Storybridging: Four steps for constructing effective health narratives

Anniek Boeijinga, Hans Hoeken and José Sanders

Abstract
Objective: To develop a practical step-by-step approach to constructing narrative health interventions in response to the mixed results and wide diversity of narratives used in health-related narrative persuasion research.
Method: Development work was guided by essential narrative characteristics as well as principles enshrined in the Health Action Process Approach.
Results: The 'storybridging' method for constructing health narratives is described as consisting of four concrete steps: (a) identifying the stage of change, (b) identifying the key elements, (c) building the story, and (d) pre-testing the story. These steps are illustrated by means of a case study in which an effective narrative health intervention was developed for Dutch truck drivers: a high-risk, underprivileged occupational group.
Conclusion: Although time and labour intensive, the Storybridging approach suggests integrating the target audience as an important stakeholder throughout the development process. Implications and recommendations are provided for health promotion targeting truck drivers specifically and for constructing narrative health interventions in general.

Keywords
Health disparities, narrative development, narrative health communication, storybridging, truck drivers

Corresponding author:
Anniek Boeijinga, Centre for Language Studies, Radboud University Nijmegen, P.O. Box 9103, 6500 HD Nijmegen, The Netherlands.
Email: a.boeijinga@let.ru.nl
Introduction

Public health communication generally attempts to motivate people to engage in (e.g. the use of sun care products) or refrain from a certain behaviour (e.g. cease smoking), typically by means of providing arguments. Processing these persuasive messages requires considerable cognitive skill (Boeijinga et al., 2017; Schellens and De Jong, 2004) and may be too demanding for target audiences of low socioeconomic status (SES) and health literacy. As a result, this approach is likely to increase health inequities between high and low SES groups. In addition, this approach rests on the assumption that changes in motivation, or intention, will automatically lead to changes in behaviour. However, there is ample evidence for the existence of an intention-behaviour gap (Sheeran, 2002; Webb and Sheeran, 2006): despite being successful in changing intentions, the subsequent change in behaviour often remains modest or absent. Sheeran (2002) reports that people are only half of the time successful in acting upon their health intentions. Motivation to change may thus be a prerequisite for subsequent behaviour change, but it appears to be far from sufficient.

Narratives as bridge builders

Narrative health interventions appear promising for bridging the intention-behaviour gap as well as health inequities between high and low SES groups. Narrative presents a sequence of chronological events, which comprises specific characters (Jahn, 2005) and ‘a plot that intentionally relates events in the story’ (Clough, 2011: 704), encompassing a variety of forms (e.g. novels, plays, films, comic strips) and offering ‘meaning through evocation, image, the mystery of the unsaid’ (Mattingly, 1998: 8). Across time and cultures, narratives have been used to disseminate behavioural information. From infancy onwards, human beings are capable of producing and processing narratives – contrary to expository texts that are only mastered in adolescence (Berman and Nir-Sagiv, 2007). In other words, humans are highly capable of comprehending information provided in a narrative format (Graesser et al., 2002; Mar, 2004), without explicit education. This makes narratives accessible for a large audience, including target audiences with lower SES and health literacy skills (Murphy et al., 2013).

Narratives may also solve the intention-behaviour gap. The Health Action Process Approach (Schwarzer, 2008) posits that people may not perform the desired behaviour for different reasons: non-intenders are not (yet) motivated to perform the desired behaviour, whereas intenders may be motivated to do so but fail to put this intention into action. According to the Health Action Process Approach, planning strategies are essential in helping intenders to overcome this intention-behaviour gap. Such strategies involve specifying the when, where and how of the intended behaviour (action planning), and anticipating potential barriers and preparing successful strategies to overcome them (coping planning). Narratives are especially suited for supporting such planning strategies; they focus on specific characters, their actions and motivations, and express the unfolding events in a temporal and causal framework (Berman and Nir-Sagiv, 2007). Hence, characters can function as role models showing how to put an intention into action, what obstacles to expect, and how to successfully navigate them (Bandura, 2004; Green, 2006).

