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Deutsche AIDS-Hilfe

Deutsche Aids-Hilfe e.V.
Abteilung Schwule, MSM und Leben mit HIV

MARCUS CAPELLARO Konzeption & Evaluation kommunikativer Maßnahmen

Marcus Capellaro- Konzeption und Evaluation kommunikativer Maßnahmen

Analysing the test quality of an online questionnaire

- a tool to evaluate the target groups´ (men who have sex with men) reception and benefit of an HIV/STI prevention campaign of the Deutsche AIDS-Hilfe e.V.

Masterthesis

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Abstract

Introduction: In Germany, gay men and other men who have sex with men (MSM) are considered to be a key population group for HIV and other Sexually Transmitted Infections prevention measures. The Deutsche AIDS-Hilfe e.V. runs a campaign ("ICH WEISS WAS ICH TU") which is evaluated regularly. The survey of 2014/15 pursued the main goals to evaluate the online appearance of the campaign, in particular the online tool users´ perception of the tools and their benefit in terms of HIV/STI prevention. Quality analysis of the questionnaire was still pending and was the scope of this thesis.

Methodology: The three main criteria of test quality analyses are objectivity, reliability and validity. These criteria were analysed in detail. Guidelines for objectivity and content and face validity analyses were considered, hence a qualitative analysis line of argument emerged. Reliability and construct validity analyses were conducted using inference statistical methods. A few additional quality criteria were analysed such as economic efficiency and ethical appropriateness.

Results: The criteria for objectivity can be rated to be of high standard. Reliability had diverse outcomes. The scales where users of the online tools gave feedback about their perception showed high values of reliability. The scales for benefit in terms of HIV/STI prevention had only moderate to low values of reliability. Content validity showed good theoretical fundamentals, however construct validity could not confirm that the items indeed capture what was intended.

Conclusion and recommendation: The goals of a survey define which quality criteria are of greater importance. Hence, the part of the survey where users rated the online tools can be considered to be of appropriate quality. Content validity and reliability are of adequate quality and, as this part does not aim to display a theoretical construct, one does not have to focus on the poor results of construct validity analysis. However, it would be advisable to exclude or revise items that proved to be weak or redundant. The other part of the survey is based on theoretical assumptions therefore the rather poor results of construct validity have a severe impact on quality. It became obvious that the theoretical grounding and the items needed to be revised.

1 Introduction

Designing a questionnaire requires the synthesis of various scientific methodologies. Literature research is the first step into the topic. (Bühner, 2006) Comparable tests and questionnaires have to be collected and rated for their ability to lend ideas and theories. Also the background knowledge about the target group, the variables of interest concerning the target group and possible psychological, behavioural or physical coherences have to be researched. Additionally, qualitative methods like analysing interviews or artefacts (pictures, written pieces, spoken words) help to create a world of items. To all these findings scientific theories and standards have to be applied to retrieve representative and meaningfully interpretable data. (Steyer et al., 2001) Everything that is included in scientific method training has to be considered and applied.

It was fascinating to be involved in the development process of the questionnaire to evaluate the online tools of the IWWIT campaign of the Deutsche AIDS-Hilfe e.V. The evolution of a questionnaire is a real challenge. It is characterised by uncertainty of the right wording in items, making decisions about the including and excluding of content as well as trying to be considerate of clients´ needs and wishes, while trying to uphold a certain scientific standard. (Porst, 2008) These issues that present an ambiguity of working scientifically but also creatively are pointed out in literature. Hence, Porst advises to use pre-testing to establish quality since Sudmann et al. (1982) stated: “Even after years of experience, no expert can write a perfect questionnaire.” (Porst, 2008)

The pre-testing of the developed questionnaire took place on a more empirical than statistical level. Thus, doing an in depth analysis of measurement precision is still pending. “Analysing the test quality of an online questionnaire - a tool to evaluate the target groups´ (men who have sex with men) reception and benefit of an HIV/STI prevention campaign of the Deutsche AIDS-Hilfe e.V.” will be done in the remainder of this thesis.

Firstly, a frame will be constructed that refers to the importance of the scope and the public health relevance of the analysed questionnaire. Secondly, the theoretical

fundamentals will be established. In the methods the conduction of analyses and results will be explained in detail. Then the main results will be summarised and discussed. Analysis of test quality will lead to a conclusion about the quality of the questionnaire. As a final step reflection on limitations of the thesis will be done.

1.1 Background

This chapter will highlight the importance of doing test quality analyses. Furthermore, the main and most recent facts about HIV and other sexually transmitted infections will be given. Then the study population and their special needs will be described and the questionnaire will be set in context. There will be information about the client, the purpose of the questionnaire as well as a short description of the analysis, results and limitations.

1.1.1 Importance of test quality analysis

In the introduction the process of building the questionnaire was described as being guided by science but also by creativity. Scientists who have been working in this field for many years share this experience. According to Rost (2004) in his course book “Fragebogen”, developing a test or questionnaire is escorted by lots of useful rules, codes of conduct and guidelines. It is necessary to work meticulous to meet the scientific requirements and to focus the research goals. Yet, there is a lot of creativity and empathy needed to translate the research aims into questions that are appropriate for the target group. That leaves room for subjective assumptions about, for instance, intelligibility or interpretation. Therefore, pre-testing is invaluable. Having additional information from people that are not concerned with the construction of the questionnaire but are related to the target group helps to achieve greater quality. It is advisable to conduct more than one pre-testing phase to eliminate as many sources of error as possible. (Kirchhoff, 2010) Most commonly in sociological literature, pre-testing or piloting is interpreted as the process where participants give feedback about how they received the questionnaire and what aspects they noticed. Using inference statistical methods as indicators for which items are good and necessary is more common in psychological testing.

Doing test quality analysis is the method to assure utility and to improve the value of a test. However, the results of test quality analysis or the documentation of the pre-testing and revising process are often times not published. Especially in terms of economic and ethical considerations, it is advisable to focus more on aspects of quality and make them openly discussable. It would spare resources to be able to rate research based on results of quality criteria and it is only ethical to initiate measures based on solid and unbiased knowledge. (Ioannidis et al., 2014)

In an economically driven society where scarcity of resources in the public sector is advertised, numbers, data and hard facts play a major role. Therefore, analysing the quality of tests systematically and with support of statistical methods is necessary. (Böttcher et al., 2014) Quality management is also ethically important, otherwise the needs of the target group will not be met. (Wottawa et al., 2003) From these different angles, high standards in science and public health care are targeted. Evidence based medicine (Deutsches Netzwerk Evidenzbasierte Medizin e.V., 2011), good practice criteria (Kooperationsverbund Gesundheitliche Chancengleichheit, 2015) or criteria for evaluation (DeGEval, 2009) point to include quality standards in every facet of scientific work. However, checklists and tools to support readers in critical appraising studies are, in one way or the other, rather incomplete. For instance, the Cochrane organisation provides “principles of critical appraisal” concerning quantitative methods. Validity is only mentioned briefly and reliability is not mentioned at all. To quote Ioannidis et al. again, there is a need to further promote quality of test criteria.

1.1.2 Facts about HIV and other STIs

The human immunodeficiency virus (HIV) remains an important public health issue and can be considered to be the most important of all sexually transmitted infections/diseases (STI). Globally, around 36, 7 million people are living with an HIV infection and there are still high numbers of incidences around 2, 2 million, in 2015. However, incidences of HIV have declined by 35% since 2000 (WHO, 2016) and, as well as HIV and AIDS related deaths, have been stable for the past few years. This data demonstrates the achievements in the international efforts to fight HIV. “Since the first global treatment target was set in 2003, annual AIDS-related deaths have decreased by 43%.” (UNAIDS, 2016) New infections among children have decreased

from 490 000 in 2010 to 150 000 in 2015, mainly due to the prevention of mother to child transmission pre-, peri- or post-natal. Furthermore, the number of people living on antiretroviral therapy has more than doubled from 7.5 million in 2010 to 18.2 million in July 2016. Pharmaceutical innovation could reduce therapy costs and simplify therapy by producing combination pills. Still HIV cannot be cured definitely. However, the numbers of people living with an HIV infection for many years are increasing and new issues are emerging that have to be addressed. General issues play a role like infrastructure for constant medical care or distribution and acceptance of condoms and more important of the people living with HIV. Despite all the success of the past years it gets evident again that health depends on social equality. Worldwide the low-income countries are burdened the most analogous for every country it is the low-income stratum. Of course, women are deprived, too, due to gender inequalities, violence, lack of education and access to sexual and reproductive health services. Young women aged 15-24 account for 20% of the newly infected cases whereas their portion within the population is only 11%. Other groups at high risk of acquiring HIV are sex workers, transgender people, gay men, other men who have sex with men or people who inject drugs. In North America, Western and Central Europe, gay men and other men who have sex with men can be considered to be the most susceptible group with 49% of the newly infected cases in 2014. (UNAIDS, Global AIDS update 2016) In Figure 1 the German epidemic can be seen. The HIV epidemic had its peak in the 1980s following a period of decline in newly infected cases due to information and prevention measures. In 2000 the numbers were increasing again until 2006 where they remained almost stable. The ups and downs since then are not following a specific trend. (RKI, 2015b) This could be related to changing protocol in testing, notification or documentation. Also each year the RKI estimates HIV numbers on improved algorithms and data findings so the slight changes could be also related to that fact. (RKI, 2014)

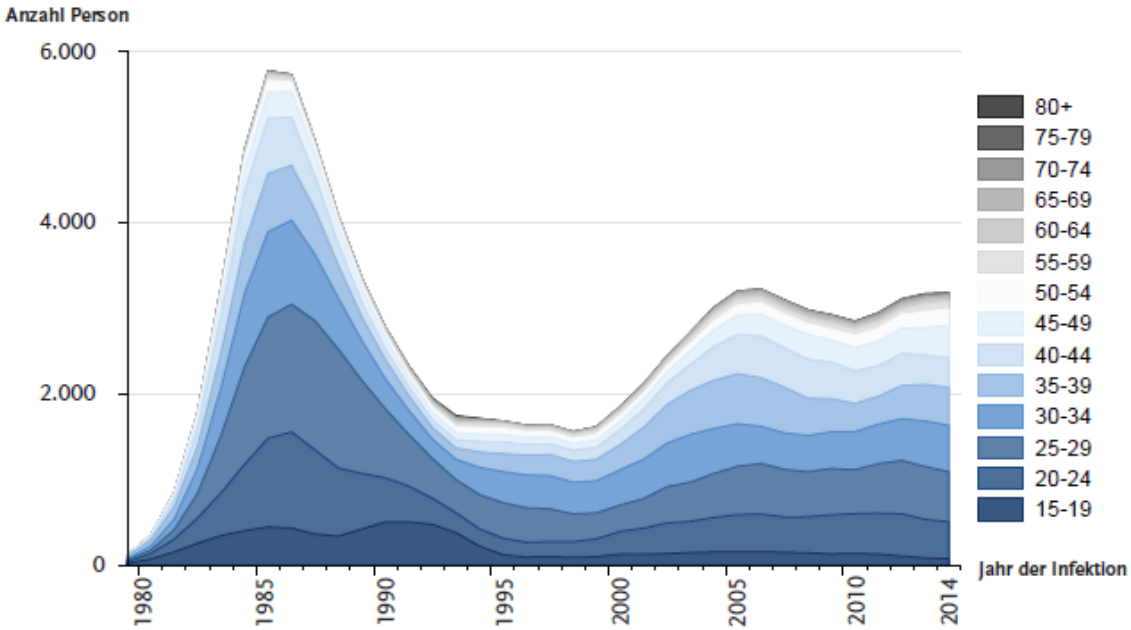

Figure 1: **Estimated numbers of newly infected HIV cases in Germany, in five year age groups (RKI, 2015b)**

None the less the numbers show distinct differences in the most impacted groups. Although the absolute numbers of women newly diagnosed with HIV in 2015 was increasing by 14% compared to only 3% in men, the incidences in men remain substantially higher, 7,6% compared to 1,8% in women. Also the portion of men in the newly diagnosed cases is almost four times higher, 79,6% in men and 20,3% in women. Within men, it is the transmission group of men who have sex with men that holds the biggest portion of newly infected cases. 50,4% are in this group whereas heterosexual contacts as way of transmission account for 26% and HIV infections due to intravenous drug use is around 3,6%. In 19% of the cases the way of transmission is not known or not reported. (RKI, 2016)

Other sexually transmitted infections/ diseases (STI) often accompany HIV infections, and having another STI infection makes it easier to become infected with the HI-virus. The immune system is already vulnerable because of one infection and prone to be overwhelmed by bacteria or viruses. (RKI, 2010) Surveillance of STIs is attached to some obstacles. As mentioned before tracking HIV is difficult. For example newly diagnosed cases are not implicitly newly infected cases so incidences have to be estimated. However HIV data is typically more reliable than data of other

STIs because cases have to be documented and reported. Only Hepatitis cases have to be registered with names, HIV and Syphilis have to be reported anonymously, all other STIs like, Gonorrhoea, Chlamydia or Herpes do not have to be reported. (BzgA, 2016) Of course this approach is reasonable to protect infected people from stigmatisation and prejudice but it also complicates handling the disease. More information helps to find the right strategy to face the disease. So there a different attempts to estimate the burden of STIs in Germany. In 2000 a new law was installed that regulated which STIs have to be reported and which not. As it were only the before mentioned Hepatitis, Syphilis and HIV cases a sentinel-surveillance system was installed in 2002 to keep track of infections. Certain health institutions report regularly their STI data. In 2010 the first report of the STI-Sentinel was published analysing the data of six years 2003 to 2008. (Figure 2) Chlamydia diagnosis were stable with also the highest percentage, Gonorrhoea diagnosis are constantly increasing; diagnosis rates for Trichomonas show ups and downs with no certain trend and Syphilis and HIV diagnoses are almost stable. As can be derived from figure 2, HIV has relatively low numbers of diagnosed cases compared to the other depicted STIs. So it is important to include other sexually transmitted infections in prevention measures too.

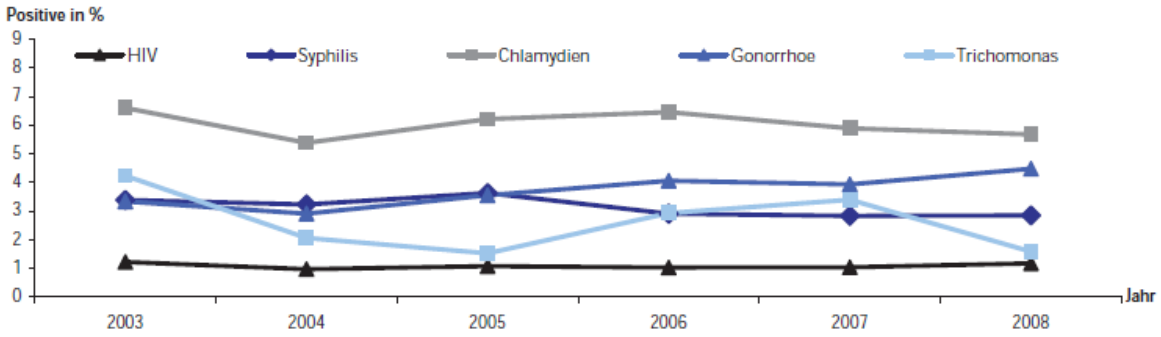

Figure 2: **Portion of positive diagnosed people of all for the STI tested people STI-Sentinel 2003-2008 (RKI, 2010)**

Looking deeper into the STI data, significant differences between men and women and between age groups become evident. Women with migration background are overly burdened with 67% of diagnosed STI cases whereas men with migration background account for 26%. Doctors reported as the leading cause of transmission in men, sexual contacts with other men (65%). In contrast 66% of the infections in women were acquired via sex working. Analysing the STIs by type of infection it is

also very diverse. HIV, Syphilis and Gonorrhoea are more common in men and Chlamydia and Trichomonas in women. (Figure 3) Women having an STI were on average younger than men and patients with Syphilis were older then patients having another STI.

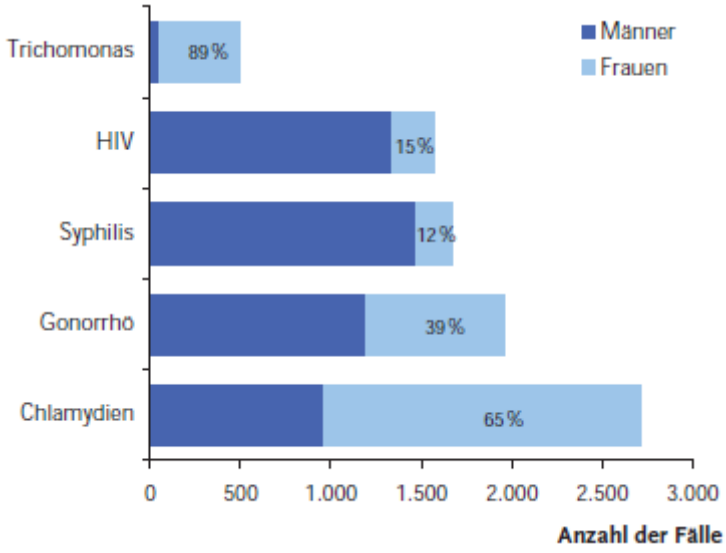

Figure 3: **Distribution of STIs sorted by sex. STI-Sentinel January 2001 to December 2008 (n=9188) (RKI, 2010)**

To conclude it has to be mentioned that the prevention methods for STIs have to be addressed individually. There are very diverse key populations to every STI. For example women with migration background who get infected mainly in Germany, sex workers and men who have sex with men. (RKI, 2010) Following these insights studies were planned and conducted to gather more information about the target populations and create more specific prevention measures. For example several KABP-studies (**K**nowledge, **A**ttitude, **B**ehaviour, **P**ractise) were set up to address women with sub-Saharan migration background (RKI, 2017) or female sex workers (RKI, 2013). Men who have sex with men were invited to participate in the large online survey EMIS (RKI, 2015a).

1.1.3 Men who have sex with men as a group of vulnerable people

The previous chapter showed that in Germany men who have sex with men are one of the most vulnerable key populations for getting infected with HIV or another STI. When the HIV epidemic in the 80s was spreading at an alarming rate, Dr. Michael Bochow started the first study widening the knowledge about the group of gay men and other men who have sex with man in West-Germany. Since then, the study was

repeated almost every three years, of course, with slight changes due to the German reunification and other general trends. In 2010 the study was merged with the EMIS study (RKI, 2015a) and the Deutsche AIDS-Hilfe e.V. (DAH) and the Bundeszentrale für gesundheitliche Aufklärung (BzgA) is interested in carrying on the periodically repetition of evaluating men who have sex with men (MSM). For epidemiological considerations it is very important to know as much as possible about the target population. To begin with, it is very difficult to estimate the size of this population group due to its diversity. However, for prevention it is particularly important to know about potential sexual risky behaviour. Sexual contacts that potentially cause micro injuries are considered to be more likely to bear a higher risk of transmitting HIV and other STIs. Especially unprotected anal intercourse seems to be of high risk for receiving infections. (BzgA, 2017) The criterion sexual behaviour is easier and more objective to investigate then asking for sexual orientation which is problematic regarding definitions. The German Mikrozensus, as well as other population wide surveys, normally investigate sexual preferences only under the aspect of life partnerships. In 2014, 78 000 people were living in a homosexual partnership which account for around 2% of the whole population (Destatis, 2015c). Surveys that ask for sexual orientation or contacts come up with numbers of 5-12% (Statista, 2008/2015). Therefore, numbers about the size of the standard population of MSM are very imprecise. However, the numbers about HIV and STI infections in the population group of MSM make the necessity of taking action obvious. Also, the need of increasing the knowledge about the target group is evident to be able to conceptualise target group specific prevention.

The highest estimated HIV incidence in the key group of MSM is between the ages 20 to 39. (RKI, 2014) That coincides with the way of transmission because these age groups also report to be the most sexual active. (Schmidt et al., 2007) Traditionally MSM living in metropolitan areas have higher incidences then those living in more rural regions although the gap is slowly getting smaller as it gets easier to find sexual partners via social media. (RKI, 2016 and 2014)

Certainly it is not the strategy to prevent people from having sex but rather help to increase acceptance of safe sex behaviour and the multiple related topics.

1.1.4 Deutsche AIDS-Hilfe e.V. and the IWWIT campaign

The Deutsche AIDS-Hilfe e.V. (DAH) unites organisations and institutions in Germany that are concerned with HIV related subjects. The main task of the DAH is to advocate the interests of people living with HIV/AIDS publicly regarding politics, science and medicine. Working together with the Bundeszentrale für gesundheitliche Aufklärung (BzgA) the DAH is the main source for information and prevention programs in key groups. (DAH, 2017)

The IWWIT campaign was launched in 2008 to reach the key group of gay men and other men who have sex with men. Studies of the RKI like the EMIS study (RKI, 2015a) showed that the target group is highly represented in big cities where also most of the newly diagnosed HIV and other STI cases are located. But there are also increasing numbers of cases in more rural areas. In the process of research for reasons social media platforms and their potential to build widely spread and anonymous networks were focused. Dating platforms for MSM are very popular as well as for other population groups. “Planet Romeo” for example has 460 654 registered user in Germany (Planet Romeo, 2017). Considering the estimated number of MSM living in Germany, around 50% of this group are enrolled in the dating site. Presumably there are a number of people having more than one alias or other biasing factors but this community still represents a significant portion of the population. This form of communication and connecting with others makes it easier for MSM living in rural areas to find partners and sexual contacts. Also the increasing number of partners, slightly decreasing condom use and early age of first anal intercourse in the age group of young men under 30 could be associated with a widened sexual network and less caution due to the anonymity of internet platforms. (RKI, 2014) Therefore, it is very reasonable to have prevention campaigns that try to reach the target group via channels they are using. A website is advisable and a Facebook appearance is a start into social networks. The aim is to reduce HIV and STI cases in the target group of MSM using the strategy of promoting acceptance of diverse life styles, sexual preferences and HIV-positive status. The different topics are presented role models that are as authentic as possible. The campaign is also present on site with members, volunteers and information material at events like the Christopher Street Day (CSD) or fetish conventions.

1.1.4.1 The project to evaluate the online tools

The DAH endeavours to supervise the campaign scientifically. Not only the content gets evaluated which has to be well founded on scientific research and up dated to for example the latest developments in medicine. Also the users´ perception of the campaign, their needs and interests are inquired on a regular basis. The questionnaire was developed to evaluate the online tools, although there were other aspects of the campaign that were evaluated, too. One goal of the questionnaire was to widen the knowledge about the group of user, how they perceive form and content of the online-tools and if they benefit in terms of HIV/STI prevention. The other goal was to investigate the potential of duplicating and distributing content in the MSM community via the internet as well as the possibility for widening the offers on the website, Facebook and Health Support. Furthermore the data collection in the tradition of the Bochow studies and the SMA study (Schwule Männer und HIV/AIDS, 2010) should be continued. Combining a quantitative survey with a qualitative approach proved very useful, especially referring to the rather undefined standard population of MSM. (Bochow et al., 2010) Thus, participants in the online survey were asked to volunteer for participation in subsequent guided interviews.

1.1.4.2 The questionnaire

The questionnaire that was designed to investigate the campaign had to mainly cover two different aims which is evaluating the target group specificity of the online-tools and checking the impact of the HIV/STI prevention messages.

On the one hand the DAH wanted to receive feedback about their campaign from the people who are using their offers. Questions were included that would help to analyse the group of visitors who use the online tools. Therefore demographic information was gathered mostly using questions of former surveys. Also hoping to be able to compare the surveys of the past years with the new one and maybe detect developments in demographics, interests or needs. Then a set of questions for each internet tool was put together that dealt with style, design, current taste and issues like importance, usefulness and topicality of the content. That would help the admins to adjust and improve their work. On the other hand a behavioural model was set up that would allow to examine possible cause and effect associations regarding the

preventive behaviour that is suggested on the IWWIT website and reported actual behaviour. (Annex I)

Consumers´satisfaction

There are several aspects how mass communication, social media, online campaigns etc. should be designed. To develop items that would give the information how good the campaign meets the target groups´ taste and preferences, research in the health communication field had to be conducted.

First lead into the topic came from McGuire (1984, In “Making health communication programs work”). The article was called “Communication for Persuasion” and listed five communication components that have to be made clear for a campaign to be successful.

1. Credibility of the message source
2. Message design
3. Delivery channel
4. Intended Audience
5. Intended behaviour

Based on these components, different topics emerged that would be important to ask the target group. First of all the contentual composition would be of interest. For example, do the consumers find the information they get from the sources website, Facebook and health support to be valid and up to date. Message design means how it is formulated or how the tone is. This was also extended to the technical design and layout. The criterion delivery channel asked if it does make sense to have a website, a Facebook appearance and health support, and would people use it. Intended Audience led to questions that asked if the target group feels acknowledged with their individual needs and preferences and is the language and terminology appropriate and appealing.

Intended behaviour is part of the health behaviour construct that was included and operationalised.

External factors were also assessed to be important for the improvement of the media campaign. Criteria addressing technical design and layout were derived from sources of general guidance for online based media design and advertisement strategies (Die VÖZ Print Positionen, 2006). Other very helpful sources were interviews with members of the campaigns steering group (Annex II) where they were asked what they think about the website since it was revised and relaunched in January 2014. Questions like item number 34 or 35 emerged (Annex I) where oversee-ability, helpfulness, or tone were the matter.

Model of preventive behaviour

The second part of the questionnaire would be the one of greater public health relevance. The question was “Does the campaign contributes to HIV/STI reduction in men who have sex with men”. To be able to create a cause and effect chain an underlying construct was developed. It contained the findings of behavioural theories such as the “health belief model” (Rosenstock, 1966). Other instruments were included that inquire for example “self-esteem” or “social support”. Components were added according to scientific experience and knowledge but also according to the clients experience and knowledge because they are experts in their field, have profound insights and stay continuously in touch with the campaign team and the target group. For example, did the DAH. specifically point towards the problem of internalised homophobia, where people feel ashamed of being gay and act violently against themselves or other homosexuals or the problem of disrespectful interaction and even bullying tone in chats of dating websites. So the DAH was interested to broaden the factual knowledge about topics like these and these aspects were included in the underlying construct for the questionnaire.

The final model (Figure 4) contains all the factors that were considered to be part of the campaign and have impact on health. As it shows, two levels of health are targeted with the campaign. On the one side it is the physical/ medical level of HIV and STI reduction (“Reduktion HIV/STI”). On the other side it is the social and emotional health. These two aspects had to be operationalised to make them measurable via the questionnaire.

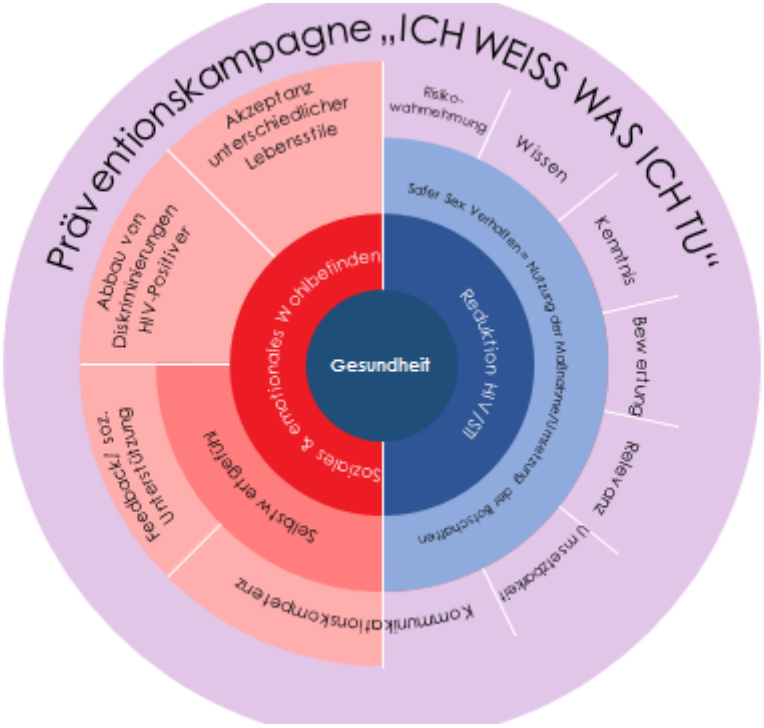

Figure 4: "Causation model" (Capellaro, 2015)

For HIV and STI reduction facts and figures are relevant. So asking about HIV status and STIs was compulsory. However, more interesting for the client was if the development of facts and figures could be linked to their campaign. So to understand if people used and acted according to safety measures and messages promoted via the campaign would give a hint if the campaign contributes to HIV and STI reduction. Based on behavioural models factors were included which are influencing preventive action in the target group. For every message that the campaign addressed a set of questions was developed. Participants had to answer if they

1. know the message ("Kenntnis"/ "knowledge")
2. if they came across it via the campaign (to check for a direct connection)
3. what they think about the message ("Bewertung"/"consent")
4. if it is relevant for them personally ("Relevanz")
5. if it would have been easy to act according to the message ("Umsetzbarkeit"/"viability")
6. if they acted according to the message. ("Safer Sex Verhalten")

Risk perception ("Risikowahrnehmung"), knowledge of facts ("Wissen") and the competence to communicate about safety measures ("Kommunikationskompetenz")

were investigated separately. For example, item 139 “Wie hoch schätzen Sie Ihr eigenes Risiko ein sich mit HIV zu infizieren“ targeted „risk perception“. „Knowledge of facts” was investigated with a collection of statements where participants had to state whether they knew them to be true or not (Item 84, Annex I). These statements were transferred from former surveys, from the website and completed from the client. The competence to communicate about prevention was operationalised via the question how often they got to talk about these topics recently with friends, family or sex partners (Item 113/114, Annex I).

All these factors were considered to have an influence on preventive action (“Safer Sex Verhalten”).

The other part of the model that dealt with social and emotional well-being was also considered to be influenced by the campaign. Public relations and public presence of the campaign team could promote positive feedback and social support as well as help to communicate openly about prevention topics within the so called “gay community” but also in the whole society. These are considered to be essential factors for self-esteem or intrinsic value. That was tried to capture with parts of the Rosenberg self-esteem scale (Item 85, Annex I) and the SF36 (Items 87 and 88, Annex I).

Two other aspects the client emphasised that would be of importance for their target group are discrimination of HIV positive people and the acceptance of individual life styles within the group itself. That was tried to capture with the question 86 “Stellt es für Sie persönlich ein Problem dar, dass Sie Sex mit Männern haben?” copied from a former survey. Questions that referred to every tool specifically, the website, Facebook and the Health Support, asked about social support or openness for other life styles (Item 49, Annex I).

Pretesting/ Documentation

The clients pre-tested the questionnaire and some adjustments were made. These adjustments were mainly about deleting questions. The request of investigating satisfaction and benefit led to creating a lot of items. Furthermore, matters of political correctness or appropriateness of wording were discussed. For example, would it be offensive to say: “Bei Jucken oder Brennen am Schwanz oder Arsch […]” (Item 66, Annex I).

During the development of the items detailed documentation is inevitable. It has to be theoretically defined which items should investigate which concept. For example, migration background was evaluated via a combination of items. A person with migration background would have answered that:

- Both parents were born in a foreign country or
- Respondent did not live in Germany since his/her birth and at least one parent was born in a foreign country or
- The first language is not German

Also a codebook was created for better documentation. That helped to maintain the overview of which item belongs to which underlying concept, which items are filter questions and if the items were copied from former questionnaires or if they were newly created.

The questionnaire went online on October 20th, 2014 with almost a month of delay. It was also prolonged due to promotion obstacles. It ended four months later on February 23th, 2015.

Figure 5 shows the development of participation. From October to the beginning of February, very few people answered the questionnaire. Then the DAH managed to get a dating portal to promote the survey and in the last two weeks about 12 000 people participated.

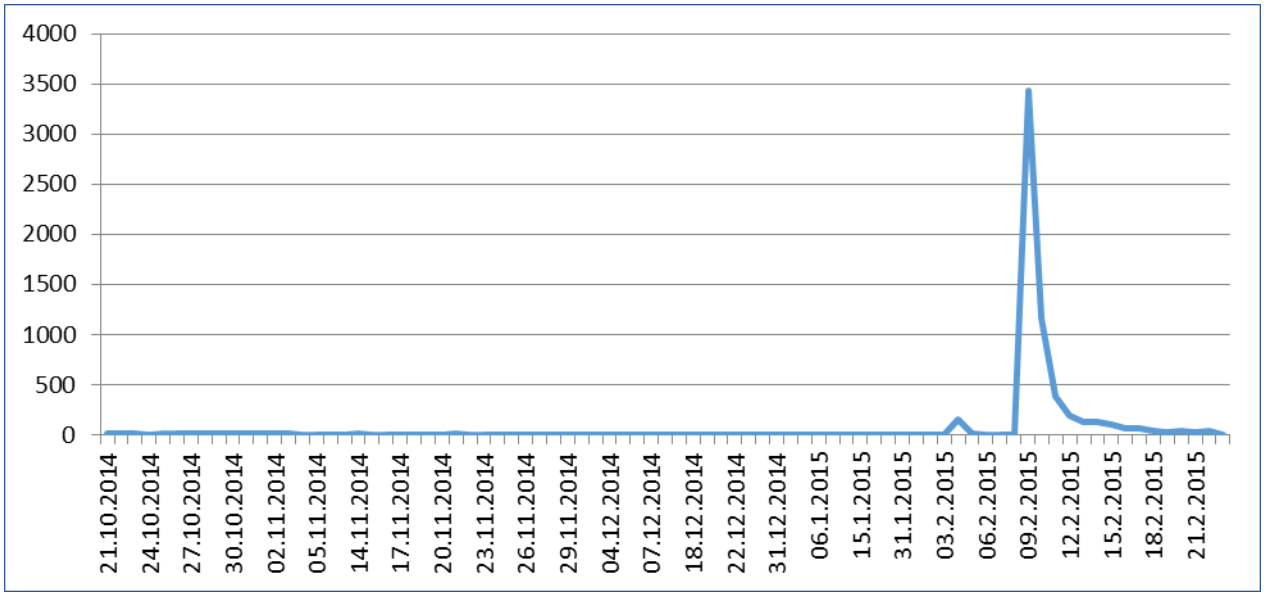

Figure 5: Participation curve

Analysis and Results

The analysis then followed the chain of data cleansing, descriptive statistics and checking for cause and effect relation via a regression model.

With the first step of data cleansing all the cases were excluded that did not meet the requirements. Only men who reported to have sex with men were included, they had to be over 16 and only completed questionnaires were included.

The second step was to carry through some descriptive statistics. Demographics such as age, migration background, HIV status, life style, social status or gender are of particular interest.

Afterwards, the sample was split into the group of people that reported to know the campaign and those who did not. Via crosstabs these two groups were compared to determine if people benefited from the campaign. HIV and STI related knowledge was tested and it was asked for attitudes towards risk and protection factors. Social support, self-esteem and psychological wellbeing were compared to observe if those who are familiar with the campaign felt more accepted in their social environment and felt free to pursue their own lifestyle.

Resulting from the crosstab analysis cause and effect relations could be derived and then in a third step be tested using regression models. With this analysis nine prevention messages that are promoted through the campaign were monitored to see if they could be contributing to a more preventive behaviour. Referring back to the underlying construct several factors were considered influential for preventive action. In the end one regression model was chosen that would test the factors that the client was primarily interested in. Therefore, knowledge, consent and viability, were tested whether they could significantly predict preventive behaviour (Annex III). The DAH anticipated that these factors could be influenced the most with the campaign.

Results descriptive statistics

The first analysis step of data cleansing left a sample of 6213 cases. The groups of participants who knew the campaign and those who did not were almost equal. 3213 reported to know the campaign 3000 did not. These two groups were also comparable regarding demographics. Also lifestyle factors that are considered to

make people more susceptible to become infected with HIV or other STIs (e.g.: many changing sex-partners, anonymous sex-partner, substance use) were the similar.

The average age in the sample was 40 years. Other demographic results that participants mostly reported were for example:

- To be gay
- They only have sex with men
- Their affinity to the gay scene is low
- They do not have a migration background
- They have higher educational qualification
- They are working
- They have an average income
- Their HIV-status is negative.

Results crosstab analysis

The crosstab analysis then showed that there are differences in the two groups regarding preventive issues.

For instance the group of participants that knew the campaign had a broader knowledge about STI and HIV related facts. They also communicated more often with their sex-partners about preventive behaviour.

Results regression models

The crosstab analysis gave the hint that there could be a cause and effect relation between the prevention campaign of the DAH and actual preventive behaviour in the target group.

