

**Tactus' clients judging instructional videos:
A valuable addition to the MDOD intervention?**

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Abstract

An intervention that aims to provide quality addiction care to individuals with intellectual disabilities, is the 'Less Alcohol or Drugs' intervention (Denouden, Kiewik and van der Nagel, 2012). This thesis aims to study how this intervention could benefit from the use of instructional videos. Instructional videos were designed that showed passive, aggressive and assertive refusal behaviour. To measure clients support for the use of such videos, clients emotional responses were analysed using the Facial Action Coding system (FACS) and an interview was conducted. Results from the FACS showed that the video about passive refusal behaviour evoked significant emotional responses for contempt, while all videos evoked significant emotional responses of surprise. The assertive refusal behaviour video was the only video that evoked positive emotional responses and also the only video that did not evoke negative emotional responses. The aggressive and passive refusal behaviour videos evoked negative emotional responses. Overall, the FACS scores indicate that the videos were effective in showing the refusal behaviour as intended. Also, the FACS scores indicate that clients experience learning benefits from videos. All client supported the use of instructional videos throughout the intervention during the interview. Clients stated that videos are a superior material compared to conventional methods that are currently applied throughout the intervention. During the interview, support was found for vicarious learning and modelling through videos, and mimicking a real life situation and clarity were mentioned as added value of videos. . Overall, this study shows great potential for the use of instructional videos in healthcare interventions tailored to individuals with intellectual disabilities. Future research might concern the extent to which personalization of the videos enhances the learning benefits of the videos.

1.1 ID and SUD.

According to Shawna, Chapman and Wu (2012), the number of individuals that is diagnosed with ID is growing. They also state that SUD' are more common among individuals with ID, compared to individuals without ID. Part of the reason for this overrepresentation is caused by interventions being made for people with an average intelligence, making them ineffective in changing the addictive behaviour of people with ID (Slayter, 2008). This is an alarming

development in healthcare, that needs to be addressed. To do so, it is important to identify people with ID and SUD, and what they can benefit from, to be able to provide fitting care.

1.1.1 ID and SUD defined

The Diagnostic and Statistical Manual of Mental Disorders (5th ed. ; DSM-5, 2013) defines ID as ‘a disorder with onset during the developmental period that includes both intellectual and adaptive functioning deficits in conceptual, social and practical domains’. The DSM-5 uses adaptive functioning to define the level of ID, and not IQ scores, because it is the level of adaptive functioning that determines the level of support that is needed.

The DSM-5 distinguishes between SUD’s by assigning severity scores. These scores are defined as mild, moderate and severe. The distinction is made based on the number of diagnostic criteria that are met by an individual. SUD’s occur when the recurrent use of alcohol and/or drugs causes clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home. According to the DSM-5, a diagnosis of SUD is based on evidence of impaired control, social impairment, risky use, and pharmacological indicators (tolerance and withdrawal). Shawna, Chapman and Wu (2012) discovered a link between ID and SUD. To be able to provide fitting care for people with ID and SUD, it is important to gain understanding about how they are linked.

1.1.2 Prevalence of ID and SUD

SUD rates among individuals with ID vary across studies, largely due to a lack of valid instruments. Van der Nagel and colleagues (2017) used the *substance use and misuse in intellectual disability- questionnaire* (SumID-Q, Van der Nagel et al, 2011), which was designed specifically to assess SU rates among people with ID, and found that almost all individuals with ID (97%) had used substances that are licit in the Netherlands (alcohol and tobacco) and a large group (50%) had used at least one illicit drug (cocaine, ecstasy). In comparison, the Trimbos Institute performs the national drug Monitor every year. They found that in 2016, 6.6% of the Dutch population had used cannabis, while 1.7% had used cocaine and 2.6% had used ecstasy in 2016. These numbers strongly indicate that people with ID are more likely to use illicit drugs during their lifetime, compared to people without ID. Also, According to a study by Kiewik, van der Nagel, de Jong and Engels (2017) the use of tobacco and cannabis among people with ID in the Netherlands is higher than the use of these substances among their fellow Dutchmen. Slayter and Steenrod (2009) studied the

susceptibility of people with ID compared to people with no ID, regarding frequent substance abuse. They found that when an individual with ID uses alcohol or drugs once, there is a significantly higher chance this individual will lapse into frequently abusing the substance, compared to individuals that do not have from ID. Even though IQ is no longer used to define the level of ID, these scores are an indication that people with ID are susceptible to develop a SUD. The intellectual disabilities among these individuals come with cognitive deficits that have implications for effective intervention design, as will be explained next.

1.1.3 Cognitive deficits and implications

According to Shawna, Chapman and Wu (2012) the cognitive limitations among individuals with ID, hinder their understanding in treatments and their ability to successfully participate in treatments. The deficits distinguished by the DSM-5 are reasoning, problem- solving, planning, judgement, academic and experience learning and practical understanding. Van der Nagel and colleagues (2014) described additional cognitive limitations faced by individuals with ID. These limitations include lack of concentration, lack in verbal skills, compliance, limited knowledge on their disease and higher comorbidity with other psychiatric complaints and physical problems. These individuals also have lower chances of receiving adequate healthcare and staying in treatment, due to treatments not meeting the different needs of people with ID, compared to the needs of people who don't have ID. Because of this, individuals with ID are often portrayed as clients with bad adherence to treatment (Shawna, Chapman and Wu 2012).

The cognitive deficits among people with ID also have implications for designing components of an intervention for this target group. When designing an intervention, adjustments have to be made regarding the content, pace, language and length of the components of the intervention (Frielink & Embregts, 2013). This means that interventions for individuals with ID need to be easy to understand. This can be achieved by adjusting the vocabulary to the cognitive level of the client, repeating important elements, adjusting the pace of the intervention to the cognitive level of the client and by limiting the length of the intervention to make sure the client can retain his attention throughout the intervention. (Frielink & Embregts, 2013).

1.2 The MDOD intervention

According to Melville (2005), individuals with ID and SUD have high levels of unmet healthcare needs compared to the general population. MDOD is a cognitive behavioural therapeutic intervention developed by Tactus, that aims to solve this problem by providing quality healthcare that fits the needs of these individuals. MDOD consists of 12 alternating individual and group meetings, aimed at gaining insight in and influencing addiction behaviour. MDOD consists of 12 themes, that are discussed in a group session as well as in an individual meeting . The 12 themes are (1) Acquaintance, (2) Substance information, (3) Pro's and con's, (4) Goals and tips, (5) Habits, (6) Craving, (7) Saying no, (8) Goals and Excuses, (9) Thinking different and doing different, (10) My plan, (11) Relapse prevention and (12) Goodbye and beyond.

1.2.1 Behavioural change techniques

MDOD aims to change the behaviours of clients by emphasizing behavioural change techniques. Bartholomew (2011) described the intervention mapping approach, which can be used to map interventions like MDOD based on the use of behavioural change techniques. When the intervention mapping approach was applied to the MDOD intervention for this study, to find out which behavioural change techniques are emphasized throughout MDOD, we found the most used behavioural change techniques throughout the 12 themes are psycho education, motivational interviewing, guided practice and goal setting. More behavioural change techniques are emphasized throughout MDOD, but these four are applied most frequently. These behavioural change techniques are implemented for different reasons and in different ways, to help clients understand and change their own behaviour. The following definitions and goals of the behavioural change techniques were derived from Bartholomew (2011).

Psycho education is implemented by providing the clients with information to gain insight in their own addictive behaviour and factors that contribute to this behaviour. Motivational interviewing means that the client and the professional have a collaborative communication style, aimed at eliciting the clients own motivation and commitment to the intervention. Guided practice implies that the clients practice the behaviour like they desire to perform it in real life, but in a safe environment while receiving feedback and discussing the experience with a professional or with peers. This repeated exercise contributes to the clients ability to perform such behaviours later in real life. Goal setting aims to increase self-efficacy by setting reachable goals, that include goal directed behaviour that will eventually result in the desired behaviour.

Event though MDOD is already tailored to the needs of individuals with ID and a SUD, there are still improvements that can be made to enhance the tailoring and effectiveness of the intervention. An example is the implementation of instructional videos throughout the intervention. Currently, MDOD mostly uses conventional methods like roleplay to achieve behavioural change among clients. This means that the behavioural change techniques need to be transferred through these conventional methods, which is not always effective. For example, Bartholomew (2011) stated, that while conventional methods can only effectively transfer particular behavioural change techniques, practically all behavioural change techniques can be efficiently transferred through instructional videos. This implies that when instructional videos are implemented, and discussed during meetings to address the behavioural change techniques that might not be transmittable through videos (like guided practice) the MDOD intervention will become more effective in achieving desired behavioural changes.

1.3 Benefits of instructional videos

Studies done by Mechling (2005) and Clark, Kehle, Jenson & Beck (1992) show great potential for learning from instructional videos, especially for individuals with ID. Therefore, the potential for the use of instructional videos in the MDOD intervention was explored. Practical and learning benefits were found that advocate for the use of instructional videos in the MDOD intervention.

1.3.1 Practical benefits of instructional videos

Mechling (2005) made a review of several instructional video programmes. She found numerous practical advantages of learning through instructional videos, for both organizations and learners. Advantages for learners include that videos can be viewed as often as needed, that the length and content of the videos can be managed to match the needs of the target group and that the videos can be shared with the learners, allowing the learners to watch the videos whenever and wherever they want. Mechlin (2005) also stated that instructional videos provide opportunities and benefits for organizations, like Tactus. This is because instructional videos are cost- efficient when compared to real live instructors performing roleplays. There are also time and schedule advantages when compared to learning from live models and roleplays, because videos can be displayed at any time without having to deal with the schedules of the models or instructors.

1.3.2 Learning benefits of instructional videos

According to Clark, Kehle, Jenson & Beck (1992), people with ID learn better and more effectively through observation, compared to learning by reading or conversation. This learning difference is bigger for people with ID than for people without ID. This is a powerful argument to include instructional videos in the MDOD intervention. There is a growing amount of literature providing findings that instructional videos are effective for learning functional skills, especially for people with ID (Mechling, 2004). The theoretical basis for these findings, are social learning processes, introduced by Bandura (1962). Bandura claimed that learners could learn to perform a certain task or show a certain behaviour by watching others perform that task or behaviour. According to Mechling (2004) and Clark, Kehle, Jenson & Beck (1992), people with ID show better performance results through social learning methods, compared to other methods. This learning often took place in small groups and with live models performing the behaviour, a method also used in the MDOD intervention. However, Ayres and Gast (2010) state that learning through instructional videos provides a new opportunity for learning through observation, besides the roleplays. The process of modelling is crucial for this learning to occur effectively.

1.3.2.1 Modelling

Modelling is commonly seen as the bridge that fills the gap between didactic information that is given and procedural skills, how to really perform the behaviour that is being explained (Bennett-Levy et al, 2009). Therefore, modelling is an extra valuable component when working with people with ID, because processing didactic information and then performing this behaviour in real life is something that people with ID struggle with. An effective model is important for vicarious learning to be effective, since modelling is a main learning process behind the vicarious learning strategy. There are several conditions for a model that need to be met, for vicarious learning to occur. First of all the model has to be credible and reliable (De Gee, 2015). This can be done linking the model to the subject of the script, for example by choosing an expert as the model or by emphasizing that the model once faced the same struggles as the clients. Second, authenticity is important (Houston, 2011). This can be achieved by creating a personal bond between the client and the model in the scripts, for example by giving the model a backstory or by arranging a meeting with the model. Third, the personal factors of the model (like age, gender and ID) should match those of the client to maximize the effectiveness of the model if possible (De Gee, 2015). Modelling is also an important condition for learning through videos to occur, which is called vicarious learning.

1.3.2.2 Vicarious learning

The specific form of learning that occurs when behaviours are learned by watching others perform these behaviours in a video, is called vicarious learning (Bandura, 1963) and provides evidence for the effectiveness of instructional videos. Vicarious learning blurs the boundaries between learning and doing (Lave & Wenger, 2005), which is beneficial to the learning of people with ID, since individuals with ID struggle to convert theory into action. This explains the earlier discussed findings from Clark, Kehle, Jenson & Beck (1992), who found that individuals with ID benefit significantly more from instructional videos compared to people with average intelligence.