Overall, narrative health interventions have proved effective in creating positive health beliefs, increasing health attitudes and intentions, and stimulating healthy behaviours—though not for each and every narrative intervention (see for reviews, De Graaf et al., 2016; Shen et al., 2015). This variation can be explained by the diversity of narratives used in these studies (De Graaf et al., 2016) and raises the question of how to develop effective health narratives. Whereas previous studies have extensively examined the mechanisms and processes involved in narrative persuasion (e.g. Murphy et al., 2013, 2011), relatively little attention has been focused on the construction of health narratives.
Some researchers have provided concrete strategies and writing techniques for constructing narratives (Gesser-Edelsburg and Singhal, 2013; Thompson and Kreuter, 2014). Several studies have described the development of their narrative health materials, including a HIV prevention video for company workers in Ecuador (Del Carmen Cabezas et al., 2015), a depression fotonovela for Latinos with limited English proficiency (Cabassa et al., 2012), photo stories for older adults with limited health literacy (Koops Van ‘t Jagt et al., 2016), stories on obesity prevention (Zwald et al., 2013), and narratives for the African American community on breast cancer screening (Kreuter et al., 2008), HIV prevention (Berkley-Patton et al., 2009), smoking cessation (Houston et al., 2011), and hypertension management (Fix et al., 2012). The majority of these studies focused on minority groups and, either implicitly or explicitly, addressed the health disparities gap. However, none of the previous studies has addressed the issue of the target group’s current stage(s) of behaviour change (non-intenders and intenders) in the narrative construction process.

This article introduces the concept of ‘storybridging’ as a method for constructing effective and well-tailored narrative health interventions, identifying meaningful steps in the construction process with regard to content and form characteristics. The method will be illustrated by examples of health narratives for Dutch truck drivers, which proved effective in increasing health intentions (Boeijinga et al., in press).

**Storybridging: constructing effective narratives**

Storybridging refers to the use of stories as a tool for bridging the gap between health inequities as well as the intention-behaviour gap. Below, the characteristics composing effective narrative health interventions are specified and converted into specific steps for narrative development.

**Content.** With regard to content characteristics, a distinction is made between health narratives targeting non-intenders and intenders, as these groups require different approaches (Schwarzer, 2008).

**Narratives for non-intenders.** According to the Health Action Process Approach, the motivation to change one’s behaviour depends on a person’s risk perception, outcome expectancies, and self-efficacy (Schwarzer, 2008). Narratives can portray the negative consequences of risky behaviours, thereby increasing the audience’s risk perceptions (De Wit et al., 2008; So and Nabi, 2013). Health narratives focusing on risk perception encompass (a) the present situation/behaviour and (b) the consequences of continuing the present behaviour. The negative consequences of the current behaviour should be presented as both severe and realistic, since ‘too severe of a threat and too low of a threat are equally as ineffective’ (Averbeck et al., 2011: 40).

Outcome expectancies refer to the audience’s perceptions of the expected consequences of a new behaviour. Observing a narrative character’s behaviour being rewarded can lead to positive intentions to perform this behaviour as well. Health narratives focusing on outcome expectancies thus entail (a) the desired situation/behaviour and (b) the consequences of performing the desired behaviour. The consequences should be presented as both realistic and positive for them to work as a motivator. In addition, conveying the story of a character who was able to successfully perform the behaviour may also increase the audience’s self-efficacy perception.

**Narratives for intenders.** According to the Health Action Process Approach, intenders will benefit from a focus on action and coping planning strategies (Schwarzer, 2008). A universal narrative pattern of action and coping is “the hero’s journey” (Campbell, 2008): the main character – the hero – is called for an adventure into the unknown and faces the beginning of change. During the journey, the
hero is tested; dragons have to be slain and barriers passed. Once the goal is achieved, the hero returns in an essentially changed, and improved, state of being. Put in more generic terms, ‘someone is confronted with some problem which he/she/it overcomes (or succumbs to) in some way’ (Gordon, 1978: 7). The way in which a recognisable character resolves recognisable problems can provide an example for the target audience on how to deal with similar problems (Bandura, 2004).

Health narratives focusing on planning strategies include (a) the present situation/behaviour, (b) the desired situation/behaviour, and (c) the connecting strategy between the present and desired situation/behaviour. An important part of the present situation/behaviour consists of the barriers experienced when trying to perform the desired situation/behaviour. According to Gordon (1978), a prerequisite for effective narratives is that the presented connecting planning strategies are well-formed, in that they lie within the target audience’s reach and control.