Three factors that are considered to be important for performing preventive behaviour were established and their influence on reported behaviour was investigated.

The three factors are knowledge, consent and viability. To provide knowledge is clearly a main goal of the campaign and the calculated regression model showed significant influence of knowledge on action for all messages.

The influence of consent on action varied in their significance level of the results. For going through HIV- and STI-tests regularly it did not get significant at all. And other four messages did not get significant completely. Which would be “getting tested before having unprotected sex”, “get hepatitis vaccination”, “do not consume different drugs at one time” and “prepare drug doses in advance”.

Viability represents the participants’ assessment whether it would have been possible to act according to the prevention message. To anticipate it is possible to act preventively had a significant effect on actual behaviour with the exception of preparing drug dosages in advance.

Control variables like education, age and migration background did not reach the significance level widely. (Annex III)

Limitations

There are several aspects that could be considered problematic and limiting for the validity of the study.

The instrument

A variety of underlying theoretical constructs were included in the instrument to gather information about several aspects. To ask about preventive behaviour, a mixture of existing health behaviour models was used. This makes it difficult to follow the action chain of cause and effect. Other psychological and social sets of questions were included, but only partially, because the questionnaire was already very comprehensive. That could be suspected to diminish reliability and validity.

Also questions of former studies had to be included to be able to compare the new results to previous years.

In the end that led to a catalogue of around 150 items. The questionnaire tried to capture too many different aspects which made it hard for participants to recognise the guiding thread and purpose of the survey. This explains the uncompleted answer rate of around 50% and was also explicitly given as a feedback.

Furthermore there was a lot of data that possibly will not get analysed because of redundancy of questions, a lack of resources or the inability to answer the specific research question.

Another serious problem was the quality analysis of the instrument. As previously mentioned only parts of already existing instruments were included, this lowers validity and the questionnaire as a whole was not statistically tested. So far there is also no reliability analysis of the instrument.

Related to that, it has to be mentioned that only a content and face validity pre-testing took place. A few co-workers at the DAH were asked to go through the questionnaire and comment on what occurs to them.

The client

The dependence on the client's preferences mattered in the already mentioned limitations. For the scientificity of the survey it was a limiting factor to consider and include everything the DAH required to be in it.

Another factor related to the DAH was the promotion for the survey. They planned on promoting via different online portals like different fetish magazines, health or lifestyle portals for the homosexual community and dating portals. However in the end the advertisements on the partners' websites were not very successful and only one dating portal supported the survey. Almost the whole sample arose in the last two weeks via one source which could be a limiting factor for the diversity and representativeness of the sample.

Analysis/Results

The population was defined as men who have sex with men (~49% men in the German population (Destatis 2014a), ~5-12% with homosexual orientation/experience (Statista 2015)), over 16 years old (~86% of the whole population (Destatis, 2015a)) and have internet access (~86% of the population (Internet life stats, 2014)). That results in a population of ~296 000 to 592 000 individuals. Therefore the sample size of approximately 6000 is only 1-2%.

Compared to the German population in general the demographics of the sample are not representative. Particularly the educational level has to be mentioned. Over 30% in the sample reported to have a university degree whereas in the average population only 8-13% (Destatis, 2014b) are in this group. Also people with migration background are not evenly represented. Only around 10% in the sample compared to 20% in the whole German population (Destatis, 2015b). But in comparison with former studies with the same target group there are many similarities in

demographics. For example the age distribution fits into the development of the last 25 years (Bochow et al, 2011). Also the educational status is distributed like in the samples of 2007 and 2010.

So the representativeness for the whole population is limited but it is in line with former studies on similar topics.

1.2 The scope of this thesis

Considering the beforehand mentioned limitations, there is still the potential for enhancing the questionnaire. Some of the challenges could have been faced in an early stage with an extensive pre-testing phase and the thorough analysis of measures of goodness. The questionnaire has the potential to be used again as the IWWIT campaign is evaluated regularly. Therefore it is still meaningful to do a goodness of test analyses even if the results have already been passed on to the client. The scope for this thesis is to do a goodness of test analysis, precisely "Analysing the test quality of an online questionnaire - a tool to evaluate the target groups´ (men who have sex with men) reception and benefit of an HIV/STI prevention campaign of the Deutsche AIDS-Hilfe e.V.". Particularly of interest will be factors that tend to produce biases in the data collection or analysis process which could lead to false or imprecise interpretation and conclusion. The in depth focus will be on objectivity, reliability and validity as they are considered to be the most important criteria to evaluate the quality of a test. (Bühner, 2006; Pospeschill 2010) There are some additional aspects that are necessary to be evaluated for an unbiased and solid interpretation of test results. These will be evaluated as well.

2 Quality criteria for a questionnaire

A scientific questionnaire should meet several demands and standards that would differentiate it from any collection of random questions.

The different scientific disciplines have a common sense of which criteria are important and should be prioritized but there are of course many intersections. For this thesis, guidelines of social and psychological science will be indicatory as they are commonly used in the health sciences.

In the following chapter the criteria will be briefly described and defined. The phrase *test* will be used idiomatic for the questionnaire

The theoretical rationale of the methods is mainly based on Lienert et al.(1994) and Moosbrugger (2012). Course books about test theory, test construction and questionnaire construction methods of sociology and psychology were used to verify or add more insight. The work of Rost (2004), Steyer et al. (2001), Pospeschill (2010) and Bühner (2006) from the field of psychology and Porst (2008) and Kirchhoff (2010) from the sociology field contributed in building the theoretical foundation for this work.

For analysis and interpretation of results Fields “Discovering statistics using SPSS” (2013) book and Weiber et al. “Strukturgleichungsmodellierung” (2010), were the main sources accompanied by several articles that were controversially discussing the methods.

2.1 Objectivity

The first crucial criterion for test quality is objectivity. It ensures that the results are unrelated to the scientist. This has to be true for conducting, analysing and interpreting the test.

“Ein Test ist dann objektiv, wenn er dasjenige Merkmal, das er misst, unabhängig von Testleiter und Testauswerter misst. Außerdem müssen klare und anwenderunabhängige Regeln für die Ergebnisinterpretation vorliegen.“ (Moosbrugger, 2012)

Any social interaction during the conduct of the test increases the chance of influencing the participants' results. Therefore limiting the social interaction or even eliminating it would be the aim for objectivity of application. (Lienert et al., 1994) Standardised tests where only the participant changes are the best option for controlling this source of error. (Moosbrugger, 2012)

Objectivity in analysis is referred to numerical or categorical score following predefined rules. The more open questions are and the more free answers are possible the less clear categorizing would become. So a high score objectivity can be reached through predefined answer possibilities where the participant only has to choose the most suitable answer for her/him and the scientist only has to count frequencies. (Lienert et al., 1994)

The last objectivity criterion is objectivity of interpretation. The scientist has to make sure that results are reproducible. Identical answers of different participants would be interpreted the same way. It should also be possible for different scientists to come to the same conclusions. If the test provides numerical results, equivalent scores should be interpreted according to predefined rules. It would be advisable to have a handbook or manual where rules and interpretation guidelines are defined. (Moosbrugger, 2012) However, in the case of closed questions interpretation, objectivity would become obsolete. It requires special attention when an open answer format is used. (Lienert et al., 1994)

2.2 Reliability

The next important criterion is reliability. This concerns the accuracy of measurement and gives an idea of how exact a specific feature is measured by the test.

"Ein Test ist dann reliabel (zuverlässig), wenn er das Merkmal, das er misst, exakt, d.h. ohne Messfehler, misst." (Moosbrugger, 2012)

A reliability coefficient would determine how reproducible results are. Meaning, if under the same circumstances the same person would produce the same results. The value of the coefficient ranges between 0 and 1. 1 would be a perfect reliability and 0 means that the results are entirely based on measurement errors. (Moosbrugger, 2012)

Under field conditions it is nearly impossible to get the same person under the exact same circumstance to do a test twice. So one can say that the reliability of a test does not really exist there are only various methodological approaches. (Lienert et al., 1994)

The first approach is the re-testing reliability. One group of participants takes the same test twice. The results would be correlated to calculate the reliability coefficient.

This method is susceptible for biases like the learning effect although mathematical methods exist to control them. (Moosbrugger, 2012)

The second approach is parallel testing reliability. One group of participants would do two tests that measure the same feature. The items would be different but lead to same values and variances. Then the results of the two tests would be correlated. This method is considered to be more accurate. (Moosbrugger, 2012)

Often it is not possible to use one of the two before mentioned methods. So the method of inner consistency of a test could be introduced. There are again two possibilities to do an analysis of inner consistency. (Lienert et al., 1994)

First method would be the split-half approach. The participants do the test only once and afterwards the test is split in two comparable parts and the results would be correlated. With a correcting factor the reliability of the parts can be enhanced to a full reliability.

The second method is a modification of the split-half method. It is obvious that there are many obstacles when someone tries to split one test into two comparable parts. So the consistency analysis considers every item to be its own part of the test and therefore correlates all items using specific values like Cronbach-α. (Moosbrugger, 2012)

Every method produces slightly different results but typically there are regularities between the coefficients. (Lienert et al., 1994)

2.3 Validity

Objectivity and reliability deal with aspects of correct measurement which helps to generate high validity. Validity deals with the content of the test and evaluates if the test really captures the feature that it should. Validity could be considered to be the most important factor to analyse concerning the goodness of a test.

“Ein Test gilt dann als valide (´gültig`), wenn er das Merkmal, das er messen soll, auch wirklich misst und nicht irgendein anderes.“ (Moosbrugger, 2012)

To get a comprehensive idea of the validity, one could have a look at different aspects.

Firstly, there is content validity. This criterion cannot be measured via mathematical considerations but by logical reasoning and common sense by experts. (Moosbrugger, 2012) There has to be an agreement that the chosen items are representative for the item pool. (Lienert et al., 1994) For operationalised items it has to be shown reasonably that the item pool is representing the world of all possible and relevant items. (Moosbrugger, 2012) For theoretical features there are assumptions about the origin of differences in test results, so the underlying construct has to be conclusive and theories about how the differences emerge have to be unveiled.

Secondly, there is construct validity. It aims to verify that the items are able to represent the theoretical grounding upon which they are based. There are two approaches. One is an exploratory approach which analyses the items for factors and dimensions. Then the findings have to be aligned with existing tests and constructs. It is important that the test is not only comparable to others which measure the same constructs, but also that the test is differentiable from tests that measure other constructs. Another approach is to proceed with confirmatory factor analysis. That is used to retest exploratory findings with new data or check explicitly existing relations between theoretical fundamentals and the item pool. (Moosbrugger, 2012)

Thirdly there is criterion validity. This aspect of validity looks at the practical applicability of the test. The question would be if the test is able to forecast behaviour or experience. (Moosbrugger, 2012) A criterion which is measured externally and

unrelated to the test gets correlated with the results of the test. The external feature has to be known to measure the same feature as the test intends to measure. The validity coefficient depends on the reliability of the test, the reliability of the external criterion and the strength of the relation between the test and the external criterion. (Lienert et al., 1994)

Sometimes a fourth dimension of validity gets attention the face validity. This aspect represents whether the test seems to be plausible for participants. That is if they get the impression they are indeed doing a test for the feature they were told they would be tested on.

There are various approaches towards a conclusive validity assessment. The aspects that have to be considered and the methods that can be applied are depending on the purpose of the test. Tests can be interpreted in different ways, for example to evaluate something, to generalise or to extrapolate findings of one issue to others.

2.4 Other quality criteria

Additional quality criteria which are of technical or ethical importance can be considered.

One aspect that has to be considered is the appropriateness of the evidence level that can be achieved with for example the study design or the features of scales. It is important for interpretation and conclusions to be aware about the conclusiveness of the results. Study design determines whether it is possible to do descriptive or experimental analysis and if key figures such as correlations can be displayed or if hypotheses can be tested. The chosen level of scales also has an impact on the meaningfulness of the results. For example, if items are metric, one can derive statements about ranks and the portion of difference between ranks. (Porst, 2008)

A measure of quality is to pre-consider biases and find a strategy to avoid them. For example participants should be prevented from being able to alter or manipulate test results. That could be possible if participants know how the measurement works and they could be prone to answer according to social desirability.

Economic efficiency has to be considered, too, because resources in the public sector are rather scarce. It is reached if the acquired knowledge and investment of finances and time are conveniently proportioned. (Bühner, 2006) Utility is linked to economic efficiency. The results have to add scientific value, the acquired knowledge has to be relevant and decisions based on the results have to aim for utility and avoid damage. Utility, as well as reasonability, are already partially an ethical consideration. These should ensure that the participants will not be harmed or overly burdened (timely, financially, physically, emotionally, and psychologically) in comparison to the benefit. Also, a factor of consideration should be how the results are used and that they will not be used to discriminate against certain groups of people. Fairness is an important aspect of quality that should be regarded, especially when minorities or marginalised groups are investigated. (Moosbrugger, 2012; Lienert et al., 1994)

3 Methodology and results

For the following analysis the same data set was used as it was processed for the final calculations.

The first step was to clean the data. Included were participants that reported to be male, transgender (male to female and female to male), persons that preferred another label and persons that did not want to give any information which constituted only 0,2 % of the participants.

Another inclusion criterion was sexual orientation. Excluded were only men that reported to solely have sexual contact with women. All other constellations were counted like only feeling attracted to men, feeling attracted to men and women equally or mostly attracted to women but sometimes to men. In addition participants younger than 16 years old were excluded. Furthermore, only questionnaires that were complete were included in the final data set. Missing values were defined and also if a question had not been asked because of a filtering question. After data cleansing, a data set of 6131 participants remained for further calculations.

As a second step a plausibility check took place. For example for questions that offered the possibility to give multiple answers, the strategy to eliminate “no” if a “yes” existed was chosen.

Also the age distribution was checked for a bell curve shaped normal distribution. It showed a satisfying distribution while only men in their 40s and early 50s were underrepresented. (Figure 6)

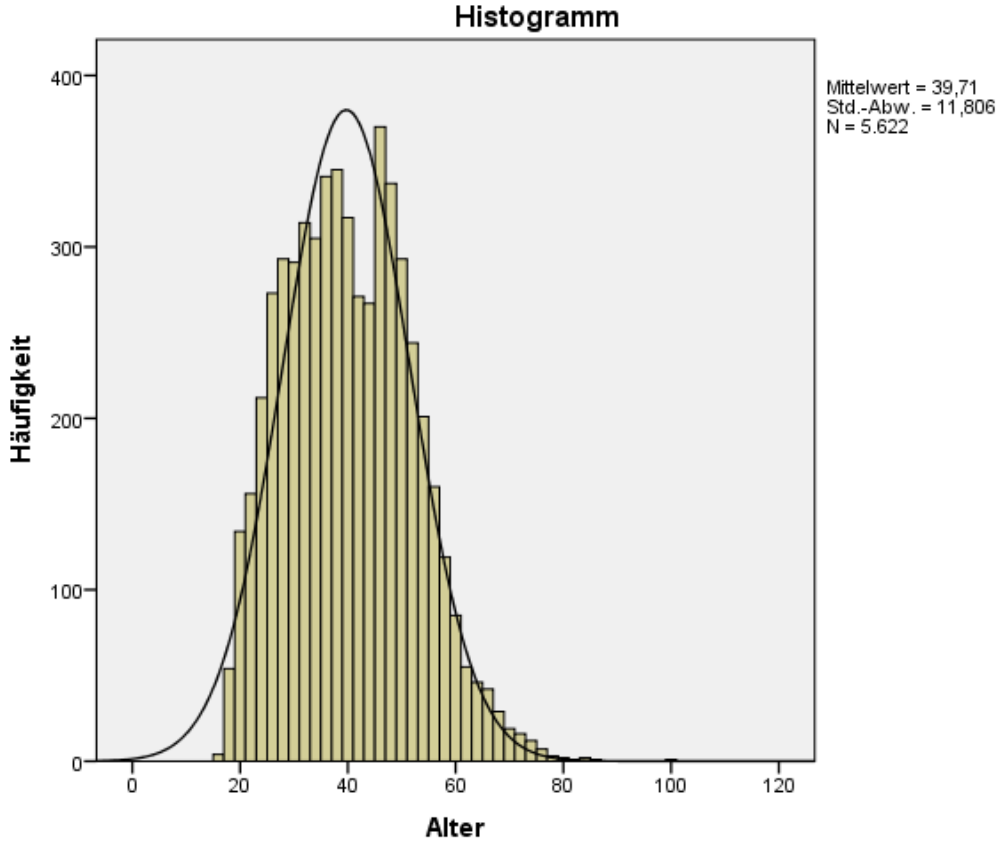

Figure 6: Distribution of age

With this data set all the following goodness of test analyses were conducted.

Further preconditions for reliability and validity analysis are an item analysis and a factor analysis. The items can be checked for their goodness and be allocated to factors. In this questionnaire a theory based approach was chosen. The combined exploratory and confirmatory factor analyses are part of construct validity considerations and will be documented and discussed under these headings.

All analyses were completed using IBM SPSS Statistics 22 except for the confirmatory factor analyses which were proceeded with an AMOS 25, also a product of IBM.

3.1 Objectivity analysis

The first step in a goodness of test analysis would be the considerations about objectivity. As defined in chapter 2.1, objectivity describes the level of independence of the scientists influence on the results.

Objectivity of creating the questionnaire means to check the items if they leave a lot of room for misunderstanding or misinterpretation or if they are suggestive. The same caution has to be applied to the conduct and interpretation process. The extent of this project is to analyse the process of developing the questionnaire and the conduction. Interpretation is not part of the analyses.

In terms of objectivity the questionnaire was created to achieve a high standardised level. Items were exclusively closed questions with predefined answer possibilities. In the pre-test phase, participants gave detailed feedback to questions they did not understand or which were not formulated precisely. Also, participants from the active phase got the chance to rate the questionnaire in a comment box at the end.

The questionnaire was an online-based standardised test. So the interviewer bias can be excluded. Influencing the answers through contact with the participants would have been impossible for the scientists. Also, the fact that the participants could individually decide when and where to do the test one could infer that answers were for the most part given honestly.

Objectivity in analysis was also high because all the steps of data cleansing and transforming were following common practise. Detailed documentation of what was done was necessary to uphold objectivity and reproducibility of results.

The most critical fraction of objectivity would be the objectivity of interpretation. One aspect that could be considered was the involvement of the client and the analysing institute. There is always the possibility of social desirability bias if the scientists/ analysts know about the aims. However, evaluation of the interpretation process is outside the scope of this project.

3.2 Reliability analysis

During the development of a questionnaire the preferred method of testing the reliability should be determined. In this thesis analysis takes place from the viewpoint where data collection is already completed.

The methods of test-retest analysis and parallel-testing would have required identifying participants and asking them to do the test twice or create a second comparable questionnaire and ask participants to do both. Because of guaranteed anonymity and the comprehensiveness of the questionnaire neither test-retest analysis nor parallel-testing was practicable.

Therefore reliability analysis has to be done via inner consistency analysis. The questionnaire consists of almost 150 items in total and even after excluding items that ask for instance for demographic information it is nearly impossible to create two comparable parts. So the split-half method has to be rejected too.

That leaves the possibility of treating every item as a “comparable part”. These calculations are done via Cronbach´s Alpha.

Preparing the data set for the reliability analysis requires eliminating demographical items and sorting the items of interest according to the constructs they ought to measure. That is necessary because the question is, if the test is able to measure attitudes and preferences in a reliable manner. The components of the “causation model” and how users feel about layout and content of the prevention offerings will be of interest.

As mentioned before, the goodness of items has to be analysed, too. This could be seen as a part or a precondition for reliability analysis.

Reliability analysis followed the chain of first doing item difficulty calculation and then going deeper into item descriptive analysis to assess and prepare the data set for item discrimination and inner consistency tests.

The following subheadings describe in detail how the analyses were done.

3.2.1 Item difficulty index

Doing item difficulty index calculation is a method to analyse how “easy” or “difficult” it was for respondents to answer the questions, not in a contentual sense, rather if everyone would choose the same answer and if the responses cumulate at the upper or the lower end of the scale. Items with a difficulty index of P_i=50 are best to differentiate between subjects with high and low expression of the measured characteristic. Items with p_1<20 or 80>p_i should be excluded because they are answered by nobody or everybody correctly. That limits the possibilities of distinction between participants. (Lienert et al., 1994)

Item difficulty index basically gets calculated via comparing the sum of score of all participants to the maximum possible score of an item. Furthermore, groups of high achieving participants get compared to low achieving. That requires scores starting from zero which only one item did. All other item scores started at one and rather than recoding all variables an alternative formula was used which integrates that fact.

So Item difficulty index calculations were made via the following formula (Pospeschill, 2010):

$$P_i = \frac{\sum_{v=1}^{n} [x_{vi} - \min(x_i)]}{n \times [\max(x_i) - \min(x_i)]} \times 100$$ [1]

Item difficulty calculations for the “target group specificity” part were done with 85 items all concerned with target group specificity, personal benefit and layout and content issues. According to the “causation model” of prevention the relevant items for the HIV/STI prevention part were summed up 88.

The calculations started with 85 items for the “target group specificity” part and 95 items for the prevention part. Using the borders of IDI<20;80>, 18 items had to be excluded for the first part (Annex IV). These items were about credibility, comprehensibility and appreciation of the website and the contents (text, video, role models and animated clips). Most of the participants gave the highest ratings.

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[1] n= number of subjects
v= subject 1−n
i= item number
x_{vi}= score of subject v on item i
$\min(x_i)$= minimum score f= maximum score for item i

Another issue was the practical usage. The majority rated that suggesting the tools to peers or publicly liking the page as not to be important.

For the HIV/STI prevention part a lot more items were too easy. 37 items were excluded (Annex V). Outstanding were the items asking about participants consent with the prevention message which received high ratings from everyone. Only the message that suggests preparing drug doses beforehand at home achieved diversity. In addition, a lot of the knowledge questions proved to be redundant. Some of the items that asked about perceived relevance of the prevention messages had to be excluded and a few for whether the participant thought the prevention measures were viable.

3.2.2 Item descriptive analysis

To get an overview how items and responses look like descriptive analysis and frequencies need to be run. The analyses were done for all items passing the item difficulty index check. For describing the items properties valid and missing cases were looked at along the mean, median, standard deviation and the scales of answer possibilities. A closer look at these attributes helps to understand, interpret and evaluate further calculations and statistical analysis.

Target group specificity

In annex VI, analysis of missing and valid cases as well as mean, median, standard deviation and minima/maxima is collected. First thing to look at are valid and missing cases. It appears that the items have very low numbers of valid cases, except for the items that ask whether the participant knows of the campaign or certain parts of it. These items are valid for all cases. Apart from that the amount of valid cases is rather poor. Item number 007 for example is the one with the highest number of valid cases, 3511, which is still only around 50%, and item 058_006 with only 218 valid cases has the lowest number of valid cases. Looking deeper into the missing cases it appears that most of them are missing due to the branching technique that was used in the questionnaire to lead participants due to their chosen answers. This is illustrated in annex X with a flow chart displaying all filters and branches. It was introduced, among other reasons, as a way to handle the amount of questions every individual participant would have to answer. The three parts that dealt with each of the online

tools: Website, Facebook and Health Support, were only answered by participants who said that they actually know this tool of the campaign. The channelling happened through the items that were only valid cases (“Bekanntheit”: 004; 026; 035; 037; 039; 043; 051).

IWWIT as the whole campaign included internet based tools, appearances at public events, leaflets and so on was known to 58,4% of the participants in this survey (Table 1).

There were 45,5% of participants who had never heard about the IWWIT website and only a fifth of all had visited the site at least once (Table 2).

Less than half of the participants knew of the health support and of those again only around 50% had already used it. Therefore numbers of around 96% of missing cases emerged, due to the fact that the question was not asked emerged (Table 3 and Table 4).

Even the Facebook appearance was not familiar to 90,8% and again more than half of them said it is not really relevant for them (Table 5 and Table 6).

	Frequency	Percentage	Valid percentage	Cumulative percentage
Yes	3631	58,4	58,4	58,4
No	2301	37,0	37,0	95,5
I do not know/no answer	281	4,5	4,5	100,0
Sum valid	6213	100,0	100,0	

Table 1: Frequencies item 004—IWWIT Bekanntheit

	Frequency	Percentage	Valid percentage	Cumulative percentage
Yes, once	717	11,5	11,5	11,5
Yes, several times	705	11,3	11,3	22,9
No, but I have heard about it	1748	28,1	28,1	51,0
No, I have never heard about it	2830	45,5	45,5	96,6
I do not know/no answer	213	3,4	3,4	100,0
Sum valid	6213	100,0	100,0	

Table 2: Frequencies item 026—Webseite Bekanntheit

	Frequency	Percentage	Valid percentage	Cumulative percentage
Yes	2964	47,7	47,7	47,7
No	3249	52,3	52,3	100,0

	Frequenc y	Percentage	Valid percentage	Cumulative percentage
Sum valid	6213	100,0	100,0	

Table 3: Frequencies item 051—Health Support: Bekanntheit

	Frequency	Percentage	Valid percentage	Cumulative percentage
Yes	239	3,8	8,1	8,1
No	2725	43,9	52,3	100,0
Sum	2964	47,7	100,0	
Missing (question not asked)	3249	52,3		
Sum valid	6213	100,0	100,0	

Table 4: Frequencies item 052—Health Support: Nutzung

	Frequenc y	Percentage	Valid percentage	Cumulative percentage
Yes	348	5,6	5,6	5,6
No	5640	90,8	90,8	96,4
I do not know/no answer	225	3,6	3,6	100,0
Sum valid	6213	100,0	100,0	

Table 5: Frequencies item 043—Facebook-Seite: Bekanntheit

	Frequenc y	Percentage	Valid percentage	Cumulative percentage
Yes	148	2,4	43,7	43,7
No	191	3,1	90,8	100,0
Sum valid	339	5,5	100,0	
Question not asked	5865	94,4		
Not answered	9	0,1		
Sum missing	5874	94,5		
Sum	6213	100,0		

Table 6: Frequencies item 044—Facebook-Seite: Relevanz

Therefore, the following frequencies emerged. Of the 6213 participants, 2455 did not know the campaign while 2081 only heard about it or came across it offline. Participants who said they were using the website were 1116, 105 using Facebook and 145 the Health Support (Figure 7).

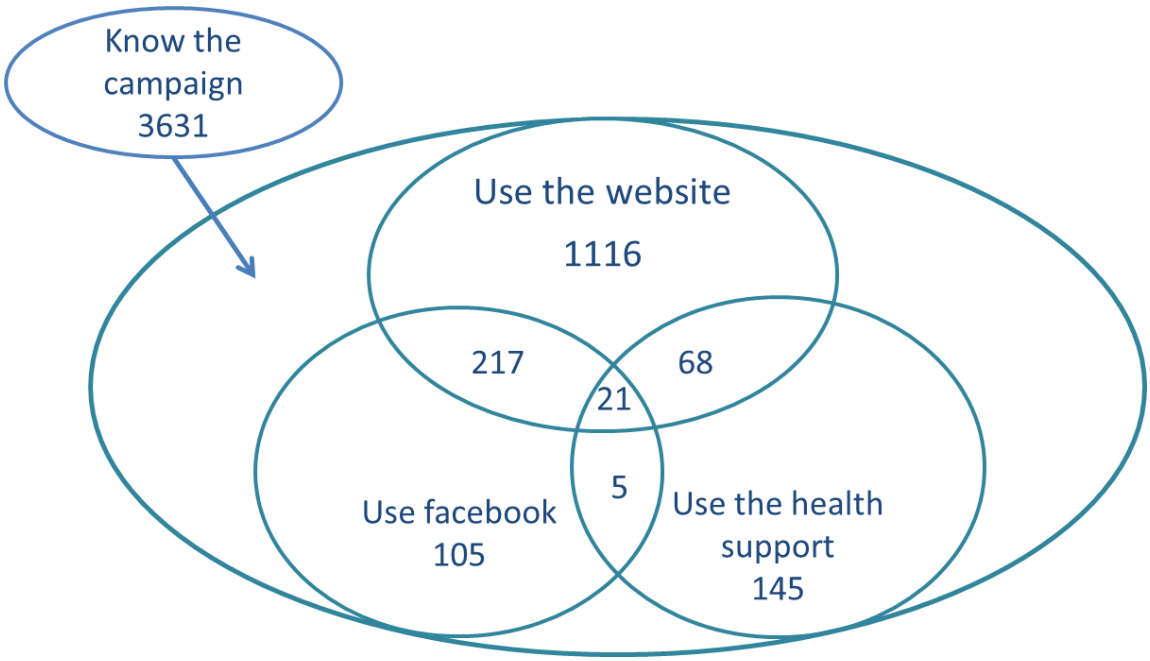

Figure 7: Frequencies of answers

There are low numbers of overlap between the users of the online components. Only very few cases will be valid.

The low numbers of valid answers will cause problems within the reliability and validity calculations. A rough rule for Cronbachs´ Alpha is that there has to be a sample of at least 200 valid cases or five times the number of the items in the calculations. (Bonett, 2002) For testing the concepts “target group specificity” and HIV/STI prevention” there will not be enough valid cases.

A theory based solution could be to count “missing – question not asked” as the lowest possible value for target group specificity. The participants that did not know the campaign and the different parts of it were obviously not reached.

It was decided to proceed with the analysis by recoding the variables to rate “missing – question not asked” as zeros. Looking at minimum and maximum values (Annex VI) one can see that almost all items have a range from one to four which equals the answer possibilities “Trifft gar nicht zu” =4; “Trifft eher nicht zu” = 3; “Trifft eher zu” = 2; “Trifft voll und ganz zu” = 1. Meaning, initially the answer possibilities were allocated to numerical scales where the more a participant is reached by the target group specificity, the lower the associated value becomes. In other words, it equalled the German school rating system where the lowest value is the best grade. These values had to be recoded to fit with the new category of zero as “not target group

specific at all". The items that were designed to be inverted can remain as they are. These are 20 items (0032_08/09/10; 0033_03/04/05; 0036_03; 0038_03/04/05; 0040_03/04/05; 0048_04/05/06; 0058_08/09/10/11)

Including the "missing – question not asked" alters, of course, the distribution. Especially in the "target group specificity" part of the questionnaire where the missing cases go up to 80% (Annex VI). The distribution graphs show how the added cases result in one high peak in almost every item. The standard deviation which gives an overview over the variability in the item data can best be analysed via graphical depiction particularly in histograms (Annex VIII). The items do not show very much variance but there are some differences. As Table 7 shows, items can have little variance and one category that was chosen remarkably frequently (peak). There are items that show more variance but with skewness to one side. There are even a few with an almost normal or even distribution (041-03-Webseite Inhalt: Informationen als Hilfe zur Entscheidung; 048-01-Facebook Posthäufigkeit; 058-11-Health Support: Wunsch Webinare etc.).

Item	Peak	Normal distributed	Evenly distributed	Skewness to one side
004--IWWIT Bekanntheit				X
007--IWWIT Bewertung				X
026--Webseite Bekanntheit	X			
028--Webseite Nutzungshäufigkeit		X		
030--Webseite Bewertung	X			
031--Webseite Hilfreich	X			
032-01-Webseite Übersicht				X
032-02-Webseite Orientierung				X
032-03-Webseite farbliche Gestaltung				X
032-04-Webseite Inhalte persönlich und authentisch				X
032-05-Webseite persönliches Interesse an Themen				X
032-06-Webseite neue Inhalte		X		
032-07-Webseite vielfältige Informationen	X			
032-08-Webseite zu großes Informationsangebot	X			
032-09-Webseite fehlende Informationen	X			
032-10-Webseite Anstoß zu Besorgnis		X		
032-11-Webseite Spaßfaktor	X			
032-13-Webseite Bilder: Gefallen	X			

Item	Peak	Normal distributed	Evenly distributed	Skewness to one side
033-01-Webseite Texte: Gefallen	X			
033-03-Webseite Texte: Sexualisierung				X
033-04-Webseite Texte: zu brav	X			
033-05-Webseite Texte: zu belehrend	X			
033-06-Webseite Texte: hilfreich	X			
035--Webseite Videos: Bekanntheit	X			
036-01-Webseite Videos: Gefallen				X
036-03-Webseite Videos: zu belehrend				X
036-04-Webseite Videos: hilfreich				X
037--Webseite Rollenmodelle: Bekanntheit				X
038-03-Webseite Rollenmodelle: zu sexualisiert				X
038-04-Webseite Rollenmodelle: zu brav	X			
038-05-Webseite Rollenmodelle: zu belehrend	X			X
038-06-Webseite Rollenmodelle: hilfreich				X
039--Webseite Animationsclips: Bekanntheit	X			
040-03-Webseite Animationsclips: zu sexualisiert				X
040-04-Webseite Animationsclips: zu brav				X
040-05-Webseite Animationsclips: zu belehrend				X
040-06-Webseite Animationsclips: hilfreich				X
041-02-Webseite Inhalt: nützliche Tips zum Leben mit HIV				X
041-03-Webseite Inhalt: Informationen als Hilfe zur Entscheidung		X		
041-04-Webseite Inhalt: Förderung von Toleranz Lebensstile		X		
042-01-Webseite als Gesprächsthema bei peers				X
043--Facebook-Seite: Bekanntheit	X	X		
044--Facebook-Seite: Relevanz			X	
045--Facebook-Seite: Bewertung	X			
048-01-Facebook Posthäufigkeit	X	X		
048-02-Facebook interessante Posts	X			
048-03-Facebook verständliche Posts	X			
048-04-Facebook zu sexualisierte Posts				X
048-05-Facebook zu brave Posts	X	X		
048-06-Facebook Posts verursachen Gesundheitssorgen				X
049-01-Facebook-Seite: Glaubwürdigkeit				X
049-02-Facebook-Seite: hilfreich				X
049-03-Facebook-Seite: Zugehörigkeit	X	X		
049-04-Facebook-Seite: nützliche Tips zum Leben mit HIV	X			
049-05-Facebook-Seite: nützliche Tips zum				X

Item	Peak	Normal distributed	Evenly distributed	Skewness to one side
Schutz vor HIV/STI				
049-06-Facebook-Seite: Aufbau von Kontakten zu peers	X			
049-07-Facebook-Seite: Förderung von Toleranz			X	
051--Health Support: Bekanntheit			X	
056-02-Health Support: hilfreiche Informationen				X
056-03-Health Support: gute Erreichbarkeit				X
058-06-Health Support: Berater hat ausreichend Fachwissen				X
058-07-Health Support: Bewertung der Beratung				X
058-08-Health Support: nicht die nützlichste Quelle			X	
058-09-Health Support: telefonische Erreichbarkeit			X	
058-10-Health Support: Wunsch Videokonferenz				X
058-11-Health Support: Wunsch Webinare etc.			X	

Table 7: Appraisal of histograms „target group specificity“

The results of item distribution align with the findings of the item difficulty analysis where only few items were around the value 0,5 which would indicate a normal distribution.

In most of the items the mean and the median differ from each other, so only very few items are almost symmetrical distributed.

Knowledge about distribution is important for preceding the Cronbach's Alpha calculations. The more equally distributed the data is, the better it fits the Cronbach´s Alpha algorithm and the more trustworthy the results will be.

HIV/STI prevention

The underlying behavioural model included elements of social and emotional well-being. The corresponding items borrowed parts of the Rosenberg self-esteem scale and the SF-36 that is about psychological wellbeing. As these questions are parts of scales that were very thoroughly checked for reliability, they get excluded from the following reliability analysis but will be examined in the discussion section, too.

Of all the remaining items that had an acceptable item difficulty index, the questions with a solely filtering purpose were excluded, too. These were q0011; q0018; q0072;

q0116; q0124. Q0108 were also excluded because it seemed to be more viable to distinguish between risky behaviour (“having unprotected anal sex), the preventive behaviour (“having protected anal sex”) and the “missing - question not asked” that equalled “not having sex with men at all” which was covered by q0107 and not distinct further between the frequency of unprotected anal sex.

Thus for the latent variable “HIV/STI safety” item descriptive analysis shows the following results for valid and missing cases, mean, median, standard deviation, minimum and maximum values (Annex VII)

Minima and maxima show that there is a wide variability in answer values. There are numerical rating scales that measure subjective perceptions like health, mental stability or attitudes. For all items the full range was used.

Most items were, as well as in the “target group specificity” part, not symmetrically distributed.

The standard deviation, visualised via histograms, showed that some items have little variance with one dominant category and therefor have little variability (Annex IX). Yet, some items have a dominant category but are almost normal distributed. There are also other items that show more variance and could be described as evenly distributed or again another type of items that have skewness to one side (Table 8).

