

WATCH OUT!!

Effects of a pun versus an explicit message on behavioural change



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Effects of a poster on behavioural change

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PREFACE

"I'd made it this far and refused to give up, because all my life I had always finished the race. To persevere is important for everybody. Don't give up, don't give in, there is always an answer to everything". This is a quotation by Louis Zamperini used in the film 'Unbroken' and the song 'Miracles' by Coldplay. It comes very close to the feelings I have now that I am finishing this master thesis. Despite the fact that the process was not always easy, it is brought to a successful conclusion.

The past four and a half year I have had a lot of fun studying Communication and I am happy I made the choice to start with it after my nursing education. The fact that I am a nurse myself, has contributed to the fact that I am very interested in everything that has to do with the combination communication and health care. So, I did not have to think twice when I got the chance to do a follow-up study to the Femke Berendsen's study that was about the prevention of wearing jewellery in nursing homes. I find it very interesting to investigate how behaviour can be changed into more desirable behaviour and thus the quality of health care can be improved. Now that I have finished communication studies, I also hope to contribute to a better and qualitatively stronger health care in future.

The completion of this thesis could not have been succeeded without the help of several persons whom I would like to thank. First, I would like to thank Joyce Karreman for all the time and effort she has put in my research. Thanks to her knowledge and advice I always found a way to get back on track. Second, I owe many thanks to Bert Pol. With his specialized knowledge and critical feedback, he helped me to look further and find side-ways I would never have seen without his directions. I would also like to thank Jordy Gosselt for his feedback and instructions at the end of the writing of this master thesis in order to reach the finish-line as well as possible.

Furthermore, I owe many thanks to Andrea Eikelenboom. She helped me to find the nursing homes and brought me into contact with the contact persons Tomas Klop of 'Het Herstelhotel' and Sanne Geurts of nursing home Madeleine. Of course I also want to thank Tomas and Sanne for their effort, help and hospitality. They made sure that I was not lost in the corridors of their organization, and was able to obtain as many respondents as possible. To all those respondents I am greatly indebted as well. Without them, the research could not have been completed at all.

Last but not least, I wish to express many thanks to my family, friends and Stefan. They offered me all the time and space I needed to complete this thesis. They listened when I just did not see the right way and always supported me not to give up.

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ABSTRACT

During the last few years, the prevention of health care associated infections has received a growing amount of attention. The number of deaths due to preventable harm in healthcare organisations is estimated at 1700 per year, and the outbreak of infections is seen as one of the most important causes of preventable harms (Arets, 2012). Health care workers often violate the most basic guideline, not wearing jewellery during work. In the past, several campaigns promoting better hand hygiene were launched, but substantial lasting effects had not been reached. Therefore, this study investigates whether campaigns that make use of posters can be effective and which factors are of influence on behavioural change.

In this study I set out to analyse which kind of posters are cognitively processed and whether that may lead to planned or automatic behavioural change. This is done by comparing the effects of a poster with an explicit message and a poster with a pun. The research question is: *“In which way is an activating message on a poster processed, and to what extent does the design of the poster influence planned or automatic behaviour change?”* To answer the research question, three methods were used: an observational study, a survey and semi-structured interviews. The study was conducted in two nursing homes in the vicinity of Nijmegen; ‘Het Herstelhotel’ and nursing home ‘Madeleine’. In ‘Het Herstelhotel’ the poster with the explicit message was revealed and the poster with the pun was hung up in Madeleine. Both posters showed the same picture. In total, 65 respondents participated. Their behaviour according to the wearing of jewellery was observed before the poster was hung and three weeks after the placement of the poster. During the second observation they were asked to fill in the questionnaire. 25 of them have participated in the interview study.

The results of this study showed that the poster with the pun led to a more positive attitude and higher attention than the poster with the explicit message, but there was no difference between both posters regarding recall, and perceived comprehension. In contrast to the study of Berendsen (2012), this present study revealed that there was no difference between both posters regarding behavioural change. During the second observation, significantly less jewellery was worn in both conditions. Moreover, the interviews showed that respondents themselves were of the opinion that the poster had no effect on their behaviour, but they reported that the social environment and more or less their involvement with the job had influenced them. Based on these results it could be concluded that both posters were observed, but the design was not deeply processed. Both posters may have served as a prompt, which triggered the unconscious process and led to automatic behavioural change. The respondents may (unconsciously) know that the wearing of jewellery is forbidden and were again reminded when they saw the poster. Thereby, they want to conform to the social norm, and therefore wear no jewellery anymore.

All in all it could be concluded that this study has led to more knowledge about the effects of posters on the processes of behaviour change. Managers of all kinds of organisations could use this knowledge to achieve desired behavioural change. They do not need to design expensive posters, for example, because the design of the poster does not influence the behaviour. For further research it is recommended to measure the extent to which the automatic behavioural change is permanent.

SAMENVATTING

De afgelopen jaren is er steeds meer aandacht besteed aan de preventie van ziekenhuisinfecties. Het aantal mensen dat overlijdt aan een te voorkomen complicatie wordt geschat op 1700 per jaar. Eén van de belangrijkste oorzaken hiervan is verspreiding van ziekenhuisinfecties (Arets, 2012). Het niet dragen van sieraden wordt gezien als één van de meest basale richtlijnen om dergelijke uitbraken te voorkomen, maar toch wordt deze regel regelmatig overtreden door medewerkers van zorginstellingen. In het verleden werden er al verschillende campagnes gelanceerd om het personeel bewuster te maken van goede handhygiëne, maar deze hebben niet tot het gewenste resultaat geleid. In deze studie wordt onderzocht of campagnes die gebruik maken van posters effectief kunnen zijn en welke factoren daarbij van invloed kunnen zijn op gedragsverandering.

In dit onderzoek wordt geanalyseerd of en wat voor soort poster cognitief verwerkt wordt en in hoeverre dit zou kunnen leiden tot een geplande of automatische gedragsverandering. Dit is gedaan door het effect dat een poster met een expliciete boodschap heeft op gedrag te vergelijken met het effect op gedrag dat een poster met een woordspeling heeft. De onderzoeksvraag hierbij luidt: *“Op welke manier wordt een activerende boodschap op een poster verwerkt en in hoeverre beïnvloedt het design van de poster geplande of automatische gedragsverandering?”* Om deze onderzoeksvraag te kunnen beantwoorden, werden drie methoden gebruikt: een observatiestudie, een enquêtestudie en een interviewstudie. Het onderzoek werd uitgevoerd in twee verpleeghuizen in de regio Nijmegen. Dit waren ‘Het Herstelhotel’ en ‘verpleeghuis Madeleine’. De poster met de expliciete boodschap werd opgehangen in ‘Het Herstelhotel’ en de poster met de woordspeling heeft in verpleeghuis ‘Madeleine’ gehangen. Op beide posters was dezelfde afbeelding afgebeeld. In totaal hebben 65 respondenten deelgenomen aan het onderzoek. Hun gedrag ten aanzien van het dragen van sieraden tijdens hun werk werd geobserveerd voordat de posters werden opgehangen en dit werd herhaald toen de posters drie weken gehangen hadden. Tijdens de tweede observatie werd aan de geobserveerde respondenten gevraagd om de enquête in te vullen. Tevens werd aan 25 van hen gevraagd om deel te nemen aan de interviewstudie.

De resultaten van het onderzoek laten zien dat de poster met de woordspeling leidde tot een positievere attitude en beter in staat was om de aandacht van de respondenten te trekken dan de poster met de expliciete boodschap. Er bestaat echter geen verschil tussen beide posters ten aanzien van herinnering en begrip. In tegenstelling tot een eerder uitgevoerd onderzoek met betrekking tot dit onderwerp (Berendsen 2012), laat dit onderzoek ook geen verschil zien ten aanzien van gedragsverandering tussen een poster met een woordspeling en een poster met een expliciete uitdrukking. In beide condities werd tijdens de tweede observatie significant minder sieraden gedragen. Tevens blijkt uit de interviews dat de respondenten zelf ook van mening zijn dat de poster geen invloed heeft gehad op hun gedrag ten aanzien van het dragen van sieraden. Wel stelden zij dat hun sociale omgeving en in zekere zin ook hun mate van betrokkenheid ten aanzien van het beroep van invloed zijn geweest op het wel of niet dragen van sieraden. Aan de hand van deze resultaten kan geconcludeerd worden dat beide posters werden waargenomen, maar dat het design van de poster niet diep verwerkt werd. Beide posters hebben waarschijnlijk als een prompt gediend, wat onbewuste verwerking in gang heeft gezet en tot automatische gedragsverandering heeft geleid. De respondenten hebben waarschijnlijk (onbewust) geweten dat het dragen van sieraden tijdens het werk

niet is toegestaan, maar werden hier opnieuw aan herinnerd toen zij de poster zagen. Ook kan het feit dat zij zich willen conformeren aan de sociale norm een reden zijn van het feit dat ze geen sieraden meer dragen.

Over het geheel genomen kan geconcludeerd worden dat dit onderzoek tot meer kennis heeft geleid over het effect van posters op het proces van gedragsverandering. Managers van verschillende organisaties zouden deze kennis kunnen gebruiken om gewenst gedrag binnen hun organisatie na te streven. Hiervoor hoeven zij geen dure posters te ontwerpen, omdat het design van een poster niet van invloed is op gedrag. Een aanbeveling voor toekomstig onderzoek is om na te gaan in hoeverre het onbewuste (automatische) verwerkingsproces leidt tot permanente gedragsverandering.

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1. INTRODUCTION

1.1 The danger of bad infection prevention

"It is safer to take part in the traffic than to stay in a hospital". This may be a shocking quotation, but if you realize that the number of deaths due to preventable harm in healthcare institutions is estimated at 1700 per year, this quotation will come very close to the truth. Health care associated injuries can be a result of health care providers not following the professional standards, shortcomings of the health care system and/ or the patients' behaviour (Huis, 2013).

According to Huis (2013), one of the most essential contributions towards patient safety is the reduction of hospital-acquired infections. The outbreak of infections is one of the most important causes of preventable harms (Arets, 2012). At any time, over 1.4 million people worldwide develop infectious complications associated with health care. This leads to a considerable burden of disease and mortality (Erasmus, Daha, Brug, Richardus, Berhendt, Vos & Van Beeck, 2010). Adequate hand hygiene among hospital personnel could probably prevent 15% to 30% of the health care associated infections (Huis, 2013).

Over the past two decades, improving patient safety has received growing attention. The substantial reduction of hospital-acquired infections is seen as one of the first goals of the World Health Organisation's World Alliance for Patient Safety. To reach this goal, improvement in compliance with hand hygiene guidelines is needed (Erasmus et al. (2010). Over the past several decades, various campaigns promoting hand hygiene have been launched, but substantial effects of those campaigns are hardly achieved.

The Healthcare Inspectorate stated that, in particular, the elderly care takes insufficient account of contagion risks (Inspectie voor de Gezondheidszorg, 2013). Too little attention is paid to infection prevention in the studied elderly institutions. This is alarming, because the elderly have an increased risk of contracting infectious diseases (Sweers, 2013). According to a study of the Healthcare Inspectorate, general precautions especially are not executed. Examples of such requirements are washing hands, the proper use of gloves and not wearing jewellery.

In nursing homes healthcare-associated infections are a serious problem and associated with excessive comorbidity and mortality. Many of the Dutch nursing homes do not adhere to the guidelines of infection prevention (Inspectie voor de Gezondheidszorg, 2014). The most basic guidelines, such as not wearing jewellery, are often violated by the health care workers. It should be stated, however, that during the last few years some small improvements have occurred. However, the Healthcare Inspectorate conducted research into infection prevention and concluded that healthcare institutions are still not well prepared for an increase of resistant bacteria.

In 2011 a publication of the Social and Cultural Planning Office, showed that the physical health of the elderly who are living in nursing homes, was worse in the year 2008 than in 2000. One of the major causes of this decline is bad hygiene policy (Haenen, Alblas, De Greeff & Veldman, 2013). Urinary tract infections are the most common infections in nursing homes. Furthermore, health care associated infections such as pneumonia, bronchitis, bacterial conjunctivitis, bloodstream infections and gastroenteritis often occur (Eikelenboom, Cox, Boom, Drabbe, Koopmans and Voss, 2011). Moreover, most of the infections are caused by resistant microorganisms, which are

increasingly difficult to fight. Many infections become resistant to antibiotics. Because of the increase of resistance, a good hygiene policy becomes more and more important (Haenen et al., 2013).

Central to personal hygiene is hand hygiene. This means; a proper washing of the hands and not wearing jewellery (Landelijk centrum hygiëne en veiligheid, 2009). Microorganisms on the hands of the health care workers contribute to the incidence of infections in patients, because hands are the most convenient transport mechanisms for micro-organisms (Huis, 2013). Furthermore, this researcher argued that for good hand hygiene it is essential not to wear jewellery. The wearing of rings, bracelets and watches during the work can be dangerous, because it is impossible to clean the skin in the location of the piece of jewellery sufficiently, allowing bacteria to settle down and spread (Huis, 2013).