Again, seeing others successfully perform the desired behaviour may not only enhance the audience’s planning strategies, but also their self-efficacy perception (if they can do it, so can I) (Falzon et al., 2015). Within the Health Action Process Approach, perceived self-efficacy is considered an important determinant at both stages of the health behaviour change process. For non-intenders, self-efficacy refers to beliefs about one’s ability to initiate healthier lifestyle behaviours (action self-efficacy), whereas for intenders, it refers to beliefs about one’s ability to deal with barriers that arise while performing these behaviours (maintenance self-efficacy).

**Character similarity.** A vital element for narrative characters to serve as role models is that the target audience perceives the character as similar to itself. This perceived similarity may be based on various characteristics of the character such as ‘socioeconomic status, group membership, place of residence, life experience, or attitudes, beliefs and values’ (Kreuter et al., 2007: 229). In depicting characters, language is essential, since the use of authentic, culturally resonant language reflects a target group’s culture, including its beliefs, norms and values (Larkey and Hecht, 2010).

Perceived similarity in language and other details (social class and context, gender and profession, etc.) has been suggested as a driver for identification (Brown, 2015; Cohen, 2006; Hoeken et al., 2016), which is recognised as an important mechanism for narrative persuasion. For example, identification with narrative characters has been found to influence attitudes (De Graaf et al., 2012; Hoeken and Sinkeldam, 2014; Igartua and Barrios, 2012), as well as intentions and actual behaviour (Moyer et al., 2011). Not only character similarity but also setting familiarity seems a promising characteristic to make narratives more persuasive (De Graaf et al., 2016). Familiarity with a character’s (living) situation was found to encourage transportation (Green, 2004) and effective in increasing risk perceptions (De Graaf, 2014).

**Perspective.** Another driver for identification is the perspective presenting the narrative (De Graaf et al., 2012; Hoeken and Fikkers, 2014; Hoeken et al., 2016). First-person health narratives tend to be more effective compared to third-person health narratives (see for a review, De Graaf et al., 2016). A first-person story perspective, in which the ‘I’-character is the deictic here-and-now-centre of the narrative, requires readers to take the position of the protagonist (Graesser et al., 2002), thus inviting them to process the presented information from their own spatial body perspective (Brunyé et al., 2009); readers appear to use ‘self’ as an anchor in organising information (D’Ailly et al., 1995). In other words, the strategic use of language can guide people to identify with certain characters (Hoeken et al., 2016).

**Medium.** Finally, the medium through which the narrative is presented may be relevant. Although Braddock and Dillard’s (2016) meta-analyses did not find clear effects for a superior effect of one medium over the other, this factor should not be underestimated regarding target audiences with
lower SES and health literacy. For example, print messages may require higher cognitive demands than audio messages (Wilson and Wolf, 2009).

A four-step method

These essential characteristics provide guidance for narrative development and can be translated into concrete steps. As non-intenders require a different intervention approach to intenders, the first step is identifying the target audience’s present stage of behaviour change, which determines the focus, and thus the content, of the narrative. For non-intenders, the narrative should focus on risk perception, outcome expectancies and/or self-efficacy, whereas a narrative for intenders should focus on planning strategies.

Step 2 involves identifying and selecting the content elements of the narrative, based on the audience’s stage of change. This implies foremost gaining an understanding of (a) the nature of the present situation/behaviour, including significant persons and events. In addition, the following elements need to be identified: (b) the experienced negative consequences of the present behaviour, (c) the desired situation/behaviour, (d) the positive consequences of the desired behaviour and/or (e) corresponding connecting strategies.

The third step involves constructing the story that basically is built on the selected key elements. Regardless of the target audience, stories should be isomorphic in order to be effective: that is, the story should cover the situations/behaviours as perceived by the audience, including relevant characters, events and barriers (Gordon, 1978). The target audience’s characteristics and experiences gathered in Steps 1 and 2 thus function as important building blocks in constructing the health narrative, materialised in optimal character similarity, linguistic perspective and medium choice.