Item	Peak	Normal distributed	Evenly distributed	Skewness to one side
009--Botschaft 1: über IWWIT bekannt		X		
013--Botschaft 1: Anwendung				X
015--Botschaft 2: über IWWIT bekannt	X	X		
017--Botschaft 2: Soziales Feedback				X
019--Botschaft 2: Umsetzbarkeit	X			
020--Botschaft 2: Anwendung	X			
022--Botschaft 3: über IWWIT bekannt	X	X		
025--Botschaft 3: Geimpft	X			
061--Botschaft 4: über IWWIT bekannt	X	X		
064--Botschaft 4: Umsetzbarkeit				X
065--Botschaft 4: Anwendung	X			
067--Botschaft 5: über IWWIT bekannt		X		
071--Botschaft 5: Anwendung	X			
073--Botschaft 6: über IWWIT bekannt	X	X		
076--Botschaft 6: Umsetzbarkeit				X
077--Botschaft 6: Anwendung	X			

Item	Peak	Normal distributed	Evenly distributed	Skewness to one side
079--Botschaft 7: über IWWIT bekannt	X	X		
082--Botschaft 7: Umsetzbarkeit				X
083--Botschaft 7: Anwendung	X			
084-08-Anwendung PEP	X			
107--Risikoverhalten: ungeschützter Analverkehr	X			
110--Art der festen Partnerschaft				X
112--HIV-Status Partner	X			
113-01-Kommunikation mit Sexpartnern				X
114-01-Kommunikation mit Freunden und Bekannten				X
115--Alkoholkonsum				X
117--Häufigkeit Konsum Substanzen		X		
119--Botschaft 8: über IWWIT bekannt	X	X		
122--Botschaft 8: Umsetzbarkeit				X
123--Botschaft 8: Anwendung				X
125--Botschaft 9: über IWWIT bekannt	X	X		
126--Botschaft 9: Bewertung	X			
128--Botschaft 9: Umsetzbarkeit				X
129--Botschaft 9: Anwendung				X
132--Letzter HIV-Test			X	
133-Häufigkeit HIV Test			X	
135--Nächster HIV-Test			X	
137-01-Persönliche Relevanz HIV	X			
138-01-Präsenz HIV				X
139-01-Risiskobewertung HIV				X
157-01-Allgemeine Relevanz HIV	X			
157-02-Persönliche Relevanz STI	X			
157-03-Allgemeine Relevanz STI	X			
158-Präsenz STI				X
159-Risikobewertung STI				X

Table 8: Appraisal of histograms „HIV/STI prevention“

In the “HIV/STI prevention” part of the questionnaire the participants were channelled through filtering questions, as well. There are items which were presented to everybody in the survey such as being aware of HIV/STI preventive messages or personal opinion about importance and usefulness. The filtering gates excluded participants who were not in a situation like the prevention message described and did not act according to the preventive behaviour. This caused the low numbers of valid cases. At one point it also made a difference if someone reported to be HIV positive or negative. This channelling was introduced to be sensitive towards HIV

positive participants and to not bother them with for example questions about their risk perception of acquiring HIV in the future (Annex X).

The “missing - question not asked” can be included in the calculations and interpretations because they are meaningful and can be arranged in the rating scales.

Items q0009; q0015; q0022; q0061; q0067, q0073, q0079; q0119; q0125 inquired whether the participants came across the prevention messages on the IWWIT tools. A missing “question not asked” can be counted as zero =”does not know the message”, because the filtering question beforehand would skip the item if one does not know the message at all. The categories are: “0= does not know the message; 1= not sure about having recognized the message on IWWIT; 2= no, did not recognize the message on IWWIT; 3= yes, did recognize the message on IWWIT”.

For items q0013; q0020; q0071; q0077; q0083; q0123; q0129 the missing “question not asked” meant to behave very preventively, because these participants never even came into a situation where they should behave according to the prevention message. The same logic applies for items q0019; q0076; q0082; q0122; q0128. These items asked the participants who had been in a critical prevention situation if the application would have been viable.

Item q0107 asks about anal sex without using a condom and the missing “question not asked” were the ones that did not have sex with men in the past six month and therefore did not get the question. This category received the highest rating although it could imply that not having sex at all is the most favoured behaviour.

Q0110 is also about risky sexual behaviour. To include the “missing - question not asked” which in this case meant not to have any kind of partnership, the categories were condensed. Not being in a permanent partnership was combined with not knowing about the terms of the partnership which could be considered as being equally risky. A monogamous arrangement could be rated as more preventive than having more than one partnership or both or one of the partners having sexual encounters with others.

And for q0112 “Do you know about your partners HIV status?” The “missing - question not asked” =not in a permanent partnership and not knowing about the partners HIV status (“he never did a test/ I do not know”) were rated equally.

Q0115 and Q0117 inquire substance abuse and the missing “question not asked” had the most preventive behaviour by not consuming anything at all.

For item q0132 “When did your last HIV test take place?” the missing “question not asked” are the participants that reported earlier to never have taken a test before and got the lowest score. The next question q0133 about frequency of testing had the same group of missing “question not asked”.

Q0135 has a group of missing “question not asked”. These are the HIV positive tested persons and they are added to the higher rated category because they do not behave as anti- preventive when they do not plan on getting tested again.

The same reasoning was applied to q0137-01; q0138-01 and q0139-01 where the missing “question not asked” group consists of the participants with an HIV positive status.

After this procedure all missing “question not asked” cases were recoded and fitted into the individual item answer possibilities. In a second step all scales were recoded so that the riskiest behaviour had the lowest rating and the most HIV/STI preventive behaviour had the high rates.

Including these cases again changed distributions but not as severely as in the “target group specificity” part. The missing cases were much lower and almost fitted into the pre-existing data.

3.2.3 Item discriminating power and inner consistency via Cronbach´s Alpha

The next steps for reliability analysis can be done in one calculation step in SPSS. The data set for these analyses was prepared by excluding the items with too high or too low item difficulty indices as well as eliminating items that are redundant due to theoretical considerations.

Firstly items were analysed for item discriminating power. It describes how much one item correlates with the sum of the other remaining items of the characteristic they

ought to measure. Item discriminating power calculations are already part of the reliability analysis. SPSS provides the option to display a table of “corrected item-total correlation” when the Crohnbach´s Alpha calculation is ordered.

A constraint for item discriminating power calculations is the requirement that they have to be interval scaled. The items of interest for reliability analysis are all of nominal or ordinal scale but it is in form and content possible to translate the scales into interval scales.

Item discriminating power can range from -1 to 1 and items that are displaying the scale as a whole very well will be near to one. Items with an item discriminating power below 0.30 should be eliminated or revised (Field, 2013).

The value that has to be looked at for item total correlation in the item total statistics is Crohnbach´s Alpha. It indicates how much an item can predict the total variance of the sum of all items and can be used to further exclude items that are not very predictive for the total. The closer the value reaches 0,95 the better the reliability of the items. A low value can be due to an only small number of items, a very diverse construct or a variety of diverse, unrelated items. If the value is over 0.95 it could be possible that the items are too similar and therefore unnecessary (Tavakol et al., 2011). Excluding some items can increase the value of the Crohnbach´s Alpha.

The number of cases that are in the calculations also has an impact on results. First of all, one has to make sure that there are enough valid cases, then an exclusion regulation has to be selected which will be deleting list-wise.

It is also viable to use subscales with around 10-15 items because too many items will eventually raise Cronbach´s Alpha values. (Pospeschill, 2010)

3.2.3.1 Target group specificity

For the calculations the remaining 66 items for the “target group specificity” part were allocated to six subscales (Annex XI). The development of the items was based on McGuire´s components for health communication programs. The first component was “credibility of the message source” which was split up further into subscales “perceived quality of information” and “perceived value”. The second component “message design” was divided into “layout/user friendliness” and “tone”. “Intended audience” is a third scale and “delivery channel” a fourth. These two did not need to

be split because the number of items was manageable for the inner consistency analysis. All scales were a pooling of questions for all three online tools, for example was the value of each tool investigated with the identical question. In Table 9 Cronbachs´ Alpha and item discriminating power values for the scales are summarised. In the item discriminating power column the number of items that did not meet the requirements is displayed. In Table 10 the improved scales are listed after excluding items with low item discriminating power and the ones that would increase Cronbachs` Alpha when deleted.

Scale	**Item discriminating power**	**Cronbachs´ Alpha**
Perceived quality of information (10 items)	2 items	0,914
Perceived value (12 items)	1 item	0,897
Layout and user friendliness (7 items)		0,808
Tone (12 items)		0,925
Intended audience (11 items)		0,925
Delivery channel (14 items)	2 items	0,899
Required	**<0,30**	**>0,75**

Table 9: Scales „target group specificity“

Scale	**Item discriminating power**	**Cronbachs´ Alpha**
Perceived quality of information (6 items)		>,920
Perceived value (11 items)		0,909
Layout and user friendliness (5 items)		0,81
Tone (10)		>0,928
Intended audience (10 items)		0,926
Delivery channel (8 items)		>0,900
Required	**<0,30**	**>0,75**

Table 10: Revised scales „target group specificity“

“Perceived quality of information” contains questions about the presented content, comprehensiveness, diversity, missing information and utility. For this subcategory 384 (6,2%) of the cases had to be excluded. The 10 chosen items resulted in a Cronbach´s Alpha value of 0,914. Item discriminating power shows that two items (058-06-Health Support: Berater hat ausreichend Fachwissen, 058-08-Health Support: nicht die nützlichste Quelle) have a value lower than 0,30 which means that they are not correlating with the scale in a reliable manner and should be excluded. Deleting these two would increase Cronbach´s Alpha as well as two more items: 049-

04-Facebook-Seite: nützliche Tips zum Leben mit HIV, 049-05-Facebook-Seite: nützliche Tips zum Schutz vor HIV/STI.

“Perceived value” asked about helpfulness of the different tools. These items also are about the helpfulness in building contacts with peers, building tolerance towards differing life styles or causing adverse outcomes like worries about health issues. Here 348 cases were excluded and the 12 items in the scale had a Cronbach´s Alpha value of 0,897. The corrected Item-Total Correlations had a satisfying value over 0.3 except for one (056-02-Health Support: hilfreiche Informationen). Deleting this item would also increase Cronbach´s Alpha to 0,909.

“Layout and user friendliness” was about colours, navigation and technical subjects. For the calculations only 169 cases had to be excluded. Cronbach´s Alpha for 7 items in this scale was 0,808. Item discrimination power calculation showed that all items correlated with the scale over a value of 0,30. Deleting two items (058-09-Health Support: telefonische Erreichbarkeit; 058-11-Health Support: Wunsch Webinare etc.) would increase Cronbach´s Alpha slightly to 0,81.

Cluster “tone” contained questions about the language and vocabulary that is used in the campaign. Mainly, if users perceive the contents as too sexualized, too modest or too lecturing. This scale had 280 invalid cases and the Cronbach´s Alpha for 12 items was 0,925. The Corrected Item-Total Correlations showed that all items correlated enough (<0,30) with the scale. But excluding item 048-04-Facebook-zu sexualisierte Posts and item 048-05-Facebook-zu brave Posts would increase the inner consistency.

“Intended audience” was about how users like content and posts, have fun, re-post and think content is intelligible and build an atmosphere where they feel affiliated to. Here 322 cases got excluded and the Cronbach´s Alpha value was 0,925 for 11 items. All items correlated with the scale and only excluding the item 048-01-Facebook Posthäufigkeit would increase Cronbach´s Alpha to 0,926.

The last category is about “delivery channel” which means that participants are asked if they know the tools in the first place, how they rate it over all and how relevant these tools are for them. Also of interest was how often they come across the online campaign components or if they talk about it with peers. In this last sub-scale 276 cases were invalid and the Cronbach´s Alpha was 0,899 for 14 items. Items 051--

Health Support: Bekanntheit and 058-07-Health Support: Bewertung der Beratung should be deleted because they do not correlate enough with the scale. And deleting six items (007--IWWIT Bewertung; 043--Facebook-Seite: Bekanntheit; 044--Facebook-Seite: Relevanz; 045--Facebook-Seite: Bewertung; 051--Health Support: Bekanntheit; 058-07-Health Support: Bewertung der Beratung) from the scale would increase Cronbach´s Alpha substantially.

HIV/STI Prevention

The remaining 53 items for HIV/STI prevention were allocated to the already existing scales of Rosenberg and the SF-36 and theoretically led to five sub-categories: “knowledge via IWWIT”, “risk perception”, “viability”, “application”, “risky behaviour”. (Annex XII) Item 126 which tests the participants´ appraisal for the statement, the message is good and right, was withdrawn because all other items in that direction did not pass the item difficulty test. Items for general knowledge about the prevention messages did not pass the item difficulty test either and only one question about knowledge passed. It got allocated to knowledge via IWWIT. Individual relevance of the prevention measure got eliminated as a solitary category because it is a filtering question for the category viability and gets displayed in it.

The remaining scales and items had partially satisfying inner consistency values over 0,75 but some had only low values. All in all the values are not as high as in the “target group specificity” part. (Table 11) Only one scale was worthwhile revising (Table 12). In the tables the Cronbachs´ Alpha values and items with a too low item discriminating power are reported.

Scale	**Item discriminating power**	**Cronbachs´ Alpha**
Knowledge via IWWIT (10 items)		0,761
Risk perception (11 items)		0,753
Viability (6 items)	6 items	0,392
Application (9 items)	8 items	0,425
Sexual life style (3 items)	1 item	0,400
Rosenberg self-esteem scale (4 items)		0,817
Emotional functioning (3 items)		0,847
Required	**<0,30**	**>0,75**

Table 11: Scales „HIV/STI prevention”

Scale	Item discriminating power	Cronbachs´ Alpha
Knowledge via IWWIT (9 items)		0,763
Required	**<0,30**	**>0,75**

Table 12: Revised scale „HIV/STI prevention“

In the first subscale participant´s knowledge about the HIV/STI prevention messages via IWWIT was tested. 510 cases were invalid and got excluded from the calculation. Cronbach´s Alpha for the ten items was 0,761. Item discriminating values were all over 0,3 and only excluding one item would increase inner consistency (125--Botschaft 9: über IWWIT bekannt) to 0,763.

The second subscale contained questions about perceived risk of acquiring HIV/STI and how serious participants take the risk of acquiring HIV/STI for themselves and in general, or are aware of their own HIV and STI status.

List-wise deletion excluded 696 cases. Cronbach´s Alpha for 11 items was 0,753. All items correlated well enough with the scale. Deleting any more items would not increase Cronbach´s Alpha.

The third category was about the perceived possibility of applying the suggested prevention measures. For these calculations only 216 cases were invalid and Cronbach´s Alpha was 0,392. Furthermore none of the six items in the scale had an item discriminating power over 0,3.

The fourth scale consists of items that ask for actual application of the prevention measures. Again only very few cases got invalid (3,4%). But Cronbach´s Alpha reached only 0,425. Of the nine items only one had sufficient item discriminating power (013--Botschaft 1: Anwendung). Deleting two items (025--Botschaft 3: Geimpft and 065--Botschaft 4: Anwendung) would increase inner consistency but still would not be extra high.

The other remaining items were tested as short scales. Substance and alcohol consumption had poor results. Cronbach´s Alpha was only 0,310. So it is not useful to treat these items as a scale.

Also items 107--Risikoverhalten: ungeschützter Analverkehr, 110--Art der festen Partnerschaft and 112--HIV-Status Partner cannot be reliable allocated to a scale. Referring to the “causation model” these items could be allocated to Safe Sex

behaviour (denoted as “application”) but this category was designed to be part of the preventive behaviour message block. Analysing the three items as a scale would result in a low Cronbachs´ Alpha value (0,40) and the item about unprotected anal sex has an unacceptable item discriminating power below 0,3.

There were also several short scales that were reliable. One was communication with sex partners and friends about prevention measures. The Cronbach´s Alpha value was 0,708 with good item discriminating power and only 114 invalid cases.

Finally there are the two scales which are shortened versions of already existing and tested instruments and one item that stands alone representing a scale.

The four chosen items of the Rosenberg self-esteem scale had a Cronbach´s Alpha of 0,817 with only 3,1% invalid cases. Also all items had a good item discriminating power and inner consistency could not be increased by deleting any of the items.

The items that were drawn of the SF-36 were three items representing emotional functioning and one item representing social functioning. The scale about emotional functioning had a Cronbach´s Alpha of 0,847 for the three items. Also item discriminating power was good and inner consistency would not increase when one of the items was deleted.

3.3 Validity

Objectivity and reliability deal with aspects of correct measurement and help to generate high validity. Validity is concerned with the content of the test and evaluates if the test really captures the feature that it should. Validity could be considered to be the most important factor to analyse with regards to the goodness of a test.

To get a comprehensive idea of validity one should have a look on different aspects. In chapter 2.3 the four aspects that are most commonly evaluated in validity analysis were described. Also the annotation was made that it is a mainly practical decision which of the criteria gets attention and should be included. The guideline for the decision is based on the purpose of the test. In this chapter each criterion gets attention and its importance is analysed.

3.3.1 Content validity

Content validity analysis is a discussion process. Insights of literature research, scientifically gained prior knowledge and experience of practitioners who are in contact with the target group or the problem, should be synthesized and balanced. The content of a test is the bases and its quality is the precondition for a good test. The analyses will not be done on scholarly exchange. Nonetheless to uphold quality, the argumentation will be accompanied by some guiding aspects.

For example, the results of the pre-testing phase will be considered. Members of the DAH, among others, were asked to review the content of the questionnaire. They were informed about the goals and also were expected to be able to give feedback about expression, tone, possible offending phrases or wording as they are familiar with the target group. In line with these hints analyses can be preceded. (Annex XIII)

Also, basic rules for item composition can be kept in mind. These aspects have an impact on data analyses and interpretation as they could be producing biases. Questions should not be suggestive and force participants to answer according to social desirability. Also the answer categories need to be checked for plausibility, comprehensibility and distinction. (Diekmann, 2012)

Furthermore, orientating towards the purpose of the questions has to be of great importance. The intention for the use of the data has to be kept in mind. For example, is there solely a descriptive analysis planned or is the purpose to introduce a cause and effect association? (Moosbrugger, 2012)

The two parts of the questionnaire are of different purpose and have to be analysed separately for the qualitative content. The more technical aspects have to apply for all items.

Target group specificity

The first part of the questionnaire contains operationalised features that get defined by the content itself. The main aim is to be able to come to a generalised interpretation (Moosbrugger, 2012). Therefore it has to be shown conclusively that the items in the test allow assuming representativeness.

McGuire´s theory about communication components, which have to work in order to communicate prevention messages successfully come down to five steps. According

to these steps the items in the “target group specificity” part got operationalised. The considerations got supported substantially by statements made by members of the steering group who are working on the regional, on site part of the campaign (Annex II). These people are in contact with campaign planners, with contact persons on site as well as with the target group. In a group interview they talked about the relaunch of the website their personal opinion about it as well as stated or assumed opinions of the target group itself. There were divergent voices about the changes, some saw them as an advancement for the website, some did not. These indifferences indicated that it would be useful to have a more detailed look into the intended audience. It might be more heterogeneous than assumed, so the first part of the questionnaire was about personal taste and subjective perception of credibility, design and delivery channel. An item world was created primarily using the wording from the interviews that should investigate these topics exhaustively.

Eventually items were developed for four different features. These were “credibility of the message (source)”, “message design”, “delivery channel” and “intended audience”. A fifth feature would have been “intended behaviour” according to McGuires´ concept of communication for persuasion. This step got skipped in the first part because it is depicted in more detail in the second part of the questionnaire.

The “credibility of message (source)” block contained questions about the provided information. To evaluate if the IWWIT campaign is a success it is important to know if it is valuable for the target group. Consequently the added benefit and overall usefulness was of interest. Items emerged about novelty and the amount of information, usefulness of messages for prevention and everyday life decisions as well as imparted expertise. Another aspect that could be subsumed to this block because it is fitting, is perceived value which meant to literally ask: “is it useful?”, “does it help to promote tolerance?”, “does it help to get in contact with peers?”. These topics were considered to be in the questionnaire because the campaign aims, among others, reducing prejudice and supporting building a community.

The items in the “message design” block were also guided by the interviews and general quality criteria for online appearances and advertisement. The layout has to be appealing in colour, overview and navigation. In addition the tone and atmosphere should create a setting where the target group feels taken seriously, is emotionally

involved or enjoys looking around. Therefore the items about external factors were included. The items that asked if the tone is too sexualised, too lecturing or too conventional addressed the perceived communication style.

Like all subcategories the intended audience category has some or even more overlap than the others. In the end, the target group and how they perceive the campaign is most important. For this feature, items about how participants like the campaign, believe it is comprehensible, credible, interesting and personable, were created.

The evaluation of the delivery channel was interpreted in a way that items about mainstream fame and rating of the different tools were included. Also it has to be mentioned that for the three different tools separate blocks had to be introduced. The online tools offer different possibilities of communication as well. Participants who knew the website might not been on the Facebook page and it would be imprecise to ask these people to make statements about it.

HIV/STI prevention

Analysing content validity for theoretical features is based on the assumption that the characteristics are imbedded in a construct. Therefore, there are theories about how differences in test results emerge. The “causation model” was created and implemented to have a theoretical foundation to explain preventive behaviour in relation to different influencing factors (Chapter 1.1.4.2). The construct that cannot be observed directly is the willingness and ability to perform HIV/STI prevention. Behaviour models identify factors that lead towards this behaviour and the idea is that varieties in these factors can be associated with varieties in the latent not observable variable. Hence, examining the content validity means to evaluate the theoretical construct, the “causation model”, for its ability to extrapolate test results on the construct that cannot be observed directly. Referring to health behaviour models like the health belief model and the precede-proceed framework the “causation model” contains the important pre-disposing factors for healthy behaviour. Individual knowledge, attitudes, behaviour, values and beliefs are integrated as well as enabling factors in the environment and community.

Nine prevention messages of the campaign were used as a framework to create blocks of items that should capture the components that lead to preventive behaviour. (Table 13)

Number	Item	Message
Message 1	Items 8-13	>>Wenn keine anderen verlässlichen Schutzmaßnahmen abgesprochen sind, soll man immer ein Kondom benutzen.<<
Message 2	Items 14-20	>>Vor dem ungeschützten Sex in einer Beziehung sollen sich die Partner erstmal auf HIV testen lassen.<<
Message 3	Items 21-25	>>Gegen Hepatitis A und B soll man geimpft sein.<<
Message 4	Items 60-65	>>Wenn man sexuell aktiv ist, soll man sich regelmäßig auf HIV und Syphilis untersuchen lassen.<<
Message 5	Items 66-71	>>Bei Jucken oder Brennen am Schwanz oder Arsch, z.B. bei Geschwüren, Bläschen oder Ausschlag soll man zum Arzt gehen.<<
Message 6	Items 72-77	>>Nach einem Safer-Sex-Unfall soll man versuchen durch eine PEP (Post-Expositions-Prophylaxe) eine HIV-Infektion noch zu verhindern.<<
Message 7	Items 78-83	>>Wenn man an HIV oder einer anderen sexuell übertragbaren Infektion erkrankt ist, soll man möglichst viele Partner informieren, damit sie sich auch untersuchen lassen.<<
Message 8	Items 118-123	>>Beim Mischen verschiedener Substanzen sind gefährliche Wechselwirkungen möglich. Wenn man eine Droge nimmt, soll man bei dieser einen bleiben.<<
Message 9	Items 124-129	>>Damit man im Rausch nicht zu viel einer Droge nimmt, soll man bei bestimmten Drogen (z.B. Liquid Ecstasy) die Rationen schon zu Hause nüchtern vorbereiten.<<

Table 13: Nine prevention messages of the IWWIT campaign

The German language allows to distinguish between knowledge that intends to describe how much a person knows about facts (Wissen) and knowledge that describes being aware of something (Kenntnis). For the blocks with prevention messages the “being aware” knowledge was important. Then the rating of the message was inquired with the item: “Ich finde das sehr gut (und richtig)”. Relevance of the message was operationalised with the question if the participants found themselves in a situation where the particular measure was applicable. Viability was inquired as well as actual execution of the preventive measure. With this approach five of the “causation model” components were already covered.

Knowledge of facts was inquired via statements about STI and HIV related topics and participants had to rate if they already knew these facts or even if they rated them as false. This block was created based on questions of the SMA study (Bochow et al., 2011)

Risk perception should be captured with items that rate lifestyle attitudes on a scale from being very open for preventive measures to behaving less preventive. For example there are items about having unprotected sex with partners without knowing their HIV status, having regularly altering partners, consuming alcohol or other substances or taking regular HIV and other STI tests. These topics were derived from the campaign itself and from what is considered to be risk factors for acquiring HIV or STIs (Chapter 1.1.2). Items about the perception of the severity of thread completed this section.

The ability and strength to talk openly about HIV/STI as a potential risk and matter of prevention is an important factor to be able to behave preventively. Therefor the items 113 and 114: “When did you last talk about safer sex to your sex partners/ friends?” were included.

With these item groups the more relevant part for the DAH was covered. The main goal of the campaign is to reduce HIV and STI. The other part which influences health but is not the core working field of the DAH is social and emotional well-being. The components of this segment were not covered completely.

Feedback/ social support was at first included in the item blocks about the prevention messages but then was eliminated again. The question remained accidentally one time. Reducing discrimination did not get operationalised at all and promoting acceptance of alternative lifestyles was only addressed with one item about internalised homophobia. Intrinsic value and self-esteem were evaluated via questions of the Rosenberg self-esteem scale and the SF-36: emotional functioning.

All of these components that were operationalised like self-esteem, social and emotional well-being or acceptance of alternative life styles can be seen as contributing to overall health (WHO, 1986). This was investigated as a potential dependant variable via a rating scale with 0= not healthy at all and 100= perfectly healthy.

Extra questions

The usual demographic variables had to be included in the questionnaire like gender, age, socioeconomic status, migration background and the size of the home town. These items were mainly transferred from earlier studies (SMA, Bochow et al. 2007/2010/2011). The idea was to create some comparability to former studies and to be able to depict trends in the target population. Furthermore these variables are known to be a potential confounder for any possible outcome association.

For the “causation model” it was significant to know if the target group consumes alcohol and other substances because that is a component of HIV/STI prevention. To ask what kind of substances are consumed and how often, is additional information which could help to identify hot topics that need to be addressed prospectively by the campaign. The same purpose pursued the item that investigated what kind of STI participants suffered from. For the “causation model” it was only necessary to know if they once had a STI but for the campaign the kind of infection was also of interest. This is because most of the STIs are not obligated to be reported and it could help to get a better idea of the target groups´ needs.

In addition, for each online tool it was also advantageous to know which particular topic brought the participants to use the tool and get in contact with the campaign.

These were items to broaden the knowledge about the target groups´ needs. Another aspect was to locate gaps in implementation and presentation more precisely. There is also a potential to intensify cooperation with other delivery channels and promotion tools.

The expert rating was mainly concerned with perceived appropriateness of language or obvious mistakes concerning facts or spelling. The feedback however did not indicate whether the items are representing the world of possible items for the “target group specificity” or if the items in the “HIV/STI prevention” actually allow inferring on behaviour. So the appraisal of content validity had to happen via theoretical reasoning.

The item blocks of the “target group specificity” part are very comprehensive. The four aspects that McGuire suggests for successful health campaigns were operationalised thoroughly. For every facet a cluster of items was included which

would provide detailed information about the target groups perception and needs. Additionally, the background information, which was gathered from the steering group, showed which aspects are important for users and target group to perceive the online tools as appealing. It was also appropriate to ask for every tool separately. The website contains a lot of information and subtopics whereas the Facebook appearance aims to be interactive, up to date and flexible and the health support is for personal interaction. Therefore it is not feasible to condense the questionnaire in this aspect.

Nonetheless, it is difficult to clearly identify the goals which influence the quality of item batteries. On the one hand participants are invited to rate the tools on the other hand there are questions that aim to broaden the knowledge about the target group. For instance, detailed inquiring about why they came across the campaign or which topics they are interested in. As such, some items cannot be allocated to one feature distinctively.

The content of the second part of the questionnaire can be seen as valid referring to the aim to capture variances in preventive behaviour and health of the target group via a theoretical construct. The theoretical explanation of the components is solid. Inner factors and environmental factors that influence decisions for preventive behaviour are included. The item batteries that are based on the messages of the campaign are designed to perform variance analyses. These categories fit their purpose which is to examine if knowledge, valuation, perceived relevance and perceived viability have an impact on preventive behaviour (application). Also the more holistic view on overall health is theoretically well funded.

The items themselves cannot always be allocated to one feature distinctively like it already appeared in the first part of the questionnaire. For example, risk perception contains items that ask about risky behaviour rather than ones opinion about perceived severity of consequences. So the question about substance use inquires about the risky behaviour itself but not the perception of increased risk of acquiring HIV/STIs when one is under influence of substances therefore more adventurous or less responsible.

Eventually there are features that did not get translated into items at all or only rudimentary. The feature about reducing discrimination of HIV positive tested people

in the community of MSM was not included and it is debatable if one item like “is it a problem for you personally, to have sex with men?” is enough to display internalised homophobia.

The interpretation will be difficult if the questions are not precise enough to eliminate ambiguity. (Annex I) That happened with the items asking for authenticity and individuality in one sentence which are obviously two different things. Imprecise wording happened in one other item, too. Participants had to answer if they think something is “good and right”, in only one item. (Diekmann, 2012)

Concerning formal aspects of items rules for good practise were met. Items are not suggestive and the wording is predominantly distinct. Also the feedback of the pre-testers helped to choose a linguistic style that fits the target group. The items were closed questions so that the answer options had to be predetermined and exhaustive. The options were mostly verbalised rating scales and with an even number to avoid the tendency to choose a mean value. (Rost, 2004)

The extra questions, included in the questionnaire, have the purpose to create a baseline. That helps to describe the study population and rate representability. It is also useful to identify possible confounder of associations. The used items are standard questions plus some which are target group specific. There is a potential weakness however because, for example, the question about dependability to the gay scene raises the issue how to exactly determine “the gay scene”?

A comparison with other questionnaires with the same aims or the same underlying construct consolidates content validity further. In the HIV/STI prevention part many items are borrowed of former studies like the SMA (Bochow, 2010) or EMIS (RKI, 2015a) studies. The EMIS study for example was discussed and revised five times within the project group and also pre-tested several times with small samples of the target group. (Weatherburn et al., 2013) Thus, the parts of the EMIS/SMA studies can be considered to be valid in content as well as the Rosenberg self-esteem scale and the SF-36.

3.3.2 Construct validity

In this validation step the aim is to review if the theoretically allocated items to scales are indeed part of the construct they ought to measure. The analyses is conducted on the item level following the beforehand performed item analyses of item difficulty index and item discriminating power.

An explanatory factor analysis (EFA) shall explore the items´ loadings on the theoretically assumed factors and reveal possible hidden coherences.

Then the hypotheses about the correlations and relations among variables and features were allocated and analysed via confirmatory factor analysis (CFA). This was done to analyse the goodness of the fixed theoretical models. Content validity analysis showed that there is an overlap and uncertainty between categories and the goodness of the models as fixed constructs has to be checked, as well.

3.3.2.1 Exploratory Factor Analysis

First step is to check preconditions for EFA. The fact that the variables are not really interval scaled but interpreted with discrete values poses the same problem as in the reliability analyses before. It is possible to do an explanatory factor analysis but this restriction has to be kept in mind for interpretation and appraisal. Also items with a normal distribution would be the best fit and as item descriptive analyses showed there is a wide variety in the items of this questionnaire. The items are not able to correlate at a maximum and could alter the results of EFA. (Prospeschill, 2010)

Parameters for analysis have to be set beforehand. Cases will be excluded list-wise which means if they have one missing value they get completely excluded. That is viable because of the recoding that made it possible to include the missing “question not asked” which were not missing at random (NMRA). The remaining missing cases are missing completely at random (MCAR) and will not cause systematic bias.

To decide which items could be in the EFA the items have to be checked for correlations. A bivariate correlation and 2-tailed significance test is appropriate because there is no ambition to test cause and effect. The correlation matrix provides a first idea about possible dimensions. A lot of low correlating items indicate a very homogenous data structure. There have to be high correlating items to actually find dimensions. High correlations indicate a possible influence by a common factor. If the

correlations are significant, it is possible to assume that they are indeed different from zero. The significance level should be set depending on the sample size. For the calculations in this analysis the sample is rather large which makes it viable to choose the significance at below 0,01. (Field, 2013)

For factor extraction the principal axis factoring will be used. The assumption of this analysis is that there are latent variables that can be detected and would explain the relationship between the manifest variables. (Prospeschill, 2010) For construct validation there should be theories about the allocation of items to latent variables. EFA would confirm if the items are indeed having their main loading on the expected factor. If not, they have to be excluded or revised.

The inverse correlation matrix can give an overview if the data fits the analysis. If the diagonal values of the correlation structure are substantially higher than the other values, an EFA is possible.

Bartlett´s test of sphericity can tell if the hypothesis that there is no correlation between all of the items is true. The data structure should be normally distributed to have reliable results, so that is again a restriction for interpretation. The KMO value investigates the measure of sampling adequacy and should be 0,8 or higher. The bottom value where it is still possible to proceed with the EFA is 0,6 (Prospeschill, 2010)

The cut off criterion for searching for factors is Kaisers´ strategy to eliminate all components with an Eigenvalue less than 1.0 in combination with the scree plot.

For rotation the varimax technique is chosen. Rotation makes it easier to read the results, medium values become higher or lower and can be allocated to factors more distinctively. Varimax preserves the freedom of the factors.

For interpretation of the dimension it is useful to follow some guidelines. Item quality could be a criterion to look at. The communalities show how well the items fit the factors. For the sample of 6213 cases even small values in the communalities will be acceptable. (Pospeschill, 2010) It is possible to interpret a factor if four or more items are loading over 0,6. Or if at least 10 have a loading over 0,4. Factor loadings below 0,2 cannot be included and the analysis should be run without them again. These thumb rules help to decide if the loading structure emerged randomly or not.

Correlation matrices

Correlation matrices give an overview if the scales that should be tested for dimension are related at all. For construct validity it is important that the items that aim to measure one construct or idea are correlated. On the other hand a correlation which is too strong makes them obsolete. (Field, 2013) That problem was partly dealt with in the reliability analyses with the item discrimination index. So at this point it is important to look at variables that correlate with a sufficient value.

The correlation matrices for the subscales were significant for the “target group specificity” part. For “HIV/STI prevention” the picture was very diverse. The correlation matrix showed high amounts of very low correlations and only a few high ones. To exclude items with mainly low correlations below 0,3 could be a strategy (Field, 2013). Yet, it would mean to exclude almost half of the items. These were not very promising results for preceding the factor analysis. Also the very low correlations were often not significant neither on the <0,01 level nor on the <0,05 level. However, in both cases the inverse correlation matrices met the requirements.

EFA “target group specificity”

Running EFA with the items of the “target group specificity” part would be with four fixed factors. This analysis showed a highly acceptable measure of sampling adequacy (KMO 0,981). Bartlett´s test of sphericity was significant at a >0,001 level which means that the hypothesis that the items in the matrix are not correlated at all can be dismissed.

The communalities hold some variety of the explained variance due to the extracted factors. For many items substantial parts (around 0,8-0,9) of the variance can be explained with the extracted factors. Nonetheless one item has only 0,057 explained variance (051--Health Support: Bekanntheit) and two more “004--IWWIT Bekanntheit” (0,17) “007--IWWIT Bewertung” (0,215) have low values in comparison to the rest. (Annex XIV)

Four factors explain a total cumulative variance of over 85% which is a satisfying result. Looking at the added explained variance of each factor it appears that the fourth factor only adds around 5% of explained variance and each additional factor explains only very little variance. The scree plot supports the findings of four factors; a knee is visual at factor five. (Figure 8)

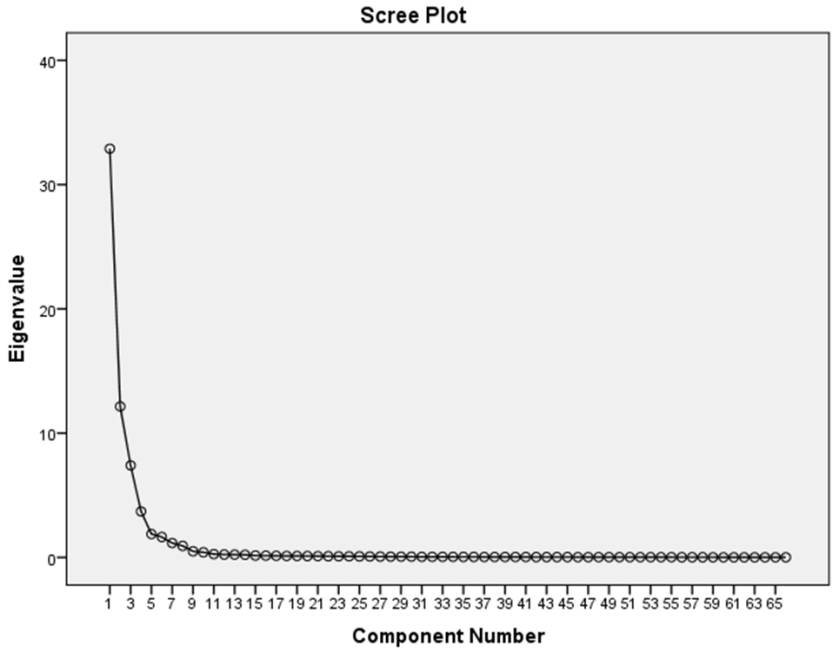

Figure 8: Scree plot for EFA „target group specificity“

The rotated component matrix showed the loadings of the items. Values below 0,3 were suppressed. That caused item “051--Health Support: Bekanntheit” to show no loading at all. Two other items that had only small portions of variance explained after extraction of four factors, had comparably low loadings, as well. The other items can distinctively be allocated to one of the four factors.