Bandura (1963) described 4 processes that are essential for vicarious learning. First, attention processes determine which of the models are focused on, and which of their behaviours are signalled out for observation. Attention in the context of this study means that clients focus on relevant aspects of the instructional video, which allows them to make better sense of the material. Second, retention processes involve the forming of a symbolic mental representation of the information and storing it in memory. Retention processes allow clients to remember the content of the videos, so they know what behaviour is expected from them. Third, motor reproduction processes involve the skill to actually reproduce this expected behaviour in a real life situation. Fourth, there are motivational processes that concern the perception of negative and positive reinforcements, following the behaviour of the model.

The presented review of literature about learning from instructional videos and the benefits of instructional videos for both learners and organizations, showed that instructional videos are worth exploring and can be a valuable source of learning for Tactus clients.

1.4 Designing instructional video prototypes

The instructional video prototypes that were designed for this study revolve around refusal behaviour styles. This topic was chosen because effective refusing is an important topic throughout the MDOD intervention and because refusal behaviour style is an important determinant for effective refusing. Another reason is that performing refusal behaviour is a functional skill, which can be effectively transferred through instructional videos (Mechling, 2004). There are three refusal behaviour styles that can be found in literature, which are also emphasized throughout the MDOD intervention. These are assertive refusal behaviour, aggressive refusal behaviour and passive refusal behaviour (Lange & Jakubowski, 1978).

1.4.1 Assertive refusal behaviour

Assertive refusal behaviour is encouraged throughout the MDOD intervention. MDOD calls this style 'Duidelijk'. According to Lange and Jakubowski (1978), assertive refusal behaviour has the purpose to convey feelings of respect for both the other person and ourselves. You honestly say what you feel instead of just what you think the other wants to hear. Assertive refusal behaviour means that you refuse in a gentle, yet firm way. In the assertiveness training developed by Englander- Golden, Elconin and Satir (1986), assertive refusal behaviour was most frequently associated with respect from others, high self- esteem from the sender and it showed to be the most effective in refusal behaviour style. The next characteristics of assertive refusal behaviour are emphasized during the MDOD intervention: (1) look the other person in the eyes, (2) stay calm, (3) speak clear and determined, (4) say 'no' again when pressured, (5) make a 'stop' gesture with your hand (6) change the subject and (7) walk away. These characteristic behaviours were also shown in the videos that were used in this study.

1.4.2 Aggressive refusal behaviour

Aggressive refusal behaviour is defined by Lange and Jakubowski (1978) as threatening and ridiculing the other person, while showing aggressive behaviour, like yelling or engaging in physical contact. This strategy often leads to feelings of anger and conflict in both the sender and receiver of the message. In the MDOD intervention aggressive refusal behaviour is called 'Gemeen'. This style of refusal behaviour is characterized by the following behaviours: (1) ridiculing, (2) threatening, (3) engaging in physical contact, (4) yelling and (5) insulting / calling names. These characteristic behaviours were also shown in the videos that were used in this study.

1.4.3 Passive refusal behaviour

Englander- Golden, Elconin and Satir (1986) defined passive refusal behaviour as not standing up for yourself. This often leads to complying when the goal was refuse, causing it to be an ineffective refusal behaviour style. In the MDOD intervention, this style is called 'Voorzichtig'. Passive refusal behaviour is defined by the following characteristic behaviours: (1) looking down, (2) speaking to soft, (3) closed body language (looking smaller instead of bigger/stronger), (4) stuttering, (5) not saying the word 'no' explicitly (using words like 'actually' and 'well'), and (6) compliance. These characteristic behaviours were also shown in the videos that were used in this study.

1.5 Formative evaluation

The MDOD intervention aims to provide quality addiction care for people with ID and SUD. Client support is a way of exploring beforehand whether or not instructional videos can contribute to this. In this study, the variables spontaneous emotional response and conscious cognitive response were used as an indication of client support.

1.5.1 Spontaneous emotional response

Lewis, Haviland- Jones and Barrett (2008) studied how facial movements contribute to the production of a recognisable emotion. They found that certain groups of simultaneously occurring facial movements were positively related to the forming of such emotions. They focused their study on the emotions that were universal according to Darwin (1872). For example widened eyes and pulled up lip corners express happiness. These universal emotions are anger, contempt, disgust, fear, happiness, joy, sadness and surprise. With this knowledge, it is possible to explore the emotional responses of individuals while they watch an instructional video, by scoring their facial movements. The Facial Action Coding System (FACS), designed by Ekman and Friesen (1978), is a validated checklist to score someone's facial movements, and provides insight in their emotional responses towards the videos.

1.5.1.1 Emotion enhanced memory effect

Emotional stimuli are better remembered than neutral ones (Kang, 2014). This is called the Emotion enhanced memory effect (EEM). EEM is proven to occur when watching videos, like the ones used in this study, even when the emotional response is low (van Steenbergen, Band & Hommel, 2010). Two processes that contribute to emotion are valence and arousal (Kensinger & Corkin, 2004). Valence is defined as an intrinsic averseness (badness) or attractiveness (goodness) of an event, object or situation, while arousal is defined as physical and mental alertness. Kensinger and Corkin (2004) found that EEM processes related to arousal are processed by automatic encoding processes, while EEM processes related to valence are processed by controlled encoding processes. This demonstrates that emotional responses while watching instructional videos indicate arousal, thereby indicating better remembering of the material. Therefore, emotional responses showed while watching the videos advocate for the use of instructional videos in the MDOD intervention.

1.5.2 Conscious cognitive response

Besides emotional responses, cognitive responses also provide valuable information about the perceptions clients have towards instructional videos. The best way to expose these cognitive responses is by engaging in a conversation about the use of instructional videos. Cognitive responses in this study are statements, thoughts and ideas expressed by the participants during an interview about instructional videos. While a spontaneous emotional responses indicate arousal, conscious cognitive responses can be used to explore valence, according to Kensinger and Corkin (2004). By engaging in a conversation and uncovering the clients valence regarding the prototypes, a learning effect has been demonstrated.

Combining both spontaneous emotional responses and conscious cognitive responses towards instructional videos, served two purposes. The first goal is to indicate a learning effect caused by instructional videos and to assess strengths and weaknesses of videos, by measuring emotional and cognitive responses. The second goal is to present a broad view on Tactus' clients preferences towards the use instructional videos throughout the MDOD intervention.

Method

2.1 Participants

A number of 13 Tactus clients took part in this study (10 males and 3 females). All participants were between 20 and 60 years old. One client had severe ID, which might hinder this clients understanding. All participants were involved with Tactus as a client. Participants were recruited with help of Tactus' clinicians. Clinicians were contacted via email to consult about which clients would be able to participate in the study and when and where the study could take place. Inclusion criteria were (1) being involved with Tactus' as a client and at some point enrolled in the MDOD intervention, (2) being able to understand instructional videos and (3) being able to reflect on instructional videos during an interview. The expected time per client was half an hour . Participant burden was low for this study, even for individuals with ID, since there were no mentally demanding exercises. The study took place in Tactus' treatment facilities in Rekken, Enschede and Almelo.

2.2 Procedure

The participants were welcomed when they entered the room. Next, the explanation sheet and informed consent were read and signed by both the participant and the researcher.

Participants were given the chance to ask questions if something was unclear. The participants watched 3 instructional videos. One showing assertive refusal behaviour, one showing aggressive refusal behaviour and one showing passive refusal behaviour. The participants were recorded while they watched the videos. They were not told which video showed effective refusal behaviour. The participants were instructed to think aloud while watching the videos. After they watched the videos, the participants were asked to point out the video that they thought showed effective refusal behaviour, while still thinking aloud. The videos were shown in a random order to eliminate a possible order- effect. The recordings were analysed using the Facial action Coding System to study the spontaneous emotional responses of the participants. Other striking behaviours, like movements or comments, were also noted and analysed. The participants also had to point out which of the three videos showed effective refusal behaviour. The answer was scored as 1 (correct) or 2 (wrong), to see if participants could single out effective refusal behaviour. Next, the participants took part in an interview, aimed at exploring their thoughts regarding instructional videos. The participants were asked to think aloud during the interview. The interview was recorded and typed out word for word. The typed out interview was analysed and themes were extracted from the text using a coding sheet. After the interview, the clients were thanked for their participation. The total procedure was expected to take half an hour.

2.3 Ethical accountability

There is no need for an METC procedure, since this study is not a WMO (scientific medical research). A WMO study is characterised by two criteria: The study focuses medical research, and the participants are submitted to actions or a code of conduct. This study does not qualify as medical research, because it does not focus on the medical condition of the clients, or how their ID and SUD affected their health. This study focuses completely on judging a material, the instructional videos, and how videos could be used to improve the MDOD intervention. Participants are also not submitted to actions or a code of conduct. No physical tests were performed and clients were the deciding factor in the contact between the researcher and the client.

2.4 Materials

A total of three videos were shown, displaying assertive, passive and aggressive refusal behaviour styles. The cognitive deficits of the participants were taken into account in the design of the videos. This was done by taking several measures: First, each video was

recorded on the same location with the same background, minimizing distractions. Second, the same two actors feature in all of the three videos. Third, the conditions and progression of the videos were the same in each of the video. These measures were taken to make sure that any responses among the participants were triggered by the refusal behaviour itself, controlling for other factors. Pace and repetition are controlled by the professional, who can stop the video to explain the scenario and replay certain scenes as often as needed.

Vicarious learning and modelling were emphasized by meeting the conditions for these phenomenon's to occur. This was done by using the same models in all three videos. The models used a vocabulary comparable to that of the clients to increase recognisability. A backstory was created (two friends met that haven't seen each other in a long time) and it was emphasized that the models struggle with the same difficulties as the clients. All factors are consistent throughout the three videos, except for the refusal behaviour. This means that different responses per video can be assigned to the refusal behaviour and not to meaningless, unintended factors.

Each video starts with two people walking towards each other and greeting each other. One represents the participant and the other represents a friend. The friend offers to go and get a drink at his place. The other person (representing the participant) refuses aggressive, passive or assertive. In the video showing aggressive refusal behaviour, the two men split up with an argument. In the video showing passive refusal behaviour, the two men go home together to get a beer. In the video showing assertive refusal behaviour, the two men go home together to get a soda.

2.5 Non- verbal response

The spontaneous emotional response of the clients was measured. This was done using an existing, validated checklist to observe people's faces while they watch a video, to assess the emotional effect this video has on the person. This checklist is called the Facial Action Coding System (FACS), published by Ekman and Friesen (1978). Ekman, Friesen and Hager updated the FACS in 2002. The FACS describes specific facial movements, called Action Units (AU's). Ekman and Friesen also provided pictures of faces showing the specific AU's, making it easier to recognize them on people's faces. However, they did not address which combinations of simultaneously occurring AU's represented which emotions. Lewis, Haviland- Jones and Barrett (2008) and Sayette (2001) completed the research of Ekman and Friesen (1978) by linking the AU's to Darwins (1872) universal emotions, which are anger, contempt, sadness fear, happiness, joy and surprise and disgust. Anger, contempt, sadness,

fear and disgust are labelled as negative emotions. Joy and happiness are labelled as positive emotions, and surprise is labelled as ambiguous, since it can be used to express both positive and negative feelings.

2.5.1 Scoring action units using the FACS

The FACS uses action units (AU's) to score facial movements. Each AU represents facial movements that show an emotion. For example, anger (emotion) can be shown by displaying AU 4 (eyebrows drawn medially and down) and AU 5 (eyes widened) simultaneously, but also by showing AU 7 (lower eyelid raised and drawn medially), AU 22 (lips everted), AU 23 (lips tightened) and AU 24 (lips pressed together) simultaneously. To make the coding of the AU's more efficient and clear, for this specific study, the AU's were divided into subgroups of simultaneously occurring AU's. Anger was divided into anger1 (AU 4,5) and anger2 (AU 7,22,23,24). Disgust was divided into disgust1 (AU 9), disgust2 (AU 10), disgust 4 (AU 25) and disgust4 (AU 26). Fear was divided into fear1 (AU 1,2,4,5,20), fear 2 (AU 25) and fear3 (AU 26). Surprise was divided into surprise1 (AU 1,2,5,25) and surprise2 (AU 26). Contempt, sadness, happy and joy only exist of one group of simultaneously occurring AU's. A list of all the AU's and the corresponding emotions is available in the appendix.