The final step involves pre-testing the health narrative with members of the target audience, assessing its authenticity and comprehensibility. Important aspects to test include perceived similarity (To what extent does the target audience relate to/identify with the character?), isomorphism (To what extent are the narrative’s key elements perceived as realistic and authentic?) and well-formedness (To what extent are the desired behaviour and connecting strategy in reach or control of the target audience?). On the basis of the results from the pre-test, the narrative is repeatedly edited and retested, until it is considered authentic and appealing by the target group. The final version of the health narrative thus results from iterative construction and pre-testing.

For all steps, it is important to integrate the target audience (Miller et al., 2015). In Steps 1 and 2, their personal stories are used as input, and in Steps 3 and 4, they provide valuable feedback on the output (the developed story). In other words, effective narrative health interventions are co-created with the target audience.

Application

The above-presented Storybridging steps are illustrated with a successful case study of narrative health communication for Dutch truck drivers (Boeijinga et al., in press): a large, high-risk, low SES group with relatively unhealthy lifestyles that is hard to reach (Sectorinstituut Transport en Logistiek [STL], 2016) and was underserved in attention of health intervention researchers so far (Ng et al., 2015).

Step 1: identifying the stage of change

To identify the current stage of behaviour change, semi-structured, in-depth interviews were conducted with members of the target audience ($n = 20$) (Boeijinga et al., 2016). Participating truck
drivers were asked general inquiries about their daily life and routines (‘What is it like to be a truck driver?’) as well as more specific questions about current eating and exercise behaviours, satisfaction with one’s physical condition and previous attempts to improve one’s condition (e.g. ‘Have you ever tried to lose weight or keep from gaining weight?’, ‘Can you tell me more about these attempts?’). To avoid socially desirable answers, questions on health-related themes were posed using indirect probing questions or postponed towards the end of the interview. Each participant was debriefed afterwards about the actual nature and purpose of the research.

**Step 2: identifying the key elements**

The content elements were incorporated in the interview design by questions like ‘What does a typical day look like?’ ‘Who are involved?’ (present situation/behaviour); ‘What advantages and disadvantages do you experience from …?’ ‘What are your expectations on the long-term?’ (consequences of continuing present behaviour); ‘What would you like to be changed?’ ‘What changes would you like to make?’ (desired situation/behaviour); ‘What advantages do you expect or experience from …?’ ‘Why would you recommend to …’ (consequences of adopting desired behaviour); ‘What stops you from …?’ ‘How will you be able to …?’ and ‘What advice would you give other truck drivers?’ (connecting strategy).

**Step 3: building the story**

The story was built around the identified key elements. To enhance isomorphism and perceived similarity, key quotes and comments were extracted from the truck drivers’ personal stories and used as building blocks for the health narrative. Similarity of language was ensured to incorporate the target group’s culture. In line with previous research, the story was written from a first-person perspective. In addition, the social perspective from which the interviewed truck drivers related their personal experiences – for example, as a truck driver, husband, father and so forth – was taken into account. Health care aspects of the content were checked for accuracy with health scientists. Also, potential media formats were checked with interview data regarding media usage as well as with literature data from other studies.

**Step 4: pre-testing the story**

The pre-test was conducted in collaboration with a Dutch trucking company. The participating truck drivers (n=7) read the story aloud, providing immediate feedback followed up by further questioning and evaluation (e.g. ‘What do you think of the story?’ ‘How does the story make you feel?’ ‘To what extent can you relate to the story?’). In addition, the story was proofread for authenticity and accuracy by important stakeholders in the transport sector, such as the Dutch National Institute for Transport and Logistics and the editors of a trucking magazine. Based on the pre-test’s results, the narrative health intervention was edited and refined.

**Findings**

**Stage of change: non-intenders and intenders**

The interviews revealed that Dutch truck drivers regard health as important and that they manage to warrant a sense of good health by comparing their own health to that of colleagues who are worse off (e.g. who suffered from heart attack or knee malfunction). This kind of downward social
Boeijinga et al.

Comparison enables truck drivers to maintain a relatively benign image of their own health status. As a result, some truck drivers feel little motivation to change their lifestyle, which qualifies them as non-intenders.