Because of the importance of good hygiene, nurses in healthcare institutions in the Netherlands have to be aware of the negative consequences of wearing jewellery. Thereby, they should change their behaviour to no wearing of jewellery during work time. In nursing homes, a clear social norm about not wearing jewellery during work time has to be developed. This may lead to less preventable harms in the health care institutions (Sweers, 2013).

1.2 Relevance of the research

As stated above, the various campaigns promoting hand hygiene have not led to the desired effect. In the past, it was often believed that creativity in (persuasive) communication is necessary for a communication message to be effective (Smith, MacKenzie, Yang, Buchholz & Darley, 2007). However, there is very little research conducted to investigate the effects of creativity and how it relates to effectiveness. This study attempts to provide new knowledge in the field of public communication and attitude/behaviour change by studying the importance of creativity in messages. It is expected that creativity is important when messages are consciously processed, but less so when they are automatically processed. According to Bargh (1984) automatic processes do not demand much attention and become active without the necessity of active control by the individual.

In her master thesis Berendsen (2012) studied whether a poster with a pun or an explicit expression, in combination with an (in)congruent image, can influence the memory, the attitude, comprehension and behaviour of recipients in natural conditions. The conclusion of this study was that a poster with a pun and an incongruent image increases the recall of the poster. However, a poster with an explicit message and a congruent picture increased perceived comprehension, recall of the recall of the poster and recall of the message and finally leads to more behavioural change.

Berendsen (2012) gave some new insights into the effectiveness of posters with congruent and incongruent messages. But no attention was paid to the cognitive processing of posters and its effects on behavioural change. So there is still very little known about the effects of (un)conscious processing and planned/automatic behaviour change. The present study will try to investigate and clarify this matter by analysing how posters with a creative element (a pun) and posters with an explicit message are processed; consciously or automatically, and whether this may lead to planned or automatic behaviour change. Because of the way in which a message is being processed may impact the result of the processing, it is expected that this influences the effect of a poster as well.

Thus, the goal of this research is to investigate whether activating messages in a natural environment are processed consciously or unconsciously, whether that finally may lead to planned or automatic behaviour change, and to what extent the design of the poster matters. Based on this goal, the following research question can be formulated: *“In which way is an activating message on a poster processed, and to what extent does the design of the poster influence planned or automatic behaviour change?”*

1.3 Context of the research

Most studies into the effects of creative messages were conducted in commercial communication studies (Berendsen, 2012). This research, however, will focus on public communication in a natural environment. A main difference between commercial advertising and public communication is the complexity of the message and the kind of message that is communicated. Commercial advertising is aimed at the creation of strong brands and the stimulation of purchases. These are relatively simple messages (Pol, 2011). The aim of public communication is to keep citizens from harmful behaviour and to stimulate desired behaviour (Rijksvoorlichtingsdienst, 2010). These are more complicated messages.

The context of the proposed research is two different healthcare institutions in the vicinity of Nijmegen. The selected institutions are primarily focused on elderly care. Good hand hygiene is particularly of importance in these institutions because of the intensive (physical) contact between the health care employee and the residents. Furthermore the residents of these nursing homes are very susceptible to infections.

Within both healthcare organisations, much attention is already paid to the importance of good hand hygiene and not wearing jewellery. However, according to one of the team managers, jewellery is still worn. In this study we will measure what is more effective; a poster with a pun or a poster with an explicit message or that factors such as social environment and job involvement are of greater influence.

1.3.1 ZZG Herstelhotel

The first organisation where the research was conducted is ZZG-Zorggroep. This is an umbrella organisation, which provides multiple services like home care, maternity care and special care aimed at recovery and revalidation. This kind of care is provided in the ‘Herstelhotel’ (recovery hotel) and this is also the location where the posters with the explicit message were placed. The ‘Herstelhotel’ is located at Park Dekkerswald in the small village of Groesbeek near Nijmegen. The ‘Herstelhotel’ serves as a residence for people with varying needs of care. For example, there are guests who underwent surgery, have broken hips, and CVA. Furthermore, a stay in the ‘Herstelhotel’ may serve as a bridge for people who are on the waiting list for a nursing home. Even people who are temporarily unable to stay in their own home can come to visit the ‘hotel’. The ‘Herstelhotel’ consists of three wings; Kraaijendal, Bruuk and Mulderskop. Each wing consists of three or four floors. During a working day (dayshift) about 60 health care workers are present. During an evening shift there are about 20 persons.

1.3.2 Pantein; Nursing home 'Madeleine'

The second organisation for this study was nursing home 'Madeleine'. This is a location of care organisation 'Pantein'. Pantein includes: 'Maasziekenhuis Pantein', homecare en several care centres. Nursing home Madeleine is located in Boxmeer. Madeleine is specialized in elderly care. In particular for those who need to rehabilitate after an accident, stroke or surgery. In addition, there are also elderly with chronic illnesses and people with dementia who need specialized care. The research was conducted at two departments of 'Madeleine'. During a day shift, about six health care workers are working at a department and two people from housekeeping are at work.

2. LITERATURE REVIEW

2.1 The problem of wearing jewellery in healthcare institutions

Approximately 5 to 10% of hospitalized patients in the Western world acquire healthcare associated infections (Longtin, Sax, Allegranzi, Schneider & Pittet, 2011). Furthermore, the European Centre for Disease Prevention and Control (ECDC, 2007) states that the number of patients acquiring those kinds of infections in the European Union every year can be estimated at 3000.000 with approximately 50.000 deaths occurring as a consequence. In the United States of America, this figure is around 99.000 per year. So, it could be stated that those kinds of infections are a global problem (Ward, 2010).

Health care associated infections have been given significant media attention due to their tremendous costs, both monetarily losses and loss of lives (White, 2013). Critical in the prevention of these infections is hand hygiene. However, Longtin et al. (2011) stated that compliance among health care workers is most often below 40%. According to White (2013) jewellery, including rings, watches and piercings have been postulated as contributing to the spread of infections, because they increase the bacterial load of the skin (Longtin et al., 2011). Jewellery is thought to carry microorganisms on their surfaces or harbour them on the skin underneath.

Thus, it can be stated that jewellery use by health care workers has been linked to the rise of health care acquired infections. A number of specific guidelines and recommendations have been published restricting the use of jewellery in the health care environment. For example, in 2009 the World Health Organisation published guidelines focusing on hand hygiene in health care that make specific recommendations with regard to the use of jewellery (White, 2013). With regard to wristwatches, for example, White (2013) states that they are believed to harbour large amounts of microorganisms, especially given the difficulty in cleaning them properly.

2.2 Studies about the prevention of health care associated infections

To prevent health care associated infections, it is important that health care workers get good education about infection prevention. According to Gould and Drey (2013) this education has to be at an early stage in student nurses' preclinical experience to protect patients and reduce risks of occupational exposure to infection. However, earlier research showed that qualified staff are poor role models for student nurses (Ward, 2010; Geller, Bakken, Currie, Schnall & Larson, 2010). Gould and Drey (2013) stated that ward managers could improve practice by establishing clear rules about nail enhancements and wearing jewellery.

Another vital aspect of the prevention of non-hygienic activities on the work floor is compliance with infection control precautions, such as not wearing jewellery during work, which are known to be effective in reducing the risks of infections and cross-infections (Ward, 2010; Fendler, Hammond, Lyons, Kelley & Vowell, 2002). Compliance with infection control precautions is very low across health care institutions around the globe and could be seen as a global issue. Sax, Perneger, Hugonnet, Herrault, Chraïti and Pittet (2005) described several factors that have been demonstrated to affect compliance in infection control. The most important factors that are of influence in infection prevention in the elderly care are forgetfulness, lack of time and lack of means. However, lack of time and lack of

means were significantly less important. Furthermore, several other reasons for noncompliance were reported in literature. For example, Chan, Molassiotis, Eunice, et al. (2002) named lack of leadership as an important issue. Harris, Samore, Nafziger, DiRosario, Roghmann and Carmeli (2002) argued that the lack of a positive role model is an important factor that leads to noncompliance and also risk perception (Naing, Nordin & Musa, 2001) is seen as a reason of this kind of undesirable behaviour.

2.3 Attitude and behaviour change

To prevent healthcare workers wearing jewellery during work time, nurses have to be aware of the fact that it is not allowed to wear jewellery during work time, that the wearing of jewellery is not the acceptable norm of health care institutions and that they have to comply with the existing standards. To achieve this, health care workers have to change their attitude or, in the most desired case, their behaviour.

An attitude can be defined as a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour (Gass & Seiter, 2014). A second feature of attitudes is that they represent favourable or unfavourable evaluations of things. A third aspect of attitudes is that they are always directed toward an attitude object; people hold attitudes among things or toward things. The conceptualizations of attitude differ in the extent to which they describe attitudes as being constructed or stored in memory (Bohner & Dickel, 2011). Furthermore, an important feature of attitudes is their persistence. Some attitudes are very easy- and others are very hard to change. When an attitude changes, it is more likely that the behaviour will change a well (Petty & Cacioppo, 1986) For this purpose, it is important that healthcare workers know the reasons why they should not wear jewellery.

However, to achieve an attitude or behaviour change, it is not enough to know why the wearing of jewellery is prohibited. According to Cacioppo and Petty (1986) it is essential that people are involved in the subject, that they are able to change their attitude and that there are some favourable cues that motivates to change. Moreover, Kelman (1958) argues that there are three different processes of influence that may lead to an attitude change: compliance, identification and internalization. Compliance can occur when an individual accepts influence because he or she hopes to achieve a favourable reaction from another person or group. Identification occurs when an individual accepts influence because he or she wants to establish or maintain a satisfying self-defining relationship to another person or group. Internalization occurs when an individual accepts influence because the content of the induced behaviour – the ideas and actions of which it is composed- is intrinsically rewarding.

In the past, studies about attitude change especially focused on message based persuasion and social influence. Message based persuasion research examined attitudes at the individual level. An example of this is exposure to communication stimuli, like posters and advertisements. This could be seen as planned behavioural change; behaviour that is preceded by consideration. (Pol & Swankhuisen, 2013).

Nowadays, social influence is seen as a more important factor of attitude change. Attitudes are now seen as social phenomena that are embedded in social interaction (Wood, 2000). When the influence of the social norm is dominant, then it is hard to influence the personal attitude and behaviour by a communicative intervention (Pol et al., 2013). Furthermore, the extent to which an

individual is involved in a message, or to the context in which the message is displayed is a crucial factor regarding the effectiveness of the message (Petty, Cacioppo & Schurmann, 1983; Pol et al., 2013). For example, when an individual is highly involved in his/her profession, this may affect the degree in which the individual attaches importance to the message.

2.4 Planned versus automatic behaviour

According to Pol et al. (2013) an estimated 95% of our behaviour is automatic behaviour. Automatic behaviour can be defined as behaviour we do not consciously think about. Planned behaviour is behaviour we consciously think about. In this section the differences between both sorts of behaviour will be discussed.

2.4.1 Planned behaviour

A well-known theory about planned behaviour is the theory of planned behaviour of Ajzen (1991). This theory is an extension of the theory of reasoned action. The theory of reasoned action is a rational model of the persuasion process and is based on one's beliefs about an outcome and the evaluation of that outcome. Furthermore, this theory states that intentions are also guided by the subjective norm (Fishbein, 1979). As in the original theory of reasoned action, a central factor in the theory of planned behaviour is the individual's intention to perform a given behaviour. Intentions are assumed to capture the motivational factors that influence behaviour. However, the motivation to process information thoroughly can differ per person (Pol et al., 2013). Information is processed deeply when it is seen as personally important.

As a general rule, it can be stated that the stronger the intention to engage in specific behaviour, the more likely should be its performance. However, in the theory of planned behaviour a third element is added; perceived behavioural control (Gass & Seiter, 2014). Ajzen (1991) states that where the theory of reasoned action is under a person's control, the theory of planned behaviour acknowledges that behaviour is not always volitional. There are several factors that may impinge on a person's perceived behavioural control. These are internal factors (lack of knowledge and/or skills) and external factors (e.g. limited resources, extenuating circumstances.) (Gass & Seiter, 2014). The theory of planned behaviour is the most extensively studied social cognition theory, and is relevant to both intention and behaviour change. (Hardeman, Johnston, Johnston, Bonetti, Wareham & Kinmonth, 2002). Only in the case of planned behaviour, actions can be seen as the consequences of our intentions. But, it is estimated that only 5% of our behaviour is planned (Pol et al., 2013).