2.6 Verbal response

The clients verbal responses represented the conscious, cognitive responses of the clients. This was measured by conducting an interview. Interviews are categorised in several ways, but experts conformed to a distinction between unstructured, semi structured and structured qualitative interview (Diccico- Bloom and Crabtree, 2006). A semi structured qualitative interview was chosen for this study, because structured interviewing often leads to quantitative data with little room to explore the thoughts and ideas of the participants. Unstructured interviewing on the contrary, offers too little support to an unexperienced interviewer.

The semi structured interview used in this study consisted of open ended questions, with other questions possibly originating from the conversation between the interviewer and the interviewee. The expected time for the interview was twenty minutes, but there was no time limit. Although there were prepared questions in a specific order, the researcher explored topics brought up by the participants, since they could provide valuable insights.

The interviews were conducted individually, so the clients did not feel ashamed, or withhold from sharing their thoughts and feelings.

2.7 Data management

Data was stored anonymously if possible. Data that could not be stored anonymously was only retrievable in a secured environment (Tactus intranet). Confidentiality of the data was high, since only the researcher had access to the digital environment where the data that contained sensitive information was stored.

2.8 Reliability and validity of materials

The interrater reliability of the FACS was tested by comparing the scores assigned by the researcher and a fellow psychology student. The assigned scores were compared to analyse differences. A total of six facial recordings were scored. The interrater agreement of the FACS was 91.67%, which means the adjustments that were made to the FACS to make it practicable for this study, did not devalue the reliability of the material and it is suitable to be used for this study.

The interrater reliability of the qualitative material used in this study was also tested. This was done by choosing two representative interviews, which were also coded by a fellow psychology student. An interrater reliability of at least 80% is considered as a score that indicates reliability of a qualitative material (MCHugh, 2012). Two interviews consisting of a total of 62 codes were coded and compared, of which twelve codes were different between the encoders and fifty codes were coded similar. The interrater agreement of the code tree used in this study is 80.65%, which indicated it is a reliable material for the encoding of the interviews.

2.9 Analysis

The FACS uses intensity scores ranging from 1 to 5 that can be attributed to the occurring AU's (Ekman & Friesen, 1978). This study also uses these intensity scores, to differentiate between strong and weak displays of emotions. The intensity scores are as follows: 0 (no evidence), 1 (slight evidence), 2 (pronounced evidence), 3 (severe evidence), and 4 (maximum evidence). The intensity scores were assigned based on how often, long and strong an emotion showed. The means of the intensity scores were calculated per video and a one- sample t- test was conducted to analyse which emotions significant for each video.

The participants also had to point out which video showed effective refusal behaviour. Participants were divided into two groups: right and wrong. The percentages of both groups were calculated and compared.

The interview was semi structured and was based on a pre- made interview guide. The scheduled time for each interview was thirty minutes. The focus was on exploring the support among Tactus clients towards the addition of instructional videos to the MDOD intervention. The interviews addressed attitudes towards videos and learning benefits of videos, since these are two determinants that affect the support towards the use of videos. Since a relatively small number of interviews was conducted (n=13), no data analysis software was used in the process of structuring and encoding the interviews. The Grounded Theory approach as described by Glaser and Strauss (1967) was used to analyse the qualitative data. This was done by combining both inductive and deductive analysis, and by leaving time between scheduled interviews to analyse data iteratively. The data was initially coded into concepts that emerged from literature reviews and expectations of the researcher. Data that did not fit in the predefined concepts were assigned conceptual codes that emerged from the data. This process allowed for theory to deduce from the data, providing insight in the phenomenon that was studied. The first stage of the data analysis consisted of a line- by-line analysis of the data, after which appropriate extracts were assigned conceptual codes. The next step was to look for relationships between codes and to form themes. The goal was to develop and relate themes in a systematic manner. The final step involved refining and integrating the themes. The goal was to cluster related themes and form categories of related themes by identifying underlying relationships between the themes.

2.10 Appendixes

Appendix A: Scripts for videos

Appendix B: Universal emotions and correlating action units

Appendix C: Scoring sheet FACS

Appendix D: Questions semi structured interview

Appendix E: Informed consent

Appendix F: Permission sheet

Appendix G: Coding sheet

Results

3.1 Recognizing effective refusal behaviour

Clients were asked to point out the video that they thought showed the most effective refusal behaviour. 11 Clients gave the right answer and pointed out video 3 as most effective, 1 client pointed out video 1 as most effective and 1 client pointed out video 2 as most effective.

3.2 Spontaneous emotional response

Table 1. Intensity score means for all subjects on the FACS per emotion per video (n=13)

| Video | Emotion | | | | | | | |
|------------|---------|----------|---------|------|-----------|-----|---------|----------|
| | Anger | contempt | disgust | fear | happiness | joy | sadness | surprise |
| Passive | .36 | .82 | .00 | .00 | .00 | .18 | .27 | .45 |
| Aggressive | .36 | .45 | .09 | .00 | .00 | .09 | .09 | 1.00 |
| Assertive | .00 | .00 | .00 | .00 | .55 | .27 | .00 | .64 |

Next, the significant emotional responses are discussed per video, and confidence intervals for the means are given. Relevant intensity scores are also compared between videos, and confidence intervals for the differences between the means are given.

For the video showing passive refusal behaviour, contempt (M= .82 ; SD= .87) deviated significantly from 0: $t(10) = 3.11, p = .01$. [.23, .14]. Surprise (M= .45 ; SD= .59) also deviated significantly from 0 for this video: $t(10) = 2.19, p = .05$ [-.01, .92]. Contempt in this video (M= .82 ; SD= .87) was significantly higher compared to contempt in the video showing assertive refusal behaviour (M= .00 ; SD= .00) with $t(20) = 3.11, p = .01$ [.23, .14].

For the video showing aggressive refusal behaviour, only surprise (M= 1.00 ; SD= 1.00) deviated significantly from 0: $t(10) = 3.32, p = .01$ [.33, 1.67]. Contempt (M= .45 ; SD= .93) scored second highest, but not significant: $t(10) = 1.61, p = .14$ [-.17, 1.08]. Anger (M=.36 ; SD= .92) did not deviate significantly from 0 for either aggressive or passive refusal behaviour, and was scored the same in both videos: $t(10) = 1.31, p = .22$ [-.26, .98]. Anger was not scored significantly more for aggressive refusal behaviour (M= .36 ; SD= .92) compared to assertive refusal behaviour (M= .00 ; SD= .00): $t(20) = 1.31, p = .22$ [-.22, .95].

For the video showing assertive refusal behaviour, only surprise (M= .64 ; SD= .94) deviated significantly from 0: $t(10) = 2.28, p = .04$ [.02, 1.26]. Happiness scored higher for assertive

refusal behaviour ($M = .55$; $SD = .93$) then for aggressive refusal behaviour ($M = .00$; $SD = .00$) and the difference was marginally significant : $t(20) = -1.94$, $p = .08$ [-1.17, .08]. The results also suggest that the video that showed assertive refusal behaviour evoked more positive emotions (joy and happiness) than the videos that showed passive and aggressive refusal behaviour, which evoked more negative emotions (anger and contempt).

3.3 Conscious cognitive response

The clients conscious cognitive response on the topic of instructional videos was explored using an interview. This led to 10 themes that will be discussed next. These 10 themes are: 1. Evaluation, 2. Observed actions, 3. Differences, 4. Effectiveness of refusal behaviour, 5. Reflection, 6. Learning effect, 7. Added value and 8. Adding videos to MDOD, 9. Tips and 10. Vicarious learning. Table 2 shows the themes that were found while analysing the interviews and the frequency by which the codes were found. The themes were clustered in categories of related concepts. Category 1 consists of themes related to judgements of the video: evaluation, added value and adding videos to the MDOD intervention. Category 2 consists of themes related to refusal behaviour: observed actions, reflection on own refusal behaviour, learning effect of videos and effectiveness of refusal behaviour. Category 3 consists of themes related to vicarious learning: vicarious learning and tips. The theme 'differences between videos' was excluded because it did not provide valuable insights. The categories will be discussed next, describing the themes and the relationships between the themes, followed by an analysis of relevant FACS scores, both on an individual and group level, to support and validate findings from the interview. The reported scores represent the intensity scores that an individual received for a certain emotion, or the average intensity score that a group of clients received for a certain emotion.

3.3.1 Category 1: Judgement of the videos

3.3.1.1 Evaluation

This theme revolves around the clients judging the videos and then assigning negative or positive evaluations to the videos. Clients seemed to judge the videos on two levels: content of the video and quality of the videos as a material.

Judgement of the video based on the content was related to the perceived refusal behaviour and its characteristics. The video that showed passive refusal behaviour was judged negatively by 12 clients. The video showing aggressive refusal behaviour was also

judged negatively by 12 clients. The video that showed assertive refusal behaviour was judged positively by 12 clients. Only client 11 was not positive about the content of the video that showed assertive refusal behaviour, because the client disliked alcohol being offered to a recovering alcoholic by a friend: *Ik vond het een beetje sneu. Die ene man. Die begrijpt blijkbaar niet wat een verslaving is. En die vraagt toch zijn kennis, of zijn maat, ik weet niet of het zijn maat was, mee. Om een biertje te drinken. Dan ben je in mijn ogen geen maat meer. Dan help je hem weer de afgrond in.* [I thought it was a bit pathetic. That guy. Apparently he does not understand what addiction is. And still he asks his acquaintance, or his mate, I don't know if it was his mate, to go for a beer. Then you are not a mate anymore. You help him go down again].

Keeping in mind the goal of this study, the judgements of the videos based on the quality of the material is more interesting. All clients were positive about the videos as a material and the videos were judged positively. The most used terms were 'good' and 'clear'. Even client 11, who disliked the content of the videos stated that he sees the value in instructional videos as designed for this study: *Nou, ik vond het goede filmpjes hoor. Ik snapte er echt wat van. Maar wat zou ik Tactus mee willen geven? Ik zou zeggen: maak ze duidelijk, maak ze te snappen. Net zoals deze, kort maar krachtig.* [Well, I thought the videos were good. I really got them. But what would I advise Tactus? I would say: make them clear, make them understandable. Like these, short but powerful].

FACS scores

Client 11 was less positive about the video showing assertive refusal behaviour compared to the other clients. This shows in the emotional response client 11 showed while watching the videos. While watching the video that showed passive refusal behaviour, client 11 showed contempt and received an intensity score of 1.00. While watching the video showing aggressive refusal behaviour, client 11 showed anger and also received an intensity score of 1.00. The video that showed assertive refusal behaviour was the only video where client 11 showed no emotional response, while the other clients did score happiness in that video ($M=.60$; $SD=.97$.) This indicates that the video that showed assertive refusal behaviour has no Emotion Enhanced Memory effect on client 11, in contrast to the other videos. It also indicates that client 11 responds less positive to this video, compared to the other participants.

We now know that the clients judged the videos as a material as positive. The characteristics of videos that contribute to this positive judgement will be generally discussed.

3.3.1.2 Added value of videos

Ten clients stated that the added value of instructional videos lies in the superiority of the material. Videos allow to show more and also clearer content, compared to the conventional methods of roleplay and conversation that are currently applied in the MDOD intervention. Negative past experiences and negative attitudes towards the learning benefits of conversation and roleplays contributed to statements about videos being superior to these methods. Client 10 for example said: *Ik denk dat het duidelijker overkomt. Individuele gesprekken, ja, ik weet niet of dat goed overkomt. In een filmpje zie je het letterlijk. Ik denk dat je daar meer van oppakt dan individuele gesprekken.* [I think it is clearer. Individual conversations, yeah, I don't know if that is clear. In a movie, you literally see it. I think that teaches more than individual conversations].