More truck drivers, however, indicated that they actually would like to live a healthier life and had repeatedly tried to do so – qualifying them as intenders. Their attempts were, in most cases, thwarted by barriers within their work environment (e.g. irregular working hours and lack of exercise facilities) and personal environment (e.g. social expectations or obligations). There are thus both non-intenders and intenders among the target audience.

**Key elements: a risk narrative and planning narrative**

Two health narratives were developed: a risk narrative in response to the non-intending truck drivers’ tendency to downplay their health risks, and a planning narrative to facilitate intenders to put their intention into action. Accordingly, relevant content elements for both narratives were identified.

**Present situation/behaviour.** The interviewed truck drivers generally described their current work situation as strenuous: ‘What is it like to be a truck driver? Working at impossible hours, unsightly hours, stressful, […] just bad for your health, just a bad job’. Their current health situation was typically related to their work; health-related issues such as overweight, obesity, worn vertebrae, stress and (chronic) fatigue were considered ‘part of the job’. The less truck drivers managed to downplay their health threats by downward social comparison, the more they regarded their present health situation as problematic.

With regard to relevant others, the partner’s role appeared to be particularly decisive. The partner (if there was one) usually prepared the trucker’s lunchbox and was in charge of the groceries and meals at home, thus playing an important role in controlling dietary patterns. At the same time, the partner’s expectations (or demands) regarding quality/family time sometimes prevented truckers from exercising during leisure time and, thus, hindered their healthy exercise habits. Crucial appeared the shift from work to home (and the balance between them). Once home, truck drivers experienced more control over their behaviours, but their lack of energy after work prevented them from exercising.

Thus, both the work and personal environment were associated with barriers; irregular working hours and a lack of exercise facilities were indicated as most decisive barriers to healthy lifestyles. The interviewed truck drivers reported unfavourable behaviours regarding both diet (irregular and unhealthy meals) and exercise (a lack of physical activity). In consultation with health scientists, a focus on exercise behaviours was chosen as most promising. Truckers’ perceived barrier of ‘lack of exercise facilities in the work environment’ resulted from their framing ‘exercise’ as ‘going to the gym’, which was generally considered too demanding or even outrageous (cf. Caddick et al., 2016). Reframing exercise as ‘being physically active’ may offer an alternative frame and, thereby, provide more ecological opportunities for truck drivers to act upon. Thus, truck drivers’ exercise behaviours appeared to provide a window of opportunity for improvement.

**Negative consequences.** Stories about other truckers being worse off provided the content for depicting negative consequences of continuing the present behaviour. For example, truck drivers described heart attacks, involving either themselves or their colleagues. Other important downsides experienced by the target audience were being unfit to engage in physical activities with their (grand)children or being afraid of not witnessing them grow up.

**Desired situation/behaviour.** The intending truck drivers indicated that they would like to adopt healthier lifestyle behaviours in order to feel better and fitter. Specifically, they would like to
improve their physical shape so that they would have more energy during/after work. In addition, intenders indicated that they strive to lose weight, not wanting to look like ‘typical truck drivers’, who are often stigmatised and portrayed as obese, ‘meatball-eating’ men.

**Connecting strategy.** Stories of truck drivers who already managed to improve their health and lifestyle provided strategies for bridging the gap between the present and desired situation/behaviour. These strategies involved (a) battling the irregularity by structuring the day, (b) exercising without typical sports equipment, and (c) tackling temptations (e.g. exercising instead of watching television) by willpower. In general, the truck drivers considered themselves in control of their own health; ‘your health is in your own hands’.

**Building the story: from quotes to narratives**

The identified key elements served as basic elements for the stories. For both narratives, a storyline was developed around the fictitious, but representative, character with the (in Dutch) neutral name René Louwisse, a 41-year-old trucker, the father of Tim (14 years) and the husband of Anja (38 years). These features were based on the characteristics of the interviewed truck drivers; the majority was ethnically Dutch, aged between 40 and 50 years and had a partner and children. As the age of 50 was described as a turning point at which physical pains and reduced fitness could no longer be ignored or downplayed, an age of early 40s was chosen; truckers around this age generally feel no need (yet) to engage in preventive health behaviours. Given the importance and influence of the partner and children, who were frequently mentioned as drivers of motivation, both the spouse and child were elaborated upon as characters in the narrative.