2.4.2 Automatic behaviour

However, nowadays, the idea that our actions are the consequence of our intentions, or our will, is seen as out-dated and not entirely correct. 95% of our behaviour can be seen as automatic behaviour (Pol et al., 2013). During the last few years, the idea of unconscious behaviour has become more and more important. This idea claims that we sometimes do what we want, but we often just do what we see (Dijksterhuis, Aarts, Bargh & Knippenberg, 2000). By many psychological scientists, the unconscious mind is still viewed as the shadow of the real conscious mind. Though, there now exists substantial evidence that the unconscious is not identifiably less flexible, complex, controlling, deliberative, or action-oriented than is its counterpart (Bargh & Morsella, 2008).

The recent insights about automatic behaviour give a different interpretation to what in the Elaboration Likelihood Model is called the peripheral route. The recent insights go deeper and describe behaviour we do not consciously think about at all. The ideas about influencing automatic behaviour give much more effective tools about practical influencing than the Elaboration Likelihood Model does (Pol et al., 2013). In recent social-scientific literature some interventions are discussed to influence automatic behaviour. Those can be divided into two categories: interventions to break existing automatic behaviour and interventions aimed at priming and social influence. According to Dijksterhuis, Spears, Postmes et al. (1998) priming traits and stereotypes can lead to corresponding behaviour in the receiver. Such priming can result in behavioural assimilation. Activated traits produce assimilation because they function as an interpretation frame and cause perceptual input to be interpreted in line with this trait construct.

Furthermore, automatic behaviour can be influenced by means of prompting. The major goal for using prompts is to provide a means to externalise mental activities that are usually covert (Scardamalia & Bereiter, 1985; Lin & Lehman, 1999). Prompts may help to comprehend and recall information. The most important effect of prompting is that it focuses people's attention on their own thoughts and on understanding the activities they are engaged in. According to Lin and Lehman (1999) engaging people may increase the probability that relevant information will be accessed when needed.

The present study is aimed at prompting and social influence. Social influence may ensure compliance with the rules. The poster may serve as a prompt and makes the health care worker again aware of the social norms. Here a prompt is seen as a symbol or message that serves to suggest or remind (Cambridge Dictionary). The difference between a prompt and a prime, however, is that people are not aware of a prime. They observe a stimulus, but have no idea that this influenced their behaviour. People are aware of a prompt, a reminder of something they unconsciously knew already (Pol et al., 2013). In case of priming, people are able to see the stimulus, but we are not aware of the impact this stimulus has on our behaviour.

It is argued by several researchers that automatic behaviour seems to be hard to influence, but it is actually easier to influence than planned behaviour (Pol et al., 2013; Dijksterhuis et al., 1998; Cesario, Plaks & Higgins, 2006). This is due to the fact people do not critically reflect on their behaviour and handle without thinking about the reasons why. So you have to permeate routine behaviour. In this situation, the use of heuristics and primes could be effective. Heuristics are rules of thumb that are used to come to a decision, and not all pros and cons are weighted up. The decision is quickly made based on experiential knowledge of ourselves and our social environment. Priming is the use of stimuli that affect the senses and thereby the behaviour. By means of priming, psychological processes like textual messages and other stimuli like images, noise and odours may stimulate our behaviour without being aware of it (Bargh, 2002). Effective priming begins with finding the right stimuli. A crucial factor is that the target group has the right associations with the stimuli (Pol et al., 2013). Knowledge about priming can be used for various purposes. Governments, for example, may use it as an effective text and image strategy to encourage people to behave in a safer way (Pol et al., 2013).

2.5 Creativity in persuasive (governmental) communication

In the past, several campaigns have been launched to prevent the wearing of jewellery, but they have not led to the desired effect (Erasmus et al. (2010). It was often believed that creativity in (persuasive) communication is necessary for a communication message to be effective so that it leads to behavioural change. Marketing researchers agree that creativity is one of the essential elements for advertising success (Smith, MacKenzie, Yang, Buchholz & Darley, 2007). Heath and Feldwick (2007) argue that the 'creative' content builds favourability and not the rational message.

A message can be seen as creative when it is divergent and relevant. According to Smith et al. (2007) divergence can be defined as the extent to which an message contains brand of execution elements that are different, novel, unusual, original and unique. Relevance refers to the extent to which the message contains elements that are meaningful, appropriate or valuable to the audience (Yang & Smith, 2009; Berendsen, 2012).

Creative messages are presumed to evoke a favourable response from the target audience (Ang, Leong, Lee & Lou, 2012). However, especially in governmental communication, the extent of personal relevance is seen as a very important factor regarding the effectiveness of messages. In many cases, the government is of the opinion that the social involvement is high, that everyone is involved in the message. However, in most cases this level of involvement is low. This is often the case in health education programs, for example (Pol et al., 2013). If someone is highly involved in the message, the person will be more inclined to pay attention to the message. In that case, the use of creative elements will not be effective because the person wants to pay attention to the message and not be distracted by other elements.

Very little research has been conducted to define message creativity or how it relates to the effectiveness of messages (Smith & Yang, 2004; Gass & Seiter, 2014). One of the most important factors for creative messages to be successful is novelty. Novel advertisements are original, out of the ordinary and not expected. However, Ang, Lee and Leong (2007) propose that to be effective, novel messages need to be both meaningful and connect their audience as well. Novelty, coupled with meaningfulness and connectedness, enhances consumer ad response. Messages containing those elements will be evaluated as being more creative and are better recalled and liked than novel messages which lack those elements (Ang, Leong, Lee & Lou, 2012). The question is, however, to what extent those creative elements are of effect regarding behavioural change. Is it that as important as it is expected to be?

2.6 Influencing planned behaviour

In this study another way of improving compliance is investigated; the effectiveness of posters with a creative element (a pun) and posters with an explicit message on behavioural change regarding the wearing of jewellery. It will be studied whether the behavioural change is planned (conscious) or automatic (unconscious). According to Pol et al. (2013) behaviour is planned when we consciously think about the intended behaviour. When this is the case, the poster will be consciously looked at, which may lead to intended behavioural change. In this thesis it will be studied whether there is a difference in analysing a poster with a pun and a poster with an explicit message.

2.6.1 Pun versus explicit message

A wordplay, or pun, is a witticism that relies for its effect on playing with different levels of language. This can be phonological, morphological, lexical, syntactic and textual. According to Van Mulken, Enschoot- van Dijk and Hoeken (2003) puns refer to the “usually humorous use of a word in such a way as to suggest two or more of its meanings or the meaning of another word similar in sound”. Therefore, puns are a form of figurative speech, a trope in which the message has at least two different meanings. Punning is probably the most obvious of all forms of humour (Partington, 2009). Of all the various forms of humour, plays on words and puns have received the bulk of attention in linguistic studies. Puns are frequently used in advertisements as a rhetorical device to promote a certain product or action by creating humour, attracting the receiver’s preferences (Laviosa, 2005).

An explicit message can be defined as a message that is fully and clearly expressed, leaving nothing implied (Cambridge Dictionary). According to Kintsch & Van Dijk, (1978) this can be described as a text that only uses those propositions that are necessary to establish formal coherence. This means that only words are interpolated that makes it possible to interpret the text. Toncar and Munch (2001) argue that an explicit message leads to logical inferences derived directly from the message. Those writers state that an explicit message is processed less deeply than wordplay is. Therefore, the pun is seen as independent variable in this research.

2.6.2 Attitude, attention, recall, comprehension, and behaviour; dependent variables

Literature shows that posters with a pun increase the attitude, attention and recall towards the poster (Toncar et al., 2001; McQuarrie & Mick, 1999; McGuire, 2000). But they are more difficult to understand, and it is less likely that they lead to behavioural change than a poster with an explicit message (Van Mulken et al., 2003; Berendsen, 2012). Those factors are seen as the dependent variables and will be discussed below.

Attitude towards the poster

Attitude change means that a person’s evaluation is modified from one value to another (Petty & Wegener, 2010). But how is it possible that some attitudes are very durable and others change overtime? The Elaboration Likelihood Model of Petty and Cacioppo (1986) provide a useful answer to this question. This model proposes two basic routes of processing a message. These are the central route and the peripheral route. Central processing involves cognitive elaboration. This means that the receiver is cognitive involved in the message. Peripheral processing involves focusing on cues that are not directly related to the substance of a message. Whether a person emphasizes the central or the peripheral route hinges on two factors: people’s motivation and ability to process information. Attitudes formed via central processing are more resistant to change than attitudes formed via peripheral processing. Actively thinking seems to ‘plant’ the attitude more firmly (Gass & Seiter, 2014; Petty & Cacioppo, 1986).

According to Leigh (1994) 10 to 40% of all advertisements contain wordplay. Advertisers believe that puns are helpful in persuading the audience. A rhetorical figure can be defined as an artful deviation in the form taken by a statement (McQuarrie & Mick, 1996). According to Meyers-ley and Malaviya (1999) one way in which advertisements are persuasive is by giving their audience a pleasurable experience. The consumer may associate the pleasure they experienced in processing

the ad with the product that is being advertised, which in turn may lead to a more positive attitude towards the product than when an explicit message is used (Toncar et al. (2001). Therefore, advertisers try to create positive attitudes by using creative elements. Several scholars indicate that rhetorical figures in messages (such as puns), in contrast to explicit messages, should increase a positive attitude among receivers (Huhmann & Albinsson, 2012; McQuarrie & Mick, 2003; Huhmann, Mothersbaugh & Franke, 2002 and Berendsen 2012). Thus, it is expected that a poster with a pun will lead to a more positive attitude than a poster with an explicit message.

Hypothesis 1: A poster with a pun leads to a more positive attitude towards the poster than a poster with an explicit message.

Attention

Attention can be goal-driven (or active) when it is controlled by the observer's deliberate strategies and intentions or attention can be stimulus-driven (or passive) when it is controlled by some salient attribute of the image that is not necessarily relevant to observer's perceptual goals Yantis (1998). Not all consumers are involved in all messages (Greenwald and Leavitt, 1984). However, it is important to recognize that any given act of attention typically involves some combination of two attentional modes.

In this study, the focus is on the attention of the health workers to the specific poster. Those people are not necessarily involved in the message. In other words, they have not chosen to come in contact with the message on the poster. Thus, in this case the paid attention will especially be stimulus-driven. Moreover, the posters used in this study can be seen as an activating message. Therefore, the visual elements as well as the textual elements are important components (McQuarrie & Mick, 1999). Visual elements are superior in capturing attention, independent of its size. Textual elements best captures attention in direct proportion to its surface size (Pieters & Wedel, 2004). Furthermore, pictures have the ability to influence the receiver, because they elicit affective responses (Miniard, Lord & Unnava, 1991; Berendsen, 2012).

In this study the focus is on the textual elements. McQuarrie and Mick (1996) made a distinction between tropes and schemes. A figure in the schematic mode occurs when a text contains excessive order or regularity, while a figure in the tropic mode occurs when a text contains a deficiency of order or irregularities. According to McGuire (2000) rhetorical tropes are eye-catching, making the messages more interesting than a text with an explicit message, and thus enhancing more attention to, and effective encoding of, the arguments. Puns could be classified as tropes, because the irregularity of a pun requires a semantic interpretation. Several studies showed that posters with a pun attract more attention than posters with an explicit message, due to their irregular shape (Huhmann et al., 2002; Laviosa, 2005) Therefore, it is expected that a poster with a pun will attract more attention than a poster with an explicit message.

Hypothesis 2: A poster with a pun attracts more attention than a poster with an explicit message

Recall

According to McQuarrie and Mick (1996) and Toncar and Munch (2001) tropes “invite elaboration by the reader”. The level or depth of comprehension of advertising language influences both attitude and memory for advertised information. Because tropes entail a deviation from expected meaning, they place additional processing demands on viewers. Viewers must first process the literal language used in the message and then make the “leap” to understand the deviation. Therefore, compared with explicit language, tropes should have significant effects on the cognitive processing and memory for print advertising, like posters. Viewers of a trope must assign a meaning that is different from its literal meaning and that resolves inconsistency inherent a trope structure. This necessitates deeper processing (Toncar & Munch, 2001).

Although figures of speech are used widely in print ads, the effects of these message structures on cognitive processing and memory have not been investigated systematically. However, several studies have shown that advertisements with rhetoric figures are better remembered than advertisements with explicit messages. Rhetorical figures stimulate cognitive processing, because they rely on the nonliteral meaning of words (McQuarrie & Mick, 2006; Toncar & Munch, 2003). Based on the literature, it could be expected that if tropes are processed more deeply than explicit claims, this should have implications for memory. The deeper level associations that result from processing tropes should enhance the recall of these claims.

Hypothesis 3: A poster with a pun will be better recalled than a poster with an explicit message.

However, in the case of unconscious processing, it is expected that it does not matter whether the poster contains a pun or an explicit message. The information is not deeply processed, so the details are not stored in memory. The poster serves primarily as a prompt. A crucial factor for an effective prompt is that the target group has the right associations with it (Pol et al. 2013). So the respondents have to know what the poster means, but not necessarily which details the poster contained.