Clients also mentioned that the added value of videos lies in the ability to portray everyday life better and more realistic than conversation and roleplay can. Risk perception, especially the risk of relapse, contributed to mentioning real life scenario as an added value of instructional videos. Clients who mentioned the outside world to be a very risky environment, named 'real life scenario' as the added value of instructional videos. Client 3 for example said: *Ik voel me hier veilig, buiten voel ik me niet meer veilig ... Dat het buiten is, denk ik. Zoals het buiten gaat. Voorbereiding voor buiten. Als je alles achter de rug hebt, en je komt weer buiten, dan kan het zo gaan. Dat is de kern denk ik. Dat het uit het echte leven is.* [I feel safe here, I do not feel safe outside anymore.. I think because it is outside. How it goes outside. Preparation for the outside. When everything is finished and you get outside again, this is how it goes. That is the key. That it represents real life].

Risk perception was also mentioned as an added value of instructional videos. Awareness raising among clients was the underlying mechanism for risk perception to be mentioned as added value. Elements of risk perception were mentioned by clients who stated that they became aware of the dangers of substance abuse, or the dangers of not being able to perform effective refusal behaviour. Client 10 for example explains how videos might help clients to understand that drugs can harm their bodies: *Ik denk dat ze dan meer aan hun eigen lichaam denken. Als je bier drinkt, wiet rookt of speed snuift, et cetera et cetera, dat is niet goed voor je lichaam.* [I think they will start to think more about their body. Drinking beer, smoking weed or snorting meth, that is not good for your body].

FACS scores

Client 3 repeatedly mentioned the added value of instructional videos lies in the ability to portray everyday life and the dangers of the 'real life' in a credible way. Client 3 mentioned how the outside world was dangerous and seductive. The data of the FACS revealed that client 3 showed more negative emotions while watching the videos about passive and aggressive refusal behaviour compared to the other clients. Client 3 scored higher for contempt ($M= 1.33$; $SD= 1.53$) while watching the videos that showed passive and aggressive refusal behaviour, compared to the other clients ($M= .33$; $SD= .66$). This strong, negative emotional response while watching the videos might have contributed to client 3 mentioning the dangers of 'real life'. This client mentioned alcohol being offered, like in the videos, as one of these dangers.

Now that the evaluations and added value of videos are documented, the addition of videos to the MDOD intervention is discussed.

3.3.1.3 Adding instructional videos to the MDOD intervention

All clients stated that they thought instructional videos should be added to the MDOD intervention. Only client 5 reacted sceptical: *Ja, ik zou zelf voor zonder filmpjes kiezen, omdat ik dat gewend ben. Ik ken geen Tactus met filmpjes. Maar ik denk dat anderen er wel baat van kunnen hebben.* [Yeah, I would choose the option without videos, because I am used to that. I do not know Tactus with videos. But I think others might benefit from it]. This scepticism was more because of unfamiliarity with instructional videos than a real disapproval towards videos. This showed when the client later stated to believe that others could benefit from videos, and to be open minded towards the use videos. All other clients were immediately enthusiastic about the idea to add instructional videos to the MDOD intervention. By far the most used term used by the clients to describe their attitude towards the addition of instructional videos to the MDOD intervention, was 'good'. This shows Tactus' clients are supportive towards instructional videos being used throughout the MDOD intervention.

FACS scores

Client 5 was sceptical about instructional videos at first, doubting the effectiveness of such videos. This was contradicted by the data of the FACS, which showed that client 5 had the strongest emotional responses of all clients while watching the videos. Client 5 showed more emotional responses while watching the video about passive refusal behaviour ($M= .50$; $SD=$

.00) compared to the other participants (M= .24; SD= .15). The same goes for the videos about aggressive refusal behaviour (M= .63; SD= .00) compared to (M= .23; SD= .13), and assertive refusal behaviour (M= .50; SD= .00) compared to (M= .25; SD= .14). According to the emotion enhanced memory theory and scores on the FACS performed in this study, client 5 has the greatest potential for learning through instructional videos. It is remarkable that this client was the least positive about instructional videos being added to the MDOD intervention.

3.3.2 Category 2: Refusal behaviour

3.3.2.1 Observed actions in videos

Clients who appeared to have knowledge on building and nurturing social relationships, seemed to categorize actions based on how it affected the other person involved, instead of just naming the refusal behaviour skills shown in the video. The extent to which a client showed social knowledge was based on the subjective judgement of the interviewer. For example, client 4 said this about the aggressive refusal behaviour in video 2: *Ja, dat je die gene aanraakt en wegduwt. Ja, je kan het ook gewoon zeggen. En de tegenreactie van diegene kan ook weer anders zijn, weet je wel? Die kan ook terug gaan slaan, of duwen.* [That he touches and pushes the other person. You can just say that. And the other person might also respond different, you know? He can also hit you, or push you]. Clients who showed less knowledge on performing social behaviour did not mention the effect of the refusal behaviour on social interaction. Client 11 did not show to possess the same level of social knowledge as client 4, and said that the aggressive refusal behaviour showed in video 2 was appropriate in that situation: *Diegene die vraagt een pilsje te drinken wordt met de neus op de feiten gedrukt. En de weet nu wat hij aan die persoon heeft. Laat ik het maar niet weer vragen, want dan flipt hij uit de pan. En hij loopt weg en zegt: jou hoef ik nooit meer te spreken, nou, dat is een probleem minder. Die vraagt het nooit meer. Nee is nee. Bam, boem, weg.* [The person that asks to go for a drink knows what's up. He knows where they stand now. I better not ask again, because he freaks out. And he walks away and says: I don't want to talk to you again! Well, that's one less problem. He never asks again. No means no]. Clients 4 and 11 saw the same video, but came to different conclusions based on their knowledge and ideas on sustaining social relationships.

Client 11 was also the only client to judge 'offering an alternative' as a non- assertive action. All other clients were very positive about this action and judged it as assertive, but

client 11 said: *En het laatste filmpje gaan ze een cola drinken. Dan komen ze thuis en dan gaan ze misschien toch nog even een biertje doen. Als je daar vatbaar voor bent en net zoals ik verslavingsgevoelig, dan maalt dat al in je hoofd. Dan is het bier al aanwezig. En dan zit je in een ruimte cola te drinken, terwijl je met je gevoel en met je hoofd al denkt: een biertje lust ik ook wel. En dan zeg je tien keer nee en dan zeurt hij maar door. Ja, en dan moet je echt sterk in je schoenen staan om toch nog nee te zeggen.* [In the last video, they drink a coke. And then they get home and maybe drink a beer. If you are susceptible for that, and sensitive to addiction, it gets in your head. The beer is already there. And you are in a room drinking a coke, thinking: I would also like a beer now. And you say no ten times, but he keeps pushing. You really have to be strong to refuse then]. Client 11 shows more foresight and risk perception compared to the other clients, recognising the potential risks of the assertive refusal behaviour performed in video 3. The reason that client 11 prefers the video showing aggressive refusal behaviour over the video showing assertive refusal behaviour might be caused by this foresight and ability to perceive risks. The stage of recovery might also be relevant.

FACS scores

Client 11 was the only client who thought the aggressive behaviour characteristics were examples of assertive and effective refusal behaviour. The data of the FACS showed that video 3, showing assertive refusal behaviour, was the only video that did not cause any emotional responses for client 11. The other clients however, showed positive emotions while watching the video about assertive refusal behaviour: happiness ($M = .97$; $SD = .60$), joy ($M = .30$; $SD = .48$) and surprise ($M = .70$; $SD = .95$). Also, client 11 showed less negative emotions while watching video 2, compared to the other participants. Client 11 showed no anger or contempt at all for this video, while the other clients showed anger ($M = .40$; $SD = .97$) and contempt ($M = .50$; $SD = .97$). The data from the FACS matches with the findings from the interview, stating that client 11 is less positive about the assertive refusal behaviour style and more positive about the aggressive refusal behaviour style compared to the other clients.

The clients abilities to identify refusal behaviour characteristics and to distinguish between refusal behaviour styles are explored. The observed refusal behaviour characteristics were related to the perceived effectiveness of the videos.

3.3.2.2 Effectiveness of refusal behaviour

The clients could be separated into two groups: Those who appeared to have knowledge on social skills and understanding of social relationships and those who did not. This was based on the subjective judgement of the researcher. The extent to which clients showed to have knowledge on social skills and understanding of social relationships was based on the subjective judgement of the interviewer, and contributed to which video was pointed out as most effective by the clients. Client 10 and 13 showed insight in social interactions and judged the effectiveness of the refusal behaviour based on the consequences for the social interaction, instead of judging the effectiveness of the refusal behaviour style on the behaviour characteristics of that style. These clients also identified friendship as the social bond between the models. Client 10 said for example: *De manier waarop vrienden met elkaar omgaan. Als je zegt dat je diegene nooit meer hoeft te zien, ben je geen echte vriend. En die andere doet het goed, die gaat mee een cola drinken. Dat zijn vrienden.* [The way how friends interact with each other. If you say that you never want to see the other person again, you are not friends. And the other one does well, he joins for a coke. They are friends]. Other clients, that showed different understanding of social interactions, judged the effectiveness of the refusal behaviour based on the performed refusal behaviour characteristics. They stated that the refusal behaviour was effective, because lots of assertive refusal behaviours were shown. Client 11, who showed little insight in social relationships and identified with the aggressive refusal behaviour style, was the only client to identify effective and assertive refusal behaviour in the video that showed aggressive refusal behaviour. Client 11 said: *Nou, nee, ik vond filmpje 3 niet duidelijk. Die vond ik een beetje als een pleistertje op de wond plakken. Je hebt een wond en hij plakt er een pleister op met een cola. Maar de verleiding is groot.* [Well, no, I did not think video 3 was clear. It was like putting a band aid on a wound. You have a wound and he puts a band aid on it. But the temptation is still big]. This is another indication that whether or not refusal behaviour is judged as effective, depends on the understanding of social interactions that was shown by the client.

Overall, clients stated that the video showing passive refusal behaviour did not show effective refusal behaviour because the model was too careful and did not perform assertive refusal skills. Clients thought the video that showed aggressive refusal behaviour did not show effective refusal behaviour because the model was too aggressive and violent. Clients thought the video that showed assertive refusal behaviour, as emphasized throughout the MDOD intervention, was the most effective. Clients said the model was clear and showed the most assertive refusal behaviour skills. Clients most frequently identified ‘offering an alternative’, showed as the model proposing to go and have a coke instead of a beer, as an

assertive refusal behaviour characteristic. Clients identified the video that they thought showed the most assertive refusal behaviour characteristics as the video that showed the most effective refusal behaviour style.

FACS scores

Client 11 observed the most assertive refusal behaviour characteristics in the video that showed aggressive refusal behaviour, and also identifies this video as the video that shows the most effective refusal behaviour style. The video that showed assertive refusal behaviour was the only video where client 11 showed no emotional response, while the mean score for happiness of the other clients on this video was $M = .60$; $SD = .97$. The data from the FACS supports the statements made during the interview and indicates that client 11 is indeed less positive about the assertive refusal behaviour style compared to the other clients.

The perceived effectiveness of the videos was related to how clients reflected on their own refusal behaviour. Clients compared their own refusal behaviour to the refusal behaviour shown in the videos. This indicates that vicarious learning occurred while watching the videos. Next is discussed how clients reflected on their own refusal behaviour skills.

3.3.2.3 Reflection on own refusal behaviour

Refusal self efficacy contributed to how clients reflect on their own refusal behaviour. Clients who mentioned they have the ability to perform effective refusal behaviour, described assertive refusal behaviour styles to describe their own refusal behaviour. Client 10 for example, says that no means no, showing refusal self efficacy: *Dan zou ik gauw mijn rug toedraaien. En dan loop ik weg. Dan is er met mij geen discussie. Nee is nee.* [I would quickly turn my back on him. And walk away. You can't discuss with me. No means no]. After that, client 10 also shares the assertive actions he would perform: *Nee ik loop gewoon weg. Er is geen discussie mogelijk, ik loop weg uit de situatie.* [No, I just walk away. No discussion, I walk away from the situation].