**Risk narrative.** The risk perception narrative described René during a typical day at work (present situation/behaviour). While unloading his truck, he experiences chest pains. At first, he tries to ignore the pain since he is already behind schedule. During his general practitioner (GP) visit the next day, he is immediately referred to the hospital for examination. It turns out that an artery near his heart is clogged and requires immediate surgery (negative consequences); the subsequent operation is successful. René realises he has been lucky and that he needs to change his current lifestyle, including lack of physical activity and overweight.

The next story fragment is taken from the risk narrative with elements derived from the interviews in italics:

*I was on my way to a delivery address in Germany and suddenly felt unwell. […] Once arrived, I stepped out the truck to unload. I pulled open the side of the trailer and suddenly felt real cold, very uncommon. I called Anja and said: ‘There’s such a cramp in my chest and guts, damn’. Usually she would comfort me and make jokes about men and their aches and pains. But not this time. ‘I’d rather see you go to the ER’, she said. I said: ‘Yes, will do’, but thought: no way. I’m not going to a hospital abroad, right?*

**Planning narrative.** The narrative focusing on planning strategies depicted René, reflecting on the road he travelled to a healthier lifestyle. Seeing his son’s embarrassment of his poor physical shape (present situation/behaviour), René decides to improve his lifestyle (desired situation/behaviour) – which proves easier said than done. His first bike ride to work is not much of a success; he arrives at his truck sweaty and red faced. The rain is not helping his resolution to cycle either, and the couch is tempting after a long day on the truck. Nevertheless, he finds his ways (connecting strategies) to navigate past these challenges and establishes a healthier life by setting fixed biking days (battling irregularity by structuring the day/week), going for walks (exercising without sport
equipment) and resisting temptations (willpower) – including a specification of the when, where and how.

All three connecting strategies were incorporated in the storyline. In this way, audience members can decide for themselves which (combination of) strategy is applicable to their personal situation. In addition, an example was given on how to spend family time while getting some exercise – that is, René playing soccer with his son – in response to the experienced social expectations and obligations and the limited ‘exercise-frame’.

A story fragment illustrates how these elements were incorporated into the narrative:

On days I don’t bike, I go for a walk. That’s easy enough to organise. Anything from a walk around the block to a couple of miles, all depends on my time available. Sometimes together with Anja or the dog. [...] Although it’s true, there are still days I don’t feel like doing anything. Such days, the couch is very tempting indeed. The other day, for example, it started raining just when I wanted to go out for a walk. So, I went for walk with my umbrella. [...] Well, there’re always excuses for not going, but it’s a matter of focusing on the reasons for going. It’s your own choice; it’s in your own hands.

Medium. Based on the truck drivers’ preferences and on previous research findings, the health narratives were presented in a written and audio format; a survey revealed that nine out of 10 truck drivers read trucking magazines, and that they consistently listen to the radio during work (TON Magazine, 2013: 12–17), which was confirmed by the interview data (Boeijinga et al., 2016).

Pre-testing the story: isomorphic and well-formed

The pre-test confirmed the health narratives’ isomorphism and perceived similarity. After reading the risk narrative, one truck driver remained quiet for a while and then said, ‘This story is about me, there is more to heaven and earth …’ It turned out that his name was René as well and that he had also suffered from heart failure. Generally, the desired situation/behaviour and connecting strategy as part of the planning narrative were considered well-formed. Some truckers pointed out that the home-to-work bike distance (10 km) was quite ambitious, and it was therefore altered to 6 km. The selected male voices (n = 3) for the audio version were all recognised as authentic. The one identified as most representative was used for the final version of the audio versions. The potential of both media formats was confirmed by the stakeholders; that is, by truck drivers themselves as well as by the Dutch National Institute for Transport and Logistics and cooperating trucking companies.

Based on the pre-test, minor changes were made. The final versions of the health narratives consisted of approximately 840 words (risk narrative: 852 words, planning narrative: 825 words). The readability was also similar for both narratives (Gunning Fog Indices: risk perception-focused narrative: 7.49, planning strategies-focused narrative: 7.13). The recorded narratives were each below 5 minutes (risk perception-focused narrative: 04: 50 minutes, planning strategies-focused narrative: 04:37 minutes). Thus, in this case study, the Storybridging approach resulted in four health narratives: (a) a written risk narrative and (b) an auditory risk narrative for non-intending truck drivers; and (c) a written planning narrative and (d) an auditory planning narrative for intending truck drivers.