However, looking at the items of the factors it became evident that these are not the intended dimensions of “message design”, “credibility of the message”, “intended audience” and “delivery channel”. The overruling dimensions were the clusters of the three tools. All the items related to Facebook were on one factor, all the items related to the Health Support on another. The items related to the Website are all loading on one factor, sometimes for subcategories on a second factor which can be explained by the precondition of setting four factors to be extracted. (Annex XIV)

EFA HIV/STI prevention

For the “HIV/STI prevention” part all the relevant items should be related to six factors. The preconditions for this analysis were chosen to be the same, as they were for the “target group specificity” part. According to the “causation model” the number of factors to be extracted was fixed to six factors. KMO showed a moderate but acceptable value of 0,755 and Bartlett´s test of sphericity was significant.

The communalities showed a moderate portion of explained variance after extraction of six factors for all items. For “115—Alkoholkonsum” it is even very low (0,065). (Annex XV)

The cumulative total variance explained is after extracting six factors still low at around 45%. Every factor only contributed small amounts of explained variance (factor 1: 14,505; factor 2: 9,232; factor 3: 6,562; factor 4: 5,312; factor 5: 5,043; factor 6: 4,354). Every additional factor would still be contributing only small amounts to the explained variance.

The scree plot shows a similarly vague picture. The first knee can be seen at factor four which would correspond to three factors. But potential visual knees could also be at factor five, seven, eight, ten and so on. (Figure 9)

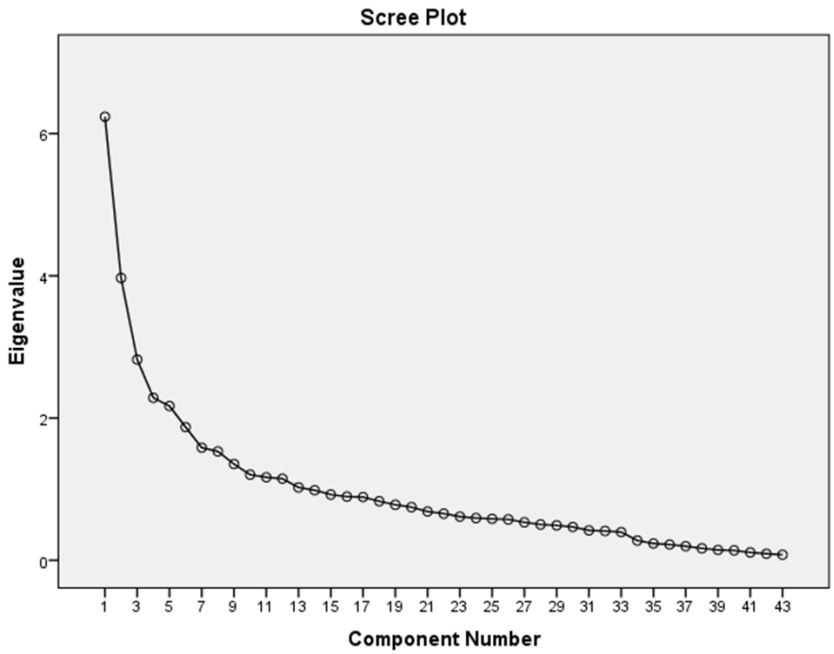

Figure 9: Scree plot for EFA „HIV/STI prevention“

Aligning with the results of the communalities the loadings of the items on the six fixed factors were not very high and with some substantial cross loadings. (Annex XV)

Also a meaningful interpretation of the factors was not possible. Thus it became evident that the items are not loading on the factors they were theoretically allocated to.

3.3.2.2 Confirmatory Factor Analysis

Confirmatory factor analysis can be done via structural equation modelling. The IBM Corporation provides an extension for SPSS to do structural equation modelling which is AMOS. The following analyses were run with AMOS Graphics 25.

For the analyses 6213 cases are once again used.

The first step is to bear the missing cases in mind and decide how to treat them to avoid massive bias in the data. The NMAR data was substituted as described earlier in the EFA analysis and the remaining NMAR values can easily be replaced via the Full Information Maximum Likelihood (FIML) method that AMOS offers. That method is rated to produce excellent results that are controlled for bias. (Weiber et al., 2010) A second step would be to check the data for outliers that happened already before the data set was used for this analyses. Thirdly, the distribution has to be looked at as a precondition for CFA. Once more it would be ideal to have normally distributed variables but the data does not provide it.

The confirmatory factor analysis estimates how well the items represent the latent variables. The items are allocated to the latent variables/ factors and structural equation modelling tests how much of the variance in the items gets explained with the factors. Additionally the values of the factor loadings will be displayed. One of the items has to be set to have a perfect loading which would be 1,00. Ensuing from the assumption that all items are loading substantially on the factor they are allocated to it is of minor relevance for the CFA which one is set to have a loading of 1,00. All independent variables are measured and therefore are assumed to have remaining measurement errors which have to be included via allocating residual variables to every manifest variable.

To assess and interpret results one has to look at the Model-Fit summary which can help to have a more accurate idea of the model-Fit. That is presented via Chi^2 for the whole model. High values of Chi^2 indicate a bigger discrepancy between empirical and theoretically assumed models but it easily becomes significant with large samples. Significance means that dismissing the hypothesis that the empirical and the theoretically assumed model are identical would be wrong. Chi^2 depends on many preconditions and reacts very sensitively to those changes. Therefore it is

advisable to involve other measures of goodness. Another inference statistical method is the Root-Mean-Square-Error of Approximation (RMSEA). A good model fit would produce values below 0.05 and values above 0,10 indicate an inacceptable model fit. Inference statistical methods are very stringent and are based only on the parameters of the model to calculate a variance-covariance matrix of the theoretical model. This is considered to be unrealistic and for practical application it has to be examined if some of the difference between the empirical and theoretical model can be neglected. This can be done via descriptive measures of goodness. The restriction of these measures is the fact that they are guided by rather arbitrary cut-off values. Unfortunately, AMOS does not produce Standardised Root Mean Square Residual (SRMR) if there is missing data. Otherwise SRMR would have been the most stable measure of goodness not vulnerable to, for instance, sample size or not normally distributed data.

The comparative evaluation of alternative models has been analysed, too. Models with the same underlying constructs but altering causal paths were compared. AMOS does this with an independent model where every parameter is only able to explain itself. The model would not have any contentual plausibility. Additionally, there is a saturated model which fits the data the best but is also not interpretable in a meaningful way. The default model is always located in between these two models. Measures of model fit that compare the models would be the Normed Fit Index (NFI), the Tucker-Lewis-Index (TLI) and Comparative Fit Index (CFI). These three indices have a cut off value of >0,90 to assume a good model fit for the default model. (Weiber et al, 2010)

CFA target group specificity

For “target group specificity” of the online tools, four latent variables were defined. Running the analysis with the four factors “credibility of message”, “message design”, “intended audience” and “delivery channel” did not produce any valid results. The iteration maximum was reached and the analysis could not be completed.

Also subdividing the “credibility of message” into “quality of information” and “perceived value” and “message design” into “tone” and “layout/user friendliness” did not change the invalid results. These findings align very well with the ones of EFA.

When testing the model in which the online tools were the determined factors, results could be produced. The minimum for Chi^2 was achieved and results were significant. One restraint was the explained variance for one of the IWWIT variables residual which was negative and therefore not a plausible parameter estimation. This would be called a Heywood case and gives a hint to a rather bad model-fit. This variable should be monitored and most likely be excluded. Figure 10 shows that the variable IWWIT does not correlate at all with the Facebook and Health Support factor and only very low (0,02) with the Website. So excluding the whole factor with the critical Heywood case is viable. For the other factors the loadings and portion of explained variance in the items were in general very high. Only a few are of lower loading were of lower loading and explained variance.

The correlations between the latent variables were not very high considering 0 as no correlation at all and 1 as perfectly correlated. Website and Facebook are correlating with a value of ˜0,29, Website and Health Support ~0,07 and Facebook and Health Support ~0,05. (Figure 10)

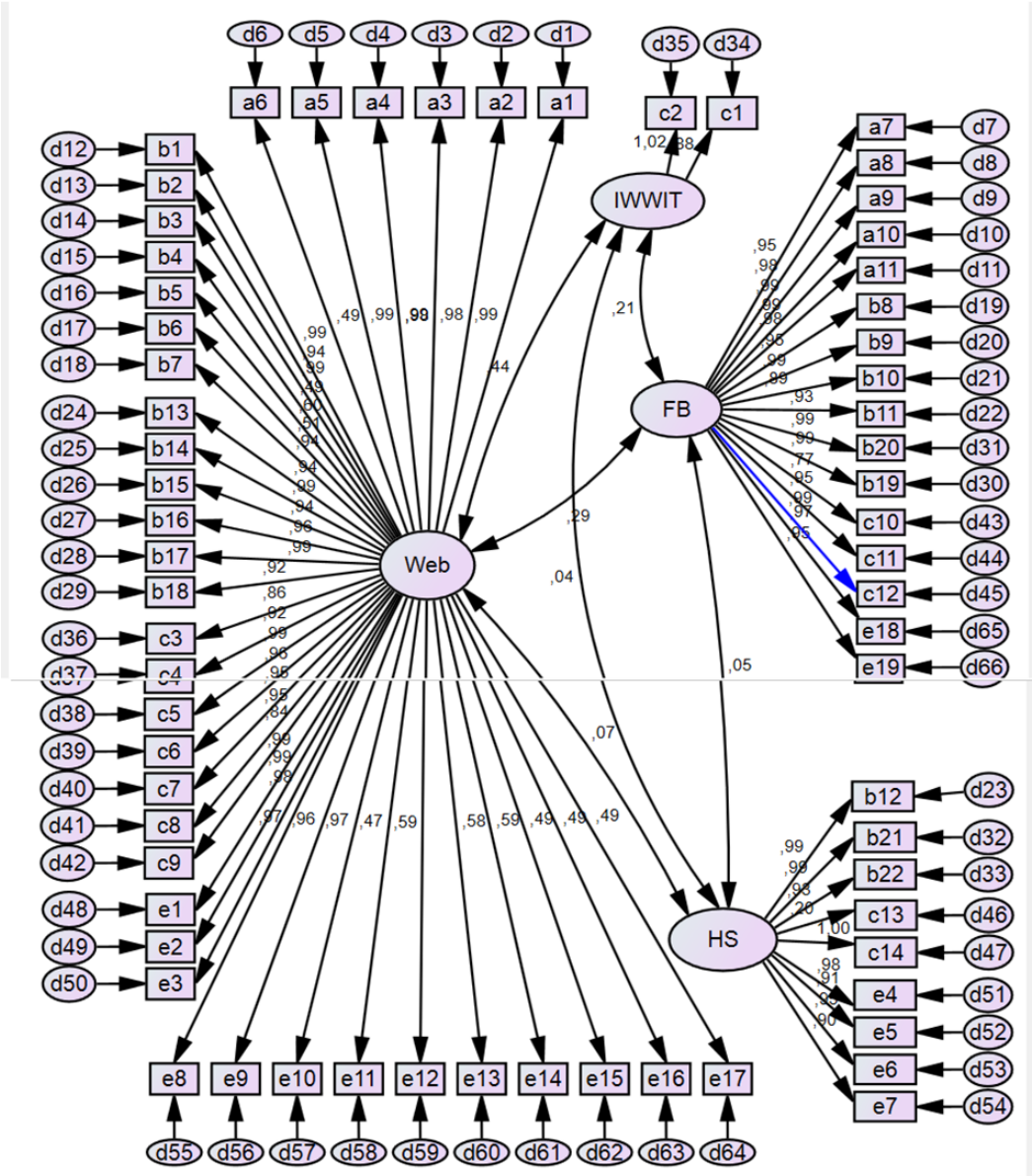

Figure 10: Results CFA model „target group specificity“

The model-fit summary showed a very large Chi^2 value (221784) which indicates a high discrepancy between empirical and theoretically assumed models. Also the p-value of 0,000 advises to dismiss the H_0- hypothesis. The Chi-square divided by the degrees of freedom value was also very high (106,78) and suggested a bad model-fit. Even RMSEA indicated an inacceptable model-fit (0,13).

The comparative evaluation of independent, saturated and default model suggested a bad model-fit of the theoretically assumed model, too. NFI (0,79), TLI (0,77) and CFI (0,79) were all below the cut off value. (Table 14)

	Chi^2	df	p	Chi/df	NFI	TLI	CFI	RMSEA
online tools	221784	2074	0,000	106,78	0,79	0,77	0,79	0,13
requirement					>090	>0,90	>0,90	<0,10

Table 14: Model-Fit summary „target group specificity“

CFA HIV/STI prevention

For the “HIV/STI prevention” part the “causation model” dictated the factors that should be tested with the CFA. To analyse all relevant factors the CFA had to be run with data for seven factors. The results of loadings and explained variance were very diverse. The factors that contained the items Rosenberg self-esteem scale (“RoseScale in Figure 11) and the SF-36: emotional functioning (“SF-36” in Figure 11) had expectedly satisfying loadings and explained variance. The communication competence factor (denoted as “Comcom” in Figure 11) had also modest but acceptable results. Many of the other items did not have satisfying results. All of the items allocated to knowledge (“Know” in Figure 11) had very small explained variances (0,10-0,43) and also small loadings (0,31-0,65). For “viability” one item did not have any portion of explained variance and the others only very low amounts (0,08-0,34). The loadings were correspondent to that, low, too. Risk perception had loadings of 0,10 to 0,76 and portions of explained variances from 0,01 to 0,58. The variable Application (which correspond to “SafeSex” in Figure 11) had loadings of 0,06-0,67 and portions of explained variances from 0,00 to 0,45.

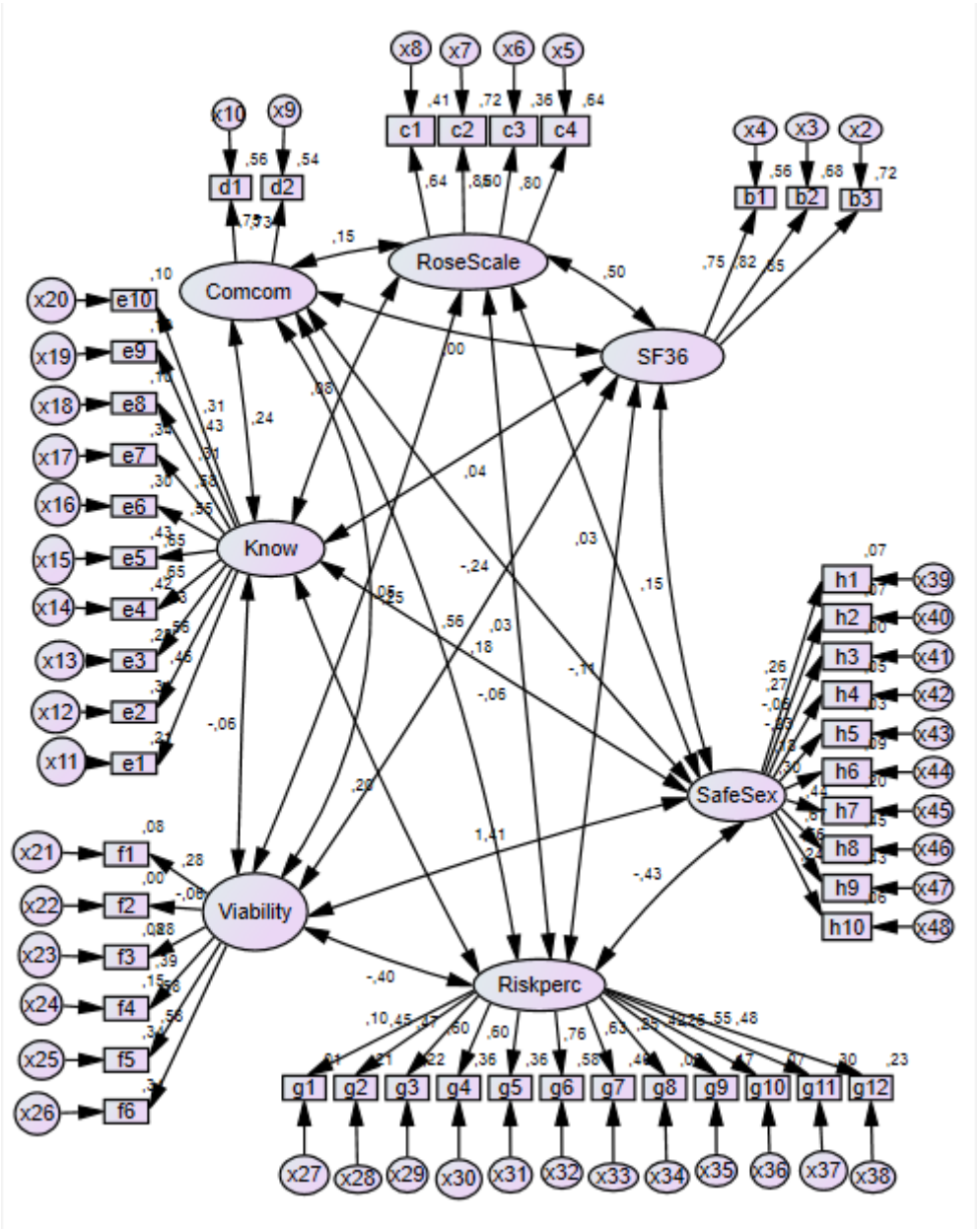

Figure 11: Results CFA model „HIV/STI prevention“

The correlations of the factors were rather low and sometimes even negative which is not admissible for structural equation modelling and indicates Heywood cases. All these findings were not very promising concerning the goodness of the tested model. The model fit summary confirmed the previous findings. Chi^2 was very large (75658) and significant at a 0,000 level which suggests to dismiss the H_0-hypothesis. Also looking at the Chi/df (74.68) and RMSEA (0,11) values did not change the result of a big discrepancy between the empirical and the theoretical model. Also comparing independent, saturated and default model suggested a unsatisfying model fit (NFI: 0,43; TLI: 0,37; CFI: 0,44).

Eliminating the critical items did not produce better results and the Heywood cases were not controllable as they were most likely due to not satisfactory data, as reliability analysis, correlations and EFA indicated.

Testing only the factors of the" causation model" which are related to HIV/STI preventive behaviour initially included only five factors. Reducing the factors to four, meaning eliminating all factors that are on the social and emotional well-being component, did not improve the model-fit. Actually, the measures of goodness decreased slightly. (Table 15)

	Chi^2	**df**	**p**	**Chi/df**	**NFI**	**TLI**	**CFI**	**RMSEA**
All factors	75658	1013	0,000	74.68	0,43	0,37	0,44	0,11
5 factors	74122	730	0,000	101.53	0,35	0,28	0,36	0,13
4 factors	69542	554	0,000	125.52	0,35	0,26	0,35	0,14
requirement					>090	>0,90	>0,90	<0,10

Table 15: Model-fit summary "HIV/STI prevention"

Correlating solely the factors that are associated according to the "causation model" was another model to test with the CFA. That would mean to treat communication competence ("Comcom"), the Rosenberg self-esteem scale ("RoseScale") and the SF-36: emotional functioning ("SF36) as only correlating with each other and being independent from the rest. Only communication competence would still be correlated with the rest as it is considered to be a part of the "HIV/STI reduction component. (Figure 12) However, this model did not produce any valid results.

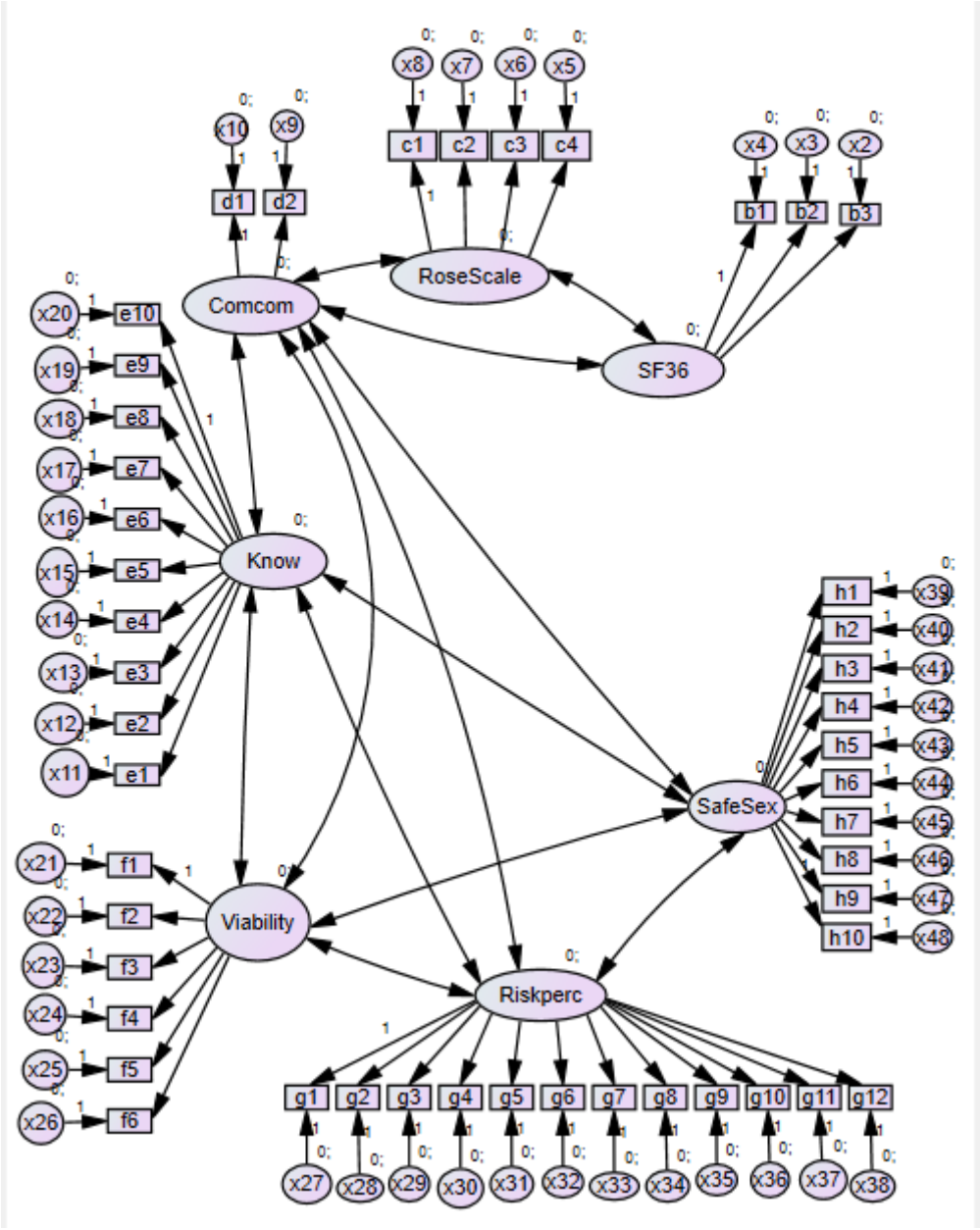

Figure 12: **CFA correlations strictly following the „ causation model”**

Regression

Regression analyses should follow exploratory and confirmatory factor analyses to research if the scales/factors explain different portions of the requested outcome variable or if they are congruent and therefore rather obsolete. That could help to reduce items that are redundant and would result in slimmer models.

The EFA and CFA showed that the theoretically reasoned models did not result in valid models regarding measures of goodness. Hence, it was not meaningful to do regression analyses.

Results

The main part of the construct validity considerations was done using inferential statistical methods. That proceeding is state of the art for this criterion of goodness of a test. However, these methods are normally not very informative concerning content and theoretical coherences. So it is useful to do both exploratory and confirmatory factor analyses.

On the one hand explanatory factor analysis, with the restraint of how many factors should be extracted, provides the possibility to compare the theoretically assumed allocation of items to corresponding scales and their empirical belonging based on the data. The EFA of the “target group specificity” items and factors showed clearly that the items do not load on their theoretically assumed factors in the first place. However, new factors could be identified which were the online tools. With these factors, the loadings were indeed very high and distinct except for some cases. The data that did not adjust enough concerned items about the campaign as a whole and not only the online tools which were the primary subject. Also one of the health support items did not fit the factors but that did not minimise the contentual significance of the results. Considering the high values of explained variance after extraction could indicate another problem which would be redundancy of items. That was already implied by the correlation matrix which had a lot of highly correlated items. The possibility of setting the subcategories Website, Facebook and Health Support as factors was tested, too, because they seemed to be weightier than any other concept. Contradictory, analysing the different parts of the campaign separately did not change the results. All the items would cumulate on one factor.

The EFA for the items of the “HIV/STI prevention” part produced blurred results. The correlation matrices showed the first problems of solely low correlations within the items and partial non-significance so the hypothesis that the items are not uncorrelated at all has to be assumed. The fixed factors did not accumulate clearly with the theoretically intended items. Furthermore, the results did not allow any meaningful interpretation due to the loadings which were often not distinct but

crosswise loaded on more than one factor. Also the explained variance after extraction is only small for most items. That fact alone would not be sufficient to speak of a bad fit of the theoretical construct but combined with the ambiguous loadings it is a sign for an inadequate fit. Therefore, construct validity tested on the item level with an explanatory factor analysis does not present useful results regarding the allocation of items to the dimensions of the “causation model”.

On the other hand, the confirmatory factor analyses contains the possibility of testing beforehand appointed coherences and models. Although the results of the EFA were not very promising a CFA with the four categories of “target group specificity” was done. That did not produce any results at all. The model with the online tools which emerged in the EFA was successful and showed mostly high loadings on their factors. Unfortunately the indicators for the model-fit all showed insufficient results except for the Chi-square value. Yet, that value is prone to react strongly on sample size and should not be seen as the crucial indicator, keeping the large sample of 6213 cases in mind.

The CFA for “HIV/STI prevention” showed sufficient loadings and explained variance in the items by the factor for the already validated scales of the SF-36 and the Rosenberg self-esteem scale. The other factors struggled with low loadings and only small portions of explained variance. Excluding the items with the worst loadings did not improve the result substantially. Also experimenting with fewer factors did not improve the results. The negative correlation values that suggested implausible parameter estimation could not be eliminated. That surely contributed to the unsatisfactory values of model-fit indicators.

3.3.3 Criterion validity

With this aspect of validity the test values get compared to one criterion that displays without a doubt the concept. This approach requires an external criterion which is to be measured validly.

For the “target group specificity” part it is not necessary to examine if the test results can forecast another external criterion. It is more or less an opinion poll and does not aim to explain certain behaviours or outcomes.

The HIV/STI prevention part aims to test components of a behavioural model for their influence on preventive behaviour. Here it is imaginable to find an external criterion or another already valid proven instrument to compare with.

The forerunner tests in the MSM scene were for example the “Schwule Männer und HIV/AIDS (SMA)” (Bochow et al., 2010) studies that were conducted several times and are partly adapted to the new study. It is conceivable to compare criteria or scores of these studies to some of the current survey. However, very little information can be inferred about validity from the reports of the SMA and EMIS studies.

Using the method of collecting data to one external criterion that can be seen as the outcome of prevention is a good attempt. The outcome of prevention campaigns could be key figures like reduced numbers of newly infected cases. Yet, that would be a biased assumption. It cannot be proven conclusively that reduced numbers of HIV/STI infections are due to the campaign or to another possible intervention, like, development in treatment or even changes in lifestyle due to the zeitgeist.

Also the compiled data about reported overall health cannot be used to assess criterion validity. This variable is not an external criterion and the study design implies that it is not possible to assume causality.

Thus in this case the criterion validity cannot be chosen to confirm validity.

3.3.4 Face validity

Participants had the chance to give a feedback about the questionnaire. Only few participants used this option but these comments were still valuable. Still, it is not very substantial to base face validity on two or three statements. Nonetheless, it has to be mentioned that for some participants the purpose of the questionnaire was not clear enough. Others found the questionnaire manipulating by trying to draw peoples´ attention towards the online tools by presenting the very detailed items about the different components and contents of the campaign.

Also the detailed questions made some participants unsure of anonymity.

Another aspect was that sometimes the answer categories were perceived as not fitting the questions well.

The length of the questionnaire was estimated to be around 20 minutes but due to the filtering logic it could vary vastly. Additionally, the survey tool could not handle the filtering system properly; participants received wrong information about how much of the test was already done. These problems probably contributed to the drop-out rate of almost 50%. The participants felt misinformed.

One more important aspect one participant mentioned was the correct use of gender wise language which fell from view during the test construction.

Also the item batteries with the prevention messages that were designed uniformly were perceived as tiring and could have caused participants to drop out. (Annex XVI)

3.4 Other quality criteria

Objectivity, reliability and validity are considered to be the essential quality criteria for goodness of test analyses. Objectivity is also considered to be necessary but not sufficient for reliability and reliability in turn is necessary but not sufficient for validity. (Pospeschill, 2010) Beside these, there are quality criteria that have to be considered. The criteria in this chapter help to retrieve representative and interpretable data.

3.4.1 Study design

First of all it has to be decided if the study design fits the research questions.

The questionnaire about the IWWIT campaign should investigate how the target group perceives the campaign and if they benefit in terms of HIV/STI prevention. It can be classified as a cross-sectional study. At one point data about a certain population is gathered. The study design allows to produce individual data that helps to acquire knowledge about existence and frequency of characteristics in the study population. It is possible to generate hypotheses about associations by correlating variables but it is impossible to say which variable cause´s changes in the other. (Kreienbrock et al., 2012) For investigating target group specificity the study design is appropriate. Regarding benefit it is ambivalent. Partially the snapshot which a cross-sectional study presents is sufficient. Correlations between the factors of the behavioural model are possible and conclusions like people with a higher reported

self-esteem are more likely to speak with friends and sexual partners about prevention issues, can be drawn. Yet, correlation analyses are prone to find associations when in reality there is no association. It is solely a statistical calculation without any contentual meaning. (Kreienbrock et al., 2012)

A cross-sectional study can also provide insight of how much of explained variance in a variable can be connected to certain other variables. This was done using a regression technique. For interpretation and drawing conclusions it has to be kept in mind that after all it is not possible to establish cause and effect chains. There is no knowledge about which factor caused participants to behave according to prevention messages. To support causality hypothesis one has to consider temporality, meaning, the appearance of one factor has to follow the other. (Bradford Hill, 1965) So statements about the campaign causing more HIV/STI preventive behaviour there cannot be made.

3.4.2 Scales

The variables are also mainly of non-metric character. Rating scales produce ordinal scales which in fact do not fit a lot of analyses techniques. It is arbitrary how each individual interprets for example the distance between “trifft voll und ganz zu” and “trifft eher zu”. Categories like that are only able to distinct between intensities of characteristics but not the extent of the differences. (Pospeschill, 2010) Yet, often they get translated into interval scales that fit analyses better. One has to keep this problematic nature for interpretation of results in mind. (Bühner, 2006) However, for mere descriptive analyses nominal and ordinal scales are sufficient.

3.4.3 Bias

Another very comprehensive aspect for quality of test analyses is controlling and eliminating possible biases. Biases like interviewer bias or social desirability were already dealt with in objectivity analysis. Yet, a lot of other biases could potentially have influenced the data. First of all there is selection bias. As users of online networks are the target group it can be assumed that the selection of the study sample represents the intended population well. (Jelke, 2009) Also, that most of the participants were required from dating network channels fits the intended population. As a possible selection bias the drop outs have to be analysed, as well. This was

already suggested within the face validity analysis. Through analysing regularities in drop outs this problem was addressed. However, the chart about the question participants would drop out did not reveal any particular item. It was assumed beforehand that some items could be too personal or too sensitive. It rather seems that the length of the whole survey caused more than 50% of participants to quit participating at some point. (Annex XVII) This may have reinforced the selection bias concerning the group of volunteers. Persons who participate in health related surveys are more likely motivated to engage with health and prevention topics than the people who are not in the study. That biases representativeness. This bias is very hard to control especially in online surveys where everything is anonymous and the researchers do not have the advantage of addressing people individually.

Recall bias is another potential source of flaw. There are some questions that request participants to recall their behaviour, events or incidences in periods extended to about a year ago. Recalling events of such a lengthy time are of course critical but the items were about rather remarkable events like participating in HIV-tests, recognising a STI or unprotected sex with people with unknown HIV-status. (Bühner, 2006)

3.4.4 Economical and ethical criteria

In terms of economic efficiency, utility and reasonability of the questionnaire several things have to be mentioned. Evaluating measures of prevention is, of course, an indispensable part of good practice (Kooperationsverbund Gesundheitliche Chancengleichheit, 2015). The aims that were formulated for the questionnaire were precise but during implementation it became evident that an extensive amount of questions would emerge. The three online tools are very diverse in aims, users and technical execution which resulted in having basically three catalogues of questions for only the first part of the survey. The second part and the demographics were also rather detailed. Utility, the adding of additional knowledge to improve the tools, would argue in favour of having all the items but with regards to reasonability, it would mean burdening participants to spend extensive time filling in the questionnaire. There is also the danger of burdening the participants emotionally, considering the sensible subjects like HIV-status, sexual behaviour or substance use. However, it is also

ethical to broaden the knowledge about the target group which will result in more specific measures that reach the people who are in need the most.

Having all this detailed data bears the duty to preserve anonymity and a sensible handling. Results have to be prohibited from being used in a harmful way for participants or certain groups of participants. It was assured that no IP-addresses were recorded and no one could be traced back. Preventing the data from being used in a harmful way is a long term goal.

4 Discussion

Upon completion of the quality of test analyses there are several things to discuss. Main results will be interpreted firstly for the test as an entity and then more detailed with reference to the several parts, the “target group specificity”, “HIV/STI prevention” and “demographics and additional items”.

4.1 Overall test quality

There are some findings holding true for all parts of the questionnaire which are summarised in the following chapter.

Considering the findings of objectivity the quality standards are met, disregarded the interpretation process. An online questionnaire with closed answers is by nature designed to be highly objective. Therefore, objectivity is an important criterion but for the particular questionnaire in this thesis not as crucial as the other criteria.

Reliability and validity analyses showed the potential to be guidelines on deciding which items to delete or revise and leading to a slimmer more focused version. The length of the questionnaire was already mentioned in Chapter 1.4.2 as a limitation for the instrument. This is still true, considering the fact, that all the questions were part of the final version that the participants had to work through. Comprehending the development of a questionnaire, it is reasonable to include a variety of questions. (Rost, 2004) The aims had to be targeted, a world of items needed to be selected and, as in the case of this questionnaire, items of former studies had to be adapted. So, already the precedent step for reliability and validity analyses the item difficulty

index calculations, showed the opportunity to reduce the amount of items that needed to be examined more precisely. Almost a third of the items should be excluded because of unfitting item difficulty index. Revision would be needed if the questionnaire is going to be used again and some items seem to be inevitable to display the underlying theoretical considerations.

The data set that was used to perform all the analyses was already analysed in terms of outliers, inconsistency and incompleteness. Yet, further item descriptive analyses showed the problems resulting from the filtering technique. The high numbers of missing “question not asked” posed difficulties in analysing reliability and validity. In some cases it resulted in extensive numbers of missing cases which made it impossible to precede the reliability calculations. The theory-led solution of including the missing cases as lowest or highest category made it none-the-less possible to do the calculations. Still, it limits the conclusiveness of Cronbach´s Alpha which is best for items with an even or normal distribution (Sheng et al., 2012). Recoding produced high peaks in the bottom or top category of several items. That was revealed in the repeated item descriptive analysis. Normal distribution could not be granted in most of the items before the recoding and afterwards, the bottom or top accumulations overlaid the other data. The critical point is to keep in mind that normal distribution is a precondition for almost every calculation of test quality. The most incongruous data was already excluded in the analysis step of item difficulty index, so reliability and validity analyses were made using the barely normal or even distributed data. Only 28 of the 111 remaining items could be considered to have a normal or even distribution.