Another factor that that was mentioned by clients regarding their own refusal behaviour, involved awareness. Awareness was related to the reflective abilities of the clients. Clients who had the ability to critically reflect on their own refusal behaviour, became more aware of the need to change their refusal behaviour style after watching the videos, compared to clients who did not reflect on their own refusal behaviour. This indicates that

feedback or guided reflection might be necessary for clients who are not able to critically reflect on their own behaviour. Clients who critically reflected on their own refusal behaviour also showed signs of remorse. Client 7 for example said: *Het geeft wel een gevoel dat ik verkeerd heb gereageerd. Ik vind dat verkeerd, agressief zijn. ik zie dat wel terug. Daar ben ik me nu wel bewust van.* [It makes me feel like I reacted wrong. I find that wrong, being aggressive. I recognize that. I am conscious of that].

FACS scores

Client 7 used to perform aggressive refusal behaviour, but claims that he wants to change his behaviour after watching the videos. This insight in his own aggressive refusal behaviour and in the effectiveness of assertive refusal behaviour, indicates emotional responses for video 2, showing aggressive refusal behaviour, and video 3, showing assertive refusal behaviour. Data from the FACS indeed showed that client 7 showed no surprise while watching video 1, but that he received high intensity scores for surprise for both the video about aggressive refusal behaviour (3.00) and assertive refusal behaviour (3.00). The other clients scored considerably lower for both the video about aggressive refusal behaviour (M= .80; SD= .79) and assertive refusal behaviour (M= .40; SD= .52). The statements made by client 7 about how the videos made him aware of his own past refusal behaviour are supported by the data from the FACS.

Most clients can distinguish between different refusal behaviour styles and reflect on their own refusal behaviour. Next is discussed whether or not the clients learned something from the videos, which was related to how the clients reflected on their own refusal behaviour.

3.3.2.4 Learning effect of videos

What clients mentioned to have learned from the videos depended on their strengths and weaknesses in performing effective refusal behaviour. The clients compared their own refusal behaviour to that showed in the videos. Client 7 says: *Ik kan geen nee zeggen, ik zou meteen meegaan in de situatie. Ik probeer het wel, maar het lukt niet echt. Ik laat me vaak toch overhalen.* [I can't say no, I would comply immediately. I try, but I really can't. I comply often]. Later, when asked if the client had learned something from watching the videos, client 7 stated: *Gewoon niet meegaan als je niet wil. Niet over laten halen door andere mensen, maar doen wat je zelf wil. Bij je standpunten blijven.* [Just don't go if you don't want to. Don't let other people convince you, but do what you want to do. Stick to your standpoint]. Client 7 identified weaknesses in his own refusal behaviour and also mentioned specific refusal behaviours from the videos that he can use to improve his own refusal behaviour.

Client 13 also mentioned that he is not able to perform effective refusal behaviour, and also stated that he learned certain refusal skills after watching the videos: *Heel rustig nee zeggen en uiteindelijk toch kopen (drugs). Dat is hoe ik ook zou reageren zeg maar. Dus ik zou nu toch recht staan, stevig staan, aangeven dat je het niet wil.* [Say no calmly and eventually still buy (drugs). That is how I would respond. So now I would stand tall, stand firm, say I do not want it]. The learned skill that was mentioned most by the clients, was being clear about not wanting to drink and stick with that (10 times), followed by offering a coke (2 times), staying calm (2 times) and staying positive (1 time). Still, this might be wishful thinking and not something the clients really learned. However, it indicates promising signs for learning if the videos were to be implemented throughout the MDOD intervention.

Clients also mentioned that watching the videos resulted in a change of attitude towards substance abuse and refusal behaviour. Clients who reflected on their own past refusal behaviour and the damage substance abuse had done for their health and social life, seemed to have experienced such attitude changes. Client 9 describes the videos caused him to reflect on his own refusal behaviour: *Het is nu niet meer van toepassing dat ik zo zou reageren, maar ja, je ziet hoe je dan zelf bent geweest. Je kijkt in de spiegel van hoe het toen is gegaan.* [I would not respond like that anymore, but yes, it shows how you acted yourself. You look at a mirror that shows you how it went]. This indicates that recognition and identification can also affect learning.

FACS scores

The Emotion Enhanced Memory Effect states that even a small emotional response towards a stimulus results in better remembering of that stimulus. This indicates that the video that triggered the most emotional responses has the biggest effect on learning. Following this logic, clients will remember the videos that showed passive refusal behaviour ($M = .26$; $SD = .16$) and aggressive refusal behaviour ($M = .26$; $SD = .17$) better than the video that showed assertive refusal behaviour ($M = .18$; $SD = .17$).

3.3.3 Category 3: Vicarious learning in videos

3.3.1 Vicarious learning

Elements of vicarious learning were also mentioned by the clients. The themes were derived from the processes related to vicarious learning: Attention, retention, modelling, motor reproduction and motivation.

Clients, 7, 9 and 11 make statements regarding attentional processes. The statements made by these clients came from negative attitudes and experiences towards the conventional methods of conversation and roleplay, and the mediocre learning benefits of these methods. Clients repeatedly mentioned that videos provide content in a clear manner, compared to roleplay or conversation. This indicates that videos are more structured and organized (therefore guiding attention better), compared to the conventional methods. This clear structure results in better remembering of the content of the videos.

Clients 4, 7, 10 and 11 made statements regarding retention processes. The most used term was 'beter opslaan'. Client 7 provided a more extensive explanation: *Kijk, je hoort heel veel van mensen, maar als je iets ziet heb je er beeld bij. Dat sla je op. Als je beeld erbij hebt, en verbaal, ik denk dat je dan beter opslaat, dat het extra versterkt.* [look, people can tell a lot, but if you see something, you can picture it. You remember that. If you have pictures, and sound, I think you remember it better, it strengthens each other]. These clients stated that information coming from instructional videos is better remembered than information coming from conversation or roleplay, because videos allow utilization of both the visual and the verbal channel for information processing.

Modelling was mentioned 18 times and by 6 clients, making it the most mentioned aspect of vicarious learning. All statements about modelling had in common that they revolved around learning from an example and how this was beneficial to learning. This indicates that modelling, which is already emphasized in the MDOD intervention, is viewed as beneficial to learning by Tactus clients. Client 4 mentions modelling as follows: *Op een filmpje zie je hoe het mis en goed kan gaan. Op papier kan je het wel lezen, maar op een filmpje zie je toch echt de gezichtsuitdrukking van iemand, dat is toch anders. Op een plaatje kan het wel staan, maar je kan het niet echt zien. In iemand zijn gezichtsuitdrukking zie je veel meer.* [A video shows how it can go wrong, and good. You can read what's on paper, but a video shows you someone's expression, that is different. It can be in a picture, but you can't really see it. You can see a lot more in someone's expression]. Client 4 mentions the behaviours of the model serving as examples of desired or undesired behaviour. Client 4 also describes that videos are a very rich medium compared to conventional methods, offering insight in someone's behaviour and being able to connect to the model on a personal level. Facial expressions for example are very powerful in communicating a message, which can't be achieved with pictures or sound alone. Client 11 dives deeper into the function of a model [context: driving car]: *Maar een voorbeeld filmpje.. als ik tegen jou zeg: je kan het beste zo hard over die kruising. Maar met een filmpje erbij zie je ook hoé je over die kruising moet.*

Het is een concreet voorbeeld. [But a video showing an example.. If I tell you: it is best to cross that crossroad at this speed. But a video also shows how to cross the crossroad. It is concrete]. This is a very clear description of a model showing how to perform a certain action or behaviour. Client 11 claims that this helps to perform the behaviour yourself. Client 12 adds a condition for such models to be effective in sharing functional skills: *Ja, dat het dezelfde personen zijn waarvan ze kunnen leren. Niet elke keer verschillende.* [Yes, that it are the same persons from whom they learn. Not different persons every time]. Client 12 wants the same models to act in every video, because the client believes that this will be beneficial to learning.

Client 10 describes aspects of motor reproduction skills, related to vicarious learning. Client 10 said: *Ik denk dat de cliënten er dan serieuzer mee omgaan en beter nee zullen zeggen, eerder zullen kunnen stoppen met gebruiken. Ik denk dat dat heel goed is.* [I think clients will take it more seriously and refuse more effectively, stop using sooner. I think that is very good]. Client 10 claims that watching instructional videos will have a positive effect on the clients ability to perform effective refusal behaviour themselves.

Clients also described motivational processes related to vicarious learning. Awareness raising contributed to the mentioning of motivational processes. Clients who reflected on their own refusal behaviour after watching the videos and became aware of their own refusal behaviour and the consequences of their behaviour, were motivated to perform effective refusal behaviour in the future. Client 7 described motivational processes related to the use of instructional videos more extensively: *Als je ziet wat er gebeurt, dan krijg je een soort van beeld wat voor effect je gedrag heeft. Dan zie je wat je wel en niet moet doen. Dan wil je dat zelf ook doen.* [If you see what happens, you understand the results of your actions. You see what you should and shouldn't do. Then you want to do that yourself]. This quote shows how instructional videos can increase motivational processes.

Clients were also asked if they had any advice or tips for Tactus regarding the use of instructional videos in the MDOD intervention. All tips that were given by clients contained elements of vicarious learning.

3.3.3.1 Tips from clients

Clients gave tips to maximize the effectiveness of the videos. Most tips contained elements of vicarious learning and the information processing processes that involved. These processes are retention, attention, motivation and reproduction motor skills.

Several clients gave tips that regarding the retention processes of vicarious learning. Client 4 said: *Kijk, iedereen reageert natuurlijk anders. Persoonlijk zou ik zoiets maken in een café. Dat ze vragen wil je een biertje, en dan kan je zien dat ze zeggen: nee, ik hoef geen bier. En dan zie je dat ze het biertje wegschuiven. Zoiets. Op straat, als je iemand tegenkomt, vraag je niet 1,2,3 wil je een biertje, weet je wel. Als je in een café zit en iemand vraagt: wil je een biertje, en je zegt nee. Dat zou voor mij meer binnenkomen.* [Look, everyone reacts different of course. I would personally make such a video in a bar. They ask if you want a beer, and you can show how they say: no, I don't want a beer. And you actually see them pushing away the beer. Like that. On the street, if you run into someone, you don't just ask if they want a beer, you know. For me, it would be clearer if someone in a bar offers you a beer, and you say no]. Client 4 makes a statement for personalisation of the videos, by adjusting the videos to the preferences of the clients. This would maximize transfer of the videos and increase retention of the information, but comes with feasibility issues like financial costs.

Client 11 gave a tip to increase attentional processes: *Ik denk door de filmpjes simpel te houden. Simpel, maar duidelijk. Dat is belangrijk. Zorg dat iedereen ze snapt. Kort maar krachtig.* [I think by keeping the videos simple. Simple, but clear. That is important. Make sure everyone gets them. Short but powerful]. Client 11 advised to keep the videos short and clear. Producing clear videos with an ideal length increase attentional information processes, which would be beneficial to learning.

Client 10 gives a tip to increase motivation among the clients. This client advised Tactus to include the clients in the production process of the videos: *Maar misschien kunnen ze cliënten van Tactus laten helpen met filmpjes maken. Dat vind ik wel een goed idee. Ik denk dat cliënten of personen dat dan makkelijker oppakken. Als ze eraan hebben meegeholpen nemen ze het misschien serieuzer en is het duidelijker. Ik kan daar niet precies de juiste bewoordingen voor vinden. Ik denk dat de cliënten er dan serieuzer mee omgaan en beter nee zullen zeggen, eerder zullen stoppen met gebruiken. Ik denk dat dat heel goed is.* [But maybe they can let Tactus client help with the videos. I think that is a good idea. I think they will understand it faster. And if they helped making the videos, they might take it more seriously and it might be clearer to them. I don't know how to put it the right words. I think clients would take it more seriously and refuse better, stop using sooner. I think that is very good]. Client 10 states that clients might take the videos more seriously and learn more from the videos if they are involved in the process of making the videos. Motivation might be increased, which is beneficial to learning.