Perceived comprehension

Perceived comprehension can be defined as a ‘communicator’s assessment of his or her success or failure when attempting to understand something’ (Myers & Bryant, 2000). Previous research overwhelmingly suggests that feelings of ease people experience while processing information lead them to infer that their comprehension is high, while feelings of difficulty lead them to infer that their comprehension is low (Miele & Molden, 2010). Therefore, for a poster to be effective, it is essential the receiver completely understands the message and it is essential that the message is not extremely difficult. The level to which an advertisement is understood, depends to a large extent on how an advertisement is developed and the use of creative elements. According to Gardner and Luchtenberg (2000) comprehension can be achieved both by first looking at the image and then reading the text, and the other way around. Furthermore they state that in most ads, the text anchors the image. This could be an explicit message as well as a pun.

Besides the fact that a pun can be seen as a humorous device, a pun can be considered as a riddle. Solving a riddle, or thinking to solve the riddle, could be felt as a pleasant experience, because

it flatters the audience's intellectual capabilities by showing them that they possess the relevant knowledge to solve the problem. However, the disability to solve the problem may also have the opposite effect. Therefore, it is very important that the receiver understands the intention of the pun. However, a disadvantage of a pun is that the message may cause uncertainty and conflict with respect to the intended meaning (Mothersbaugh, Huhmann & Franke, 2002). For interpreting a pun, Van Mulken, Enschoot-Van Dijk and Hoeken (2003) suggest that the receiver has to process more than one meaning in the message and this generally involves more processing effort than interpreting an explicit message. However, the supplementary interpretation of wordplay does not necessarily supply extra information (Van Mulken et al. 2003). On this basis, it can be expected that a poster with a pun is more difficult to understand and perceive to understand than a poster with an explicit message.

Hypothesis 4: A poster with a pun is more difficult to perceive to comprehend and to comprehend than a poster with an explicit message

Behaviour

In literature, there is very little known about the effects of a pun on the behaviour of the recipient. In this research, a congruent image will be combined with a pun or an explicit message. This could be seen as the prompt. Because it is expected that a pun distracts attention from the message (McQuire, 2000) it is believed that it is less likely that a poster with a pun leads to the desired behavioural change than a poster with an explicit message (Berendsen, 2012).

Hypothesis 5: It is less likely that a poster with a pun leads to the desired behavioural change, than a poster with an explicit message will do.

However, Pol et al. (2013) argue that posters can be seen as a prompt and will be unconsciously processed. Persons may be aware of the prompt but not aware of the effect it has on their behaviour. How automatic behaviour could be influenced will be discussed in paragraph 2.8.

2.7 Applicability of the hypothesis

The hypotheses described above are only applicable when there is planned behaviour. This could be the case when there is a difference regarding behavioural change between the poster with the wordplay and the poster with the explicit message. Attitude, attention, recall and comprehension could be of influence on behavioural change then. In case of automatic behaviour, however, it is expected that the opposite effect will occur. When there is automatic behaviour, attitude, attention, recall and comprehension will play no role as influencer. In that case, the design of the poster has no direct influence on behavioural change. How automatic behaviour could be influenced, will be discussed in the following section.

2.8 Influencing automatic behaviour

The extent to which one's own thought and behaviour are or are not under one's own intentional control has been a fundamental existential question over the past two decades. Researchers in the area of attitudes and social cognition have documented that many of the phenomena they study are

unintentional or automatic in nature. Attitudes are discovered to become activated automatically on the mere presence of the attitude object, without conscious awareness or intention (Bargh, Chen & Burrows, 1996).

Traditionally, the study of attitude change has focused on message based persuasion and social influence. Message based persuasion research examined attitudes at the individual level. An example of this is exposure to (persuasive) communication stimuli, like posters, advertisements etcetera. Nowadays, social influence is seen as a more important factor of attitude change. Attitudes are now seen as social phenomena that are embedded in social interaction (Wood, 2000). Moreover, the effectiveness of advertising messages is widely believed to be moderated by audience involvement (Greenwald & Leavitt, 1984). Several studies have indicated that involvement is an important moderator of the amount and type of information processing elicited by (persuasive) communication (Petty et al., 1983; Petty & Cacioppo, 1986; Greenwald & Leavitt, 1984). However, in the case of automatic behaviour, attitudes play no role as an influencer. When automatic behaviour needs to be changed, no attention needs to be paid to underlying attitudes. Attitudes follow the behaviour or are quite separate from them. So, in the case of automatic behaviour, they are no predictors of behaviour (Pol, et al., 2013). As stated above (p12), in this study social environment and job involvement can be seen as influencers of automatic behaviour. Both will be discussed below.

2.8.1 Influence of the social environment

Bargh et al. (1996) propose that social behaviour is often triggered automatically on the mere presence of relevant situational features. These writers argue that if an individual consistently behaves the same way in response to a situation, that behavioural response should become automatically associated with those situational features.

The strength of the social norm is deeply ingrained in social norms that have become an integral part of our behaviour. According to Pol et al. (2013) the social network theory offers good opportunities in order to change stuck behaviour. The core of this theory is that members of a target group are heavily involved by the implementation of the communication message. The success of this method is due to dialogue and discussion between the group members. Arguments of people in your own group are seen as more impressive than outsiders' arguments. However, a precondition for the success of the social network theory is social cohesion (Pol et al., 2013).

According to Lodahl and Kejnar (1965) most socialization processes use social motivations for control. Nonconformity is discouraged by social rejection, and conformity to norms is rewarded with social acceptance. Pol et al. (2013) express this as "those who stick to the rules of the group, will also benefit from the advantages of the flock". In a group, people often behave like others behave. People are assumed to be more willing to contribute when others contribute. This is called 'conditional co-operation'. The behaviour resulting from this conditional co-operation is consistent with at least three theoretical approaches: (Frey & Meier, 2004). First, people may want to behave in an appropriate way and conform to a social norm (Messick, 1999); second, people have some level of fairness preferences, such as reciprocity (Rabin, 1993); and third, contributions by others may serve as a signal of the quality of the public good, or of the organisation that provides the good (Vesterlund, 2003).

Moreover, according to Bargh et al. (1996), there is a strong historical precedent for postulating an automatic link between the representations used to perceived behaviour and those who engage in that behaviour themselves. Those writers argue that imitation, for example, consists of performing an action that corresponds in its structure to the perceived action of another person. When we see others behave in a particular way, we tend to behave in the same way. Learning about others, such as their group membership and reputation is crucial for social interaction (Frith & Frith, 2012).

Dijksterhuis and Bargh (2001) argue that the tendency to imitate is the consequence of the way we, or our brains, are shaped. Social perception has a direct effect on social behaviour. So, perceptual representations automatically activate corresponding behaviour. Because imitations are the consequence of 'mere' perception, there are no additional mechanisms needed to engage in imitation. No motivation is required, nor a conscious decision. We just do it. Furthermore, Dijksterhuis and Bargh (2001) argue that imitation is safe as a basic, default behavioural tendency. This capacity is present in early childhood (Piaget, 1946). Human beings have a fundamental 'need to belong' (Baumeister & Leary, 1995). They do not want to be the outsider and they need to be accepted and be liked. Imitation may lead to greater cohesion and the greater liking. It makes social interactions easier without many conflicts. So, a system that allows for automatic imitation will help to fulfil an enormously important social need.

Dijksterhuis et al. (2000) state that our social environment also directs our actions through cognitive constructs such as personality traits and social stereotypes. The perception of an individual usually leads to the activation of traits or stereotypes and the activation of these constructs affects our behaviour. So, behaviour is partly socially constructed but not everybody is affected in the same way. Hereby, the critical determinant is associative strength. This means that an attribute that is not present in one's cognitive repertoire does not elicit behavioural effects.

In this study, the focus will be on the conformity to the social norm. According to Cialdini and Goldstein (2004) conformity refers to the act of changing ones behaviour to match the responses of others. Individuals often look to social norms to gain an accurate comprehension of and effectively respond to social situations. Social norms have been found to influence a range of behaviours. The impact of the social norms on subtle behaviour shaping and more overt compliance-gaining will be determined by the extent to which each of the norms is focal and the degree to which the different types of norms are in alignment. Given that relevant norms must be salient in order to elicit the proper norm congruent behaviour, individuals attempting to persuade others to engage in a particular behaviour face the dual challenge of making the norm salient not only immediately following message reception, but in the future as well.

"Is the behaviour of the health care worker influenced by colleagues who are behaving according to the organisational norms?"

2.8.2 Influence of (job) involvement

Moreover, the level of someone's involvement in his/her profession could influence (automatic) behaviour. In this research, the focus will especially be on the perceived involvement of the healthcare workers in their profession. Empowerment and nurses' control over the content and context of their practice are important issues in nursing today (McQueen, 2004).

According to Kanungo (1981) there is a difference between job involvement and work involvement. Involvement in a specific job is not the same as involvement with work in general. The former is seen as a belief descriptive of the present job and tends to be a function of how much the job can satisfy the person's present needs. Involvement with work in general is a normative belief about the value of work in one's life. It is seen as a function of one's past cultural conditioning or socialization. In this research the influence of the specific job in the health care worker's life will be questioned and how this relates to his/her thoughts about wearing jewellery. Therefore, in this study the concept 'job involvement' will be used. Job involvement is the internalization of values about the goodness of work or the importance of work in the worth of the person, and perhaps it thus measures the ease in which the person can be further socialized by the organisation (Lodahl et al., 1965). According to Lodahl et al. (1965) there is a high relevance of social norms and values to the understanding of industrial motivation. The work may be judged by the organisation; it sets the norms for what is good work.

Moreover, the work, or the way in which work is executed, may become a routine. This automaticity in behaviour is called routinization. Features of routinization include unintentionality, uncontrollability, lack of awareness, and efficiency (Bargh, 1994). Research on habits and automaticity gives important insights into the role of routinization in behaviour regulation. Through frequent and consistent co-activation, representations of environmental features become associated with goals and behaviour. As a result, environmental features can automatically trigger behaviour without a conscious decision to execute the behaviour (Ohly, Sonnentag & Pluntke, 2006). Routines may be attractive for involved employees, due to their past success, relative ease and certainty. However, associative thinking, based on habits and following routines, may make it more difficult to search for improvements.

According to the Elaboration Likelihood Model of Petty and Cacioppo (1986) 'high involvement' attitudes in response to an advertisement would be affected via the central route and 'low involvement' attitudes would be affected via the peripheral route. High involvement messages have greater personal relevance and consequences or elicit more personal connections than low involvement messages. Personal relevance is thought to increase a person's motivation for engaging in consideration of the issue-relevant information presented (Petty et al., 1983). Therefore, one could speak of central processing when the target group is motivated and able to process the message. However, there are all sorts of reasons why a message is not centrally processed, even though the receiver is strongly motivated and able to process the message. This may be the case when a person has lack of time, when he/she finds the arguments not convincing or the message is unconsciously processed (Pol et al., 2013). Based on the described literature above, the following question could be asked:

"Is the level of someone's involvement with his/her profession of influence to automatic behavioural change?"

3. METHODS

3.1 The research design

In this study three methods will be used to answer the research question. These are an observational study, a survey and semi-structured interviews. By using the three methods it will be possible to obtain a more complete picture of the actual effect of both posters.

3.1.1 *Observational study*

The observations are the basis of this study. According to Aldmann (1974) the observation method plays a curious and unique role in the behavioural sciences. It is seen as the necessary link between laboratory research and 'real world' behaviour.

In this study it is observed to what extent nurses wear jewellery before and after the intervention. The study took place over time with two periods of observations; before and after the posters were presented. To be exact, this was a trend survey, because it keeps up with changes in the population by drawing a new sample at each measurement. (Dooley, 2009) This is necessary, because it is hardly possible to observe the same nurses during the two observation periods. To record the results of the observations, a self-developed scoring form was used to directly observe hand hygiene compliance (not wearing jewellery). This scoring form is attached in the appendix.

The first period of observations was done during an unobtrusive presence in the wards. The second observations were done during the second visit when the respondents were asked to fill in the questionnaire.

3.1.2 *The questionnaire*

Questionnaires are used to measure the effects of the two different posters on the dependent variables attitude, attention, recall, comprehension and self-reported behaviour. A questionnaire is a generally accepted method within the social sciences, because this method is relatively simple and reliable (Ten Klooster, Visser & De Jong, 2008). Questionnaires usually consist of many items and the most common method for creating a scale is the use of Likert-type questions. A Likert item consists of a statement, followed by a number of possible levels of agreement. These scales range from a group of categories—least to most—asking people to indicate how much they agree or disagree, approve or disapprove, or believe to be true or false (Allen & Seaman, 2007). Adding up Likert item scores assumes equal weighting of each question (Dooley, 2009). According to Wakita, Ueshima and Noguchi (2012) the answering options vary more when more options are used. The questionnaire was handed out and filled out during the second observations.