Discussion

Using the Storybridging method, health narratives were developed for both non-intending and intending Dutch truck drivers. A quantitative study testing the effectiveness of these narratives
showed that both narratives were, via different routes and regardless of their medium, effective in increasing truck drivers’ exercise intentions (Boeijinga et al., in press). These findings endorse the effectiveness of the applied Storybridging method, in which the target audience served as an important stakeholder throughout the development process; their personal stories (input) formed the basis of the health narratives (output). On the basis of this case study, the article aims to offer a practical step-by-step method for constructing effective narrative health interventions.

Although time-consuming and labour intensive, the Storybridging method suggests that it pays off to first gain a thorough understanding of the problem behaviour at stake and the stage(s) of behaviour change the target audience is at (Step 1). Based on this knowledge, the health narrative’s key elements can then be determined (Step 2) and used as building blocks while constructing the story (Step 3). According to the Health Action Process Approach, non-intenders benefit from a focus on risk perception, outcome expectancies and/or self-efficacy, whereas intenders benefit from a focus and action and coping planning.

However, the theoretical concepts implicit in the Health Action Process Approach have a certain interrelatedness, which prevents a clear-cut distinction between them both in practice and while developing health narratives. The developed planning narrative, for example, depicts the story of a role model truck driver who (after a bumpy road) is currently living and enjoying a healthier life. By implying the beneficial aspects of his lifestyle change (e.g. ‘being happy with the lifestyle changes’; ‘feeling stronger and fitter’), the storyline unintentionally could lead to positive outcome expectancies as well. Planning strategies also operate in concert with perceived self-efficacy, both of which are enhanced by role model behaviour of narrative characters. With regard to persuasiveness, the story’s quality, accuracy and readability outweigh its strictness and limit in focus. The theoretical concepts should therefore serve as guide rather than fixed rules.

The final step involves pre-testing and refinement (Step 4). The developed health narratives were pre-tested in a research setting, which may differ from truck drivers’ real-life setting. The question is whether these narratives would also be read on a voluntary basis under less favourable, everyday conditions. A promising format in this regard is TON magazine, a free of charge, national trucking magazine that is widely distributed both in printed (home delivery) and digital format (available at http://www.tonmagazine.nl), and well read by Dutch truck drivers (Steijvers and Van der Valk, 2012). The importance and influence of both the work and private context give rise to another limitation. Rather than targeting the target group on its own, narrative health interventions may benefit from a multiple audience design, including significant others such as the partner. Printed home-delivered versions of professionally focused magazines such as TON may reach both the primary, professional target group members and their household members, specifically their partners. In collaboration with the National Institute for Transport and Logistics, for example, a special edition of TON magazine could be developed targeting truckers’ partners by sharing stories and tips (e.g. easy recipes and exercises) on how to facilitate healthier lifestyles. Previous research has indicated that such a holistic, multi-stakeholder health promotion approach – including individual, interpersonal and ecological levels – is an imperative need in the context of the trucking sector (Apostolopoulos et al., 2012, 2011).

To conclude, the Storybridging method offers a careful and practical step-by-step approach for co-creating narrative health interventions, in response to the mixed results and wide diversity of narratives used in health-related narrative persuasion research. The steps established are guided by the Health Action Process Approach as well as choices around narrative characteristics. An important implication of this method is that non-intenders and intenders each require a specific approach and, therefore, specific narrative content. Identifying the target group’s stage of behaviour is thus an essential first step in constructing effective health narratives. The developers of narrative health interventions are recommended to involve the target audience in each step of the development
process. Narrative health interventions developed using the Storybridging method are promising in bridging health inequities as well as the intention-behaviour gap. Future narrative health interventions should be carried out following the Storybridging steps to further verify the utility and generalisability of the method.

Acknowledgements
The authors thank the truck drivers and sector partners for their time and participation.

Funding
The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This study was funded by the Netherlands Organisation for Scientific Research (NWO/ZonMW), Project BGRL-11-15.

References