Vicarious learning occurs when learners watch behaviour being performed by a model in a video (Bandura, 1963). Therefore, modelling is an important factor effective vicarious learning to occur. Several clients gave tips regarding modelling in the videos. Client 7 would like to see videos of people being intoxicated, but acknowledges that it may be hard to portray intoxication and remain credible, which is a condition for modelling to be effective. Client 12 also mentions aspects of modelling and advise Tactus to use the same models in every video: *Ja, dat het dezelfde personen zijn waarvan ze kunnen leren. Niet elke keer verschillende stemmen.* [Yes, that they learn from the same persons every time. Not different voices every time]. Using the same models throughout the videos increases the personal bond between the learner and the model, which is beneficial to learning.

Table 2. Frequency of codes

| Theme | Concept | Number of clients (n=13) |
|-------------------------------|-----------------------------------|--------------------------|
| 1. Judgement | Judgement video 1 | 9 |
| | Judgement video 2 | 11 |
| | Judgement video 3 | 10 |
| | Overall judgement | 3 |
| 2. Observed actions | Physical/ verbal assertive | 12 |
| | Physical/verbal non- assertive | 12 |
| | Mental/non- verbal assertive | 10 |
| | Mental/non- verbal non- assertive | 9 |
| | Proposed actions | 2 |
| 3. Differences between videos | Physical/ verbal | 4 |
| | Mental/ non- verbal | 6 |
| | Result | 1 |
| 4. Effectiveness | Mental/ non- verbal behaviour | 4 |
| | physical/verbal behaviour | 6 |
| | Positive result | 5 |
| | Negative result | 2 |
| | Offering an alternative | 3 |

| | | |
|---------------------------------|---------------------------|----|
| 5. Reflection refusal behaviour | Assertive actions | 7 |
| | Non- assertive actions | 7 |
| | Attitude | 9 |
| | Self efficacy | 4 |
| | Peer pressure | 2 |
| | Risk perception | 1 |
| 6. Learning effect | No effect | 1 |
| | Refusal skills | 10 |
| | Attitude | 10 |
| | Risk perception | 2 |
| 7. Added value | Refusal skills | 5 |
| | Attitude | 6 |
| | Risk perception | 6 |
| | Real life scenario | 4 |
| | Self- reflection | 5 |
| | Superior material | 10 |
| 8. Adding videos to MDOD | Positive judgement | 12 |
| | Negative judgement | 1 |
| 9. Tips | Script | 4 |
| | Setting | 1 |
| | Topic | 2 |
| | Production | 1 |
| 10. Vicarious learning | Attention | 3 |
| | Retention | 4 |
| | Modelling | 6 |
| | Motor reproduction skills | 1 |
| | Motivation | 4 |

5. Discussion

5.1 Conclusion

The goal of this study is to advice Tactus on whether or not instructional videos should be added to the MDOD intervention, based on the level of support among Tactus clients for the use of such videos. A total of 13 clients participated in this study. There were two measures of client support: First, the clients' emotional responses were scored, while they watched instructional

videos, using the FACS. Second, the clients' conscious cognitive responses were explored by conducting an interview about the use of instructional videos. Overall, this study clearly suggests a great potential for the use of instructional videos in the MDOD intervention. Results from the interview showed a great consensus among the sample, and this was largely confirmed by the emotional responses from the non- verbal data.

5.2 Non- verbal response

Overall, the non- verbal data indicates that the videos used in this study are a reliable and valid material to study the emotional responses from clients towards instructional videos, and advocates for the use of instructional videos in the MDOD intervention.

The non- verbal responses indicate that all three videos evoked the intended emotional responses. For example, happiness was only scored for the video that showed assertive refusal behaviour, while contempt and anger were scored only for the videos that showed passive and aggressive refusal behaviour, but not for the video that showed assertive refusal behaviour. Surprise was scored significant for all three videos. This might be because surprise is an ambiguous emotion, which can be used to express both negative and positive emotions. Surprise being expressed so frequently might also indicate that the clients were interested and involved in the videos, which means they are susceptible to their content and have an open mind set towards videos, which allows the clients to learn from the videos.

The emotional responses towards the videos also indicate the occurrence of emotion enhanced memory effect (EEM). Van Steenbergen, Band & Hommel (2010) found that even small emotional responses towards a stimulus, result in better remembering of that stimulus. This advocates for the feasibility of instructional videos and their use in the MDOD intervention. One client stated that the video about aggressive refusal behaviour was too extreme, and that the aggressive behaviour should be depicted calmer. However, the aggressive refusal behaviour should be recognisable for the EEM- effect to occur as intended, and for learning from the video to be effective. Also, both anger and contempt were not significant for the video that showed aggressive refusal behaviour. These results indicate that the video about aggressive refusal behaviour was, in fact, not too extreme.

5.3 Verbal response

Findings from the interview indicate that vicarious learning, based on Bandura's social learning theory (1963), is one of the effective components of instructional videos. When clients were asked about the added value of instructional videos, several clients named elements of modelling. An effective model is a condition that needs to be met for vicarious learning to occur effectively. According to de Gee (2015), credibility and reliability are characteristics of an effective model. The videos that were designed for this study featured a model that lived up to these characteristics. This was done by providing a coping model, which turned into a mastery model throughout the videos (see Schunk and Hanson, 1985), emphasizing that the model once faced the same problems as the clients and by using the same model throughout all three videos. All clients but one stated that they learned something from the videos, which is an indication that vicarious learning might have occurred after watching the videos. However, based on this study, no actual behavioural or cognitive changes can be tested. This is due to the low number of participants and the absence of both a baseline measurement and a control group.

We also found support for the dual channel assumption, introduced by Clark and Paivio (1991), as clients mentioned that the added value of instructional videos lies in superiority of the instrument 'video' itself, compared to conventional methods like roleplay and conversation. Clients stated instructional videos are superior to roleplays and conversation, because videos allow information to enter the cognitive system through both the verbal and the visual channel. Clients said this made the content of the videos clearer compared to roleplays. The dual channel assumption is a key element of the multimedia learning theory by Meyer (2014), which states not only that videos allow for bigger quantities of information to be processed compared to conventional methods that only utilize one channel, but also that the information complements each other if the videos are designed effectively. This allows for deeper and meaningful learning to occur, compared to single channel learning and is called the Multimedia Learning Effect (Meyer, 2014).

The dual channel assumption and the multimedia theory explain why videos are more effective compared to conversation, because conversation is a one- channel vehicle for information to enter the cognitive system. Roleplays however, are also multi- channels through which vicarious learning might occur. It might even be argued that roleplays are more effective compared to videos, because roleplays are more engaging than instructional videos. An explanation is that the superiority of the instrument 'video' as mentioned by the clients, lies in the level of content control. Every detail of the video content can be controlled, which means

the videos can be tailored specifically to the needs of the clients. This control means that the videos can be designed in the light of the cognitive deficits that the clients suffer from and thereby increases learning, resulting in an instrument that transfers knowledge more effectively compared to roleplays. This was also the case for the videos that were shown to the clients during this study, which explains why the clients judged the videos to be 'clear'.

5.4 Implementation of videos in the MDOD intervention

All clients that participated in this study were already familiar with the MDOD intervention, either being in treatment or having received treatment, and therefore might have had prior knowledge on refusal behaviour. Therefore, it might be that emotional responses indicate recognition of refusal behaviour instead of clients actually learning new behaviours. However, even if not all the emotional responses indicate actual learning of new refusal skills, but recognition of known refusal behaviours, the frequent exposure to the refusal behaviour will still contribute to the strengthening of the recognition and therefore contribute to learning. Also, emotional responses in itself indicate better remembering and therefore contribute to learning. Moreover, emotional responses by clients who are currently in treatment and are familiar with MDOD, provide valuable insights in the feasibility of such videos for new clients without experience regarding the MDOD intervention. For these reasons, the implementation of instructional videos throughout the MDOD intervention should be explored.

There is discussion on whether or not wrong examples should be shown when learning how to perform certain behaviours. Especially individuals with ID might be susceptible to these wrong examples. However, recent studies take away this doubt and have found that studying wrong examples is actually more beneficial to learning compared to studying correct examples (Cattaneo and Boldrini, 2017). This matches with findings from the interview, where clients continuously reflect on both videos that showed ineffective refusal behaviour styles and even literally stated that they would never perform refusal behaviour like that. It also matches with data from the FACS, which showed that clients showed more emotional responses while watching the videos about passive and aggressive refusal behaviour, compared to the video that showed assertive refusal behaviour. Schunk and Hanson (1985) also studied the effectiveness of showing right and wrong examples, using coping models and mastery models. A coping model initially makes errors, but gradually improves throughout the task and eventually performs the task as well as a mastery model, who performed well from the start. The videos used in this study also portray a coping model, who eventually becomes a mastery model. Schunk and

Hanson (1985) found that self-efficacy and achievements of learners benefitted more from watching coping models than from watching mastery models. These results indicate that more learning occurred while watching the videos that showed ineffective refusal behaviour styles, compared to the video that showed effective refusal behaviour, but that they are both necessary.

Catteano and Boldrini (2017) added that even though wrong examples are effective for learning, the right example should be emphasized. Therefore, this study advises to first show the videos that portray passive and aggressive refusal behaviour and to finish with showing the video that portrayed assertive refusal behaviour. The video that showed assertive refusal behaviour should be emphasized during the conversation about the videos that is scheduled afterwards. During the conversation, the assertive refusal behaviour style is further explained and discussed to maximize remembering of this refusal behaviour style. Finally, the clients practice the assertive refusal behaviour style in the form of a roleplay. Statements made by the clients during the interview showed that not all clients understand the content of the videos. Therefore, feedback and guided discussion is necessary to ensure the clients understand the videos and can benefit from watching them.

It must be taken into account that Catteano and Boldrini studied the effectiveness of correct and wrong examples in a population of individuals with average intelligence. Without research among individuals suffering from ID on this matter to go by, it was assumed that these results could be generalised to a population with individuals suffering from ID. Also, because of the cognitive deficits the clients suffer from, it is important to not just show the videos, but to incorporate them into a meeting by discussing the videos afterwards, to provide clarity. This was also mentioned by client 8 and others during the interview, who stated that they would like to discuss the videos either in a group session or during an individual session after they watched the videos.

5.5 Limitations

(1) The clients that participated in this study, might not be a representative reflection of Tactus' clients. A total of 13 clients participated, which is quite low, and the substance use among the participating clients was not defined enough to make statements about their substance use and whether or not this is representative for Tactus' clients. The goal was to get more clients to participate and there were more participations scheduled, but several clients did not show up, which might also be seen as refusal. Future research should focus on which sub groups of

Tactus' clients exist and whether or not these groups are sufficiently represented throughout studies.

(2) The videos revolving around alcohol refusal might be a limitation, because it might appeal weaker to individuals who have not struggled with alcohol abuse compared to individuals who did. However, it must be taken into account that this was a pilot study to research the effectiveness of instructional videos in general. Also, there are feasibility issues that need to be taken into account. It was unfeasible to design separate videos for all substances and alcohol abuse is the most frequently abused substance among Tactus clients, which advocates for the choice to design video that revolve around alcohol being refused. However, the extent to which individuals with a cannabis addiction profit from videos that revolve about alcohol, remains unresolved.

(3) Although most clients easily identified the assertive refusal behaviour as depicted in the video, one client had a different interpretation of this video. This client stated that agreeing to go for a coke together does not eliminate the temptation to have a beer. This indicates that which refusal behaviour style is most effective depends on the context and the clients phase of recovery. Clients in an early recovery state prefer to completely avoid temptations, because they think they are not able to resist temptations, while clients in a later recovery state might gradually increase exposure, because they believe they are strong enough to resist temptations. Also, assertive refusal behaviour may have several actual behavioural scenarios. In the video it was depicted as 'offering an alternative', but this client preferred 'walking away'. Future studies should focus on how to depict the different refusal behaviour styles as effective as possible and if different clients could profit from different refusal behaviour scenarios.

(4) The quantitative analysis was conducted by performing t- tests that compared the emotional responses evoked by the videos directly with each other, per video. This means that more results might be based on coincidence, because the emotional responses were compared using multiple individual t- test, instead of in one group with a Post- hoc test to analyse where differences existed, which would have decreased coincidental results. The t- tests that were used in this study were a correct way to perform the analysis as intended, but other tests would have decreased the coincidence interval more.