3.1.3 *The semi-structured interview*

After the observations and handing out of the questionnaires, 25 randomly selected respondents were asked to participate in a short interview. During this interview respondents were asked about their motivations to wear of jewellery or not. This qualitative study should give insight regarding the most important factors that may lead to the desired behaviour. In this study these are the social environment and job involvement. Thus, it could be stated that the qualitative interview clarifies the observations and focuses more on the 'why' of wearing jewellery. Moreover, the interview enables the

respondents to give their opinions as clearly as possible. During the interview, the researcher can ask for clarification to obtain as much information as necessary.

According to Downs and Adrians (2004) face-to-face communication may lead to more detailed information. The interviews in this study were done in a semi-structured way. This means that no use was made of fixed questions. However, there were some questions attached that could help in case the conversation faltered. The main disadvantages of using interviews as a research method is that it is very time consuming, the collected data are hard to code, interpret and analyse because the opinion of the researcher may be reflected in the interview.

The interviews were analysed by means of a codebook. This codebook consisted of the several topics used in the interviews. In order to ensure the reliability of the coding, an independent researcher was asked to code the interviews as well. This second coder was asked to code the quotes of a part of the respondents. Based on this, the reliability coefficient Kohens Kappa could be calculated. This was done by coding the quotes of seven respondents for each topic. The calculations are processed in the Graph Pad software program. The Kohens Kappa of the construct 'opinions regarding the wearing of jewellery' was 0,95. This was 0,80 for the construct 'social environment' and the Kappa of the construct 'job involvement' was 0,78. This means that there was a high degree of similarity between both coders. The inter-rater reliability was of sufficient quality to achieve reliable outcomes.

3.2 Procedure of the research

To investigate whether behavioural change occurs after the intervention, it was important to determine how many health care workers were wearing jewellery before the posters were exposed. Therefore, a 0-measurement was performed. During this measurement two different nursing homes were visited, both in the vicinity of Nijmegen; 'Het Herstelhotel' in Groesbeek and nursing home 'Madeleine' in Boxmeer. In each nursing home it was observed if and what kind of hand jewellery was worn. The results were noted down on the observation form. The researcher was present in the nursing home until every present health care worker was observed. This took about 4 hours in 'Het Herstelhotel' and 2 hours in Madeleine.

During the observations a cover story was used to prevent test-effects. The employees were told that the researcher was doing research about communication in health care. However, before the research started, the researcher had contact with a contact person of the different locations. This person was fully informed of the study and helped the researcher to gather as many as results as possible. All the results of the observations were processed anonymously. The contact person also has placed the posters at the several departments of both nursing homes. This was done a few days after the first observations, so the employees could not directly link the posters with the researcher. The posters were placed in the staff offices, the cleaning cupboard and the staff toilets. It was not allowed to place posters in public areas.

About three weeks after the 0-measurement, the actual experiment was carried out. The researcher came back to the nursing home and visited the several departments. All of the present staff were asked whether they were willing to fill in a questionnaire and would be interested in participating in a short interview. They were told that all their answers would be processed anonymously. Just as during the pre-test, the respondents were not informed about the exact reason for the study. They

were told again that the study was about health communication. Completing the survey took place in a quiet room (if possible). During the completion of the survey, the respondents were again observed for wearing hand jewellery. In cases in which respondents had not seen the poster, they only had to fill in the general data.

After completing the survey, respondents were randomly asked if they would participate in the interview. The interviews were conducted on the basis of three topics: their opinion about the wearing of jewellery, the influence of their colleagues with regard to their behaviour and job involvement. The interviews were all recorded. Respondents were asked not to talk in substance about the research. The contact persons of the nursing homes were asked to inform the employees about the actual purpose of the study afterwards.

3.3 The research population

To measure the effects of the posters, it is essential to select a representative research population (Verschuren & Doorewaard, 2007). For this research, a potential behaviour change with regard to wearing jewellery was measured among healthcare workers in several nursing homes. Those respondents were chosen, because former research had shown that infections within those institutions occur regularly. This, among other things, may be due to bad infection prevention and wearing jewellery during work time. Moreover, according to the Healthcare inspectorate, most basic guidelines to prevent infections are violated by those healthcare employees.

The research population consisted of all employees who were physically present at the department and in direct contact with the residents. These are mainly nurses, but the study population also includes physiotherapists, physicians, housekeeping are part of the study population. A total of 79 respondents participated in this study. The respondents during the first observations were not necessarily the same as the respondents during the second observations. 54 participants of 'the nursing home where the poster with the explicit message was hung took part in this research and 25 participants of the nursing home where the pun was hung. In total 65 of the respondents who were exposed to a poster took part in the survey. A number of 45 employees were exposed to the poster with the explicit message (69,2%) and 20 respondents who were exposed to the poster with the pun (30,8%) have completed the questionnaire. Of those respondents 15 health care workers who were exposed to the poster with the explicit message were interviewed and there were 11 health care workers who were exposed to the poster with the pun. Two participants who were exposed to the poster with the explicit message had not noticed the poster and therefore could not fill in the questionnaire. Of those respondents only the demographics were analysed.

Table 3.2.1 shows the demographics of the respondents both from the nursing home where the poster with the explicit message was hung and the nursing home where the poster with the pun was exposed. The majority of the 65 respondents were female (89,2%). A total of 7 men took part in the research (10,8%). Of those men, 6 were exposed to the poster with the explicit message and only 1 was exposed to the poster with the pun. The average age of all the respondents is 35,91 with a standard deviation of 14,08. The average age of the health care workers who were exposed to the poster with the explicit message was 37,31 (SD = 14,20) and the respondents exposed to the poster with the pun had an average age of 32,75 (SD = 13,64). The independent sample T-test shows no

significant differences between the average ages of both groups ($t(df63) = 1,21, p = .23$) Based on age, this means that the respondents are evenly distributed over both groups.

Furthermore, table 3.1.2 shows that the majority of the respondents have completed vocational training (55,4%). This was 46,7% in the nursing home where the poster with the explicit message was hung and in 'the nursing home where the poster with the pun was exposed it was 75%. Here, the independent sample T-test shows ($t(df63) = .90, p = .37$). Thus, regarding the educational level, the respondents are evenly distributed over both groups as well.

The health care workers have worked an average of 12,26 years in the healthcare sector ($SD = 11,57$). This was 12,76 ($SD = 14,20$) for the respondents who were exposed to the poster with the explicit message and 11,15 ($SD = 13,64$) for the respondents who were exposed to the pun. The number of working years ranged from a few days to 40 years. Of all the respondents, the function of Care Assistant is present the most (66,2%). This was 62,2% in the nursing home with the poster with the explicit message and 75% in the nursing home with the pun. The respondents had been in their function on average 8,28 years in their function ($SD = 9,96$). An independent sample T-test shows no significant differences between the two groups regarding the average number of years in care ($t(df63) = 0,51, p = .61$) and regarding the average number of years in function ($t(df63) = -0,25, p = 0,80$). Based on these data it can be stated that de respondents are evenly divided over both conditions.

Table 3.2.1. Demographics of the respondents per condition

		Explicit message		Pun		Total	
Gender	Male	6	(13,3%)	1	(5%)	7	(10,8%)
	Female	9	(86,7%)	19	(95%)	58	(89,2%)
Age	Mean	37,31	(14,20)	32,75	(13,64)	35,91	(14,08)
Education level	mavo/vmbo	7	(15,6%)	4	(20%)	11	(16,9%)
	havo/vwo	7	(15,6%)	1	(5%)	8	(12,3%)
	mbo	21	(46,7%)	15	(75%)	36	(55,4%)
	other	10	(22,1%)	0	(0%)	10	(15,4%)
Years in care	Mean	12,76	(14,20)	11,15	(13,64)	12,26	(11,57)
Function	Care assistant	28	(62,2%)	15	(75%)	43	(66,2%)
	House keeping	8	(17,8%)	0	(0%)	8	(12,3%)
	Living environment	2	(4,4%)	5	(25%)	7	(10,8%)
	Physiotherapist	4	(8,9%)	0	(0%)	4	(6,2%)
	Doctor	3	(6,7%)	0	(0%)	3	(4,6%)
Years in function	Mean	8,07	(10,48)	8,75	(8,9)	8,28	(9,96)

3.4 The measurement instrument

3.4.1 Stimuli

To obtain relevant observations, an observation scheme was developed. On the basis of this scheme a list could be made of if and how many health care workers were wearing jewellery and what type of jewellery was worn. After those first observations, two different posters could be placed in the several nursing homes. For this experiment, two posters were selected; a poster with a pun and a congruent picture and a poster with an explicit message and a congruent picture. To ensure the validity of the

research the two posters had the same size and layout. This means they had the same picture, colours and font. The posters used were selected on the basis of the study of Berendsen (2012). The pre-test of that study concluded that the pun 'versier hem buiten werktijd' and the explicit message 'draag geen sieraden tijdens het werk' were best understood. The image with the 'X' was seen as the most appropriate fit for the message. Both posters are depicted in Figure 3.1.



Figure 3.1: The used posters for the research

3.4.2 Measurement of planned behaviour

Attitude

Attitudes can't be observed directly, because they are inside people's heads. Therefore, social scientists have developed explicit and implicit methods of measuring attitudes. Explicit measurements can be made when people know their attitude. An example of an explicit measure is a self-report scale. Implicit measurements can be done when people are not aware of their attitude. They assume that unconscious attitudes can be accessed. This may be done by implicit association tests (Gass & Seiter, 2014). This study measured conscious attitudes by using the Likert Scale.

To measure the attitude of the respondents, the attitude regarding the poster was measured. To do this, nine items on a 7-point Likert scale were used (McQuarrie & Mick, 2006; Burton & Lichtenstein, 1988; Mackert, Lazard, Champlin, Liang, Mabry, Stroeve & Watkins, 2014). Examples of items are: (1) foolish (7) nice and (1) useful (7) not useful etc. The items formed a reliable scale ($\alpha = .90$).

Attention

Attention to the poster is very important in order to achieve an effect. Seven items on a 5-point Likertscale measure the extent to which the respondents pay attention to the poster (1 = totally disagree, 5 = totally agree) (Based on Chaffee & Schleuder, 1986). All the items formed a reliable scale ($\alpha = .82$).

Moreover, to measure the extent to which effective attention was paid to the poster, respondents were asked which elements of the poster they could remember. Attention could influence the operations of recognition of other cognitive systems such as are involved in the recognition of visual patterns (Posner & Petersen, 1989).

Recall

An open question was asked in order to determine whether respondents were able to recall the poster. This question was "What could you remember of the poster? And describe as many elements as you can remember." (McQuarrie & Mick, 2003). The response framework included two columns; one for textual elements and one for visual elements. The answers were coded as (1) totally right, (2) partly right/ partly wrong, (3) totally wrong. In order to score an answer as totally right on textual elements, "geen sieraden" and "werk" had to be named regarding the explicit message and "versier hem" and "buiten werktijd" had to be named. Regarding the image, a hand with jewellery and a 'X' had to be named in order to be scored as 'totally right'. When no answer was given, it was scored as totally wrong. To be sure, the answers were scored in a reliable way, a second rater was asked to score 21 interviews as well. Those were imported into SPSS to obtain a crosstab. This was done for both recall of the text and recall of the image. Based on those two crosstabs the Kohens Kappa was calculated in the software program Graph pad. The results showed a Kappa of 0,91 for recall of the text and a Kappa of 0,84 for recall of the image. This yielded an average score of 0,88, which means that the answers were scored in a reliable way.

Comprehension and perceived comprehension

To measure to what extent the respondent thought to understand the poster, two items on a 7-point Likert scale were used (Phillips, 2000). The two items were: (1) "easy to understand" (7) "difficult to understand" and (1) "clear" (7) "confusing". The two items on the 7-point Likert scale together formed a reliable scale ($\alpha = .86$)

In order to measure real comprehension, an open question was asked. This question was: "What do you think what is meant by the poster?" When the message was totally understood it was scored as (1), when the message was partially understood it was scored as (2) and when the message was not understood as all it was scored as (3). A respondent scored a '1' when he or she said that it was not allowed to wear jewellery at work. A '2' was scored when a respondent wrote that you have to work hygienically and named no jewellery in the answer. A '3' was scored when the respondent gave no answer at all. To ensure the reliability, the second coder scored also 21 interviews. The results were again imported in SPSS and the Kappa was calculated in Graph Pad. The results showed a Kappa of 0,84.

Self-reported behaviour

To measure the behaviour of the respondents, observations were made use of. Those observations were done before- and after the posters were displayed at the departments of both nursing homes. It was observed if and which jewellery the respondents wore. The results of the observations were noted on the observation form.

The choice was made to observe the behaviour of the healthcare workers, because the study of Curtis, Cousens, Mertens, Traore, Kanki and Diallo (1993) argued that observations would provide more reliable results than when only a survey is used. However, to obtain a more complete picture of the behaviour component, four additional questions were included. Those questions were: 'I have never worn jewellery during work', 'The poster makes sure health care workers do not wear jewellery during work', 'The poster encourages me to remind my colleagues that they are not allowed to wear

jewellery during work' and 'The poster keeps me from wearing jewellery during work time' (Mackert et al. 2014). These questions are seen as individual items, and were therefore analysed individually, so no cronbachs alfa was calculated.