During the development phase, the items were theoretically derived and allocated to item batteries which had equal scales in reliability and validity analyses. It was not always possible to allocate the items decisively. It appeared that sometimes there was an overlap or gap in definition. The aspect of overlapping of categories in both parts of the questionnaire entails problems in reliability as well as in construct validity analyses. The scales are neither extensively consistent nor distinct which causes imprecise interpretation of results.

Furthermore, two categories had to be divided because there were still too many items which would cause artificially high Cronbach´s Alpha values and bias the consistency results. (Field, 2013)

As said before, there are many different approaches towards analysing validity and the researcher has to choose which of them fit the purpose of the instrument the best. This should be a practical decision. For this questionnaire content validity, construct validity and face validity were focused.

The content validity analysis showed that there are many sub-goals. Assessing the target groups opinion about the campaign, broadening knowledge about the target group, trying to create trends out of data in comparison to other surveys or trying to establish cause and effect chains. These are a lot of requirements for one questionnaire and make it difficult to hold up the overview. The more there is to handle the more possibilities emerge for flaws to get into the instrument. (Kirchhoff, 2010) Also the overlapping of categories can be ascribed to the multitude of sub-goals. To argue theoretically about the items contribution to meet the aims of the survey, it had to be divided into three categories and these will be looked at in greater detail in the following chapters.

Apart from that, the inference statistical analyses of construct validity presented lots of leverage points for improvement, too. The overlapping of categories which was thematised earlier could very likely have caused the difficulties in construct validity analyses. There were items that correlated only very weakly with the others and some even in a non-significant manner as the correlation matrices showed. Bearing in mind the tendency of producing stronger significance with big sample sizes, that has to be rated critical for construct validity. Also, as seen before in reliability analyses, if the data does not meet the requirements of preconditions the calculations are made on assumptions that the data cannot prove to be true. The EFA and CFA analyses required interval scaled items and that was circumvented by treating the ordinal scales as interval scales. Often times the statistical analyses are done despite this fact. Eventually, EFA and CFA could not confirm high construct validity.

Face validity was based on the feedback of participants and should be noted and included in revising processes. If face validity is rather weak, dropout rates will be

expectedly higher. Dropouts are always biasing the representativeness and should be avoided. Considering the high dropout rate of around 50%, (Chapter 1.1.4.2) face validity cannot be rated to be sufficient.

Quality criteria that evaluate which aims can be reached with the chosen study design, the handling of biases and economical and ethical reasoning showed strengths and limitations. According to the results the aim to find out about influencing factors through a behavioural model cannot be entirely met. The other aims of widening the knowledge about the target group and the evaluation of the IWWIT online tools could be met with the design and precautions that were established to avoid bias. Even so, the length of the questionnaire and the partially very intimate questions imply economic inefficiency and burdened the target group.

4.2 Test quality “HIV/STI prevention”

In this chapter reliability and validity will be discussed focusing on the scales of the “HIV/STI” prevention part of the questionnaire.

Reliability analysis for the “HIV/STI prevention” part of the questionnaire resulted in diverse findings for the subscales. As a lot of items were too easy respectively too hard, the initial theoretical item blocks were reduced. In one case this left a scale with only one item but the other scales were all reduced to a reasonable number so that inner consistency calculation would make sense. However, the next restriction appeared. The items were not interval scaled so Cronbach´s Alpha calculations could not be unconditionally accepted. It was theoretically possible to allocate values to the answer possibilities according to a more or less preventive desirable behaviour. Respectively meaning, that the riskier a certain behaviour category could be rated, the lower it would score. These translated scales may well be one of the reasons why Cronbach´s Alpha values were very low for many of the subscales. Crohnbach´s Alpha underestimates the inner consistency value in ordinal scales (Zumbo et al., 2007).

However, four of seven scales in the “HIV/STI prevention” part proved to be fairly reliable. Two scales, “viability” and “application”, had very low Craonbach´s Alpha values, below 0,5 which means that the single items do not correlate much with the

scale and therefore do not investigate the same underlying concept. The items in these batteries were identical only adjusted for different prevention messages. The nonetheless low inner consistency could be because the scale is not really a concept or a latent variable measured from different angles. That is contradicted by the scale about “knowledge” which produced acceptable values of inner consistency (0,761), even though it follows the same logic of asking the same question about different topics.

The reliability for “knowledge” and “risk perception” (0,753) is good and the included items seem to be able to display the inquired latent variable as item discriminating power is also good for all items. The scales that were drawn partly from the existing “Rosenberg self-esteem scale” and the “SF-36: emotional functioning” were still reliable, even at the highest level of all scales in “HIV/STI prevention” (>0,8). The short scale about communication competence seemed reliable although it may be incorrect to speak of a scale if there are only two items. Inner consistency calculations of substance and alcohol consumption as well as the items about sexual lifestyle showed that they are not reliable scales, at least in their current form. The items are very heterogeneous which could have resulted in the underestimation of consistency. (Prospeschill, 2010) Still, it could be reasonable and useful to include them in the questionnaire but not as part of a scale that tries to display the “causation model”. Otherwise, more items will have to be developed that would provide additional reliable scales.

The underlying theoretical construct was the basis of the validity assessment. It was developed mainly related to one model but completed with aspects of others to depict all dimensions of the campaign. Therefore the theoretical reasoning is patchy but, all in all, the construct is solid concerning the current knowledge about factors influencing preventive behaviour and health. Initially all components of the “HIV/STI reduction” part of the “causation model” were operationalised. On the other hand, the “social and emotional well-being” component of health was marginalised and only partly adapted. Moreover, the items that should fill the features with data are sometimes not precise or exhaustive enough to capture the intended defined variable. Also considering the fact that several items should be eliminated because of the reliability analysis, the remaining items will not be able to test preventive behaviour according to the “causation model”. The empty cells in the matrix of Table

16 show that one scale should be eliminated completely and a second only consisted of one item.

	Ich habe das (auch) auf iwwit.de gelesen oder gesehen.	„Ich finde das sehr gut (und richtig).“	Ich war in den letzten 12 Monaten in einer Situation, in der ich das hätte umsetzen können.	Da wäre bzw. ist die Umsetzung leicht möglich gewesen.	Wie oft haben Sie das umgesetzt?
Botschaft 1 (Nutzung Kondom)	X				X
Botschaft 2 (Test vor ungeschütztem Sex)	X			X	X
Botschaft 3 (Impfung Hepatitis)	X				X
Botschaft 4 (Test auf HIV und Syphilis)	X			X	X
Botschaft 5 (Im Zweifel zum Arzt)	X				X
Botschaft 6 (Sex-Unfall > PEP)	X			X	X
Botschaft 7 (Info über STIs an Partner)	X			X	X
Botschaft 8 (keine Drogen mischen)	X			X	X
Botschaft 9 (Drogen portionieren)	X	X		X	X

Table 16: Matrix of messages and remaining items in the questionnaire

In terms of construct validity, the partially adapted scales (Rosenberg self-esteem scale, SF-36: emotional functioning, parts of EMIS and SMA studies) were solid.

For HIV/STI prevention construct validity can be rated to be more important than for the other parts of the questionnaire. The impact of attitudes on behaviour is the important factor and a theory exists about how the items and scales are related. Yet, the chosen method of exploratory factor analysis could not reduce dimensions in the data and produce interpretable results. In addition confirmatory factor analysis that tested the model fit of the assumed relations of the scales was not promising. If the purpose of the results should be to predict where participants are located in terms of preventive behaviour according to their answers in attitudes, the items and the construct have to be enhanced.

The only partially included scales of the social and emotional well-being aspect of the “causation model” should also be mentioned. The DAH intends to create a more health promoting environment where the easy choice is the healthy choice (WHO,

1986) and HIV/STI prevention should be more comprehensive than focusing merely on behavioural aspects. The aspects dealing with social and emotional well-being are part of the campaign and should be evaluated along with the other components in order to retrieve a conclusive picture.

Concerning the analysis of criterion validity it would be more important to validate the construct of the “causation model” with an external criterion or the findings of comparable tests. Interpreting data based on inconclusive theoretical assumptions about interaction of factors is ineffectual. However, in practise, finding or constructing evidently valid external criteria is resources consuming so the considerations about which aspects of validity are included should be of practical nature. Therefore it is viable to skip criterion validity.

4.3 Test quality “target group specificity”

As previously stated, the categories of the “target group specificity” part had to be subdivided. All of the subscales showed high Cronbach´s Alpha values and can be considered as reliable to display the intended latent variables of “target group specificity” without measurement errors. All scales had values above 0,80. Deleting the variables that had low item discriminating power could raise the inner consistency further. These variables were only two for “perceived quality of information” and “delivery channel” and one for “perceived value”. The items with low item discriminating power were the ones about the Health Support which also caused the initial high numbers of missing cases. To have a thorough assessment of all online tools, one can argue in favour of keeping them in the questionnaire. It also has to be kept in mind that a lot of items were already deleted due to a low item difficulty index. It may be necessary to build up new scales to cover all aims. Additionally, one could have a closer look at the excluded items and decide if any of them are essential for an even more comprehensive picture in which case they should be revised and included again. For displaying the categories of McGuire, the remaining items are sufficient as the reliability analyses suggest. Even so, Cronbachs´ Alpha values at such high levels could also indicate redundancy. The items could be too similar and do not add more explained variance in the scale. (Field, 2013)

Dealing with the “missing - question not asked” had an even higher impact in this part of the questionnaire than in the “HIV/STI prevention” part. The online tools of the campaign were only familiar to very few participants. It was possible to count these missing cases as “target group not reached” and proceed with the analyses. Yet, it limits the value of the Cronbach´s Alpha calculation and one has to bear this in mind for interpretation and drawing conclusions for action.

The “target group specificity” part was based on operationalised features for a good health campaign and it only has to be shown that the chosen items are representative for the possible item-world. The item catalogue is very comprehensive and variable so that a full picture of the target groups´ opinion and perception of the IWWIT online tools emerges. The aim of assessing the online tools for their appeal on the defined group of men who have sex with men was met. However, the category “intended audience” had potentially overlapped with all three other categories. There are some items that could have been excluded because of, for instance, redundancy, which the item reliability analyses indicated as well.

The validity of the four “target group specificity” categories based on McGuire could not be supported by the exploratory factor analyses. The emerging factors, however, could be interpreted content wise. Testing the newly emerged factors with the confirmatory method was again inconclusive. The high correlations of items over a value of 0,85 could have caused the problems in the estimation of the model. (Pospeschill, 2010)

Basically, it has to be considered if it is important at all to test construct validity in terms of target group specificity. Content validity can be rated as more important for that part of the questionnaire. The item world has to be able to display a conclusive picture about participants´ opinions and not necessarily verify a construct.

4.4 Test quality additional items

Concerning demographics, they were raised very comprehensively which was due to the request to compare the results to former questionnaires. From that viewpoint the content is valid. However, referring to face validity, it would be better to reduce it to some key aspects, as participants would feel that their anonymity is respected and the item catalogue would be reduced. Considering formal aspects of content validity which is also related to objectivity, the items predominantly meet the requirements. As these items do not represent operationalised or theoretical constructs and therefore reliability analyses and construct validity analysis are not applicable.

5 Conclusion and recommendation

The scope of this work was to analyse the test quality of a questionnaire about online tools of a HIV and other STI prevention campaign launched by the DAH. The study population, which is men who have sex with men, is not well-known in its entirety. The data had already been collected, analysed and interpreted when the quality analyses of this thesis started. Yet, putting results into perspective and identifying weak spots is still important, particularly if the questionnaire should be used again.

Analysed were objectivity, reliability, validity and some more measuring qualities that support avoiding biases. Results are discussed in detail in chapter 4.

As a conclusion for objectivity, it can be said that it is not the most important criterion to focus on in an online questionnaire. The researchers are not able to influence participants or report data in a biasing way. However, if items are implying social desirability or are suggestive, objectivity can still be violated. This is also part of content validity considerations and was found to not be the case in this questionnaire. In more technical terms, the items do follow certain rules like being neutral in tone and present answer categories that cover a vast variety such that no one feels forced to choose a category he/she cannot identify with. (Diekmann, 2010)

The length of the questionnaire is always a critical point (Kirchhoff, 2010), most of all for face validity and ethical and economical quality. An extensive pre-testing phase

helps to reduce the amount of items that were carefully selected and rated as invaluable for the questionnaire.

Reducing and revising the item pool is the main conclusion that can be derived from reliability and construct validity analyses. The analyses showed the potential to slim down the catalogue of questions by presenting hints to redundant items or items without substantial contribution to the examined theoretical construct. The item difficulty index indicated weaknesses in items ability to distinct high scoring participants from low scoring and suggests excluding them. Revising would be necessary in terms of an items´ ability to display scales (item discriminating power and Cronbachs´ Alpha). (Bühner, 2006) As also seen in the content validity analysis, there was sometimes a gap in definition and scales could be overlapping. Nonetheless, the scales of “target group specificity” are reliable whereas the scales of “HIV/STI prevention” predominantly are not able to measure the features without errors. Scales need to be built with revised or new items. Construct validity results also suggest that the items and scales are not able to reproduce the theoretically assumed relations.

Recollecting the good reliability values and validity results of the partially adapted scales which were already tested for quality, one could suggest using more of already existing and evaluated instruments/scales or using already tested underlying theoretical constructs. Combining elements of different psychological or behavioural theories can be necessary and reasonable but considering limited resources to investigate the reliability and validity of the new instrument, it may limit the usefulness. The problem of imprecise items could be addressed by creating a cluster of questions around one aspect and test different phrases to draw closer to the most accurate item and scale. However, that procedure would require several pre-testing rounds.

Furthermore, one has to keep in mind the restriction that the study design bears. The inference that preventive behaviour was influenced directly by the campaign cannot be made. Hence, to reduce the length, it would be an asset to spare the aim of evaluating participants´ individual benefit in the questionnaire. That aim could be focused on the interviews/ qualitative data that was planned to be collected

subsequently to the online-survey. Moreover, this data could be also used to enrichen the scales and the “causation model”.

Besides the aspect of gaps in definition and overlapping, the filtering technique was a biasing obstacle. In remembrance of the questionnaires length, filters are useful, not to speak of their necessity in terms of being sensitive towards for example HIV-status or not forcing anyone to answer questions about tools of the campaign they do not know. (Porst, 2008) Yet, it caused many not missing at random cases (NMRA) that needed to be handled. It is advisable to try to find another way of drawing a sample where more people are familiar with the tools, as missing cases in “target group specificity” part were more severe.

As stated before, the different possibilities to evaluate validity of a test do not have to be included entirely, whereas, reliability and objectivity are indispensable for test quality. The purpose of the test is to determine which validity criteria are important. For the “target group specificity” part it is more important to discuss the content than assessing construct validity. The purpose is solely to gather information about the target groups opinion and perception of the online tools. If the analyses would have taken part in the pre-testing phase, it would have been advisable to have as many items them in the questionnaire to then narrow down to the most valuable ones. Considering the possible world of items and the criteria that have to be met for a successful health campaign, it would also be possible to have different items in the questionnaire. These would, for example, ask for innovativeness, catchiness or the ability of the messages to float in one´s head. Yet, not everything can be included in a single questionnaire and the chosen items are defendable as shown in the content analyses.

In contrast to the first part, construct validity is vital for the “HIV/STI prevention” part. It ought to prove a theory about which factors are influencing preventive behaviour and therefore help to reduce HIV and other STIs. Hence, new and better fitting items have to be developed or even the theoretical construct, the “causation model”, has to be changed.

Of course it would be of better use to consider all possible problems beforehand in order to build good evidence based on reliable and valid data. Especially, because it is not possible to create the perfect construct and corresponding set of questions

from the beginning, it would be ideal to circle back and do analyses and adjustments more than one time. In many cases that is not viable considering the restriction on resources and the requirements of acting promptly. However one comprehensive pre-testing phase can be very helpful. Including the participants´ feedback can also provide a lot of valuable information for improvement, as the aspects that were discussed in face validity analyse, showed.

Circling back to Porst who pled insistently for pre-testing in his course book, he proved to be right citing Sudmann et al. (1982): “Even after years of experience, no expert can write a perfect questionnaire [.]”, hence “[if] you don´t have the resources to pilot test your questionnaire, don´t do the study.” (Porst, 2008)

6 Limitations of the thesis

Approaching the scope of this thesis, a lot of decisions had to be made in the different states of the working process. That is necessary to handle the aims and narrow them down to a manageable scope. However, decisions are by nature limiting factors. Choosing to follow one path, respectively selecting one method and dismissing another, results in neglecting possibly superior proceedings.

In this chapter final deliberations about limitation for this thesis will be done.

Firstly, there is the preparation of the data for analyses. The answer categories of the items were nominal and ordinal scaled but for analysis it was handled like interval scaled data. These translated scales may well be one of the reasons why Cronbach´s Alpha values were very low for many of the subscales. Crohnbach´s Alpha underestimates the inner consistency value in ordinal scales. (Zumbo et al., 2007) Other methods, like for instance the Weighted Least Squares Means and Variance Adjusted (WLSMV)-Algorithm (Geiser, 2011), could have been a more adequate fit for the data. Concerning the precondition for items in Cronbach´s Alpha calculations to have normally but at least evenly distributed data (Field, 2013), this limitation becomes slightly moderated by the large sample size. (Sheng et al., 2012) A more advanced solution could be to substitute the values with their logarithmic values or to use transformed z-values. (Prospeschill, 2010)

The handling of the not missing at random (NMAR) cases is also debatable. Theoretically it makes sense to include these cases, because they are indeed not missing at random and would systematically bias the analysis. It is understandable that for the “target group specificity” part where the NMAR cases would be of greater impact, one could summarise the tools items and build scales in which a NMAR is counted as zero. Never the less, it was not possible to have only identical items for each tool as they are different in aims and execution.

The item difficulty index calculations were done with the original data before the recoding. That is the most accurate approach, as the recoding and including of NMAR cases altered the data substantially. Item difficulty index analysis should be followed by a discussion about including items because of their necessity for reaching the aims, despite their insufficient statistical results.

Furthermore, the substantially altering of data has to be kept in mind. Even if the new variables are not used for the actual analysis of the questionnaire and solely for quality of test analysis, every altering step bears the potential of biasing the results.

It also has to be mentioned that a more detailed expert discussion or rating would have contributed to an extended comprehensive content validity. The expert rating of the pre-testing phase was more concerned with the factual knowledge then with the analysis of the representativeness and fit of the items according to their underlying theories and constructs. Examining content validity via theoretical reasoning without peer discussion is nonetheless viable if it is thoroughly done and replicable for everyone. Of course, the basic rule to do the analyses as openly visible as possible has to apply, too. Every reader should be able to do his or her own rating and appraisal and even come to a different conclusion. Yet, superior quality is most certainly achieved in round table sessions.

The reliability and construct validity analyses were conducted with scales that contained items which could have possibly fit also into other scales. Decisions had to be made for allocating the overlapping items. A different mapping could have resulted in higher reliability and may also have confirmed construct validity.

For exploratory and confirmatory analyses, it would have been of greater quality to have a second sample to avoid bias that may distort the results with repetition. It is

not necessary to do a second round of data collection, as it would have been viable to split the sample. The large sample size would have supported that approach.

Construct validity which would be important for the behavioural background of “HIV/STI prevention” has not been conducted. It was not possible to retrieve any data about valid comparable questionnaires or external features that would display without a doubt the intended ones in the “causation model” from literature research. It would have been more accurate to put more effort into the research, maybe contacting research teams and authors of former studies to provide more insights. Yet, primarily due to limited time resources that could not be accomplished.

As the different aspects of quality complement and depend on each other creating a qualitative sophisticated test has to be a cyclical process. After the reliability analyses showed poor results for scales it would have been necessary to go back to work on the content. Also, the poor results of construct validity would have required revising the allocation of items and conducting reliability analyses once more.

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8 Annex - Table of Content

I. Questionnaire

Warum wird diese Umfrage durchgeführt?
Die Deutsche AIDS-Hilfe e.V. ist stets bemüht die Gesundheit ihrer Zielgruppe bestmöglich zu fördern. Dies gelingt nur, wenn wir wissen, was Sie brauchen und was Sie sich wünschen.
Aus diesem Grund werden Angebote wie die IWWIT-Webseite, die IWWITFacebook-Seite und der Health Support regelmäßig evaluiert.

Ihre Meinung zu den Themen, den Inhalten und zur Aufmachung der aktuellen Kampagne ist uns wichtig!

Es würde uns sehr freuen, wenn Sie sich 20-30 Minuten Zeit nehmen um den ausführlichen Fragebogen zu beantworten.

Wer wird gebeten teilzunehmen?
Zielgruppe dieser Befragung sind Männer, die Sex mit Männern haben, ab einem Alter von 16 Jahren.

Datenschutz
Ihre Angaben werden anonym erhoben. Wir garantieren Ihnen weder die IP-Adresse Ihres Computers zu erfassen noch Informationen über Sie zu erheben, die Ihre Identifikation ermöglichen.

Ergebnisse
Die Ergebnisse der Befragung werden voraussichtlich im Herbst 2015 veröffentlicht. Sie können Hinweise auf die Veröffentlichung auch per E-Mail erhalten.

Machen Sie es sich leicht
Die Umfrage passt sich an Ihr Browserfenster an. Wählen Sie eine Größe, die Ihnen die Beantwortung leicht macht. In vielen Browsern können Sie die Schrift mir der Tastenkombination „Strg" bzw. „Cmd" und „+" vergrößern.
Manche Fragen sind mit einem *Sternchen gekennzeichnet. Bei diesen Fragen ist aus technischen Gründen eine Antwort notwendig.

Vielen Dank, Ihre Deutsche AIDS-Hilfe

***1. Sind Sie...**

- ◯ Ein Mann
- ◯ Eine Frau
- ◯ Trans (Mann zu Frau)
- ◯ Trans (Frau zu Mann)
- ◯ Oder bevorzugen Sie eine andere Definition
- ◯ Keine Angaben

***2. Zu wem fühlen Sie sich sexuell hingezogen?**

- ◯ Ausschließlich zu Männern
- ◯ Überwiegend zu Männern
- ◯ Zu Männern und Frauen gleichermaßen
- ◯ Überwiegend zu Frauen und manchmal zu Männern
- ◯ Ausschließlich zu Frauen
- ◯ Zu anderen
- ◯ Möchte ich nicht angeben

Diese Umfrage richtet sich an Männer. Sie können den Fragebogen gerne weiterlesen und bis zum Ende ausfüllen, jedoch werden wir Ihre Angaben nicht nutzen.

Willkommen zu unserer Umfrage! Bitte beachten Sie, dass nicht alle Fragen Ihre persönliche Situation widerspiegeln. Wenn Sie denken, dass eine Frage nicht auf Sie zutrifft, lassen Sie sie einfach aus und fahren mit der nächsten fort.

3. Ich interessiere mich sehr für folgenden Themen:

	Trifft voll und ganz zu	Trifft eher zu	Trifft eher nicht zu	Trifft gar nicht zu
Emotionales Wohlbefinden	◯	◯	◯	◯
Safer Sex	◯	◯	◯	◯
Teste dich auf HIV, Syphilis & Co.	◯	◯	◯	◯
Schutz durch Therapie	◯	◯	◯	◯
Partnerschaft und Beziehung	◯	◯	◯	◯
Drogen	◯	◯	◯	◯
Ehrenamt ("Mach mit")	◯	◯	◯	◯
Sex 4 Cash ("Käuflicher Sex")	◯	◯	◯	◯
HIV und Arbeit	◯	◯	◯	◯
Schwule Identität	◯	◯	◯	◯

Diese Umfrage richtet sich an Männer, die mit Männern Sex haben. Sie können den Fragebogen gerne weiterlesen und bis zum Ende ausfüllen, jedoch werden wir Ihre Angaben nicht nutzen.

5. Die Kampagne ICH WEISS WAS ICH TU ist auf verschiedene Weise in der Szene präsent. Haben Sie das Folgende schon einmal wahrgenommen?

	Habe ich schon häufig gesehen	Habe ich manchmal gesehen	Habe ich noch nie gesehen/kenne ich nicht
Anzeigen mit Rollenmodellen	◯	◯	◯
Plakate von ICH WEISS WAS ICH TU	◯	◯	◯
Berichte in der schwulen Presse über ICH WEISS WAS ICH TU	◯	◯	◯
Berichte im schwulen Radio oder Fernsehen über ICH WEISS WAS ICH TU	◯	◯	◯
Berichte im Internet über ICH WEISS WAS ICH TU	◯	◯	◯
Internetbanner von ICH WEISS WAS ICH TU	◯	◯	◯
Teams und Aktionsstände von ICH WEISS WAS ICH TU auf schwulen Veranstaltungen und in der schwulen Szene	◯	◯	◯
CSD-Wagen von ICH WEISS WAS ICH TU	◯	◯	◯

6. Haben Sie die IWWIT-Kampagne im Zusammenhang mit einer örtlichen Aids-Hilfe wahrgenommen? (Mehrfachantworten möglich)

- ☐ Nein
- ☐ Ja, auf der Webseite der örtlichen Aids-Hilfe
- ☐ Ja, ich habe von der örtlichen Aids-Hilfe Cruising Packs erhalten
- ☐ Ja, ich habe von der örtlichen Aids-Hilfe Postkarten erhalten
- ☐ Ja, ich habe von der örtlichen Aids-Hilfe Aufkleber erhalten
- ☐ Ja, in Broschüren der örtlichen Aids-Hilfe
- ☐ Ja, im persönlichen Gespräch
- ☐ Ja, anders

7. Wie bewerten Sie die Kampagne ICH WEISS WAS ICH TU?

- ◯ Sehr gut
- ◯ Eher gut
- ◯ Eher nicht gut
- ◯ Gar nicht gut

ICH WEISS WAS ICH TU
www.iwwit.de

***4. Haben Sie schon einmal von der Kampagne ICH WEISS WAS ICH TU (IWWIT) gehört oder gelesen?**

- ◯ Ja
- ◯ Nein
- ◯ Weiß nicht/Keine Angabe

>>Wenn keine anderen verlässlichen Schutzmaßnahmen abgesprochen sind, soll man immer ein Kondom benutzen.<<

***8. Das ist mir bekannt.**

- ◯ Ja
- ◯ Nein

Im Folgenden stellen wir Ihnen einige verhaltensbezogene Botschaften vor, bitte beantworten Sie einige Fragen dazu.

>>Wenn keine anderen verlässlichen Schutzmaßnahmen abgesprochen sind, soll man immer ein Kondom benutzen.<<

12. Da wäre bzw. ist die Umsetzung leicht möglich gewesen.

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

13. Wie oft haben Sie das umgesetzt?

- ◯ Immer
- ◯ Fast immer
- ◯ Manchmal
- ◯ Selten
- ◯ Nie

>>Wenn keine anderen verlässlichen Schutzmaßnahmen abgesprochen sind, soll man immer ein Kondom benutzen.<<

9. Ich habe das (auch) auf iwwit.de gelesen oder gesehen.

- ◯ Ja
- ◯ Nein
- ◯ Ich bin mir nicht sicher

10. Ich finde das sehr gut (und richtig).

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

***11. Ich war in den letzen 12 Monaten in einer Situation, in der ich das hätte umsetzen können.**

- ◯ Ja, einmal.
- ◯ Ja, mehrmals.
- ◯ Nein

>>Vor dem ungeschützten Sex in einer Beziehung sollen sich die Partner erstmal auf HIV testen lassen.<<

15. Ich habe das (auch) auf iwwit.de gelesen oder gesehen.

- ◯ Ja
- ◯ Nein
- ◯ Ich bin mir nicht sicher

16. Ich finde das sehr gut (und richtig).

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

17. Meine Freund und Bekannten akzeptieren das.

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

***18. Ich war in den letzen 12 Monaten in einer Situation, in der ich das hätte umsetzen können.**

- ◯ Ja, einmal.
- ◯ Ja, mehrmals.
- ◯ Nein

>>Vor dem ungeschützten Sex in einer Beziehung sollen sich die Partner erstmal auf HIV testen lassen.<<

***14. Das ist mir bekannt.**

- ◯ Ja
- ◯ Nein

>>Gegen Hepatitis A und B soll man geimpft sein.<<

***21. Das ist mir bekannt.**

- ◯ Ja
- ◯ Nein

>>Vor dem ungeschützten Sex in einer Beziehung sollen sich die Partner erstmal auf HIV testen lassen.<<

19. Da wäre bzw. ist die Umsetzung leicht möglich gewesen.

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

20. Wie oft haben Sie das umgesetzt?

- ◯ Immer
- ◯ Fast immer
- ◯ Manchmal
- ◯ Selten
- ◯ Nie

Mit den folgenden Fragen möchten wir erfahren, inwieweit Sie die Webseite der IWWIT-Kampagne nutzen und wie sie Ihnen gefällt.

***26. Haben Sie schon einmal die Webseite iwwit.de besucht?**

- ◯ Ja, einmal
- ◯ Ja, mehrfach
- ◯ Nein, ich habe aber schon davon gehört
- ◯ Nein, ich habe davon noch nie gehört
- ◯ Wieß nicht / keine Angabe

>>Gegen Hepatitis A und B soll man geimpft sein.<<

22. Ich habe das (auch) auf iwwit.de gelesen oder gesehen.

- ◯ Ja
- ◯ Nein
- ◯ Ich bin mir nicht sicher

23. Ich finde das sehr gut (und richtig).

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

24. Die Umsetzung ist leicht möglich.

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

25. Ich bin gegen Hepatitis geimpft.

- ◯ Ja, gegen Hepatitis A
- ◯ Ja, gegen Hepatitis B
- ◯ Ja, gegen Hepatitis A und B
- ◯ Nein, ich bin nicht geimpft
- ◯ Weiß nicht genau

31. Fanden Sie iwwit.de hilfreich?

- ◯ Sehr hilfreich
- ◯ Eher hilfreich
- ◯ Eher nicht hilfreich
- ◯ Gar nicht hilfreich

32. Im Folgenden geht es um den Eindruck, den Sie von iwwit.de haben. Inwieweit treffen die folgenden Aussagen Ihrer Meinung nach zu?

Klicken Sie bitte die Antwort an, die am ehesten Ihrer Meinung entspricht.

	Trifft voll und ganz zu	Trifft eher zu	Trifft eher nicht zu	Trifft gar nicht zu
Die Webseite ist sehr übersichtlich.	◯	◯	◯	◯
Ich finde mich auf der Webseite gut zurecht.	◯	◯	◯	◯
Die farbliche Gestaltung der Webseite ist angenehm.	◯	◯	◯	◯
Die Inhalte sind persönlich und authentisch.	◯	◯	◯	◯
Die Themen interessieren mich persönlich.	◯	◯	◯	◯
Einige Inhalte sind neu für mich.	◯	◯	◯	◯
Das Informationsangebot ist vielfältig.	◯	◯	◯	◯
Das Informationsangebot ist zu groß.	◯	◯	◯	◯
Es fehlen Informationen, die ich erwartet hätte.	◯	◯	◯	◯
Beim betrachten der Webseite mache ich mir Sorgen über meine Gesundheit.	◯	◯	◯	◯
Es macht Spaß, die Webseite zu durchstöbern.	◯	◯	◯	◯
Die Informationen auf der Webseite sind glaubwürdig.	◯	◯	◯	◯
Die Bilder auf der Webseite gefallen mir im Allgemeinen gut.	◯	◯	◯	◯

33. Nun geht es um die Texte auf der Webseite.

	Trifft voll und ganz zu	Trifft eher zu	Trifft eher nicht zu	Trifft gar nicht zu
Die Texte gefallen mir im Allgemeinen gut.	◯	◯	◯	◯
Die Texte sind gut verständlich.	◯	◯	◯	◯
Die Texte sind mir zu sexualisiert.	◯	◯	◯	◯
Die Texte sind mir zu brav.	◯	◯	◯	◯
Die Texte sind mir zu belehrend.	◯	◯	◯	◯
Die Texte sind hilfreich.	◯	◯	◯	◯

27. Wie sind Sie zum ersten Mal auf iwwit.de aufmerksam geworden? (Mehrfachantworten möglich)

- ☐ Über Anzeigen mit Rollenmodellen
- ☐ Über Berichte in Zeitungen/Zeitschriften
- ☐ Über Berichte, Erwähnungen im Internet
- ☐ Über ein Banner von ICH WEISS WAS ICH TU im Internet
- ☐ Über eine Befragung
- ☐ Auf einem CSD oder einer anderen Veranstaltung
- ☐ Über Freunde, Bekannte, Kollegen
- ☐ Anders

28. Wie oft haben Sie iwwit.de in den letzten 6 Monaten ungefähr besucht?

- ◯ Jeden Tag
- ◯ Jede Woche
- ◯ Jeden Monat
- ◯ Ca. 2-5 Mal
- ◯ Einmal
- ◯ Nie

29. Welche Gründe haben Sie bisher auf iwwit.de geführt? (Mehrfachantworten möglich)

- ☐ Konkrete Fragestellung
- ☐ Allgemeine Informationen gesucht
- ☐ Allgemeines Interesse
- ☐ Zufällig drauf gestoßen
- ☐ Zur Unterhaltung
- ☐ Andere Gründe

30. Wie bewerten Sie iwwit.de?

- ◯ - 1 - Sehr gut
- ◯ - 2 - Gut
- ◯ - 3 - Befriedigend
- ◯ - 4 - Ausreichend
- ◯ - 5 - Mangelhaft
- ◯ - 6 - Ungenügend

35. Auf der iwwit.de gibt es Videos, welche Interviews mit Experten zeigen.

Haben Sie sich eines/mehrere davon angesehen?

- ◯ Ja
- ◯ Nein
- ◯ Weiss nicht / keine Angabe

34. Wie gefällt Ihnen die Umsetzung folgender Themen auf iwwit.de? Bitte kreuzen Sie eine Zahl zwischen 1 und 6 an!

	Ist mir nicht aufgefallen/Kenn ich nicht	1 (sehr gut)	2	3	4	5	6 (sehr schlecht)
Safer Sex	◯	◯	◯	◯	◯	◯	◯
Teste dich auf HIV, Syphilis & Co.	◯	◯	◯	◯	◯	◯	◯
Schutz durch Therapie	◯	◯	◯	◯	◯	◯	◯
Partnerschaft und Beziehung	◯	◯	◯	◯	◯	◯	◯
Drogen	◯	◯	◯	◯	◯	◯	◯
Ehrenamt ("Mach mit")	◯	◯	◯	◯	◯	◯	◯
Sex 4 Cash	◯	◯	◯	◯	◯	◯	◯
HIV und Arbeit	◯	◯	◯	◯	◯	◯	◯

37. Auf der iwwit.de gibt es Filme mit Rollenmodellen.

Haben Sie sich einen/mehrere angesehen?

- ◯ Ja
- ◯ Nein
- ◯ Weiss nicht / keine Angabe

36. Die Interviews mit Experten...

	Trifft voll und ganz zu	Trifft eher zu	Trifft eher nicht zu	Trifft gar nicht zu
... gefallen mir im Allgemeinen gut.	◯	◯	◯	◯
... sind gut verständlich.	◯	◯	◯	◯
... sind mir zu belehrend.	◯	◯	◯	◯
... sind hilfreich.	◯	◯	◯	◯

39. Auf der iwwit.de gibt es Animationsclips zu Safer Sex und PEP (Postexpositionsprophylaxe) und Co.

Haben Sie sich einen/mehrere davon angesehen?