(5) The material used for the qualitative analysis was validated by having a fellow psychology student encode two interviews that consisted of 62 codes in total. Officially, all interviews should be coded by a peer from scratch, instead of labelling highlighted extracts, and different results should be discussed between the peers. However, there are legitimate

arguments as to why the qualitative analysis was simplified for this study. The workload would be enormous if all the interviews had to be encoded by a peer from scratch. Also, both the researcher and the peer were relative novices to the field of qualitative analysis. The nature of the study also allows for this way of qualitative data analysis. The goal was not to produce a scientific impeccable study that should be worthy of publication, but to conduct a pilot study that would advise Tactus on the use of instructional videos and hopefully yield some exciting results and insights. Based on the presented arguments, the qualitative analysis as performed was sufficient to meet the expectations of this study.

5.6 Future research

Since the correlation between ID and prevalence of substance abuse is relatively new and understudied, research on this relation should continue to grow. To follow up on this study, that provided evidence for the effectiveness of instructional videos for people with ID, instructional videos should be applied in practice and the effect on learning should be documented. There are several factors that should be studied regarding the effectiveness of instructional videos.

First, there are many substances that are being abused among Tactus clients. Can every substance be explained using the same instructional video, or does each substance require a different video? The need for different types of videos also depends on the second factor that contributes to the effectiveness of instructional videos, which is the level of ID among clients.

One client that participated in this study clearly had severe ID compared to the other participants, which showed in the client inability to identify the video that showed effective refusal behaviour. This indicates that Tactus has clients on both the low end and the high end of the ID spectrum, which affects the clients' understanding of instructional videos. Future research should focus on whether it is best to design one video that can be understood by all clients, or whether there should be different videos for severe and mild ID.

Third, future research should focus on how the videos will be implemented in the MDOD intervention, or any other intervention. Cattaneo and Boldrini (2017) made claims about how this should be done, but their study did not focus on individuals with ID. Therefore, it should be studied whether or not their findings can be generalised to a population of people with ID. Future implementation of videos throughout the MDOD intervention and studying the results would be beneficial not only for the clients and Tactus, but could also provide more valuable insights in the cognitive processes of individuals with ID, getting closer to providing them with the quality addiction care that fits their needs.

6. Literature

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Appendixes

Appendix A

Passive refusal behaviour (Voorzichtig)

De scene speelt zich af in het huis van een vriend. Jullie kwamen elkaar na lange tijd weer tegen en hij nodigde je bij hem thuis uit. Hij biedt je een biertje aan.

De ander

complimenteert, benadrukt gemeenschappelijk verleden

Leuk dat je langskomt man, lang niet gezien! Zin in een biertje?

Jij

Kijkt naar beneden, schuifelt heen en weer

Nou, eh... eigenlijk ben ik...

De ander

Aardig en charmant, deelt complimentjes uit

Aah joh, dat is toch gezellig man! Lekker ouwehoeren met en biertje erbij!

Jij

Praat binnensmonds, kijkt naar beneden

Klinkt inderdaad gezellig, maar eigenlijk eh.. ik drink niet echt meer..

De ander

complimenteert

Aah joh, doe eens gek, je kan het hebben!

Jij

Schuifelt heen en weer, is niet overtuigend

Eigenlijk..

De Ander

Onderbreekt

Kom op, eentje maar!

Jij

Onzeker, zacht pratend

Nou.. ik weet niet hoor..

.....

Aggressive refusal behaviour (gemeen)

De scene speelt zich af in het huis van een vriend. Jullie kwamen elkaar na lange tijd weer tegen en hij nodigde je bij hem thuis uit. Hij biedt je een biertje aan.

De ander

complimenteert, benadrukt gemeenschappelijk verleden

Hee, lang niet gezien man! Je ziet er goed uit zeg! wil je een biertje?

Jij

Schreeuwt hard

NEE, IK WIL GEEN BIERTJE MET JE DRINKEN!

De ander

Blijft Aardig en charmant, deelt complimentjes uit

Aah joh, dat is toch gezellig man! Ouderwets herinneringen ophalen met en biertje erbij!

Jij

Schreeuwt, dreigt tegen de ander

NEE DAT KLINT NIET GEZELLIG. ENU NU ZOU IK MAAR WEGLOPEN ALS IK JOU WAS!

De ander

Blijft kalm, bagatelliseert

Maar je hoeft toch niet zo te schreeuwen? Kom op, één biertje kan toch geen kwaad?

Jij

Schreeuwt, scheldt en dreigt. Stapt dichterbij en geeft een duw.

NU WEGWEZEN EIKEL, ANDERS PAK IK JE! IK ZEI TOCH NEE!

De Ander

Vermijdt conflict, blijft rustig

.Je hoeft niet te schreeuwen hoor, dat is ook weer niet nodig.

Jij

Schreeuwt

GA TOCH WEG MAN!

.....

Assertive refusal behaviour (duidelijk)

De scene speelt zich af in het huis van een vriend. Jullie kwamen elkaar na lange tijd weer tegen en hij nodigde je bij hem thuis uit. Hij biedt je een biertje aan.

De ander

complimenteert, benadrukt gemeenschappelijk verleden

Hee, lang niet gezien man! Kom binnen! Zin in een biertje?

Jij

Staat rechtop, kijkt de ander aan en articuleert duidelijk.

Nee, ik ben gestopt met drinken.

De ander

Aardig en charmant, deelt complimentjes uit

Aah joh, dat is toch gezellig man! Ouderwets herinneringen ophalen met en biertje erbij!

Jij

Staat rechtop, kijkt de ander aan en articuleert duidelijk.

Zoals ik al zie, ik ben gestopt met drinken.

De ander

complimenteert

Aah joh, doe eens gek, je kan het hebben!

Jij

Staat rechtop, kijkt de ander aan en articuleert duidelijk, maakt stop gebaar met hand

Ik drink niet meer. Ik lust wel een cola. Zullen we in de tuin gaan zitten of binnen?

De Ander

Aardig en kalm

Oke, een cola dan. Ja, laten we lekker in de tuin gaan zitten

Jij

Staat rechtop, kijkt de ander aan en articuleert duidelijk.

Dat lijkt me een goed idee.

Appendix B

Table 2: Universal emotions and positively correlating action units

| Emotion | AU's | Description |
|-----------|--|--|
| Anger | 4 5 or 7 22 23 24 | Eyebrows drawn medially and down Eyes widened Lower eyelid raised and drawn medially Lips everted (funnelled) Lips tightened Lips pressed together |
| Contempt | 12 14 | Lip corners pulled up and laterally Lip corners tightened, cheeks compressed against teeth |
| Disgust | 9 or 10 or 25 or 26 | Upper lip raised and inverted Upper lip raised Lips parted Jaw dropped |
| Fear | 1 2 4 5 20 or 25 or 26 | Inner corner of eyebrow raised Outer corner of eyebrow raised Eyebrows drawn medially and down Eyes widened Lip corners pulled laterally Lips parted Jaw dropped |
| Happiness | 6 12 | Cheeks raised, eyes narrowed Lip corners pulled up and laterally |

| | | |
|----------|-------------------------------|---|
| Joy | 6 7 12 | Cheeks raised, eyes narrowed Lower eyelid raised and drawn medially Lip corners pulled up and laterally |
| Sadness | 1 4 15 17 | Inner corner of eyebrow raised Eyebrows drawn medially and down Corner of the mouth pulled downward and inward Skin of chin elevated |
| Surprise | 1 2 5 25 or 26 | Inner corner of eyebrow raised Outer corner of eyebrow raised Eyes widened Lips parted Jaw dropped |

Appendix C

Table 3: Checklist video's

| Emotion | Intensity | | | Total |
|----------|-----------|--------|---------|-------|
| | Video 1 | video2 | video 3 | |
| Anger1 | | | | |
| Anger2 | | | | |
| Contempt | | | | |
| Disgust1 | | | | |
| Disgust2 | | | | |
| Disgust3 | | | | |

| | | | | |
|-----------|--|--|--|--|
| Disgust4 | | | | |
| Fear1 | | | | |
| Fear2 | | | | |
| Fear3 | | | | |
| Happiness | | | | |
| Joy | | | | |
| Sadness | | | | |
| Surprise1 | | | | |
| Surprise2 | | | | |

Appendix D

Je hebt net drie videos gezien die nee zeggen laten zien. Wat vond je hiervan?

Client zegt: stom, leuk, of een ander kort antwoord. Interviewer reageert: Kun je dat uitleggen / waarom / vertel eens?

Kun je me iets vertellen over de verschillen tussen de drie videos?

Client kan op vele manieren antwoorden. Stuur aan naar een waardeoordeel van de cliënt door de volgende vraag te stellen.

Wat vond je van de verschillende filmpjes?

Als er nog geen waardeoordeel komt stel dan de volgende vraag

Welk filmpje denk je dat het meeste effect heeft?

Client antwoord met een getal van het filmpje dat hij denkt dat het effectiefst is. Antwoord:

Kun je dat uitleggen / waarom / vertel eens?

Hoe zeg je zelf nee als dat nodig is?

Client noemt enkele assertieve handelingen. Koppel terug naar de performance van de cliënt tijdens de roleplay en het kijken van de filmpjes.

Wat heb je geleerd van de filmpjes?

Cliënt zal assertieve handelingen noemen. Vraag indien nodig door en luid de volgende vraag in.

Wat denk je dat de toegevoegde waarde is van zulke filmpjes?

Houdt rekening met begripvend vermogen van de cliënt. Anders formuleren: waarom zou minder drank of drugs beter worden van zulke filmpjes?

Wat zou je ervan vinden als dit soort filmpjes in de MDOD behandeling zouden komen?

Cliënt geeft een oordeel. Interviewer vraag door: Kun je dat uitleggen / waarom / vertel eens?

Heb je na het zien van de filmpjes nog tips die kunnen worden gebruikt bij het maken van zulke filmpjes?

Heb je nog een laatste opmerking, of schiet je nog iets te binnen wat je wil zeggen?

Appendix E

Informatie formulier onderzoek

Toevoegen van filmpjes aan Minder Drank of Drugs

Hallo,

Mijn naam is Teun Gerritsen.

Voor school ga ik een onderzoek doen.

Ik heb gevraagd of je mee wil doen aan mijn onderzoek.

Daarom krijg je deze informatie.

Lees deze informatie goed door.

Nu komt informatie over het onderzoek

Waar gaat het over?

Het onderzoek gaat over instructie filmpjes.

Dit zijn filmpjes waarvan je iets leert.

Wat ga je doen?

Eerst kijk je naar 3 filmpjes

De filmpjes gaan over nee zeggen

Je ziet 3 manieren van nee zeggen

Tijdens het kijken wordt je gefilmd

Je zegt alles wat je denkt

Daarna wijs je het effectieve filmpje aan

Je denkt na welk filmpje je gaat aanwijzen

Je zegt alles wat je denkt

Je wijst het filmpje aan

Tot slot praten we over filmpjes

Ik stel vragen over de filmpjes

Je geeft antwoord op de vragen

Je zegt alles wat je denkt

Doel

Het doel is Tactus advies te geven.

Het advies gaat over wel of geen filmpjes gebruiken.

Tijd

Het onderzoek duurt ongeveer een half uur.

Meedoen

Je mag op elk moment vragen stellen.

Je hoeft alleen mee te doen als je zelf wil.

Je mag altijd stoppen.

Je hoeft geen reden te geven om te stoppen.

Alles wat je zegt en doet blijft geheim.

contact

Als je na afloop vragen hebt kan je die stellen

Je kan bellen naar: 088 382 28 87

Je kan mailen naar: t.k.gerritsen@student.utwente.nl

Tot slot

Bedankt voor het lezen van de informatie.

Namens de onderzoeker,

Teun Gerritsen.

Appendix F

Toestemming formulier onderzoek

Toevoegen van filmpjes aan Minder Drank of Drugs

Ik doe mee aan een onderzoek.

Ik heb de informatie gelezen.
Het gaat over reacties op filmpjes.
Er wordt een advies gegeven aan Tactus.
Ik weet wat het doel is van het onderzoek.
Wat ik zeg blijft geheim.
Ik kreeg antwoorden op mijn vragen.
Ik wil zelf graag meedoen.
Ik kan op elk moment stoppen.
Stoppen mag zonder reden.