3.4.3 Investigation of (automatic) behaviour

After conducting the observations and handing out the questionnaires, some respondents were interviewed. Those respondents were selected randomly. The interviews were conducted to clarify the reasons why health care workers wear jewellery during work time or why they do not wear jewellery during work. Based on the answers in comparison with the outcomes of the survey, it was tried to determine whether the poster was of influence regarding their behaviour (change) or whether the poster had no direct effect on behaviour. When the latter was the case, it could be expected that the poster was unconsciously processed and led to automatic behaviour change. It was attempted to investigate which factors did affect the employee's behaviour. Thus, by means of the interviews was tried to investigate how respondents have processed the poster.

In those interviews it was asked why respondents were not wearing jewellery anymore or why they were still wearing jewellery despite the fact that they had seen the poster. Those respondents were asked one question which was posed in a very open way to allow the respondents to express his or her opinion as well as possible. The question was: "Could you indicate why you currently wear less jewellery in your work than before?" In the cases in which the respondent did not give clear information or did not say anything about the influence of the social norm or job involvement, the respondent were asked some additional questions. These questions where: "What is the influence of your colleagues on your behaviour towards wearing jewellery?" and "To what extent do you feel committed to your profession?"

4. RESULTS

In this chapter, the outcomes of the study are discussed. First, the results of the survey are outlined. After that, the results of the interviews are revealed.

4.1 Results of the survey

This paragraph shows the results of the survey. An outline is shown of what the effects of the poster with the explicit message and the poster with the pun were on the attitude towards the poster, attention, recall and comprehension.

Table 4.1: Average score on the dependent variables per condition and scale

		Mean	Standard Deviation	Scale
Attitude *	Explicit message	5,32	1,02	7-point
	Pun	6,02	.76	
Attention *	Explicit message	2,99	.70	5-point
	Pun	3,74	.64	
Recall	Explicit message	2,37	.62	3-point
	Pun	2,20	.89	
Perceived comprehension	Explicit message	2,38	1,66	7-point
	Pun	2,85	1,75	
Comprehension	Explicit message	1,63	.90	3-point
	Pun	1,60	.88	

* = Significant difference

4.1.1 Effects of both posters on attitude

To test if there are main effects of both text-types and the attitude regarding both posters, an independent sample T-test was conducted. The test variable was the average score on attitude per nursing home. The grouping variable was the nursing home. The results of this test showed a significant difference between the explicit message and the pun regarding attitude $t(df61) = -3,20$, $p < 0.00$. Based on these outcomes it can be concluded that a poster with a pun leads to a higher attitude towards the poster than a poster with an explicit message. The group statistics of this test showed the average score on attitude per condition, which are shown in table 4.1.

4.1.2 Effects of both posters on attention

In order to determine if a poster with a pun attracts more attention than a poster with an explicit message, as was expected by McGuire (2000), an independent sample T-test was conducted. The average score on attention was used as the test variable and the nursing home was used as grouping variable. The results of the test showed a t-score of $t(df61) = -4,19$ ($p < 0.00$). Based on this outcome it could be stated that a poster with a pun attracts more attention than a poster with an explicit message. The group statistics used for this test are shown in table 4.1.

4.1.3 Effects of both posters on recall

An independent sample T-test was conducted to test which text type is better remembered. The average score on attention was used as test variable and the nursing home was used as grouping variable. The test showed $t(df61) = 0,78$, $p = .44$. This means that there is no significant difference between an explicit message and a pun on the level of recall. Therefore, it can be stated that a poster with a pun does not lead to a better recall of the poster. The group statistics showed the average score on recall of the text, which are shown in table 4.1.

4.1.4 Effects of both posters on (perceived) comprehension

To test the effects of both posters on perceived comprehension, an independent sample T-test was conducted once again. The average score of the two items 'I think the poster is easy/difficult to understand' and 'I think the poster is clear/confusing' was used as testing variable and nursing home as grouping variable. The results of this test showed no significant difference between both text types on perceived comprehension ($t(df61) = -1,00$, $p = .32$).

An independent sample T-test was also used to test the effects of both posters on comprehension. Here, the construct 'real comprehension' was used as testing variable and the nursing home was used as grouping variable. The results of this test showed ($t(df61) = .12$, $p = .91$). This means that there is no significant difference between both text types on comprehension.

Based on this test it can be concluded that there is no significant difference between an explicit message and a pun to the extent to which the message is (perceived to be) understood. The group statistics of both perceived comprehension and comprehension are shown in table 4.1.

4.1.5 Effects of both posters on self-reported and actual behaviour

The four individual items of the survey regarding self-reported behaviour were individually analysed. The first item was 'I have never worn jewellery during work'. An independent sample T-test was conducted to test if there were significant differences between both nursing homes regarding this item. The results showed $t(df61) = .57$, $p = .58$. Based on this result it could be stated that there were no significant differences between the wearing of jewellery in the past for both nursing homes.

The second item was 'The posters ensures that no jewellery is worn by the employees during work'. Again, an independent sample T-test was conducted to determine whether there are differences between the two text-types. The results showed $t(df61) = -1,93$ $p = .062$. Therefore, it can be concluded that there is no significant difference between both posters regarding the wearing of jewellery during work.

The third item was 'the poster supports me to comment on colleagues that the wearing of jewellery is not allowed'. The independent sample T-test conducted on this item showed $t(df61) = .25$, $p = .81$. So, there is no significant difference between the two posters on commenting colleagues.

The last item on behaviour was 'the poster has contributed to the fact that I am not wearing jewellery anymore'. The results of the independent sample T-test showed $t(df61) = .46$, $p = .65$. Based on this result it could be concluded that there is also no significant difference between the two text-types on the actual wearing of jewellery. Table 4.2 shows all grouping variables used for the tests. An item could be scored between '1' and '5'. The higher the mean, the more the respondent agreed with the item.

Table 4.2: Average score per item per condition on a 5-point scale*

	Mean	Standard Deviation
Never wore jewellery during work		
Explicit message	3,53	1,62
Pun	3,30	1,49
Poster ensures the personnel is not wearing jewellery during work		
Explicit message	3,35	.90
Pun	3,85	.99
Poster supports to comment on colleagues		
Explicit message	3,53	.94
Pun	3,60	.99
Not wearing jewellery due to the poster		
Explicit message	3,02	1,53
Pun	2,85	1,42

* There were no significant differences between the items

4.2 Results of the observational study

To test if the placement of a poster has led to behavioural change, regardless the type of text, a Chi-Square test was conducted. The test was conducted on the total number of respondents, whether they were wearing jewellery or not. The results show a significant relationship between the first and the second measurement ($X^2(3) = 10,48, p = .02$). The number of respondents who were wearing jewellery during the first measurement (35%) is higher than the number of respondents who were wearing jewellery during the second measurement (6%).

Furthermore, a Chi-Square test was conducted to determine whether the type of the text had led to behavioural change. The results showed significant effects for both the explicit message and the pun (explicit message: $X^2(1) = 8,49, p = .004$), pun $X^2(1) = 10,00, p = .002$). 33% of the respondents who had seen the poster with the explicit message were wearing jewellery during the first measurement and 9% of the respondents who saw that poster were wearing jewellery during the second measurement. Of all the respondents who were confronted with the poster with the pun, 40% was wearing jewellery during the first measurement and 0% during the second measurement. The results of the observations are shown in table 4.3. The managers of the nursing homes were involved in this study, so it is expected that no other events happened which may have influenced the wearing of jewellery.

Table 4.3: The wearing of jewellery per measurement

	First measurement			Second measurement		
	Number observed	Jewellery	No jewellery	Number observed	Jewellery	No jewellery
Explicit message	54	18 (33%)	36 (67%)	45	4 (9%)	41 (91%)
Pun	20	8 (40%)	12 (60%)	20	0 (0%)	20 (100%)
Total	74	26 (35%)	48 (65%)	65	4 (6%)	61 (94%)

4.3 Results of the interview study

In this paragraph the results of the interview study are discussed. The interviews were conducted to try to clarify the possible influence of unconscious processing and the factors that influenced automatic behaviour. The results are divided into three topics: the general opinion regarding the wearing of jewellery, influence of the social environment and influence of the social norm.

4.3.1 Results regarding the opinions about the wearing of jewellery

Table 4.4 shows the general view of the 25 respondents with regard to the wearing of jewellery in nursing homes.

Table 4.4: Overview of the given opinions regarding the wearing of jewellery in nursing homes

Opinions regarding the wearing of jewellery	Agree	Disagree	Not agree/not disagree	Nothing said about
<i>Ever worn jewellery?</i>	10	15		0
<i>Against the wearing of jewellery</i>	21	1	3	0
Reasons against the wearing of jewellery				
<i>Unhygienic</i>	23			2
<i>Wounding patients</i>	10			15
<i>Own safety</i>	5			20
Reasons why jewellery should be allowed				
<i>Jewellery can be useful</i>	1			24
<i>Jewellery contributes to perception-oriented care</i>	2			23

It can be seen that 15 of all the respondents have ever worn jewellery. However, nowadays the vast majority of them say they are against the wearing of jewellery in nursing homes (21 out of 25). One of them said: *"I think you are not supposed to wear jewellery in health care organisations, because it can harm patients and it is absolutely not hygienic. Moreover it can be very dangerous for yourself. So, the wearing of jewellery is really dangerous"* (respondent 5). One respondent has the opinion that he/she should be allowed to wear jewellery: *"I really have no problems with the wearing of jewellery during my work here in the nursing home. Therefore, I do not agree with the ban on wearing jewellery. But it is the rule and I have to stick to the rules"* (respondent 17). Three respondents have no clear opinion on the topic. They do not fully approve or disapprove of it. *"I do understand that the wearing of jewellery is not allowed during care. It is unhygienic. But it feels very bare not to wear any jewellery. We want to provide perception-oriented care and in my opinion, the wearing of jewellery goes with that! Yes, I really have some difficulties with that"* (respondent 14).

The respondents gave three arguments why the wearing of jewellery should not be allowed. The vast majority (23) gave the fact that the wearing of jewellery is unhygienic as main reason. *"I think the wearing of jewellery is really not acceptable. It is unhygienic! It can transmit bacteria and therefore infect patients"* (respondent 11). The fact that jewellery may wound patients is another widely given answer (10): *"Especially in elderly care people often have a very thin skin. Jewellery can easily damage their skin"* (respondent 24). A few respondents (5) also gave their own safety as a reason not to wear jewellery: *"When you wear hand jewellery, you can easily get hooked"* (respondent 4).

The arguments of the three respondents who said to have no problems with the wearing of jewellery were the contribution of jewellery to perception-oriented care and the usefulness of jewellery.

4.3.2 Results regarding the influence of the social environment

By means of the second topic it was tried to find reasons for the fact respondents were not wearing jewellery (anymore). Respondents were asked which causes they thought to be of influence and if they thought the poster had any influence on this behaviour as well. The results of this topic are shown in table 4.5.

Table 4.5 Results of the given causes not to wear jewellery

Factors affecting the wearing of jewellery	Agree	Disagree	Nothing said about
<i>Poster has influence on the wearing of jewellery</i>	7	17	1
Already wore no jewellery	11		14
Increases awareness	15	1	9
<i>Influence of colleagues</i>	14	11	0
Colleagues comment on each other	22	2	1
I will do what others do	3	13	9
<i>Imposed by superiors</i>	10	0	0

As can be seen in the table, most of the respondents (17) have the opinion that the poster did not affect whether they would wear jewellery or not: *"The poster did not really affect me. Perhaps it serves as a reminder, so you are aware there again. But it I am not going to wear less jewellery because of the poster"* (respondent 1). 11 respondents said the poster had no influence, because they already wore no jewellery before the poster was hung. However, many respondents said the poster served as a reminder and made them again aware of the fact that wearing jewellery is not allowed. *"The poster has made me more aware of the fact that it is forbidden. But before the poster was hung, I already wore no jewellery, so it did not really affect me"* (respondent 8). Seven respondents said the poster did have some influence on their behaviour regarding the wearing of jewellery. In that case the fact that the poster increases awareness was given as the main reason as well: *"Yes, I think the poster did affect me. But it was also a reminder not to wear it. It makes clear that the wearing of jewellery is definitely not allowed"* (respondent 4).