- ◯ Ja
- ◯ Nein
- ◯ Weiss nicht / keine Angabe

38. Die Filme mit den Rollenmodellen ...

	Trifft voll und ganz zu	Trifft eher zu	Trifft eher nicht zu	Trifft gar nicht zu
... gefallen mir im Allgemeinen gut.	◯	◯	◯	◯
... sind gut verständlich.	◯	◯	◯	◯
... sind mir zu sexualisiert.	◯	◯	◯	◯
... sind mir zu brav.	◯	◯	◯	◯
... sind mir zu belehrend.	◯	◯	◯	◯
... sind hilfreich.	◯	◯	◯	◯

41. Inwieweit treffen die folgenden Aussagen Ihrer Meinung nach zu?

	Trifft voll und ganz zu	Trifft eher zu	Trifft eher nicht zu	Trifft gar nicht zu
Die Webseite enthält nützliche Tipps zum Schutz vor HIV und anderen sexuell übertragbaren Infektionen.	◯	◯	◯	◯
Die Webseite enthält nützliche Tipps zum Leben mit HIV.	◯	◯	◯	◯
Die Informationen auf der Webseite haben mir schonmal geholfen, eine Entscheidung zu treffen.	◯	◯	◯	◯
Durch die Webseite und die Darstellung der Rollenmodelle bin ich (noch) offener genüber anderen Lebensstilen geworden.	◯	◯	◯	◯

42. Wann haben Sie zuletzt...

	Heute	In den letzen 7 Tagen	In den letzten zwei Monaten	Im letzten halben Jahr	Länger her	Noch nie
... mit Freunden und Bekannten über die Themen der IWWIT-Webseite gesprochen?	◯	◯	◯	◯	◯	◯
... Freunden und Bekannten Links zu Themen der Webseite geschickt und/oder ihnen diese über Facebook empfohlen?	◯	◯	◯	◯	◯	◯

40. Die Animationsclips zu Safer Sex und PEP und Co....

	Trifft voll und ganz zu	Trifft eher zu	Trifft eher nicht zu	Trifft gar nicht zu
... gefallen mir im Allgemeinen gut.	◯	◯	◯	◯
... sind gut verständlich.	◯	◯	◯	◯
... sind mir zu sexualisiert.	◯	◯	◯	◯
... sind mir zu brav.	◯	◯	◯	◯
... sind mir zu belehrend.	◯	◯	◯	◯
... sind hilfreich.	◯	◯	◯	◯

44. Folgen Sie der IWWIT Facebook-Seite, d.h. haben Sie die Posts abboniert?

- ◯ Ja
- ◯ Nein

45. Wie bewerten Sie die Facebook-Seite?

- ◯ - 1 - Sehr gut
- ◯ - 2 - Gut
- ◯ - 3 - Befriedigend
- ◯ - 4 - Ausreichend
- ◯ - 5 - Mangelhaft
- ◯ - 6 - Ungenügend

46. Haben Sie die IWWIT Facebook-Seite mit "Gefällt mir" gekennzeichnet?

- ◯ Ja
- ◯ Nein

47. Wann haben Sie zuletzt...

	Heute	In den letzen 7 Tagen	In den letzten zwei Monaten	Im letzten halben Jahr	Länger her	Noch nie
... einen Post der IWWIT Facebook-Seite geliked?	◯	◯	◯	◯	◯	◯
... einen Post geteilt?	◯	◯	◯	◯	◯	◯
... einen Post kommentiert?	◯	◯	◯	◯	◯	◯
... auf Links geklickt oder sind einem Verweis eines Posts gefolgt?	◯	◯	◯	◯	◯	◯

48. Inwieweit treffen die folgenden Aussagen Ihrer Meinung nach zu?

	Trifft voll und ganz zu	Trifft eher zu	Trifft eher nicht zu	Trifft gar nicht zu
Es gibt zu wenige oder zu selten Posts auf der IWWIT Facebook-Seite.	◯	◯	◯	◯
Die Posts auf der IWWIT Facebook-Seite interessieren mich.	◯	◯	◯	◯
Die Posts auf der IWWIT Facebook-Seite sind verständlich.	◯	◯	◯	◯
Die Posts auf der IWWIT Facebook-Seite sind zu sexualisiert.	◯	◯	◯	◯
Die Posts auf der IWWIT Facebook-Seite sind zu brav.	◯	◯	◯	◯
Beim Lesen der Posts auf der IWWIT Facebook-Seite mache ich mir Sorgen über meine Gesundheit.	◯	◯	◯	◯

Die folgenden Fragen beziehen sich auf die Facebook-Seite der IWWIT-Kampagne.

***43. Kennen Sie die Facebook-Seite der IWWIT-Kampagne (https://www.facebook.com/ICH.WEISS.WAS.ICH.TU)?**

- ◯ Ja
- ◯ Nein
- ◯ Weiss nicht / keine Angabe

Die nächsten Fragen beziehen sich auf den Health Support. Der Health Support bietet die Möglichkeit auf gayromeo/planetromeo mit ausgebildeten Health Supportern zu chatten.

***51. Haben sie schon mal vom Health Support der Deutschen AIDS-Hilfe gehört oder gelesen?**

- ◯ Ja
- ◯ Nein

49. Inwieweit stimmen Sie folgenden Aussagen zu?

	Trifft voll und ganz zu	Trifft eher zu	Trifft eher nicht zu	Trifft gar nicht zu
Die IWWIT Facebook-Seite ist glaubwürdig.	◯	◯	◯	◯
Die IWWIT Facebook-Seite ist hilfreich.	◯	◯	◯	◯
Auf der IWWIT Facebook-Seite fühle ich mich aufgehoben.	◯	◯	◯	◯
Die IWWIT Facebook-Seite enthält nützliche Tipps zum Leben mit HIV.	◯	◯	◯	◯
Die IWWIT Facebook-Seite enthält nützliche Tipps zum Schutz vor HIV und anderen sexuell übertragbaren Infektionen.	◯	◯	◯	◯
Ich habe über die IWWIT Facebook-Seite Kontakte zu anderen Nutzern geknüpft.	◯	◯	◯	◯
Durch die IWWIT Facebook-Seite bin ich (noch) offener genüber anderen Lebensstilen geworden.	◯	◯	◯	◯

50. Welche der folgenden Themen der Facebook-Posts interessieren Sie besonders? (Bitte kreuzen Sie maximal drei Themen an!)

- ☐ Gesundheit
- ☐ Antidiskriminierung HIV-Positiver
- ☐ Diskriminierung von Schwulen
- ☐ Gleiche Rechte für LGBTI* (Abkürzung für **L**esbian, **G**ay, **B**isexual, **T**rans, **I**ntersexual and all others)
- ☐ Homophobie
- ☐ Veranstaltungen

53. Wann haben Sie das letzte Mal mit einen Berater des Health Supports gechattet?

- ◯ Heute
- ◯ Höchstens eine Woche her
- ◯ Höchstens einen Monat her
- ◯ Höchstens 6 Monate her
- ◯ Länger her

54. Wie oft haben Sie den Health Support in den letzten 12 Monaten kontaktiert?

- ◯ 1 Mal
- ◯ 2-5 Mal
- ◯ 6-9 Mal
- ◯ Häufiger

55. Wie bewerten Sie den Health Support?

- ◯ - 1 - Sehr gut
- ◯ - 2 - Gut
- ◯ - 3 - Befriedigend
- ◯ - 4 - Ausreichend
- ◯ - 5 - Mangelhaft
- ◯ - 6 - Ungenügend

56. Inwieweit stimmen Sie folgenden Aussagen zu?

	Trifft voll und ganz zu	Trifft eher zu	Trifft eher nicht zu	Trifft gar nicht zu
Die Informationen des Health Supports fand ich sehr glaubwürdig.	◯	◯	◯	◯
Die Informationen des Health Supports fand ich sehr hilfreich.	◯	◯	◯	◯
Der Health Support ist gut zu erreichen.	◯	◯	◯	◯

***52. Haben Sie schon einmal mit einem Berater des Health Supports gechattet?**

- ◯ Ja
- ◯ Nein

Die nächsten beiden Fragen beziehen sich auf weitere Netzwerke und Dienste, die Sie nutzen.

59. Ich nutze die folgenden Webseiten, Netzwerke oder Dienste (Mehrfachantworten möglich):

- ☐ Myspace
- ☐ Facebook
- ☐ Tumblr
- ☐ gayromeo.com/planetromeo.com
- ☐ StayFriends
- ☐ nearox.com
- ☐ Foursquare/Swarm
- ☐ queer.de
- ☐ dbna.de
- ☐ Gaydar
- ☐ Hornet
- ☐ Scruff
- ☐ Twitter
- ☐ Yelp
- ☐ Instagram
- ☐ Google+
- ☐ Andere/weitere
- ☐ Ich nutze keine Netzwerke oder Dienste

57. Wegen welcher der folgenden Themen haben Sie den Health Support kontaktiert? (Mehrfachantwort möglich)

- ☐ Risikokontakt
- ☐ HIV Risiko bei Oralverkehr
- ☐ HIV Risiko ohne Oralverkehr
- ☐ Drogen
- ☐ PreP (Pre-Expositionsprophylaxe)
- ☐ PEP (Post-Expositionsprophylaxe)
- ☐ Leben mit HIV
- ☐ HIV Test
- ☐ HIV Therapie
- ☐ Beziehung
- ☐ Test auf sexuell übertragbare Infektionen (außer HIV)
- ☐ Therapie gegen sexuell übertragbare Infektionen (außer HIV)
- ☐ Schwule Gesundheit
- ☐ Schwule Identität
- ☐ Keine konkrete Frage/Neugier
- ☐ Andere konkrete Frage

58. Inwieweit treffen die folgenden Aussagen Ihrer Meinung nach zu?

	Trifft voll und ganz zu	Trifft eher zu	Trifft eher nicht zu	Trifft gar nicht zu
Der Chat ist ein gutes Medium, um Fragen zur Gesundheit zu stellen.	◯	◯	◯	◯
Der Berater hat sich Zeit genommen, mein Anliegen vollständig anzuhören.	◯	◯	◯	◯
Der Berater hat mein Anliegen verstanden.	◯	◯	◯	◯
Der Berater hat mich respektvoll behandelt.	◯	◯	◯	◯
Der Berater ist auf meine individuelle Situation eingegangen.	◯	◯	◯	◯
Der Berater hatte das nötige Fachwissen, um meine Fragen zu beantworten.	◯	◯	◯	◯
Insgesamt bin ich mit dem Ergebnis der Beratung sehr zufrieden.	◯	◯	◯	◯
Aus einer anderen Quelle habe ich nützlichere Informationen zu meiner Frage erhalten als beim Chat mit dem Health Support.	◯	◯	◯	◯
Es wäre gut, wenn ich mit einem Berater, z.B. per Telefon, sprechen könnte.	◯	◯	◯	◯
Es wäre gut, wenn ich mit einem Berater per Videokonferenz sprechen könnte.	◯	◯	◯	◯
Es wäre gut, wenn es Webinare, also online live Informationsveranstaltungen mit Diskussionen, zu verschiedenen Themen der ADIS-Hilfe geben würde.	◯	◯	◯	◯

>>Wenn man sexuell aktiv ist, soll man sich regelmäßig auf HIV und Syphilis untersuchen lassen.<<

61. Ich habe das (auch) auf iwwit.de gelesen oder gesehen.

- ◯ Ja
- ◯ Nein
- ◯ Ich bin mir nicht sicher

62. Ich finde das sehr gut (und richtig).

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

63. Meine Freund und Bekannten akzeptieren das.

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

64. Regelmäßige Untersuchungenauf HIV und Syphilis halte ich für leicht realisierbar.

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

65. Mein letzter Syphilis Test war...

- ◯ ... in den letzten 4 Wochen
- ◯ ... in den letzten 6 Monaten
- ◯ ... in den letzten 12 Monaten
- ◯ ... in den letzten 5 Jahren
- ◯ ... vor mehr als 5 Jahren
- ◯ Ich habe noch keinen Test auf Syphilis gemacht.

Im Folgenden stellen wir Ihnen weitere verhaltensbezogene Botschaften vor, bitte beantworten Sie wieder ein paar Fragen dazu.

>>Wenn man sexuell aktiv ist, soll man sich regelmäßig auf HIV und Syphilis untersuchen lassen.<<

***60. Das ist mir bekannt.**

- ◯ Ja
- ◯ Nein

>>Bei Jucken oder Brennen am Schwanz oder Arsch, z.B. bei Geschwüren, Bläschen oder Ausschlag soll man zum Arzt gehen.<<

67. Ich habe das (auch) auf iwwit.de gelesen oder gesehen.

- ◯ Ja
- ◯ Nein
- ◯ Ich bin mir nicht sicher

68. Ich finde das sehr gut (und richtig).

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

***69. Ich war in den letzen 12 Monaten in einer Situation, in der ich das hätte umsetzen können.**

- ◯ Ja, einmal.
- ◯ Ja, mehrmals.
- ◯ Nein

>>Bei Jucken oder Brennen am Schwanz oder Arsch, z.B. bei Geschwüren, Bläschen oder Ausschlag soll man zum Arzt gehen.<<

***66. Das ist mir bekannt.**

- ◯ Ja
- ◯ Nein

>>Nach einem Safer-Sex-Unfall soll man versuchen durch eine PEP (Post-Expositions-Prophylaxe) eine HIV-Infektion noch zu verhindern.<<

***72. Das ist mir bekannt.**

- ◯ Ja
- ◯ Nein

>>Bei Jucken oder Brennen am Schwanz oder Arsch, z.B. bei Geschwüren, Bläschen oder Ausschlag soll man zum Arzt gehen.<<

70. Da wäre bzw. ist die Umsetzung leicht möglich gewesen.

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

71. Wie oft haben Sie das umgesetzt?

- ◯ Immer
- ◯ Fast immer
- ◯ Manchmal
- ◯ Selten
- ◯ Nie

>>Nach einem Safer-Sex-Unfall soll man versuchen durch eine PEP (Post-Expositions-Prophylaxe) eine HIV-Infektion noch zu verhindern.<<

76. Da wäre bzw. ist die Umsetzung leicht möglich gewesen.

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

77. Wie oft haben Sie das umgesetzt?

- ◯ Immer
- ◯ Fast immer
- ◯ Manchmal
- ◯ Selten
- ◯ Nie

>>Nach einem Safer-Sex-Unfall soll man versuchen durch eine PEP (Post-Expositions-Prophylaxe) eine HIV-Infektion noch zu verhindern.<<

73. Ich habe das (auch) auf iwwit.de gelesen oder gesehen.

- ◯ Ja
- ◯ Nein
- ◯ Ich bin mir nicht sicher

74. Ich finde das sehr gut (und richtig).

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

***75. Ich war in den letzen 12 Monaten in einer Situation, in der ich das hätte umsetzen können.**

- ◯ Ja, einmal.
- ◯ Ja, mehrmals.
- ◯ Nein

>>Wenn man an HIV oder einer anderen sexuell übertragbaren Infektion erkrankt ist, soll man möglichst viele Partner informieren, damit sie sich auch untersuchen lassen.<<

79. Ich habe das (auch) auf iwwit.de gelesen oder gesehen.

- ◯ Ja
- ◯ Nein
- ◯ Ich bin mir nicht sicher

80. Ich finde das sehr gut (und richtig).

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

***81. Ich war in den letzen 12 Monaten in einer Situation, in der ich das hätte umsetzen können.**

- ◯ Ja, einmal.
- ◯ Ja, mehrmals.
- ◯ Nein

>>Wenn man an HIV oder einer anderen sexuell übertragbaren Infektion erkrankt ist, soll man möglichst viele Partner informieren, damit sie sich auch untersuchen lassen.<<

***78. Das ist mir bekannt.**

- ◯ Ja
- ◯ Nein

84. Alle der folgenden Aussagen sind zutreffend! Haben Sie das gewusst?

	Das wusste ich bereits	Darüber war ich mir nicht sicher	Das wusste ich noch nicht	Ich verstehe das nicht	Ich glaube nicht, dass das stimmt
Eine effektive Behandlung einer HIV-Infektion reduziert das Risiko einer HIV-Übertragung.	◯	◯	◯	◯	◯
HIV bekommt man nicht vom Küssen.	◯	◯	◯	◯	◯
Man kann sich auch beim aktiven ungeschützten Anal- oder Vaginalverkehr mit einem/r HIV-positiven Partner/in über seinen Penis mit HIV anstecken.	◯	◯	◯	◯	◯
Man kann sich beim "passiven" ungeschützten Analverkehr mit einem HIV-positiven Partner mit HIV anstecken.	◯	◯	◯	◯	◯
Auch ohne Ejakulation birgt Oralverkehr das Risiko einer Infektion mit Syphilis oder Tripper (Gonorrhö).	◯	◯	◯	◯	◯
Sexuell übertragbare Infektion wie z.B. die Syphilis verursachen kleinste Wunden, die auch eine Übertragung von HIV erleichtern.	◯	◯	◯	◯	◯
Wenn man sexuell aktiv ist, sollte man sich mindestens ein Mal im Jahr, wenn man mehr als 10 Partner im Jahr hat, mindestens 2 mal im Jahr, auf HIV und Syphilis untersuchen lassen.	◯	◯	◯	◯	◯
Eine PEP (Postexpositionsprophylaxe) sollte man innerhalb von 24 Stunden, spätestens nach 48 Stunden nach dem Risikokontakt beginnen.	◯	◯	◯	◯	◯
Die meisten anderen sexuell übertragbaren Krankheiten können leichter weitergegeben werden als HIV.	◯	◯	◯	◯	◯

>>Wenn man an HIV oder einer anderen sexuell übertragbaren Infektion erkrankt ist, soll man möglichst viele Partner informieren, damit sie sich auch untersuchen lassen.<<

82. Da wäre bzw. ist die Umsetzung leicht möglich gewesen.

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

83. Wie oft haben Sie das umgesetzt?

- ◯ Immer
- ◯ Fast immer
- ◯ Manchmal
- ◯ Selten
- ◯ Nie

Im Folgenden möchten wir Ihnen ein paar Fragen zu Ihrer Person stellen.

89. In welchem Jahr wurden Sie geboren?

Jahr

90. Welchen höchsten allgemeinbildenden Schulabschluss haben Sie erworben?

- ◯ Haupt-/Volksschulabschluss, POS 8. Klasse
- ◯ Mittlere Reife/Realschulabschluss, POS 10.Klasse
- ◯ Fachhochschulreife
- ◯ Abitur/Hochschulreife, EOS
- ◯ Ich besitze keinen Schulabschluss
- ◯ Ich besitze einen ausländischen Schulabschluss

91. Welche berufliche Ausbildung haben Sie absolviert bzw. in welcher beruflichen Ausbildung befinden Sie sich derzeit?

- ◯ Abschluss einer beruflich-schulischen oder beruflich-betrieblichen Ausbildung
- ◯ Abschluss einer Fachschule
- ◯ Abschluss einer Fachhochschule
- ◯ Abschluss einer Universität
- ◯ Ich habe keine berufliche Ausbildung begonnen oder abgeschlossen

92. Sind Sie gegenwärtig...

- ◯ berufstätig
- ◯ arbeitslos
- ◯ Rentner/Pensionär
- ◯ im freiwilligen Wehrdienst/ Bundesfreiwilligendienst/ Freiwilligen Sozialen Jahr
- ◯ Student
- ◯ Auszubildender
- ◯ Schüler

Bitte beantworten Sie nun ein paar Fragen zu Ihrem Wohlbefinden.

85. Es gibt keine „richtigen“ und „falschen“ Antworten.
Bitte kreuzen Sie an!

	Trifft voll und ganz zu	Trifft eher zu	Trifft eher nicht zu	Trifft gar nicht zu
Ich habe eine positive Einstellung zu mir selbst gefunden.	◯	◯	◯	◯
Alles in allem neige ich dazu, mich für einen Versager zu halten.	◯	◯	◯	◯
Ich halte mich für einen wertvollen Menschen, jedenfalls bin ich nicht weniger wertvoll als andere auch.	◯	◯	◯	◯
Hin und wieder denke ich, dass ich gar nichts tauge.	◯	◯	◯	◯

86. Stellt es für Sie persönlich ein Problem dar, dass Sie Sex mit Männern haben?

Gar kein Problem 1	2	3	4	5	6	7	8	9	Sehr großes Problem 10
◯	◯	◯	◯	◯	◯	◯	◯	◯	◯

87. Hatten Sie in den vergangenen 12 Monaten aufgrund seelischer Probleme irgendwelche Schwierigkeiten bei der Arbeit oder anderen alltäglichen Tätigkeiten im Beruf bzw. zu Hause (z.B. weil Sie sich niedergeschlagen oder ängstlich fühlten)?

	Ja	Nein
Ich konnte nicht so lange wie üblich tätig sein.	◯	◯
Ich habe weniger geschafft als ich wollte.	◯	◯
Ich konnte nicht so sorgfältig wie üblich arbeiten.	◯	◯

88. Wie sehr haben Ihre körperliche Gesundheit oder seelischen Probleme in den vergangegen 12 Monaten Ihre Kontakte zu Familienangehörigen, Freunden, Nachbarn oder zum Bekanntenkreis beeinträchtigt?

- ◯ Überhaupt nicht
- ◯ Etwas
- ◯ Mäßig
- ◯ Ziemlich
- ◯ Sehr

96. Wo leben Sie derzeit?

93. Wie viel Geld haben Sie monatlich zur Verfügung? (Netto-Einkommen)

- ◯ Unter 400 €
- ◯ 401 - 600 €
- ◯ 601 - 1000 €
- ◯ 1001 - 1500 €
- ◯ 1501 - 2000 €
- ◯ 2001 - 3000 €
- ◯ 3001 - 5000 €
- ◯ Mehr als 5000 €

94. Wie viele Einwohner hat der Ort, in dem Sie derzeit leben?

- ◯ unter 50.000 Einwohner
- ◯ 50.000 bis unter 100.000 Einwohner
- ◯ 100.000 bis unter 500.000 Einwohner
- ◯ 500.000 bis unter 1.000.000 Einwohner
- ◯ 1.000.000 Einwohner und mehr

***95. Leben Sie derzeit in Deutschland?**

- ◯ Ja
- ◯ Nein

99. Wo sind Sie geboren?

100. Von welchem Staat besitzen Sie die Staatsbürgerschaft?

101. Welche Sprache bezeichnen Sie als Ihre Muttersprache?

102. Wo ist Ihre Mutter geboren?

103. Wo ist Ihr Vater geboren?

97. In welchem Bundesland leben Sie?

98. Wie lauten die ersten beiden Ziffern der Postleitzahl Ihres Wohnortes?

104. Wie würden Sie sich selbst beschreiben?

- ◯ Schwul
- ◯ Homosexuell
- ◯ Bisexuell
- ◯ Queer
- ◯ Heterosexuell
- ◯ Andere Bezeichnung
- ◯ Lehne Selbstdefinition ab

105. Wie stark würden Sie sich als zugehörig zur schwulen Szene bezeichnen?

gar nicht 1	2	3	4	5	6	7	8	9	sehr stark 10
◯	◯	◯	◯	◯	◯	◯	◯	◯	◯

***106. Mit wie vielen Männern hatten Sie in den letzten 6 Monaten Sex?**

- ◯ Mit keinem Mann
- ◯ Mit 1 Mann
- ◯ Mit 2-3 Männern
- ◯ Mit 4-5 Männern
- ◯ Mit 6-10 Männern
- ◯ Mit 11-15 Männern
- ◯ Mit 16-20 Männern
- ◯ Mit mehr als 20 Männern
- ◯ Keine Angabe

Im Folgenden möchten wir Ihnen einige Fragen zu Ihrer Sexualität stellen. Diese Fragen sind sehr persönlich, dennoch möchten wir Sie bitten, diese zu beantworten. Damit unterstützen Sie die Weiterentwicklung der ICH WEISS WAS ICH TU Kampagne.
Wir versichern Ihnen noch einmal die Wahrung Ihrer Anonymität bei der Verwendung der Daten.
Sie müssen die folgenden Fragen nicht beantworten, Ihre Teilnahme wäre jedoch sehr hilfreich.

108. Wie oft ist dies in den letzten 6 Monaten vorgekommen?

- ◯ 1-2 mal
- ◯ 3-5 mal
- ◯ 6-10 mal
- ◯ 11-15 mal
- ◯ 16-20 mal
- ◯ Mehr als 20 mal

***107. Hatten Sie in den letzten 6 Monaten Analverkehr ohne Kondom mit einer Person, von der Sie nicht sicher wussten, ob sie HIV-negativ oder HIV-positiv war?**

- ◯ Ja
- ◯ Nein
- ◯ Keine Angabe

110. Wie würden Sie die Beziehung mit Ihrem festen Partner charakterisieren?

- ◯ Wir sind monogam, keiner von uns hat Sex mit anderen Personen
- ◯ Wir haben beide Sex mit anderen Personen
- ◯ Nur ich habe Sex mit anderen Personen, mein Partner nicht
- ◯ Nur mein Partner hat Sex mit anderen Personen, ich nicht
- ◯ Ich habe mehrere feste Partner
- ◯ Weiß nicht
- ◯ Anders

111. Wie lange dauert die Beziehung mit Ihrem festen Partner bereits an?

- ◯ weniger als 1 Monat
- ◯ 1 bis 6 Monate
- ◯ 6 Monate bis 1 Jahr
- ◯ 1 bis 5 Jahre
- ◯ 5 bis 10 Jahre
- ◯ länger

112. Wissen Sie, ob Ihr Partner HIV-negativ oder HIV-positiv getestet ist?

- ◯ Sein letzter Test war negativ
- ◯ Sein letzter Test war positiv
- ◯ Er hat noch nie einen Test geamcht
- ◯ Ich weiß es nicht

***109. Haben Sie derzeit einen festen Partner?**

- ◯ Nein
- ◯ Ja, einen Mann
- ◯ Ja, eine Frau
- ◯ Ja mein/e Partner/in ist Transgender/-sexuell
- ◯ Keine Angabe

117. Wie häufig konsumieren Sie diese Substanzen?

- ◯ Täglich
- ◯ Ein- bis mehrmals pro Woche
- ◯ Ein- bis mehrmals im Monat
- ◯ Ein- bis mehrmals im Jahr
- ◯ Seltener

113. Wann haben Sie in den letzten 6 Monaten über Safer Sex bzw. HIV gesprochen?

	Heute	In den letzen 7 Tagen	In den letzten zwei Monaten	Im letzten halben Jahr	Länger her	Noch nie
mit Sexpartnern	◯	◯	◯	◯	◯	◯

114. Wann haben Sie in den letzten 6 Monaten über Safer Sex bzw. HIV gesprochen?

	Heute	In den letzen 7 Tagen	In den letzten zwei Monaten	Im letzten halben Jahr	Länger her	Noch nie
mit Freunden und Bekannten	◯	◯	◯	◯	◯	◯

115. Wie häufig konsumieren Sie Alkohol?

- ◯ Täglich
- ◯ Ein- bis mehrmals pro Woche
- ◯ Ein- bis mehrmals im Monat
- ◯ Ein- bis mehrmals im Jahr
- ◯ Seltener bis nie

***116. Konsumieren Sie eine der folgenden Substanzen, wenn auch nur gelegentlich? (Mehrfachantworten möglich)**

- ☐ Poppers
- ☐ Viagra®, Cialis®, Levitra® oder andere erektionsfördernde Substanzen
- ☐ Beruhigungsmittel (Valium®, Rivotril®, Rohypnol®)
- ☐ Cannabis (Haschisch, Marihuana)
- ☐ Ecstasy („E", MDMA)
- ☐ Amphetamine (Speed)
- ☐ Methamphetamine (Crystal Meth)
- ☐ Heroin oder ähnliche Substanzen
- ☐ Mephedron (Meph, Miau)
- ☐ GHB/GBL (Liquid Ecstasy)
- ☐ Ketamin (Special K)
- ☐ LSD (Acid)
- ☐ Kokain
- ☐ Crack
- ☐ Andere/weitere
- ☐ Nein, keine
- ☐ Keine Angabe

>>Beim Mischen verschiedener Substanzen sind gefährliche Wechselwirkungen möglich. Wenn man eine Droge nimmt, soll man bei dieser einen bleiben.<<

119. Ich habe das (auch) auf iwwit.de gelesen oder gesehen.

- ◯ Ja
- ◯ Nein
- ◯ Ich bin mir nicht sicher

120. Ich finde das sehr gut (und richtig).

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

***121. Ich war in den letzen 12 Monaten in einer Situation, in der ich das hätte umsetzen können.**

- ◯ Ja, einmal.
- ◯ Ja, mehrmals.
- ◯ Nein

Nun möchten wir Ihnen noch einmal Fragen zu den letzten beiden verhaltensbezogenen Botschaften stellen.

>>Beim Mischen verschiedener Substanzen sind gefährliche Wechselwirkungen möglich. Wenn man eine Droge nimmt, soll man bei dieser einen bleiben.<<

***118. Das ist mir bekannt.**

- ◯ Ja
- ◯ Nein

>>Damit man im Rausch nicht zu viel einer Droge nimmt, soll man bei bestimmten Drogen (z.B. Liquid Ecstasy) die Rationen schon zu Hause nüchtern vorbereiten.<<

***124. Das ist mir bekannt.**

- ◯ Ja
- ◯ Nein

122. Da wäre bzw. ist die Umsetzung leicht möglich gewesen.

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

123. Wie oft haben Sie das umgesetzt?

- ◯ Immer
- ◯ Fast immer
- ◯ Manchmal
- ◯ Selten
- ◯ Nie

>>Damit man im Rausch nicht zu viel einer Droge nimmt, soll man bei bestimmten Drogen (z.B. Liquid Ecstasy) die Rationen schon zu Hause nüchtern vorbereiten.<<

128. Da wäre bzw. ist die Umsetzung leicht möglich gewesen.

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

129. Wie oft haben Sie das umgesetzt?

- ◯ Immer
- ◯ Fast immer
- ◯ Manchmal
- ◯ Selten
- ◯ Nie

>>Damit man im Rausch nicht zu viel einer Droge nimmt, soll man bei bestimmten Drogen (z.B. Liquid Ecstasy) die Rationen schon zu Hause nüchtern vorbereiten.<<

125. Ich habe das (auch) auf iwwit.de gelesen oder gesehen.

- ◯ Ja
- ◯ Nein
- ◯ Ich bin mir nicht sicher

126. Ich finde das sehr gut (und richtig).

- ◯ Trifft voll und ganz zu
- ◯ Trifft eher zu
- ◯ Trifft eher nicht zu
- ◯ Trifft gar nicht zu

***127. Ich war in den letzen 12 Monaten in einer Situation, in der ich das hätte umsetzen können.**

- ◯ Ja, einmal.
- ◯ Ja, mehrmals.
- ◯ Nein

132. Wann haben Sie das letzte mal einen HIV-Test machen lassen?

- ◯ In den letzten 4 Wochen
- ◯ In den letzten 6 Monaten
- ◯ In den letzten 12 Monaten
- ◯ In den letzten 5 Jahren
- ◯ Vor mehr als 5 Jahren

133. Wie oft haben Sie schon einen HIV-Test gemacht?

Schätzen Sie bitte gegebenenfalls: _____

***134. Was war das Ergebnis Ihres letzten HIV-Tests?**

- ◯ Der Test war negativ
- ◯ Der Test war positiv
- ◯ Dazu möchte ich keine Angaben machen

Im Folgenden geht es um Fragen zu Ihrer Gesundheit.

130. Wenn Sie den besten denkbaren Gesundheitszustand mit 100 Punkten bewerten und den schlechtesten denkbaren mit 0 Punkten. Wie viele Punkte geben Sie Ihrem derzeitigen Gesundheitszustand?

_____

***131. Haben Sie schon einen HIV-Test gemacht?**

- ◯ Ja
- ◯ Nein
- ◯ Keine Angabe

137. Wie wichtig ist das Thema...

	Völlig unwichtig 1	2	3	4	5	6	7	8	9	Extrem wichtig 10
... HIV für Sie persönlich?	○	○	○	○	○	○	○	○	○	○
... HIV-Prävention heutzutage bei Männern, die Sex mit Männern haben, Ihrer Meinung nach?	○	○	○	○	○	○	○	○	○	○
... sexuell übertragbare Infektionen für Sie persönlich?	○	○	○	○	○	○	○	○	○	○
... Prävention von sexuell übertragbaren Krankheiten heutzutage bei Männern, die Sex mit Männern haben, Ihrer Meinung nach?	○	○	○	○	○	○	○	○	○	○

138. Was schätzen Sie wie oft Sie in den letzten zwei Wochen an...

	Gar nicht	1-2 mal	3-5 mal	Öfter
... HIV gedacht haben?	○	○	○	○
... eine andere sexuell übertragbare Infektion gedacht haben?	○	○	○	○

139. Wie hoch schätzen Sie Ihr eigenes Risiko ein...

	Sehr niedrig 1	2	3	4	5	6	7	8	9	Sehr hoch 10
... sich mit HIV zu infizieren?	○	○	○	○	○	○	○	○	○	○
... sich in nächster Zeit mit HIV zu infizieren?	○	○	○	○	○	○	○	○	○	○
... sich mit einer anderen sexuell übertragbaren Infektion anzustecken?	○	○	○	○	○	○	○	○	○	○

135. Haben Sie vor in den nächsten sechs Monaten einen HIV-Test zu machen?

○ Ja

○ Nein

136. Hatten Sie in den letzten 12 Monaten eine dieser Erkrankungen? (Mehrfachantworten möglich)

☐ Syphilis

☐ Tripper/Gonorrhö

☐ Chlamydien

☐ Genitaler/analer Herpes

☐ Feigwarzen/HPV

☐ Hepatitis A

☐ Hepatitis B

☐ Hepatitis C

☐ Nein, ich hatte keine dieser Erkrankungen

141. Wie wichtig ist das Thema...

	Völlig unwichtig 1	2	3	4	5	6	7	8	9	Extrem wichtig 10
... HIV-Prävention heutzutage bei Männern, die Sex mit Männern haben, Ihrer Meinung nach?	○	○	○	○	○	○	○	○	○	○
... sexuell übertragbare Infektionen für Sie persönlich?	○	○	○	○	○	○	○	○	○	○
... Prävention von sexuell übertragbaren Krankheiten heutzutage bei Männern, die Sex mit Männern haben, Ihrer Meinung nach?	○	○	○	○	○	○	○	○	○	○

142. Was schätzen Sie wie oft Sie in den letzten zwei Wochen an...

	Gar nicht	1-2 mal	3-5 mal	Öfter
... eine sexuell übertragbare Infektion gedacht haben?	○	○	○	○

143. Wie hoch schätzen Sie Ihr eigenes Risiko ein...

	Sehr niedrig 1	2	3	4	5	6	7	8	9	Sehr hoch 10
... sich mit einer anderen sexuell übertragbaren Infektion anzustecken?	○	○	○	○	○	○	○	○	○	○

140. Hatten Sie in den letzten 12 Monaten eine dieser Erkrankungen? (Mehrfachantworten möglich)

- ☐ Syphilis
- ☐ Tripper/Gonorrhö
- ☐ Chlamydien
- ☐ Genitaler/analer Herpes
- ☐ Feigwarzen/HPV
- ☐ Hepatitis A
- ☐ Hepatitis B
- ☐ Hepatitis C
- ☐ Nein, ich hatte keine dieser Erkrankungen

In Kontakt blieben

Wenn Sie möchten, können Sie hier Ihre E-Mail-Adresse angeben, damit die Deutsche AIDS-Hilfe Ihnen eine kurze Version der Ergebnisse und Hinweise auf Berichte über die Studie zusenden kann.

(Diese Angabe wird an die Deutsche AIDS-Hilfe e.V. weiter gegeben.)

144. Möchten Sie weitere Informationen über die Befragung per E-Mail erhalten? Dann geben Sie hier bitte Ihre E-Mail Adresse an.

Verabschiedung

Sie haben es geschafft! Vielen Dank für Ihre Antworten!

Ja, auch wenn der Balken unten noch nicht die 100% erreicht hat, haben Sie es geschafft! Einige Fragen durften und sollten Sie überspringen.

Im Folgenden können Sie noch einen Hinweis auf die veröffentlichten Ergebnisse der Befragung per E-Mail bestellen und Angaben zu möglichen weiteren Befragungen machen.

Interesse an einer telefonische Befragung?

Für die Evaluation von "ICH WEISS WAS ICH TU" möchten wir gerne mit einigen von Ihnen am Telefon sprechen.

Die Teilnahme ist selbstverständlich freiwillig und Ihre bisher gemachten Angaben sind Ihnen nicht zuzuordnen.

Das Gespräch wird vorraussichtlich im Frühjahr 2015 stattfinden.
Wären Sie bereit uns ca. 15 Minuten telefonisch für weitere Fragen zur Verfügung zu stehen?

Dann melden Sie sich bitte unter folgender E-Mail Adresse bei uns:

iwwit-befragung@univation.org

Möglicherweise wird es in Zukunft eine weitere Befragung geben. Falls Sie daran auch teilnehmen würden, wäre es hilfreich wenn wir Ihre heutigen Angaben mit den zukünftigen vergleichen könnten.

Hierfür würden wir anhand der folgenden Angaben ein Pseudonym erstellen. Von diesem Pseudonym kann man nicht auf Ihre Person schließen.

Die Angaben der folgenden Daten ist ebenfalls freiwillig.