Naam deelnemer:

Datum:

Handtekening deelnemer:

.....

Hierbij geef ik aan de deelnemer volledig te hebben geïnformeerd.
Ik geef aan het onderzoek uit te voeren zoals beschreven in de informatiebrief.
Ik geef toestemming om als contact persoon op te treden.

Naam onderzoeker:

Datum:

Handtekening onderzoeker:

Appendix G

Codeboom

Hieronder de codeboom naar aanleiding van interviews met cliënten van Tactus over het toevoegen van filmpjes aan de MDOD interventie. Eerst volgen enkele toelichtingen voor bij het coderen:

- Onder fysieke handelingen vallen fysiek en verbaal gedrag (duwen/schreeuwen)
- Onder mentale/emotionele handelingen vallen non verbale gedragingen zoals mentale staat en houding/non verbale communicatie (rustig blijven/duidelijk zijn)
- Met assertieve handelingen worden handelingen bedoeld die bijdragen aan effectief weigeren zoals benoemd in de MDOD interventie.
- Met niet assertieve handelingen worden handelingen bedoeld die niet bijdragen aan effectief weigergedrag, maar die contraproductief zijn voor het weigeren, zoals benoemd in de MDOD interventie.
- Het verschil tussen aandacht (10.1) en modelling (10.3) zit hem erin dat bij aandacht met duidelijkheid wordt bedoeld dat de inhoud van het filmpje duidelijk over komt, terwijl bij modelling met duidelijk wordt bedoeld dat het hebben van een voorbeeld het vertoonde gedrag verduidelijkt.
- Het verschil tussen de thema's bij leereffect en toegevoegde waarde, zit hem erin dat leereffect draait om het leereffect bij de cliënt zelf, terwijl bij het thema toegevoegde waarde de toegevoegde waarde voor de doelgroep als geheel wordt bedoeld.
- Bij citaten die als waardevol werden beoordeeld, is de code rood gearceerd om gemakkelijk terug te vinden te zijn.

| Code | Definitie |
|-----------------------------|--|
| <u>1. Waardeoordeel</u> | De cliënten geven aan wat zij vinden van de filmpjes. Ze verbinden hier een waardeoordeel aan. |
| Sub- code | Definitie |
| 1.1 Waardeoordeel filmpje 1 | De cliënt geeft een waardeoordeel over filmpje 1 |
| 1.2 Waardeoordeel filmpje 2 | De cliënt geeft een waardeoordeel over filmpje 2 |
| 1.3 Waardeoordeel filmpje 3 | De cliënt geeft een waardeoordeel over filmpje 3 |
| 1.4 Waardeoordeel algemeen | De cliënt geeft een waardeoordeel over de filmpjes in het algemeen |

| Code | Definitie |
|-----------------------------------|--|
| <u>2. Waargenomen handelingen</u> | De cliënten geven aan welke handelingen zij herkennen in de filmpjes, die zijn gerelateerd aan weigerend gedrag. |
| Sub- code | Definitie |
| 2.1 Fysieke/verbale handelingen | De cliënten noemen fysieke/verbale handelingen van de weigeraar gerelateerd aan weigerend gedrag. |

| | |
|--|---|
| 2.2 Mentale/non verbale handelingen | De cliënten noemen mentale/non verbale handelingen van de weigeraar gerelateerd aan weigerend gedrag |
| 2.3 Voorgestelde handelingen | De cliënten noemen voorbeelden van assertieve handelingen die de weigeraar had kunnen vertonen |
| Sub sub- code | Definitie |
| 2.1.1 Fysieke/verbale assertieve handelingen | De cliënt noemt fysieke/verbale handelingen van de weigeraar die effectief weigergedrag uitbeelden |
| 2.1.2 Fysieke/verbale niet- assertieve handelingen | De cliënt noemt fysieke/verbale handelingen van de weigeraar die niet- effectief weiger gedrag uitbeelden |
| 2.2.1 Mentale/non verbale assertieve handelingen | De cliënt noemt mentale/non verbale handelingen van de weigeraar effectief weigergedrag uitbeelden |
| 2.2.2 Mentale/non verbale niet- assertieve handelingen | De cliënt noemt mentale/non verbale handelingen van de weigeraar niet- effectief weigergedrag uitbeelden |

| | |
|-------------------------------------|---|
| Code | Definitie |
| <u>3. Verschillen</u> | De cliënten benoemen welke verschillen zij zien tussen de filmpjes. |
| Sub- code | Definitie |
| 3.1 Fysieke/verbale verschillen | De cliënten noemen verschillen tussen de filmpjes in fysieke/verbale handelingen. |
| 3.2 Mentale/non verbale verschillen | De cliënten noemen verschillen tussen de filmpjes in mentale/non verbale gedragingen. |
| 3.3 Verschillen in uitkomst | De cliënten noemen verschillen tussen de filmpjes in het resultaat van de interactie |

| | |
|--------------------------------------|---|
| Code | Definitie |
| <u>4. Effectiviteit weigergedrag</u> | De cliënten benoemen welk filmpje volgens hen de meeste effectieve manier van weigeren laat zien. |
| Sub- code | Definitie |
| 4.1 Gedrag | De cliënten benoemen kenmerken van het gedrag van de weigeraar als maatstaaf voor de effectiviteit van het weigerende gedrag. |
| 4.2 Resultaat gedrag | De cliënten noemen resultaten van het gedrag als maatstaaf voor effectiviteit. |
| 4.3 Alternatief aanbieden | De cliënten benoemen het verkiezen van een cola boven alcohol als kenmerk van effectief nee zeggen. |
| Sub sub- code | Definitie |

| | |
|----------------------------------|--|
| 4.1.1 Mentaal/non verbaal gedrag | De cliënten benoemen mentale/non verbale gedragingen die de weigeraar vertoont, die het gekozen filmpje effectief maakt. |
| 4.1.2 fysiek/verbaal gedrag | De cliënten benoemen fysieke/verbale gedragingen die de weigeraar vertoont, die het gekozen filmpje effectief maakt. |
| 4.2.1 Positief resultaat | De cliënten benoemen positieve resultaten van het gedrag van de weigeraar |
| 4.2.2 Negatief resultaat | De cliënten benoemen negatieve resultaten van het gedrag van de weigeraar. |

| Code | Definitie |
|--|--|
| <u>5. Reflectie eigen weigergedrag</u> | De cliënten reflecteren op hun eigen manier van weigerend gedrag vertonen. |
| Sub- code | Definitie |
| 5.1 Handelingen | De cliënten beschrijven handelingen gerelateerd aan weigerend gedrag die zij uitvoeren wanneer ze zelf nee zeggen. |
| 5.2 Attitude | De cliënten beschrijven hun gedachtes en houding over weigerend gedrag vertonen. |
| 5.3 Self- efficacy | De Cliënten beschrijven het vertrouwen in eigen bekwaamheid om weigerend gedrag te vertonen. |
| 5.4 Peer pressure | De cliënten beschrijven groepsnormen- en druk die hen ertoe aanzette bepaald gedrag te vertonen en hoe zij hiermee omgaan. |
| 5.5 Risico perceptie | De cliënt benoemt het risico van weer gebruiken en terugvallen |
| Sub sub- code | Definitie |
| 5.1.1 Assertieve handelingen | De cliënten beschrijven assertieve handelingen van sterk weigergedrag dat zij vertonen |
| 5.1.2 Niet- assertieve handelingen | De cliënten beschrijven niet- assertieve handelingen van zwak weigergedrag dat zij vertonen |

| Code | Definitie |
|----------------------|---|
| <u>6. Leereffect</u> | De cliënten geven aan of zij denken iets te hebben geleerd van de filmpjes. |
| Sub code | Definitie |
| 6.1 Geen leereffect | De cliënten geven aan niets te hebben geleerd van de filmpjes |
| 6.2 Wel leereffect | De cliënten geven aan wel iets geleerd te hebbe van de filmpjes. |

| Sub sub- code | Definitie |
|------------------------|---|
| 6.2.1 Refusal skills | De cliënten beschrijven assertieve handelingen (skills) geleerd uit filmpjes, die effectief weigeren mogelijk maken en die ze zelf kunnen toepassen |
| 6.2.2 Attitude | De cliënten noemen veranderingen in hun houding ten aanzien van gebruik, naar aanleiding van de filmpjes. |
| 6.2.3 Risico perceptie | De cliënten beschrijven inzichten in de gevolgen en risico's van verslaving, opgedaan na het zien van de filmpjes. |

| Code | Definitie |
|------------------------------|---|
| <u>7. Toegevoegde waarde</u> | De cliënten geven aan wat volgens hen de toegevoegde is van het gebruik van filmpjes in de MDOD interventie. |
| Sub- code | Definitie |
| 7.1 Refusal skills | De cliënten geven aan dat zichzelf en anderen cliënten beter weigerend gedrag zullen kunnen vertonen na het bekijken van de filmpjes. |
| 7.2 Attitude | De cliënten geven aan dat de filmpjes leiden tot nieuwe gedachtes en een veranderde houding ten aanzien van gebruik |
| 7.3 Risico perceptie | De cliënten beschrijven veranderingen in waargenomen risico's van gebruik. |
| 7.4 Real life scenario | De cliënten geven aan dat filmpjes het echte leven beter benaderen dan andere methodes die gebruikt worden in de MDOD interventie. |
| 7.5 Zelfreflectie | De cliënten geven aan dat filmpjes mensen meer inzichten geven in hun eigen gedrag en handelen en hierover na laat denken. |
| 7.6 Superieur materiaal | Cliënten doen uitspraken over de effectiviteit en duidelijkheid van filmpjes in verhouding tot andere methodes |

| Code | Definitie |
|---------------------------------------|---|
| <u>8. Toevoegen filmpjes aan MDOD</u> | De cliënten doen uitspraken over het toevoegen van filmpjes aan de MDOD interventie. Ze verbinden er een waardeoordeel aan. |
| Sub- code | Definitie |

| | |
|----------------------|---|
| 8.1 Positief oordeel | De cliënten geven een positief oordeel over het toevoegen van filmpjes aan de MDOD interventie. |
| 8.2 Negatief oordeel | De cliënten geven een negatief oordeel over het toevoegen van filmpjes aan de MDOD interventie. |

| Code | Definitie |
|------------------|--|
| <u>9. Tips</u> | De cliënten geven tips en ideeën voor de ontwikkeling van filmpjes in de toekomst. |
| Sub- code | Definitie |
| 9.1 Script | De cliënten geven tips over hoe de verschillende vormen van weigergedrag weergegeven zouden kunnen worden. |
| 9.2 Setting | De cliënten geven tips over de omgeving waarin de filmpjes opgenomen zouden kunnen worden. |
| 9.3 Onderwerp | De cliënten dragen onderwerpen aan waarover zij graag een filmpje zouden zien. |
| 9.4 Productie | De cliënt geeft tips voor de productie van de filmpjes |

| Code | Definitie |
|-------------------------------|--|
| <u>10. Vicarious learning</u> | De cliënten geven noemen kenmerken van vicarious learning (leren door het observeren van anderen op video) |
| Sub- sub code | Definitie |
| 10.1 Aandacht | De cliënt benoemt aandacht processen om informatie waar te nemen. Cliënten zien meer/ beter wat er gebeurt in de filmpjes. |
| 10.2 Retentie | De cliënt benoemt retentie processen om informatie op te slaan in het geheugen. Duidelijkheid, onthouden en begrijpen van filmpje wordt besproken. |
| 10.3 Modeling | De cliënt benoemt observaties van een model en handelingen van een model, waardoor het vertoonde gedrag duidelijker wordt |
| 10.4 Motor reproductie | De cliënten geven aan dat het hebben van een voorbeeld ertoe zal leiden dat cliënten zelf beter weigergedrag zullen kunnen vertonen. |
| 10.5 Motivatie | De cliënt geeft aan dat voorbeelden in de vorm van filmpjes ertoe leiden dat ze meer gemotiveerd raken om zelf effectief |

| | |
|--|--|
| | weigergedrag te vertonen of de filmpjes serieus te bekijken. |
|--|--|