With regard to the influence of colleagues on behaviour regarding the wearing of jewellery, opinions are divided. As can be seen in table 4.5, 14 respondents think colleagues do affect each other and 11 of them do not think colleagues have influence on the wearing of jewellery. An example of a respondent who thinks colleagues do affect each other is: *"I think the wearing of jewellery happens less when colleagues structurally address each other's behaviour regarding the wearing of jewellery"* (respondent 1). A respondent who does not think colleagues have influence on each others' behaviour said: *"Every colleague of me knows that the wearing of jewellery is not allowed, so in that sense we do not affect each other. But we do comment on each other when we see others wearing"* (respondent 19). This quote makes also clear why so many respondents (22) are of the opinion that colleagues do comment on each other; despite the fact they do not think they have some influence on their behaviour. Furthermore, 13 respondents have indicated not to wear jewellery even if others would do so: *"I would not wear jewellery by myself when I see others wearing it. I know the law and I*

know that the wearing of jewellery in health care institutions is forbidden” (respondent 15). However, three respondents indicated they would wear jewellery if they see others wearing it too. An example of an argument for this statement is the following quote: *“I would definitely wear jewellery again when I see others wearing it! In my opinion you have to wear gloves to ensure hygiene”* (respondent 17).

A remarkable outcome of this topic is that 10 respondents indicated that they wear no jewellery during work, because their superiors imposed a ban on wearing it. Those respondents came up with this remark without a prior question of the researcher. No respondents said that superiors were not of any influence. An example of a quotation regarding the influence of executives is: *“It was no longer allowed to wear jewellery. We got a new team manager who had worked in the hospital. Since then, the rule has been more strictly enforced”* (respondent 15).

4.2.3 Results regarding the influence of job involvement

The last topic of the interview study was about the influence of job involvement on the wearing of jewellery. The results are shown in table 4.6.

Table 4.6: Overview of the given opinions regarding the expected influence of job involvement

Job involvement	Very involved	Involved	Not involved
<i>Level of involvement</i>	20	4	1

Job involvement vs. wearing of jewellery	Agree	Disagree	Nothing said about
<i>Influencing the wearing of jewellery</i>	17	8	0
<i>Don't want to hurt patients</i>	8		17
<i>Don't want to infect patients</i>	10		15
<i>Belongs to the developments within the profession</i>	1		24
<i>It's an agreement not to wear jewellery</i>	4		21

As can be seen in the table above, 20 respondents indicated feeling very involved in his/her profession. Most of them had been working in the nursing home for a long time. *“I feel very, very involved! My work is an important part of my life!”* (respondent 23). There were four respondents who indicated feeling involved, but not very involved. Most of them were working temporarily in the organisation, because they were an intern or a flex worker. A quote that illustrates this outcome is: *“I feel involved to some extent. For me, this is only is a part time job. This is not a job that I want to do the rest of my life. I especially work here because this is the sector where I would like to work in future”* (respondent 13). One respondent said not to feel involved at all. This was an intern as well: *“I do not feel involved, because this is not my profession yet. I have not been working here that long, so in my opinion it is hardly possible to feel involved”* (respondent 4).

The vast majority of respondents (17) indicated that the level of job involvement has influence on the behaviour regarding the wearing of jewellery. The fact that they do not want to infect or hurt patients with their jewellery, because they want all the best for the people they have to take care for, were the arguments given to support that opinion. *“In my opinion, if you want to do the job in the best possible way, you are not allowed to wear jewellery. It is not hygienic to wear jewellery and you may wound your patients with it”* (respondent 7). *“I don't want to wound patients and transmit any diseases. I am not wearing jewellery, because I know I can hurt someone with that”* (respondent 19).

Of the 8 respondents who did not see any relation between the level of job involvement and the wearing of jewellery, 4 respondents indicated again that the fact that it is just not allowed was of greater influence. One of them said for example *“No, I don't think that my level of involvement influences the wearing of jewellery. I do not wear it, because it is not allowed”* (respondent 23). One respondent argued that the level of involvement really has something to do with the wearing of jewellery and also reasoned that this has to do with the agreements made. *“Yes of course the level of involvement has something to do with the extent to which jewellery is worn! If it is said that it is important not to wear jewellery, than I would not wear it!”* (respondent 14)

5. CONCLUSION

This study is a follow-up investigation of the study of Berendsen (2012). That study revealed some new insights regarding the effectiveness of a poster with a pun or an explicit message, in combination with an (in)congruent message, and whether this influences recall, attitude, comprehension and behaviour of recipients in natural conditions. The study of Berendsen (2012) concluded that a poster with a pun and an incongruent picture increases the recall of the poster. However, a poster with an explicit expression and congruent picture leads to more extensive processing of the message and increases comprehension, recall and behavioural change.

This study attempts to give an answer to the remaining questions regarding the study of Berendsen (2012) and tried to reveal whether the derived behavioural change is automatic or planned. Based on a observational study was tried to investigate whether behavioural change occurred, a survey was used to clarify whether the behavioural change was a result of conscious processing and a interview study was conducted in order to verify a possible unconscious process that may have led to behavioural change. In this chapter, the conclusions of all methods are outlined and after that the final conclusion will be given.

5.1.1 Conclusion of the observational study

Based on the results of the observations it could be concluded that behavioural change occurred between the first and second measurement. During the first measurement 65% of all respondents wore no jewellery versus 94% during the second observation. There was no difference between the respondents who saw the poster with the explicit message and those who saw the poster with the pun. Thus, the fact that behavioural change occurred implies that a process was put into motion. By analysing the results of the survey and the interview study I have tried to find out which process has taken place.

5.1.2 Conclusion of the survey

The survey study showed that respondents who saw the poster with the pun had a more positive attitude towards the poster than respondents who were exposed to the poster with the explicit message. Thus, hypothesis 1 is confirmed. This is in line with what Huhmann et al. (2012), McQuarrie et al. (2003), Huhmann et al. (2002) and Berendsen (2012) argued about the positive influence of rhetorical figures in rhetorical messages. According to those writers rhetorical figures increase a positive attitude.

Furthermore, McGuire (2000) argued that posters with rhetorical figures are eye-catching, which makes the message more attractive and thus gets more attention. This survey also showed that the poster with the pun attracted significantly more attention than the poster with the explicit message. Therefore, it could be concluded that hypothesis 2 is confirmed.

With regard to the construct 'recall' it was expected that a poster with a pun would be better recalled than a poster with an explicit message (H3). This hypothesis was based on what McQuarrie et al. (1996) and Toncar et al. (2001) stated in their studies. Those researchers argued that tropes should have a significant effect on the cognitive processing and memory for print advertising, because

they entail a deviation from expected meaning and it places additional processing demands on viewers. The results of this study, however, showed no significant difference between both posters. However, in case of unconscious processing, it was expected that it does not matter whether the poster contains a pun or an explicit message, because the information is not deeply processed. The poster may have served as a prompt then (Pol et al., 2013). Because of the fact that this study showed that the poster with the pun was not recalled more but not recalled less either than the poster with the explicit message, hypothesis 3 is rejected. This suggests unconscious processing occurred.

Moreover, the survey showed that there was no difference regarding perceived comprehension and real comprehension between both posters. The poster with the explicit message was not (perceived to be) better understood and than the poster with the pun, but also not (perceived to be) understood worse either. However, from literature it was expected that a poster with a pun was (perceived to be) more difficult to understand than the poster with the explicit message (H5), because the receiver has to process more than one meaning in the message when interpreting a pun. This is not in line with what this study showed, so hypothesis 5 could be rejected.

Regarding the dependent variable 'self-reported behaviour' used in the questionnaire, it was expected that the poster with the pun would not lead to more desired behavioural change than the poster with the explicit message (H6), because it was argued that a poster with a pun distracts attention from the message (McQuire, 2000). Based on the results, however, it could be concluded that there was no difference regarding behavioural change between both groups. Both posters led to behavioural change. Posters can be seen as a prompt and therefore are unconsciously processed (Pol et al. 2013). Thus, whether a poster contains a pun, does not matter with regard to behavioural change.

5.1.3 conclusions of the interview study

Based on the results of the interview study it could be concluded that the majority of the respondents were against the wearing of jewellery during work. They found it unhygienic and dangerous. However, they did not think the posters had influenced their behaviour. Respondents noted that they already wore no jewellery, that they were influenced by the agreements made and by their colleagues. All in all, it could be stated that a decrease in the wearing jewellery could be induced by the influence of the social environment. The observations certainly showed a decrease but respondents indicated that the poster did not influence them. They reported that the poster had primarily served as a reminder (prompt). Besides, they will comment on each other when they see someone is wearing jewellery and they will not wear it because superiors forbid it. So, conformity to the social norm seems to be an influencing variable with respect to the wearing of jewellery.

Moreover, the results showed that the majority of the respondents reported to be very involved in their profession. Most of them were of the opinion that job involvement is of influence on the wearing of jewellery. They do not want to hurt or infect patients. Based on the results, it is possible that the level of involvement is of influence on the wearing of jewellery, but is not clear that the poster had an effect on this as well. However, it could not be stated that the level of involvement influenced the effect of the poster. Respondents did not say anything about the poster when talking about their level of involvement.

5.1.4 Answering the research question

The goal of this research was to investigate whether activating messages in a natural environment are processed consciously or unconsciously and whether that may lead to planned or automatic behaviour. This was done based on the research question: *“In which way is an activating message on a poster processed, and to what extent does the design of the poster influence planned or automatic behaviour change?”*

Based on the conclusions of the three methods used in this study, the final conclusion is that behavioural change certainly occurred between the first and the second observations. The survey showed that respondents had a more positive attitude towards the poster with the pun and the poster with the pun caught also more attention than the poster with the explicit message. The fact, however, that respondents had a more positive attitude and more attention for the poster with the pun had not led to more behavioural change regarding the poster with the pun. The results showed no significant difference between both posters. Furthermore, there was no difference in recall, and (perceived) comprehension. Moreover, respondents themselves also thought the poster had no influence on their behaviour. They think it is more important to behave according to the agreements made and the social norm. Those outcomes indicate that the exposition of the posters have served as a prompt, which triggered unconscious processing and finally led to automatic behavioural change.

6. DISCUSSION

6.1 Theoretical implications

This study showed that the exposition of posters in nursing homes regarding the ban on wearing jewellery has influence on automatic behaviour instead of planned behaviour. This conclusion is based on the results of observations, a survey and an interview study. In this chapter will be discussed how this conclusion relates to the literature as discussed in chapter 2.

6.1.1 Theoretical implications based on the survey; measuring planned behaviour

By means of the survey it was studied whether this behavioural change was planned. As stated by Ajzen (1991) planned behaviour is behaviour we consciously think about and is based on one's beliefs about an outcome and the evaluation of that outcome. So, in that case, the poster will be consciously looked at and the meaning will be thought about which may finally lead to intended behaviour change. Because of the fact that the poster is consciously processed, there could be a difference in effectiveness between a poster with a pun and a poster with an explicit message. Literature has shown that posters with a pun increase the attitude, attention to and recall towards the poster (Toncar et al., 2001; McQuarrie & Mick, 1999; McGuire, 2000).

From literature it was expected that rhetorical figures in messages should increase a positive attitude towards the poster (Huhmann & Albinsson, 2012; McQuarrie & Mick, 2003; Huhmann, Mothersbaugh & Franke, 2002 & Berendsen 2012). As discussed above, this study indeed showed respondents had a more positive attitude towards the poster with the pun, but this did not lead to more behavioural change regarding the poster with the pun. This is in line with what Pol et al. (2013) stated: Attitude is no predictor of behaviour in case of automatic behaviour.

According to the variable attention, McGuire (2000) argued that posters with wordplay are more eye-catching, which makes the message more interesting than a poster with an explicit message. It was expected that posters with a pun, due to their irregular shape, would attract more attention (Huhmann et al., 2002; Liviosa, 2005) This is also what this study showed. However, it had no effect on behavioural change.

Moreover, several studies showed that advertisements with rhetorical figures are better remembered than those with explicit messages. According to McQuarrie et al. 2006 and Toncar et al. (2003) rhetorical figures stimulate cognitive processing, because they rely on the nonliteral meaning of words. It was expected that tropes are processed more deeply than explicit claims and that this should have implications for memory. In case of unconscious processing, however, it was expected that it does not matter whether the poster contains a pun or not (Pol et al. 2013). The poster serves as a prompt then. This means that the receivers have to know what the poster means, but the lay out is less important (Pol et al., 2013). In that case, it was expected that there would be no difference regarding recall between the poster with the pun and the poster with the explicit message, and that is also what this study shows.

Regarding the variable '(perceived) comprehension Van Mulken et al. (2003) stated that the receiver has to process more than one meaning in the message when interpreting a pun. This generally involves more additional effort, but the processing of a word play is less economical than the processing of explicit messages, which means that it does not necessarily leads to extra information.

Moreover, the message may cause uncertainty (Mothersbaugh, Huhmann & Franke, 2002). Therefore, it was predicted that a poster with a pun would be more difficult to understand than a poster with an explicit message. However, this study showed no difference in (perceived) comprehension between both text-types.