145. Bitte geben Sie den 1. und 3. Buchstaben des Namens Ihres Geburtsortes/Ihrer Geburtsstadt ein.

146. Bitte geben Sie den 1. und 3. Buchstaben Ihres Geburtsnamens ein.

147. Bitte geben Sie die letzten beiden Buchstaben Ihres Vornamens ein.

148. Bitte geben Sie Ihren Geburtsmonat (MM) als Zahl ein.

II. Exerpt from the interviews with the IWWIT steering group

Layout

- Design schöner als früher.
- wenig Unterschiede gesehen und wenn diese gesehen werden, sind sie eher nicht so positiv. Sie haben sehr viel darüber gesprochen, aber wirklich positive Veränderungen hat er nicht gesehen.
- Die iwwit-Kampagne ist generell eher provokativ, das wird auch eher als gut befunden, aber jetzt sei es teilweise zu viel. Z.B. der Spruch „Kannste Gummi“, das ist kein Deutsch und das klingt einfach nicht schön.
- Die Materialien waren zu eintönig und die Titel zu sehr um die Ecke gedacht.
- Die Szene ist stark sexualisiert und somit kann man gut mit Bildern arbeiten.
- Die Webseite ist übersichtlicher geworden. Es kann sein, dass die Besucher sich auf der Seite besser zurechtfinden, weil nicht mehr so viele Informationen auf einer Seite stehen.
- Die neue Ausrichtung ist zeitnäher als die alte
- Die vorherige Online-Plattform war in die Jahre gekommen, obwohl sie ihm, seinem Alter entsprechend, näher war als die neue
- Der Großteil der Zielgruppe, die im Internet unterwegs ist, ist jünger und deshalb war es auch wichtig, dies zu überarbeiten und das auch gut gelungen. Auch die Werbematerialien sind gut gemacht.
- Neue Homepage wird als überladen und zu bunt empfunden
- Ob die Streifen jetzt gleichfarbig sind oder dicker oder dünner, ist letztlich der Zielgruppe egal und ihnen auch. Die Homepage ist designmäßig geschmacksfrage.
- Ist damit zufrieden, aber sieht keine so große Veränderung gegenüber der vorherigen Form
- Findet er schön, weil es ein bisschen lockerer rüberkommt, ein bisschen frecher, findet es schön, dass farbiger geworden ist, vorher zu lila
- Die Homepage gefällt ihm sehr gut, auch die Grafiken und Materialien, die wenigen, die es gibt, findet er sehr gut, das ist einfach was anderes, Homepage ist schön und ist weitaus freundlicher geworden, die Farben sind abwechslungsreicher geworden, vorher zu eintönig und je nachdem zu dunkel, nicht freundlich genug

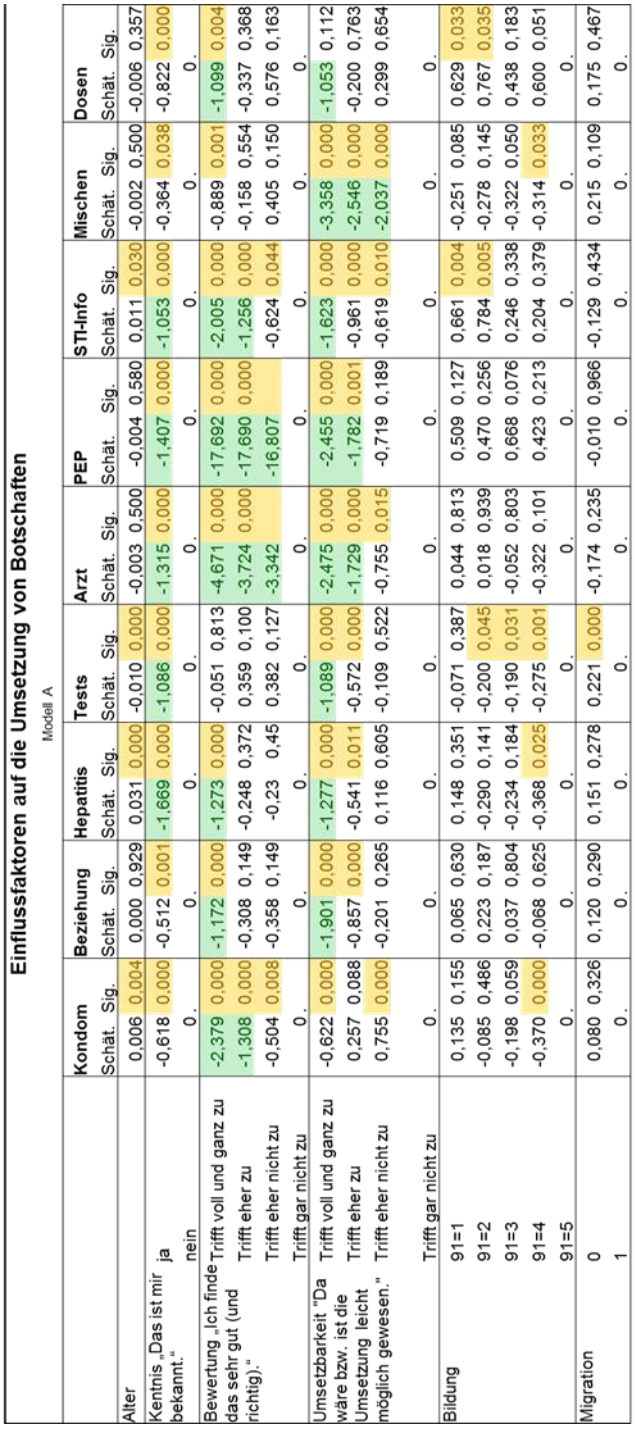
Inhalt

- E s besteht der Eindruck, dass mehrere Rollenmodelle, die früher da waren und die nicht unbedingt perfekt aussahen, aber die eine persönliche Geschichte hatten, mit denen man sich identifizieren konnte, die sind nicht mehr da.

- Die Rollenmodelle sind nicht mehr so präsent wie früher
- Nach dem Relaunch ist die Kampagne mehr am Marketing orientiert.
- Man versucht nun, wie in der herkömmlichen Werbung, Sachen „zu verkaufen“. Das klappt nun hoffentlich besser als vor der Neuausrichtung.
- Er empfindet die Materialien jetzt als zielgruppengerechter
- Die Kampagne entwickelt sich dahin, dass sie massentauglicher wird.
- Die Kampagne hat auf jeden Fall schon die Vielfältigkeit des Arbeitsfeldes aufgegriffen, vielleicht ein bisschen zu gut. Man verliert ein wenig das wichtige Ziel der HIV-/STI-Prävention aus den Augen, wenn man mit allen möglichen Themen rundherum ankommt.
- Man darf sich nicht in den Nebenthemen verzetteln.
- Die Kampagne heißt ja, ich weiß, was ich tu und hatte zum Ziel gehabt, die Selbstkompetenz zu stärken und in der Sprache und Wortwahl wird dem User, Nutzer, mehr abgenommen, das hat mehr den Charakter bekommen, wir wissen, was Du tun solltest, läuft ja viel Sprache, so etwas zu initiieren, aber wenn die Sprachwahl mehr in die Richtung geht, Du solltest und das wäre gut für Dich, hat einen direktiveren Charakter bekommen
- Homepage wird als wichtigste Infoquelle in der Schwulenszene beurteilt
- Es wird als positiv bewertet, dass die Seiten besser nach Unterthemen strukturiert sind als vorher
- Rollenmodelle werden als überzeugend und echt empfunden (der eine nimmt wohl echt Drogen ;-))
- Überschneidungen mit Landesprojekten beachten: Gentleman (BW), Herzenslust (NRW), SVEN (NI)
- Sie hatten sich gewünscht, dass die Seite ein bisschen eingestampft und abgespeckt wird, das ist auch passiert, aber ansonsten wird das überbewertet
- Das hat dort vor Ort niemand mitbekommen, dass das eine andere Homepage ist
- Alles, was sie haben, kann man vergessen, weil die QA-Codes ins Leere laufen, die Sachen sind nicht mehr brauchbar, die Prints sind reduziert mit ganz kurzen Botschaften und dem Hinweis informiere Dich im Netz weiter und dann macht man das und das läuft ins Leere
- Findet es wesentlich übersichtlicher, die Themen werden einfacher besprochen und man kann besser durchdringen, früher war das immer so früher war das immer so Wirr-Warr, jetzt macht es auch Lust mehr durch die ganze Seite durchzuklicken
- Diese Ansätze, welcher Typ bist Du und daraufhin alles weitere abzuleiten und Themenvorschläge zu entwickeln findet er sehr frisch und sehr gut
- (Die Botschaften) sehr eindeutig, das gefällt ihm
- Inhaltlich auch sehr gut gelungen, obwohl er dort noch keine so großen Veränderungen festgestellt hat, unten gibt es ein zwei Punkte, die stärker herausgehoben wurden, er findet es sehr gut, dass diese einzelnen Themen, die aktuell von IWWIT gesetzt sind, wie männliche Sexarbeiter, oder Schwule ins Ehrenamt, dass die noch mal mehr auf der Internetseite und überhaupt in der Kommunikation eindeutiger dargestellt werden

- „Der Ansatz der Kampagne bleibt der gleiche: Lebensweisen und Lebensentwürfe von Menschen zu akzeptieren, nicht zu (be)werten und nützliche Tipps zum Schutz vor HIV und STIs und zum Leben mit HIV zu geben.“ (homepage)

III. Results of regression analysis



Einflussfaktoren auf die Umsetzung von Botschaften

Modell A

		Kondom		Beziehung		Hepatitis		Tests		Arzt		PEP		STI-Info		Mischen		Dosen	
		Schät.	Sig.	Schät.	Sig.	Schät.	Sig.	Schät.	Sig.	Schät.	Sig.	Schät.	Sig.	Schät.	Sig.	Schät.	Sig.	Schät.	Sig.
Alter		0,006	0,004	0,000	0,929	0,031	0,000	-0,010	0,000	-0,003	0,500	-0,004	0,580	0,011	0,030	-0,002	0,500	-0,006	0,357
Kentnis „Das ist mir bekannt.“	ja	-0,618	0,000	-0,512	0,001	-1,669	0,000	-1,086	0,000	-1,315	0,000	-1,407	0,000	-1,053	0,000	-0,364	0,038	-0,822	0,000
	nein	0.		0.		0.		0.		0.		0.		0.		0.		0.	
Bewertung „Ich finde das sehr gut (und richtig).“	Trifft voll und ganz zu	-2,379	0,000	-1,172	0,000	-1,273	0,000	-0,051	0,813	-4,671	0,000	-17,692	0,000	-2,005	0,000	-0,889	0,001	-1,099	0,004
	Trifft eher zu	-1,308	0,000	-0,308	0,149	-0,248	0,372	0,359	0,100	-3,724	0,000	-17,690	0,000	-1,256	0,000	-0,158	0,554	-0,337	0,368
	Trifft eher nicht zu	-0,504	0,008	-0,358	0,149	-0,23	0,45	0,382	0,127	-3,342		-16,807		-0,624	0,044	0,405	0,150	0,576	0,163
	Trifft gar nicht zu	0.		0.		0.		0.		0.		0.		0.		0.		0.	
Umsetzbarkeit "Das wäre bzw. ist die Umsetzung leicht möglich gewesen."	Trifft voll und ganz zu	-0,622	0,000	-1,901	0,000	-1,277	0,000	-1,089	0,000	-2,475	0,000	-2,455	0,000	-1,623	0,000	-3,358	0,000	-1,053	0,112
	Trifft eher zu	0,257	0,088	-0,857	0,000	-0,541	0,011	-0,572	0,000	-1,729	0,000	-1,782	0,001	-0,961	0,000	-2,546	0,000	-0,200	0,763
	Trifft eher nicht zu	0,755	0,000	-0,201	0,265	0,116	0,605	-0,109	0,522	-0,755	0,015	-0,719	0,189	-0,619	0,010	-2,037	0,000	0,299	0,654
	Trifft gar nicht zu	0.		0.		0.		0.		0.		0.		0.		0.		0.	
Bildung	91=1	0,135	0,155	0,065	0,630	0,148	0,351	-0,071	0,387	0,044	0,813	0,509	0,127	0,661	0,004	-0,251	0,085	0,629	0,033
	91=2	-0,085	0,486	0,223	0,187	-0,290	0,141	-0,200	0,045	0,018	0,939	0,470	0,256	0,784	0,005	-0,278	0,145	0,767	0,035
	91=3	-0,198	0,059	0,037	0,804	-0,234	0,184	-0,190	0,031	-0,052	0,803	0,668	0,076	0,246	0,338	-0,322	0,050	0,438	0,183
	91=4	-0,370	0,000	-0,068	0,625	-0,368	0,025	-0,275	0,001	-0,322	0,101	0,423	0,213	0,204	0,379	-0,314	0,033	0,600	0,051
	91=5	0.		0.		0.		0.		0.		0.		0.		0.		0.	
Migration	0	0,080	0,326	0,120	0,290	0,151	0,278	0,221	0,000	-0,174	0,235	-0,010	0,966	-0,129	0,434	0,215	0,109	0,175	0,467
	1	0.		0.		0.		0.		0.		0.		0.		0.		0.	

IV. Item difficulty index “target group specificity”

Item	IDI >20; 80<	Item	IDI<20;80>
q0047_0002	77,5	q0042_0002	87,1617647
q0049_0006	77,2447724	q0047_0003	84,4303797
q0048_0004	76,6541823	q0040_0001	19,8815567
q0040_0003	75,9450172	q0055	19,7457627
q0038_0003	75,7973734	q0038_0001	19,3370166
q0033_0003	75,7841574	q0032_0012	19,3064182
q0028	75,1343706	q0056_0003	19,1091954
q0042_0001	74,8792977	q0033_0002	19,036397
q0038_0005	73,0069052	q0058_0005	18,8340807
q0040_0005	70,8547009	q0058_0002	18,6011905
q0033_0005	70,2666667	q0036_0002	18,0821918
q0058_0010	68,4766214	q0056_0001	17,4468085
q0047_0001	67,4691358	q0058_0001	16,3768116
q0047_0004	65,8934169	q0038_0002	16,1710037
q0038_0004	65,5345912	q0058_0003	15,7037037
q0032_0010	65,4398329	q0040_0002	14,6835443
q0033_0004	64,7451294	q0058_0004	11,8518519
q0040_0004	64,1816624	q0041_0001	11,8206862
q0032_0008	64,1126909		
q0048_0005	63,3838384		
q0036_0003	63,2311978		
q0032_0009	61,6452991		
q0049_0007	57,8686493		
q0044	56,3421829		
q0058_0008	55,0989346		
q0026	54,4946081		
q0041_0003	54,2447917		
q0048_0001	53,2818533		
q0051	52,293578		
q0043	49,01014		
q0032_0006	48,0614104		
q0058_0011	45,4954955		
q0058_0009	44,1964286		
q0035	41,8073136		
q0039	40,6118143		
q0049_0003	40,1709402		
q0048_0002	39,3162393		
q0032_0011	37,7635442		
q0037	35,5133615		
q0049_0004	32,0610687		
q0049_0002	27,7978339		

Item	IDI >20; 80<	Item	IDI<20;80>
q0048_0003	27,5252525		
q0032_0013	27,3180982		
q0032_0007	26,9680436		
q0033_0001	26,3877927		
q0049_0005	26,1462206		
q0031	25,4469753		
q0032_0005	25,3426429		
q0038_0006	25,1396648		
q0033_0006	25,0463331		
q0032_0003	24,8902659		
q0032_0001	24,7295209		
q0045	23,9215686		
q0045	23,9215686		
q0032_0004	23,0749152		
q0032_0002	23,0471771		
q0004	23,0403992		
q0036_0004	22,985348		
q0049_0001	22,8504122		
q0036_0001	22,1611722		
q0056_0002	21,3675214		
q0040_0006	21,3435374		
q0058_0007	20,8708709		
q0007	20,858255		
q0041_0002	20,578096		
q0030	20,3387334		

V. Item difficulty index “HIV/STI prevention”

Item	IDI >20; 80<	Item	IDI<20;80>
77	79,7453704	127	96,1210365
157 AllgRel HIV	79,0293445	81	91,6867858
157 AllgRel HIV	78,93201	75	91,2441655
111	75,2810502	121	87,0352487
157 persRel STI	74,9339833	69	81,7881861
18	74,7545469	17	19,0639465
87.1	73,1831634	120	18,8124531
137.1	69,7993918	63	18,034291
87.3	65,7955293	12	17,1762366
65	61,2201074	70	16,9826224

Item	IDI >20; 80<	Item	IDI<20;80>
11	59,4157412	24	16,8234582
25	59,1828479	84.9	15,9005705
117	59,097447	84.7	15,7555483
114	58,7363622	109	15,7452117
87.2	57,445064	84.1	14,9667046
124	56,3013037	139.2	14,9619722
113	55,5878986	118	14,2282311
125	54,7191888	74	13,2402423
119	54,5303652	131	12,3772735
115	53,8383757	21	12,0392725
22	53,7990196	16	11,4537683
15	51,9645341	86	11,3524612
67	51,9352089	84.6	11,3188335
79	51,610376	62	11,2491148
132	50,3958201	10	11,0496638
73	49,452821	80	10,6048144
135	48,9573183	23	10,0208196
85.3	48,8219895	68	7,89272031
9	46,9405003	84.5	7,30875426
61	46,7648096	60	6,10011267
116	46,1288752	14	4,97344278
133	46,1279033	84.2	4,44236709
76	45,7609268	78	4,23305971
85.1	44,0953001	84.3	4,03304574
85.2	43,4343434	66	2,55915017
85.4	42,7351831	8	2,30162562
129	40,080429	84.4	1,66341305
83	36,7759146		
107	36,1669383		
123	36,1599665		
72	31,5628521		
20	30,9798995		
138.1	29,6463654		
126	28,0322307		
159 Riskb STI	27,9870908		
82	27,3373984		
112	24,9461634		
108	24,1157961		
71	23,7896825		
64	23,7799226		
13	23,4606825		
88	23,3186419		
158 Prs STI	23,1046731		

Item	IDI >20; 80<	Item	IDI<20;80>
110	23,0899256		
122	21,3704016		
128	20,923913		
84.8	20,3619172		
139.1	20,2442482		
19	20,2386956		

VI. Descriptive analysis „target group specificity”

	N			Mean	Median	Standard deviation	Min	Max
	Valid	Missing						
		Not asked	Not answered					
004-IWWIT Bekanntheit	6213	0		1,46	1	0,582	1	3
007--IWWIT Bewertung	3511	2702		1,63	2	0,644	1	4
		2582	120					
026-Webseite Bekanntheit	6213	0		3,18	3	1,066	1	5
028-Webseite Nutzungshäufigkeit	1414	4799		4,76	5	0,906	1	6
		4791	8					
030--Webseite Bewertung	1358	4855		2,02	2	0,803	1	6
		4791	64					
031--Webseite Hilfreich	1361	4852		1,76	2	0,605	1	4
		4791	61					
032-01-Webseite Übersicht	1294	4919		1,74	2	0,607	1	4
		4791	128					
032-02-Webseite Orientierung	1293	4920		1,69	2	0,62	1	4
		4791	129					
032-03-Webseite farbliche Gestaltung	1291	4922		1,75	2	0,706	1	4
		4791	131					
032-04-Webseite Inhalte	1277	4936		1,69	2	0,652	1	4
		4791	145					
032-05-Webseite persönliches Interesse an Themen	1289	4924		1,76	2	0,707	1	4
		4791	133					
032-06-Webseite neue Inhalte	1281	4932		2,44	3	0,87	1	4
		4791	141					
032-07-Webseite vielfältige Informationen	1283	4930		1,81	2	0,644	1	4
		4791	139					
032-08-Webseite zu großes	1266	4947		2,92	3	0,843	1	4
		4791	156					

	N			Mean	Median	Standard deviation	Min	Max
	Valid	Missing						
		Not asked	Not answered					
Informationsangebot								
032-09-Webseite fehlende Informationen	1248	4965		2,85	3	0,846	1	4
		4791	174					
032-10-Webseite Anstoß zu Besorgnis	1277	4936		2,96	3	0,908	1	4
		4791	145					
032-11-Webseite Spaßfaktor	1249	4964		2,13	2	0,729	1	4
		4791	173					
032-13-Webseite Bilder: Gefallen	1269	4944		1,82	2	0,677	1	4
		4791	153					
033-01-Webseite Texte: Gefallen	1267	4946		1,79	2	0,566	1	4
		4791	155					
033-03-Webseite Texte: Sexualisierung	1254	4959		3,27	3	0,714	1	4
		4791	168					
033-04-Webseite Texte: zu brav	1249	4964		2,94	3	0,797	1	4
		4791	173					
033-05-Webseite Texte: zu belehrend	1250	4963		3,11	3	0,746	1	4
		4791	172					
033-06-Webseite Texte: hilfreich	1259	4954		1,75	2	0,618	1	4
		4791	163					
035-Webseite Videos: Bekanntheit	1422	4791		1,84	2	0,578	1	3
036-01-Webseite Videos: Gefallen	364	5849		1,66	2	0,641	1	4
		5840	9					
036-03-Webseite Videos: zu belehrend	359	5854		2,9	3	0,848	1	4
		5840	14					
036-04-Webseite Videos: hilfreich	364	5849		1,69	2	0,63	1	4
		5840	9					
037-Webseite Rollenmodelle: Bekanntheit	1422	4791		1,71	2	0,635	1	3
038-03-Webseite Rollenmodelle: zu sexualisiert	533	5680		3,27	3	0,738	1	4
		5661	19					
038-04-Webseite Rollenmodelle: zu brav	530	5683		2,97	3	0,833	1	4
		5661	22					
038-05-Webseite Rollenmodelle: zu belehrend	531	5682		3,19	3	0,739	1	4
		5661	21					
038-06-Webseite Rollenmodelle: hilfreich	537	5676		1,75	2	0,671	1	4
		5661	15					
039-Webseite Animationsclips: Bekanntheit	1422	4791		1,81	2	0,585	1	3
040-03-Webseite Animationsclips: zu sexualisiert	388	5825		3,28	3	0,767	1	4
		5811	14					

	N			Mean	Median	Standard deviation	Min	Max
	Valid	Missing						
		Not asked	Not answered					
040-04-Webseite Animationsclips: zu brav	389	5824		2,93	3	0,943	1	4
		5811	13					
040-05-Webseite Animationsclips: zu belehrend	390	5823		3,13	3	0,853	1	4
		5811	12					
040-06-Webseite Animationsclips: hilfreich	392	5821		1,64	2	0,671	1	4
		5811	10					
041-02-Webseite Inhalt: nützliche Tips zum Leben mit HIV	1257	4956		1,62	2	0,649	1	4
		4791	165					
041-03-Webseite Inhalt: Informationen als Hilfe zur Entscheidung	1280	4933		2,63	3	1,007	1	4
		4791	142					
041-04-Webseite Inhalt: Förderung von Toleranz Lebensstile	1257	4956		2,47	2	0,961	1	4
		4791	165					
042-01-Webseite als Gesprächsthema bei peers	1367	4846		4,74	5	1,345	1	6
		4791	55					
		4791	62					
043-Facebook-Seite. Bekanntheit	6213	0		1,98	2	0,303	1	3
044-Facebook-Seite: Relevanz	339	5874		1,56	2	0,497	1	2
		5867	9					
045--Facebook-Seite: Bewertung	306	5907		2,2	2	0,962	1	6
		5865	42					
048-01-Facebook Posthäufigkeit	259	5954		2,6	3	0,803	1	4
		5865	89					
048-02-Facebook interessante Posts	273	5940		2,18	2	0,841	1	4
		5865	75					
048-03-Facebook verständliche Posts	264	5949		1,83	2	0,664	1	4
		5865	84					
048-04-Facebook zu sexualisierte Posts	267	5946		3,3	3	0,715	1	4
		5865	81					
048-05-Facebook zu brave Posts	264	5949		2,9	3	0,844	1	4
		5865	84					
048-06-Facebook Posts verursachen Gesundheitssorgen	268	5945		3,27	3	0,864	1	4
		5865	80					
049-01-Facebook-Seite: Glaubwürdigkeit	283	5930		1,58	1	0,707	1	4
		5865	65					
049-02-Facebook-Seite: hilfreich	277	5936		1,83	2	0,799	1	4
		5865	71					
049-03-Facebook-	273	5940		2,21	2	0,932	1	4

	N			Mean	Median	Standard deviation	Min	Max
	Valid	Missing						
		Not asked	Not answered					
Seite: Zugehörigkeit		5865	75					
049-04-Facebook-Seite: nützliche Tips zum Leben mit HIV	262	5951		1,96	2	0,801	1	4
		5865	86					
049-05-Facebook-Seite: nützliche Tips zum Schutz vor HIV/STI	269	5944		1,78	2	0,737	1	4
		5865	79					
049-06-Facebook-Seite: Aufbau von Kontakten zu peers	271	5942		3,32	4	0,99	1	4
		5865	77					
049-07-Facebook-Seite: Förderung von Toleranz	269	5944		2,74	3	1,072	1	4
		5865	79					
051-Health Support; Bekanntheit	6213	0		1,52	2	0,5	1	2
056-02-Health Support: hilfreiche Informationen	234	5979		1,64	2	0,758	1	4
		5974	5					
056-03-Health Support: gute Erreichbarkeit	232	5981		1,57	1	0,66	1	4
		5974	7					
		5974	16					
058-06-Health Support: Berater hat ausreichend Fachwissen	218	5995		1,7	2	0,736	1	4
		5974	21					
058-07-Health Support: Bewertung der Beratung	222	5991		1,63	2	0,712	1	4
		5974	17					
058-08-Health Support: nicht die nützlichste Quelle	219	5994		2,65	3	1,061	1	4
		5974	20					
058-09-Health Support: telefonische Erreichbarkeit	224	5989		2,33	2	1,023	1	4
		5974	15					
058-10-Health Support: Wunsch Videokonferenz	221	5992		3,05	3	0,957	1	4
		5974	18					
058-11-Health Support: Wunsch Webinare etc.	222	5991		2,36	2	0,987	1	4
		5974	17					

VII. Descriptive analysis „HIV/STI prevention“

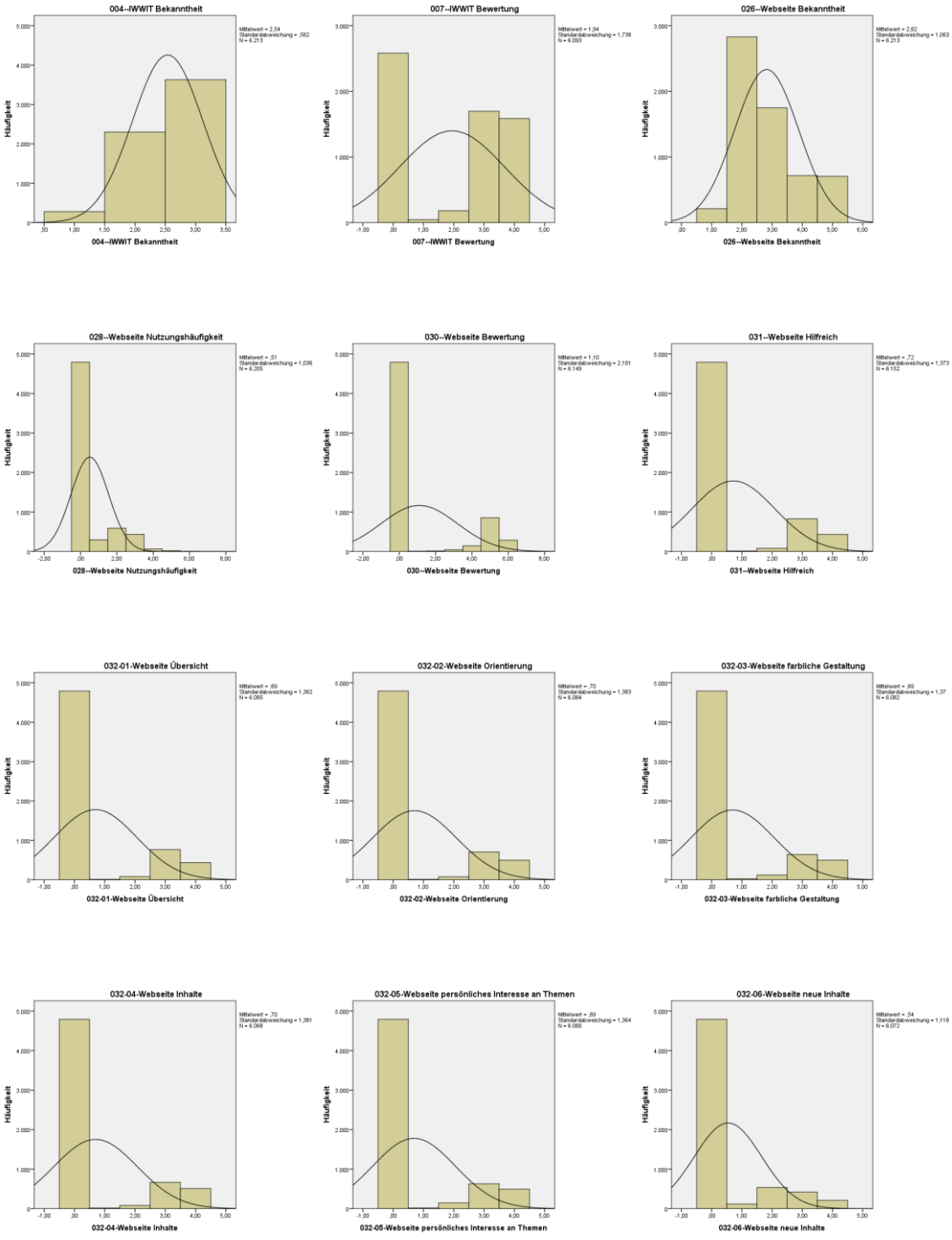
	N			Mean	Median	Standard deviation	Min	Max
	Valid	Missing						
		Not asked	Not answered					
009--Botschaft 1: über IWWIT bekannt	5916	297		1,94	2	0,724	1	3
		143	154					
013--Botschaft 1: Anwendung	4044	2169		1,94	2	1,105	1	5
		2140	29					
015--Botschaft 2: über IWWIT bekannt	5752	461		2,04	2	0,678	1	3
		309	152					
017--Botschaft 2: Soziales Feedback	5833	380		1,57	1	0,712	1	4
			380					
019--Botschaft 2: Umsetzbarkeit	1983	4230		1,61	1	0,802	1	4
		4181	49					
020--Botschaft 2: Anwendung	1990	4223		2,24	2	1,455	1	5
		4181	42					
022--Botschaft 3: über IWWIT bekannt	5304	909		2,08	2	0,645	1	3
		748	161					
025--Botschaft 3: Geimpft	6180	33		3,37	3	0,883	1	5
			33					
061--Botschaft 4: über IWWIT bekannt	5672	541		1,94	2	0,658	1	3
		379	162					
064--Botschaft 4: Umsetzbarkeit	6113	100		1,71	2	0,829	1	4
			100					
065--Botschaft 4: Anwendung	6147	66		4,06	4	1,854	1	6
			66					
067--Botschaft 5: über IWWIT bekannt	5865	348		2,04	2	0,608	1	3
		159	189					
071--Botschaft 5: Anwendung	1260	4953		1,95	1	1,386	1	5
		4937	16					
073--Botschaft 6: über IWWIT bekannt	4112	2101		1,99	2	0,65	1	3
		1961	140					

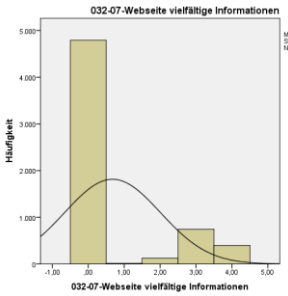
	N			Mean	Median	Standard deviation	Min	Max
	Valid	Missing						
		Not asked	Not answered					
076--Botschaft 6: Umsetzbarkeit	633	5580		2,37	2	1,023	1	4
		5547	33					
077--Botschaft 6: Anwendung	648	5565		4,19	5	1,428	1	5
		5547	18					
079--Botschaft 7: über IWWIT bekannt	5744	469		2,03	2	0,605	1	3
		263	206					
082--Botschaft 7: Umsetzbarkeit	656	5557		1,82	2	0,92	1	4
		5542	15					
083--Botschaft 7: Anwendung	656	5557		2,47	2	1,545	1	5
		5542	15					
084-08-Anwendung PEP	6134	79		1,81	1	0,995	1	5
			79					
107--Risikoverhalten: ungeschützter Analverkehr	5523	690		1,72	2	0,476	1	3
			690					
109--Feste Partnerschaft	6213	0		1,63	1	0,772	1	5
110--Art der festen Partnerschaft	2958	3255		2,39	2	1,372	1	7
		3233	22					
112--HIV-Status Partner	2941	3272		1,75	1	1,078	1	4
		3233	39					
113-01-Kommunikation mit Sexpartnern	6115	98		3,78	4	1,327	1	6
			98					
114-01-Kommunikation mit Freunden und Bekannten	6141	72		3,94	4	1,353	1	6
			72					
115--Alkoholkonsum	6181	32		3,15	3	1,213	1	5
			32					
117--	2781	3432		3,36	3	0,963	1	5

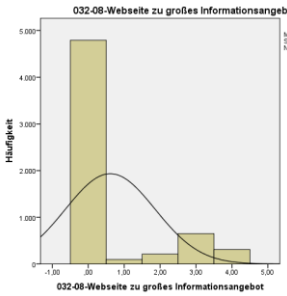
	N			Mean	Median	Standard deviation	Min	Max
	Valid	Missing						
		Not asked	Not answered					
Häufigkeit Konsum Substanzen		3335	97					
119--Botschaft 8: über IWWIT bekannt	5121	1092		2,09	2	0,537	1	3
		884	208					
122--Botschaft 8: Umsetzbarkeit	1187	5026		1,64	2	0,734	1	4
		4993	33					
123--Botschaft 8: Anwendung	1194	5019		2,45	2	1,33	1	5
		4993	26					
125--Botschaft 9: über IWWIT bekannt	2564	3649		2,09	2	0,543	1	3
		3498	151					
126--Botschaft 9: Bewertung	5502	711		1,84	1	1,131	1	4
			711					
128--Botschaft 9: Umsetzbarkeit	368	5845		1,63	1	0,723	1	4
		5831	14					
129--Botschaft 9: Anwendung	373	5840		2,6	2	1,421	1	5
		5831	9					
132--Letzter HIV-Test	4737	1476		3,02	3	1,261	1	5
		1439	37					
133-Häufigkeit HIV-Test	4490	1723		4,23	4	2,261	1	8
		1439	279					
135--Nächster HIV-Test	5131	1082		1,49	1	0,5	1	2
		986	96					
137-01-Persönliche Relevanz HIV	5079	1134		7,28	8	2,754	1	10
		986	148					
138-01-Präsenz HIV	5090	1123		1,89	2	0,951	1	4
		986	137					
139-01-Risiskobewertung HIV	5095	1118		2,82	2	2,058	1	10
		986	132					
Q85 Rosenberg 1	6142	71		2,32	2	0,731	0	3
			71					
Q85 Rosenberg 3	6112	101		2,46	3	0,745	0	3
			101					
Q85	6105	108		2,3	2	0,827	0	3

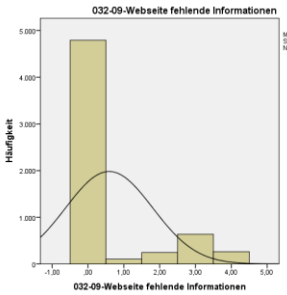
	N			Mean	Median	Standard deviation	Min	Max
	Valid	Missing						
		Not asked	Not answered					
Rosenberg 2			108					
Q85 Rosenberg 4	6091	122		2,28	3	0,925	0	3
			122					
157-Allgemeine Relevanz HIV	6028	185		8,11	9	2,456	1	10
			185					
157-Persönliche Relevanz STI	6017	196		7,74	9	2,613	1	10
			196					
157-Allgemeine Relevanz STI	5978	235		8,1	9	2,476	1	10
			235					
158-Präsenz STI	6006	207		1,69	1	0,911	1	4
			207					
159-Risikobewertung STI	6025	188		3,52	3	2,421	1	10
			188					
Q87 SF-36 emotionale Rollenfunktion 1	6082	131		73,1832	100	44,30422	0	100
			131					
Q87 SF-36 emotionale Rollenfunktion 2	6098	115		57,4451	100	49,44666	0	100
			115					
Q87 SF-36 emotionale Rollenfunktion 3	6084	129		65,7955	100	47,44335	0	100
			129					
Q88 SF-36 Soziale Funktionsfähigkeit (0-100)	6126	87		76,6814	75	28,66109	0	100
			87					

