1						
062	1	1			2	3			3	3		
	7	1			4	3			5	3		
					6	3			8	1		
064	2	1	1	1					3	2		
	5	3							4	2		
065	5	1	1	1	3	1	2	1	4	1		
068	3	1			2	1			1	1		
	5	1			4	1			6	3		
					7	3						
069	2	1							1	1		
071	2	2			1	2			4	1		
	5	3			3	3						
					6	3						
072	1	3			3	1			2	3		
	5	1			4	3			6	1		

ID										
074	2	1			1	3				
	5	1			3	3				
					4	3				
075	3	1							1	2
									2	2
076	2	1			3	1			1	1
	5	1			4	2			6	2
					7	1			8	1
077	5	3	2	2	1	2			3	2
	7	3			4	1			12	1
	10	1			6	3			14	3
					8	3				
					9	2				
					11	3				
					13	3				
					15	2				
082	4	1			2	1			1	1
									3	1
088	3	3	2	2					1	1
089	1	2			3	2			2	2
	6	2			5	2			4	2
					7	2			8	2
091	3	1			2	1			1	1
093	3	3			1	1			2	1
					4	1			5	1
095	3	2			2	1			1	1
	4	1			6	3			10	1
	5	3			7	3				
	8	1			9	3				
096	2	1			3	1			1	1
	4	1			5	1				
097			1	2	3	3			2	3
					5	3			4	1
098	1	1			2	1				
099	1	1			4	1	2	1	3	1