The final variable measured by the survey was behaviour. In literature very little was known about the effects of a pun on the behaviour of a recipient. Pol et al. (2013) argued that posters can be seen as prompt and therefore are unconsciously processed. Whether a poster contains a pun or explicit message does not matter in that case. Persons may be aware of the prompt, but not aware of the effect it has on their behaviour. Therefore, it was expected that there would be no difference in behaviour between a poster with a pun and a poster with an explicit message. This is also what this study revealed. But it is in contrast with the study of Berendsen (2012). That study showed that the poster with the explicit message has more effect than the poster with the wordplay. A possible explanation of this could be that at the start of the present study most respondents already wore no jewellery. They already knew the norms. In that case, a poster with a cross through a hand of jewellery may serve as a prompt. Textual messages may be less important then. When the picture and the written words are presented together, the picture may block conditioning of the words (Didden, Prinsen & Sigafonds, 2000) The cross alone may be enough to remind the respondent not to wear jewellery. It may focus peoples' attention on their own (unconscious) knowledge and understanding that the wearing of jewellery is not allowed (Lin et al., 1999).

Because of the fact there was no difference in behavioural change between both posters, unless the poster with the pun led to a higher attitude and attention (Pol et al, 2013), it could be stated that the posters are processed unconsciously and led to automatic behaviour change.

6.1.2 Theoretical implications based on the interview study; measuring automatic behaviour

Automatic behaviour is based on the unconscious process that we sometimes perform what we want but oftentimes just do what we see (Dijksterhuis et al. (2000). According to Pol et al. (2013) the use of primes and heuristics are important in influencing automatic behaviour. By means of priming, psychological processes like textual messages and other stimuli like images may stimulate our behaviour without us being aware of it.

As proposed by Bargh et al. (1996) social behaviour is often triggered automatically on the mere presence of relevant situational features. According to Pol et al. (2013) the strength of the social norm has become an integral part of our behaviour. This study also confirms this. Respondents reported commenting on each other when they saw someone was wearing jewellery, wanting to obey to authorities and agreements. This is in line with the statement Pol et al. (2013) made about the influence of arguments of people in their own group. Those arguments are seen as more impressive than outsider's arguments. Moreover, those writers argued that people are assumed to be more willing to contribute when others contribute. Furthermore, it is stated that people want to behave in an appropriate way and conform to a social norm and contributions by others may serve as a signal of the organisation that provides a public good (Pol et al. 2013; Frey et al., 2004 & Vesterlund, 2003). People want to behave conform the social norm and match to responses of others (Messick, 1999; Cialdini & Goldstein, 2004). Nonconformity may lead to social rejection and conformity is rewarded with acceptance (Lodahl et al., 1965).

However, it is remarkable that the vast majority of the respondents indicated that they would not be tempted to wear jewellery when they see others wearing it. However, this is also very difficult to estimate. According to Dijksterhuis et al. (2000), people have the innate tendency to imitate; they have a fundamental 'need to belong' and do not want to be the outsider. Baumeister et al. (1995) stated that imitation might lead to greater liking. But this is not what the interviews revealed. This outcome could be explained, however, by what Dijksterhuis et al. (2000) stated about the perception of an individual; "The perception of an individual usually leads to the activation of traits or stereotypes and the activation of these constructs affects our behaviour" (p 15). Not everybody is affected in the same way.

With respect to the construct 'job involvement', the results showed that the majority of the respondents reported to be very involved and most of them thought job involvement was of influence on the wearing of jewellery. According to Lodahl et al. (1965) job involvement is the internalization of values about the goodness of work or the importance of work in the worth of the person. According to this author it perhaps measures the ease in with which the person can be further socialized by the organisation. This is more or less what this study revealed. Respondents said not to wear jewellery, because they did not want to hurt or infect patients. They wanted all the best for their patients. According to them, this could not be reached when jewellery is worn. This outcome is in line with what Cacioppo et al. (1983) stated: "It is essential that people are involved in the subject, that they are able to change their attitude and that there are some favourable cues that motivate them change" (p2).

6.2 Limitations

Like any scientific research, this research has some limitations as well. The first is the relatively small number of respondents who participated in this study. Because of this small amount, the conclusions of this study could not be set very hard. Furthermore, there was a huge difference between the number of respondents per nursing home. This may be due to the fact the nursing homes were assigned. Moreover, it was not possible to conduct long interviews, because the majority of the health care workers were very busy and did not want to be kept from their work too long. Interviews themselves have the disadvantage that respondents may give socially desirable answers.

Furthermore, the outcomes of the observational study are based on what was observed during the two visits. Although the managers of the nursing homes were involved in the study, it is not known if some other events happened in the period the posters were exposed which may have influenced the results. Moreover, the researcher had no influence on the behaviour of the respondents. Respondents were asked not to talk about the research with colleagues when they had taken part in the survey or interview study, because that could influence the answers of their colleagues. However, it cannot be stated with certainty they really did not, so this may have influenced their answers. In addition, respondents may have come into contact with the poster in different ways. Some of them may have seen it more often than others because of differences in their work schedules.

As described, this research was a follow-up of the study of Berendsen (2012). The outcomes of both studies differ on several points. Those differences could be explained by the fact that the present study was conducted two years later and in another region of the Netherlands. During the past few years, more and more attention has been given to the importance of not wearing jewellery in health care organisations. The Radboud University in Nijmegen has paid much attention to this. Therefore, health care workers of the nursing homes in the vicinity of Nijmegen may be more aware of

the dangers than they were two years ago in the province Zealand. This difference in region and time could have affected the results. To rule this out, a follow-up study could be conducted in another region.

6.3 Recommendations for future research

Based on the conclusion of this research, it could be stated that this study has provided new insights about the way in which activating messages are processed and their effects of that on planned/automatic behaviour. However, it is still not known if unconscious processing also occurs in marketing advertisements, for example.

Furthermore, this research was conducted in nursing homes. Here, employees generally had vocational training. Health care workers in hospitals have generally had higher education. Future research could focus on health care workers in hospitals for example, to see if the level of education is of influence as well.

Another recommendation is to investigate the long-term effects of automatic behaviour change. This research only measured the effects once (during the second observations). It may be interesting to investigate whether permanent behavioural change has occurred. To do this, more observations, spread over the long term should be performed, and more interviews could be held as well.

6.4 Practical implications

At the end of this study, the most favourable outcome, a decrease in the wearing of jewellery by health care workers is reached. The exposition of the posters has served as a prompt and triggered automatic behavioural change. So, exposition of posters makes sense, but automatic behaviour is more influenced by the social environment. This outcome may be cost-effective for organisations, because they do not need to spend a lot of money on the development of very fancy posters. The exposition of some kind of prompt with a clear and simple design that makes the employee aware of the desired behaviour, has the most favourable effects on compliance. Thereby, it is very important that the poster is easy to understand.

Furthermore, managers of health care organisations should focus more on the development of tight teams and the importance of the social norm. Employees should be triggered to behave according those social norms. This knowledge could contribute to more desired behaviour of employees in all kinds of organisations.

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APPENDIX

A. Questionnaire

Beste medewerker van

Ter afronding van mijn opleiding 'Communicatiewetenschap' aan de Universiteit Twente ben ik momenteel bezig met mijn afstudeeronderzoek naar communicatie in de zorg. Mijn vraag aan u is of u hieraan wilt meewerken door het invullen van onderstaande vragenlijst. Dit zal ongeveer 5 minuten van uw tijd in beslag nemen.

Er zijn geen goede of foute antwoorden! Ik ben vooral benieuwd naar uw mening. Alle antwoorden die u geeft zullen anoniem worden verwerkt en alleen worden gebruikt voor dit onderzoek.

Alvast heel hartelijk dank voor uw medewerking.

Hilde Dorman
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Algemene informatie

Wat is uw geslacht?

- Man
- Vrouw

Wat is uw leeftijd?

.....jaar

Wat is uw hoogst afgeronde opleiding?

- MAVO / VMBO
- HAVO
- VWO
- MBO
- HBO
- Universiteit
- Anders, namelijk:.....

Hoe lang bent u al werkzaam in de zorg?

.....jaar

Wat is uw functie?

- Medewerker zorg
- Medewerker huishouding
- Medewerker woon-leefmilieu
- Fysiotherapeut
- Arts
- Anders, namelijk:

Hoe lang bent u al werkzaam in deze functie?

.....jaar

De vragen hieronder gaan over de poster die de afgelopen weken op de afdeling heeft gehangen. Wanneer u deze poster niet heeft gezien, hoeft u de vragen niet in te vullen.

Wat is uw algemene indruk van de poster?

slecht	<input type="radio"/>	goed						
stom	<input type="radio"/>	leuk						
negatief	<input type="radio"/>	positief						
lelijk	<input type="radio"/>	Mooi						
niet informatief	<input type="radio"/>	informatief						
niet effectief	<input type="radio"/>	effectief						
niet overtuigend	<input type="radio"/>	overtuigend						
onopvallend	<input type="radio"/>	opvallend						
niet nuttig	<input type="radio"/>	nuttig						

Hieronder vindt u een aantal stellingen. Geef aan in hoeverre u het eens bent met deze stellingen.

	Helemaal mee oneens	Mee oneens	Niet mee eens/ niet mee oneens	Mee eens	Helemaal mee eens
De poster trok mijn aandacht	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De tekst op de poster trok mijn aandacht	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De afbeelding op de poster trok mijn aandacht	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik keek langer naar de poster dan ik normaal doe als ik naar posters kijk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik keek langer naar de tekst dan ik normaal doe als ik een tekst bekijk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik keek langer naar de afbeelding dan ik normaal bij een poster doe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb met mijn collega's over de poster gepraat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Wat kunt u zich herinneren van de poster? Beschrijf zoveel mogelijk kenmerken van de poster

Tekst	Afbeelding

Ik vind de poster...

Makkelijk te begrijpen Moeilijk te begrijpen

Duidelijk Verwarrend

Wat wordt er volgens u met de poster bedoeld?

Hieronder vindt u een aantal stellingen. Geef aan in hoeverre u het eens bent met deze stellingen.

	Helemaal mee oneens	Mee oneens	Niet mee eens/ niet mee oneens	Mee eens	Helemaal mee eens
Ik heb nooit sieraden gedragen tijdens mijn werkzaamheden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De poster zorgt ervoor dat personeel geen sieraden draagt tijdens het werk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De poster moedigt mij aan om mijn collega's te wijzen op het feit dat zij geen sieraden mogen dragen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De poster heeft ertoe bijgedragen dat ik geen sieraden draag tijdens mijn werkzaamheden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B. Interview topics

Topic	Startvraag	Doorvragen
Dragen van sieraden	Wat is uw mening ten aanzien van het dragen van sieraden tijdens werkzaamheden in het verpleeghuis?	Draagt u wel eens sieraden tijdens het werk? Waarom wel/niet? Bent u de afgelopen tijd minder sieraden gaan dragen?
Oorzaken voor afname van het dragen van sieraden	Kunt u aangeven waarom u op dit moment minder sieraden draagt tijdens uw werkzaamheden dan voorheen?	In hoeverre was de poster hier van invloed op? Wat is de invloed van uw collega's op uw gedrag ten aanzien van het dragen van sieraden?
Job involvement	In hoeverre voelt u zich betrokken bij uw beroep?	In hoeverre denkt u dat de mate waarin u uw beroep belangrijk vindt, van invloed is op het wel of niet dragen van sieraden tijdens het werk?

C. Codebook

Opinions regarding the wearing of jewellery	agree	disagree	Not agree/not disagree	Nothing said about
Ever worn jewellery?	10	15		0
Against the wearing of jewellery	21	1	3	0
Reasons against the wearing of jewellery				
Unhygienic	23			2
Wounding patients	10			15
Own safety	5			20
Reasons why jewellery should be allowed				
Jewellery can be useful	1			24
Jewellery contribute to perception-oriented care	2			23

Factors affecting the wearing of jewellery	agree	disagree	Nothing said about
Already wore no jewellery	11		14
Poster has influence on the wearing of jewellery	7	17	1
<i>Increases awareness</i>	15	1	9
Colleagues	14	11	0
<i>Colleagues comment on each other</i>	22	2	1
<i>Do what others do</i>	3	13	9
Imposed by superiors	10	0	0

Job involvement	Very involved	involved	Not involved
Level of involvement	20	4	1

Job involvement vs wearing of jewellery	agree	disagree	Nothing said about
Influencing the wearing of jewellery	17	8	0
Reasons why influencing			
Don't want to hurt patients	8		17
Don't want to infect patients	10		15
Reasons why not influencing			
Belongs to the developments within the profession	1		24
It's an agreement not to wear jewellery	4		21

Observation form

Nursing home: ...

Number of observed people: 54

<i>Nursing staff</i>	<i>Doctors</i>	<i>Physiotherapists</i>	<i>Housekeeping</i>	<i>Nutrition/ living room assistant</i>

Number of people who where wearing jewelry: 18

<i>Nursing staff</i>	<i>Doctors</i>	<i>Physiotherapists</i>	<i>Housekeeping</i>	<i>Nutrition/ living room assistant</i>

Type of jewelry that was worn:

Watch	
Bracelet	
Ring	