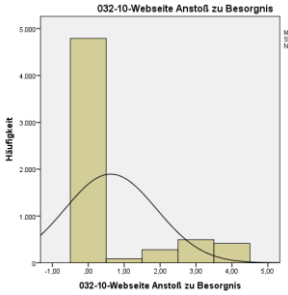
VIII. Histograms “target group specificity” recoded

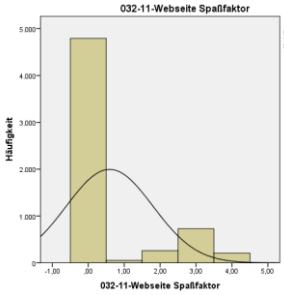


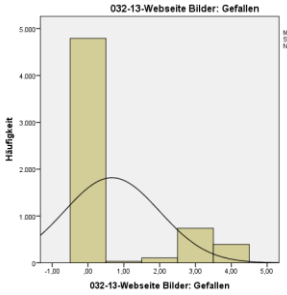

032-07-Webseite vielfältige Informationen
Mittelwert = ,67
Standardabweichung = 1,336
N = 6.074
Häufigkeit
032-07-Webseite vielfältige Informationen

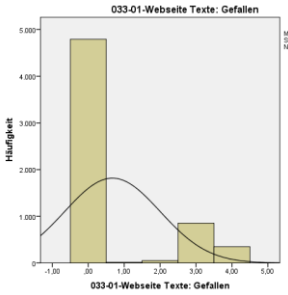

032-08-Webseite zu großes Informationsangebot
Mittelwert = ,61
Standardabweichung = 1,25
N = 6.057
Häufigkeit
032-08-Webseite zu großes Informationsangebot

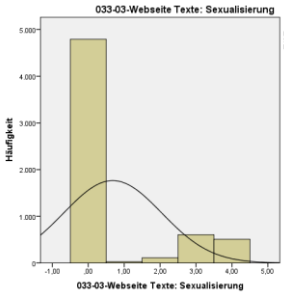

032-09-Webseite fehlende Informationen
Mittelwert = ,59
Standardabweichung = 1,216
N = 6.039
Häufigkeit
032-09-Webseite fehlende Informationen

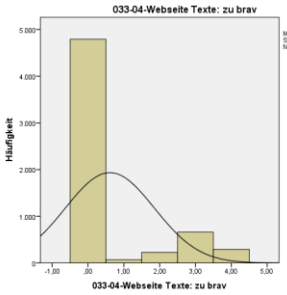

032-10-Webseite Anstoß zu Besorgnis
Mittelwert = ,62
Standardabweichung = 1,278
N = 6.068
Häufigkeit
032-10-Webseite Anstoß zu Besorgnis


032-11-Webseite Spaßfaktor
Mittelwert = ,59
Standardabweichung = 1,208
N = 6.040
Häufigkeit
032-11-Webseite Spaßfaktor

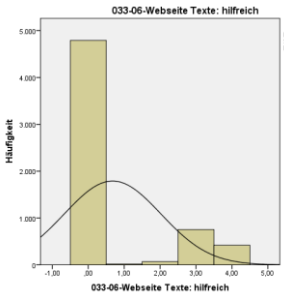

032-13-Webseite Bilder: Gefallen
Mittelwert = ,67
Standardabweichung = 1,331
N = 6.060
Häufigkeit
032-13-Webseite Bilder: Gefallen

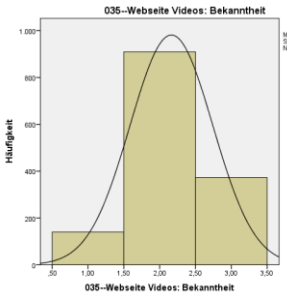

033-01-Webseite Texte: Gefallen
Mittelwert = ,67
Standardabweichung = 1,33
N = 6.058
Häufigkeit
033-01-Webseite Texte: Gefallen

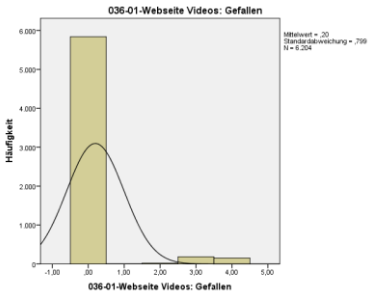

033-03-Webseite Texte: Sexualisierung
Mittelwert = ,68
Standardabweichung = 1,367
N = 6.045
Häufigkeit
033-03-Webseite Texte: Sexualisierung

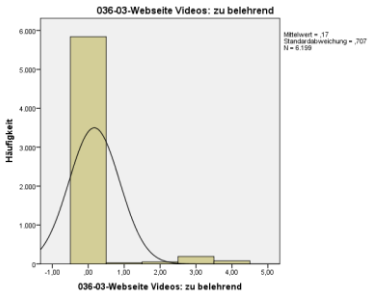

033-04-Webseite Texte: zu brav
Mittelwert = ,61
Standardabweichung = 1,246
N = 6.040
Häufigkeit
033-04-Webseite Texte: zu brav

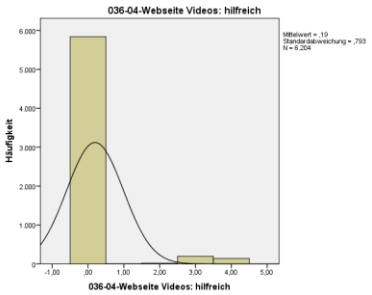

033-05-Webseite Texte: zu belehrend
Mittelwert = ,64
Standardabweichung = 1,364
N = 6.041
Häufigkeit
033-05-Webseite Texte: zu belehrend

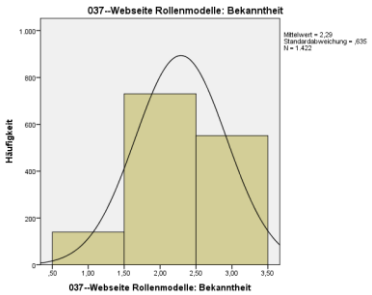

033-06-Webseite Texte: hilfreich
Mittelwert = ,68
Standardabweichung = 1,349
N = 6.053
Häufigkeit
033-06-Webseite Texte: hilfreich

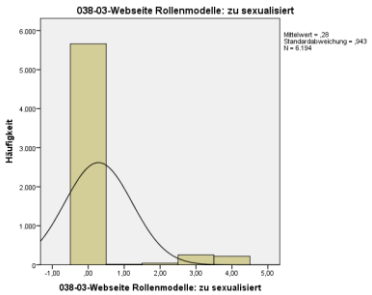

035--Webseite Videos: Bekanntheit
Mittelwert = 2,16
Standardabweichung = ,578
N = 1.422
Häufigkeit
035--Webseite Videos: Bekanntheit

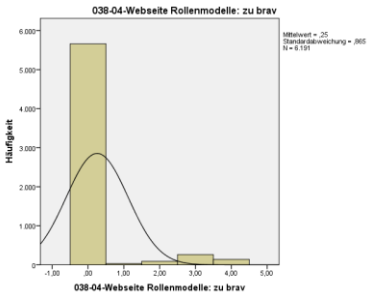

036-01-Webseite Videos: Gefallen
Mittelwert = ,20
Standardabweichung = ,799
N = 6.204
Häufigkeit
036-01-Webseite Videos: Gefallen

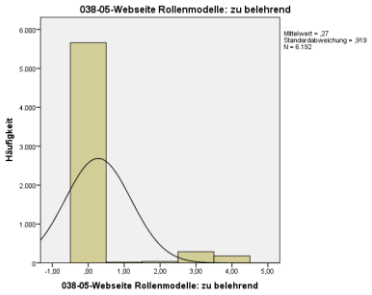

036-03-Webseite Videos: zu belehrend
Mittelwert = ,17
Standardabweichung = ,707
N = 6.199
Häufigkeit
036-03-Webseite Videos: zu belehrend

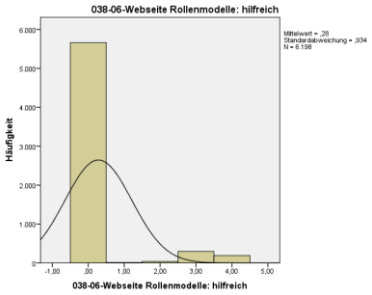

036-04-Webseite Videos: hilfreich
Mittelwert = ,19
Standardabweichung = ,793
N = 6.204
Häufigkeit
036-04-Webseite Videos: hilfreich

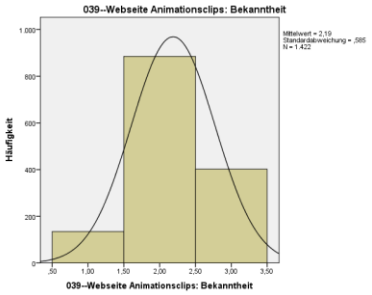

037--Webseite Rollenmodelle: Bekanntheit
Mittelwert = 2,29
Standardabweichung = ,635
N = 1.422
Häufigkeit
037--Webseite Rollenmodelle: Bekanntheit

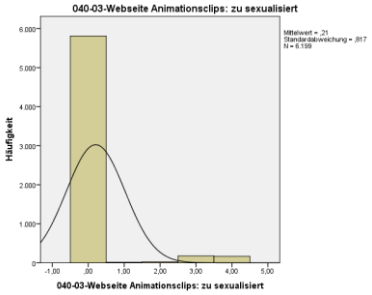

038-03-Webseite Rollenmodelle: zu sexualisiert
Mittelwert = ,28
Standardabweichung = ,943
N = 6.194
Häufigkeit
038-03-Webseite Rollenmodelle: zu sexualisiert

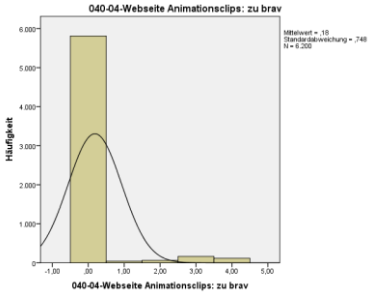

038-04-Webseite Rollenmodelle: zu brav
Mittelwert = ,25
Standardabweichung = ,865
N = 6.191
Häufigkeit
038-04-Webseite Rollenmodelle: zu brav

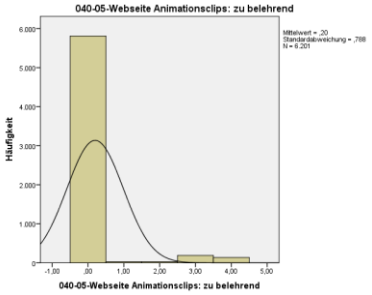

038-05-Webseite Rollenmodelle: zu belehrend
Mittelwert = ,27
Standardabweichung = ,919
N = 6.192
Häufigkeit
038-05-Webseite Rollenmodelle: zu belehrend

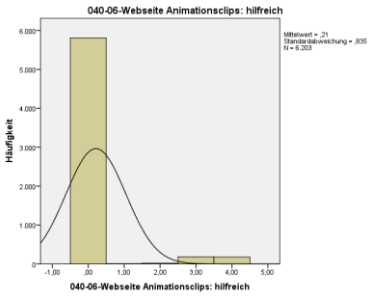

038-06-Webseite Rollenmodelle: hilfreich
Mittelwert = ,28
Standardabweichung = ,934
N = 6.198
Häufigkeit
038-06-Webseite Rollenmodelle: hilfreich

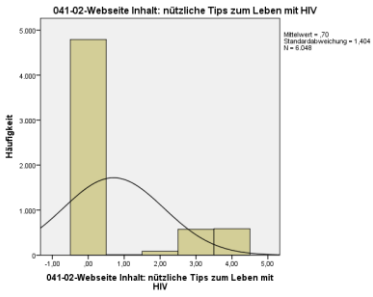

039--Webseite Animationsclips: Bekanntheit
Mittelwert = 2,19
Standardabweichung = ,585
N = 1.422
Häufigkeit
039--Webseite Animationsclips: Bekanntheit

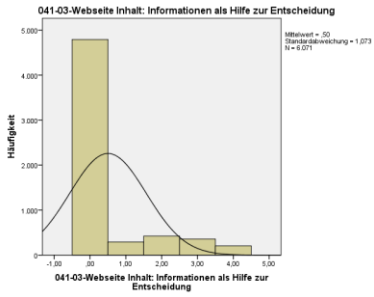

040-03-Webseite Animationsclips: zu sexualisiert
Mittelwert = ,21
Standardabweichung = ,817
N = 6.199
Häufigkeit
040-03-Webseite Animationsclips: zu sexualisiert

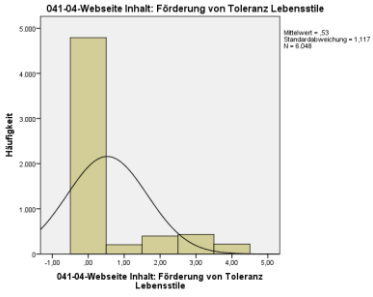

040-04-Webseite Animationsclips: zu brav
Mittelwert = ,18
Standardabweichung = ,748
N = 6.203
Häufigkeit
040-04-Webseite Animationsclips: zu brav

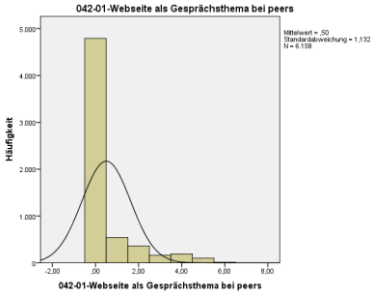

040-05-Webseite Animationsclips: zu belehrend
Mittelwert = ,20
Standardabweichung = ,788
N = 6.201
Häufigkeit
040-05-Webseite Animationsclips: zu belehrend

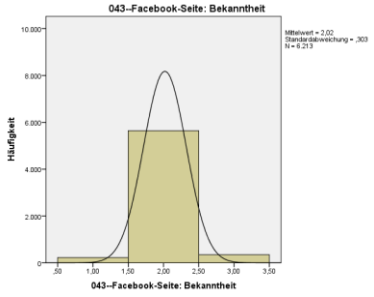

040-06-Webseite Animationsclips: hilfreich
Mittelwert = ,21
Standardabweichung = ,835
N = 6.203
Häufigkeit
040-06-Webseite Animationsclips: hilfreich

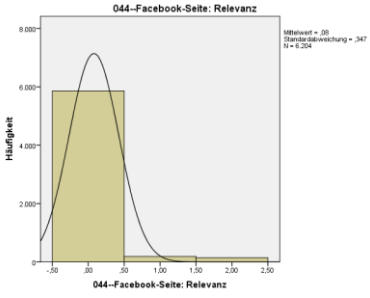

041-02-Webseite Inhalt: nützliche Tips zum Leben mit HIV
Mittelwert = ,70
Standardabweichung = 1,404
N = 6.048
Häufigkeit
041-02-Webseite Inhalt: nützliche Tips zum Leben mit HIV

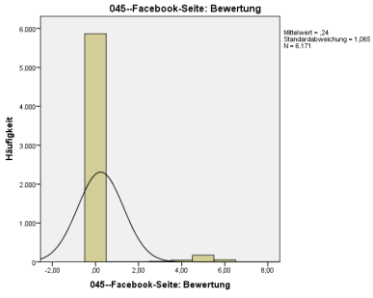

041-03-Webseite Inhalt: Informationen als Hilfe zur Entscheidung
Mittelwert = ,50
Standardabweichung = 1,073
N = 6.071
Häufigkeit
041-03-Webseite Inhalt: Informationen als Hilfe zur Entscheidung

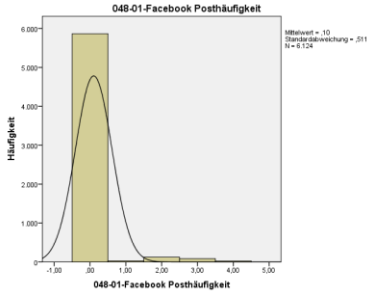

041-04-Webseite Inhalt: Förderung von Toleranz Lebensstile
Mittelwert = ,53
Standardabweichung = 1,117
N = 6.048
Häufigkeit
041-04-Webseite Inhalt: Förderung von Toleranz Lebensstile

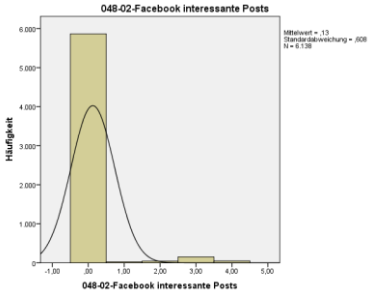

042-01-Webseite als Gesprächsthema bei peers
Mittelwert = ,50
Standardabweichung = 1,132
N = 6.158
Häufigkeit
042-01-Webseite als Gesprächsthema bei peers

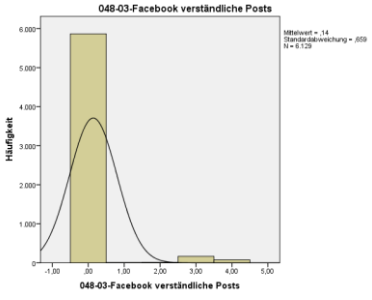

043--Facebook-Seite: Bekanntheit
Mittelwert = 2,02
Standardabweichung = ,303
N = 6.213
Häufigkeit
043--Facebook-Seite: Bekanntheit

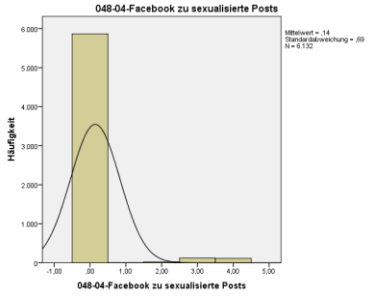

044--Facebook-Seite: Relevanz
Mittelwert = ,08
Standardabweichung = ,347
N = 6.204
Häufigkeit
044--Facebook-Seite: Relevanz

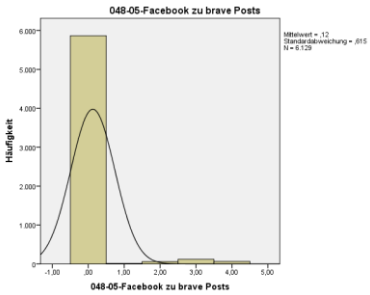

045--Facebook-Seite: Bewertung
Mittelwert = ,24
Standardabweichung = 1,065
N = 6.171
Häufigkeit
045--Facebook-Seite: Bewertung

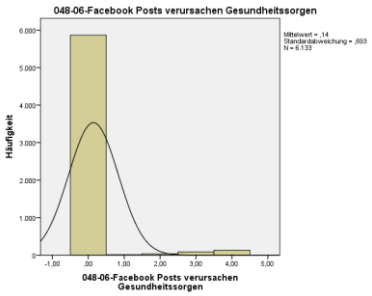

048-01-Facebook Posthäufigkeit
Mittelwert = ,10
Standardabweichung = ,511
N = 6.124
Häufigkeit
048-01-Facebook Posthäufigkeit

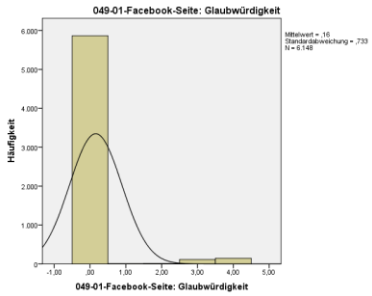

048-02-Facebook interessante Posts
Mittelwert = ,13
Standardabweichung = ,608
N = 6.139
Häufigkeit
048-02-Facebook interessante Posts

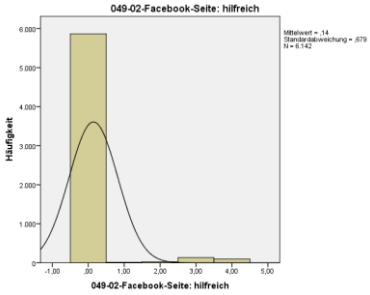

048-03-Facebook verständliche Posts
Mittelwert = ,14
Standardabweichung = ,659
N = 6.129
Häufigkeit
048-03-Facebook verständliche Posts

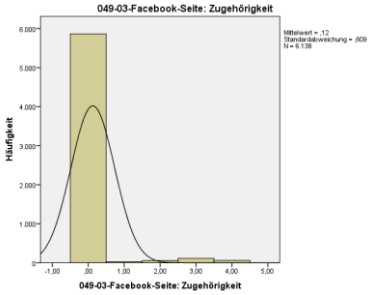

048-04-Facebook zu sexualisierte Posts
Mittelwert = ,14
Standardabweichung = ,69
N = 6.132
Häufigkeit
048-04-Facebook zu sexualisierte Posts

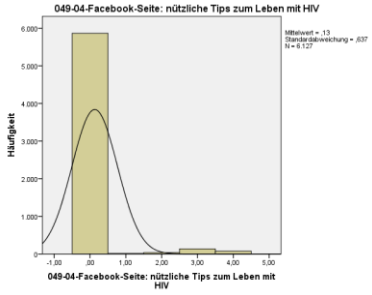

048-05-Facebook zu brave Posts
Mittelwert = ,12
Standardabweichung = ,615
N = 6.129
Häufigkeit
048-05-Facebook zu brave Posts

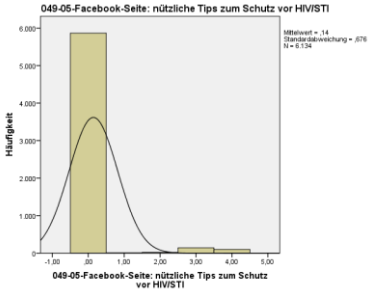

048-06-Facebook Posts verursachen Gesundheitssorgen
Mittelwert = ,14
Standardabweichung = ,693
N = 6.133
Häufigkeit
048-06-Facebook Posts verursachen Gesundheitssorgen

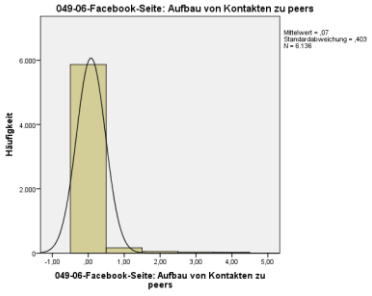

049-01-Facebook-Seite: Glaubwürdigkeit
Mittelwert = ,16
Standardabweichung = ,733
N = 6.148
Häufigkeit
049-01-Facebook-Seite: Glaubwürdigkeit

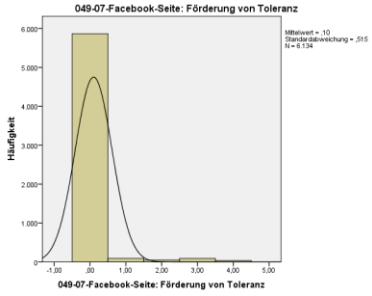

049-02-Facebook-Seite: hilfreich
Mittelwert = ,14
Standardabweichung = ,679
N = 6.142
Häufigkeit
049-02-Facebook-Seite: hilfreich

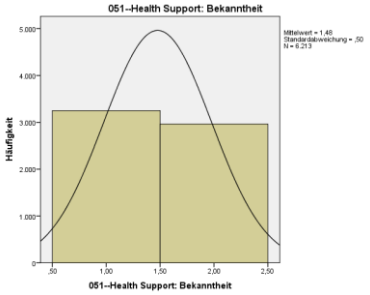

049-03-Facebook-Seite: Zugehörigkeit
Mittelwert = ,12
Standardabweichung = ,609
N = 6.138
Häufigkeit
049-03-Facebook-Seite: Zugehörigkeit

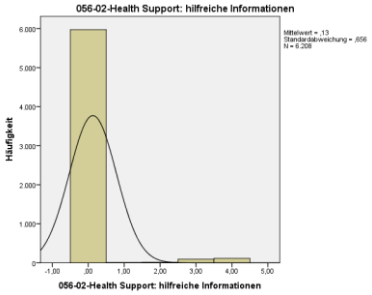

049-04-Facebook-Seite: nützliche Tips zum Leben mit HIV
Mittelwert = ,13
Standardabweichung = ,637
N = 6.127
Häufigkeit
049-04-Facebook-Seite: nützliche Tips zum Leben mit HIV

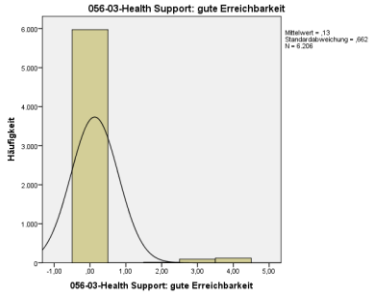

049-05-Facebook-Seite: nützliche Tips zum Schutz vor HIV/STI
Mittelwert = ,14
Standardabweichung = ,676
N = 6.134
Häufigkeit
049-05-Facebook-Seite: nützliche Tips zum Schutz vor HIV/STI

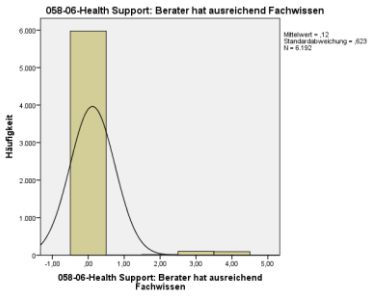

049-06-Facebook-Seite: Aufbau von Kontakten zu peers
Mittelwert = ,07
Standardabweichung = ,403
N = 6.136
Häufigkeit
049-06-Facebook-Seite: Aufbau von Kontakten zu peers

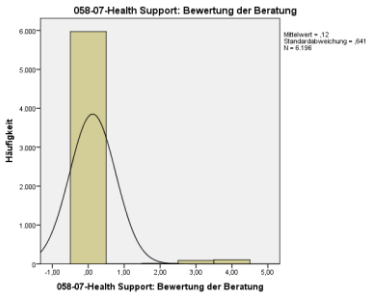

049-07-Facebook-Seite: Förderung von Toleranz
Mittelwert = ,10
Standardabweichung = ,515
N = 6.134
Häufigkeit
049-07-Facebook-Seite: Förderung von Toleranz

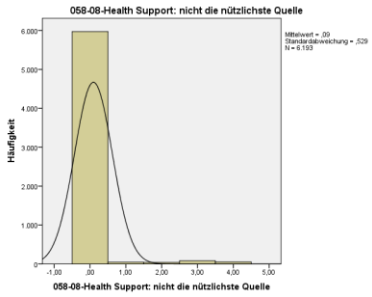

051--Health Support: Bekanntheit
Mittelwert = 1,48
Standardabweichung = ,50
N = 6.213
Häufigkeit
051--Health Support: Bekanntheit

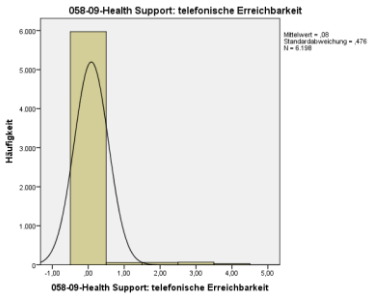

056-02-Health Support: hilfreiche Informationen
Mittelwert = ,13
Standardabweichung = ,656
N = 6.208
Häufigkeit
056-02-Health Support: hilfreiche Informationen

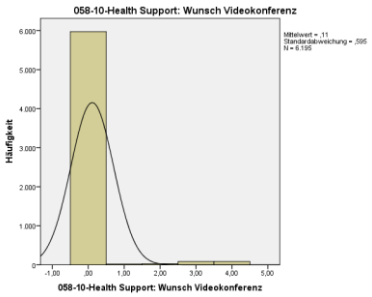

056-03-Health Support: gute Erreichbarkeit
Mittelwert = ,13
Standardabweichung = ,662
N = 6.206
Häufigkeit
056-03-Health Support: gute Erreichbarkeit

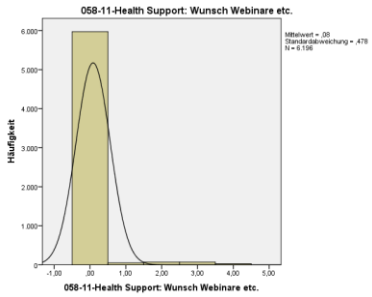




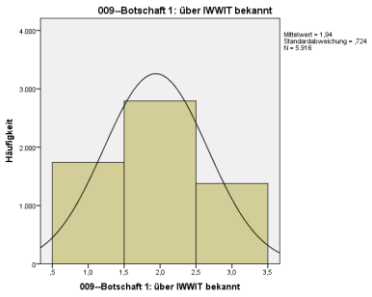


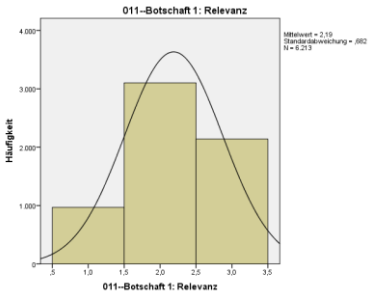


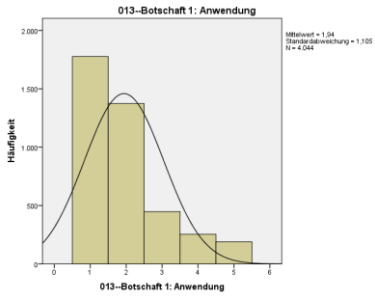


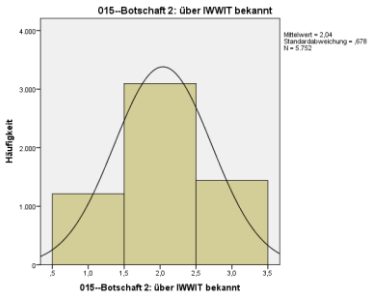


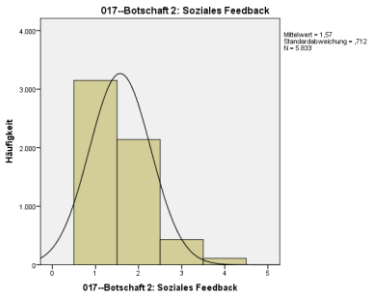
IX. Histograms “HIV/STI prevention”

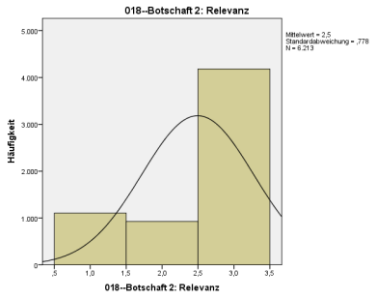


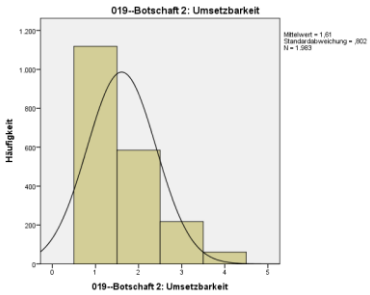


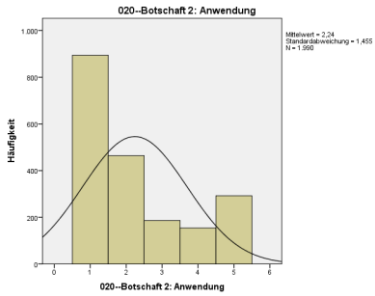


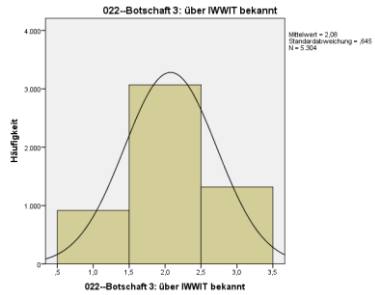


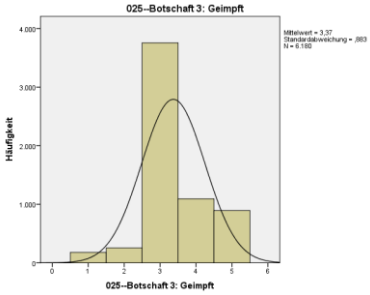


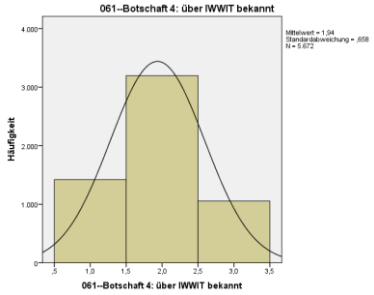


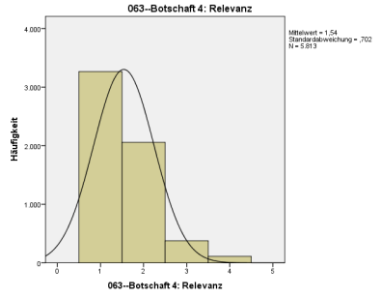

019--Botschaft 2: Umsetzbarkeit
Mittelwert = 1,61
Standardabweichung = ,802
N = 1.983
Häufigkeit
019--Botschaft 2: Umsetzbarkeit

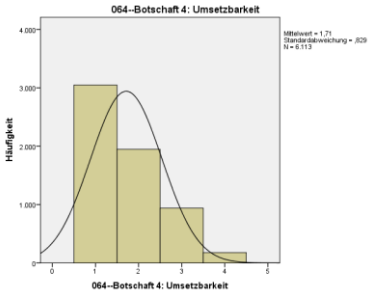

020--Botschaft 2: Anwendung
Mittelwert = 2,24
Standardabweichung = 1,455
N = 1.992
Häufigkeit
020--Botschaft 2: Anwendung

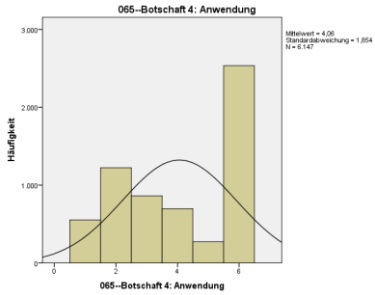

022--Botschaft 3: über IWWIT bekannt
Mittelwert = 2,08
Standardabweichung = ,645
N = 5.304
Häufigkeit
022--Botschaft 3: über IWWIT bekannt

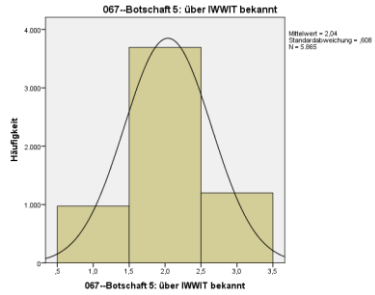

025--Botschaft 3: Geimpft
Mittelwert = 3,37
Standardabweichung = ,883
N = 6.180
Häufigkeit
025--Botschaft 3: Geimpft

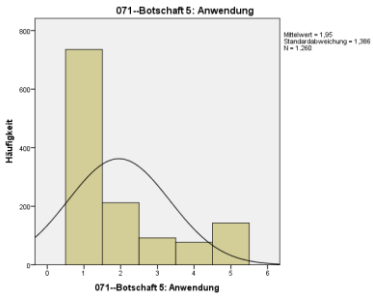

061--Botschaft 4: über IWWIT bekannt
Mittelwert = 1,94
Standardabweichung = ,658
N = 5.672
Häufigkeit
061--Botschaft 4: über IWWIT bekannt

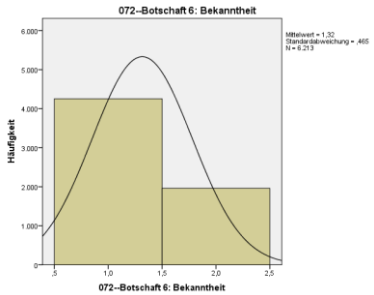

063--Botschaft 4: Relevanz
Mittelwert = 1,54
Standardabweichung = ,702
N = 5.813
Häufigkeit
063--Botschaft 4: Relevanz

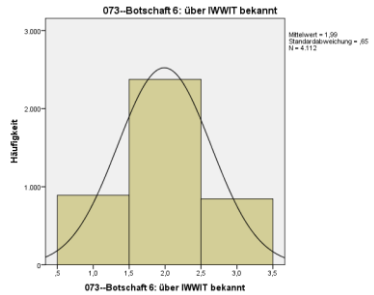

064--Botschaft 4: Umsetzbarkeit
Mittelwert = 1,71
Standardabweichung = ,829
N = 6.113
Häufigkeit
064--Botschaft 4: Umsetzbarkeit

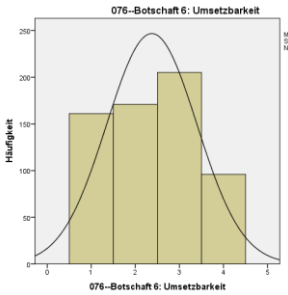

065--Botschaft 4: Anwendung
Mittelwert = 4,06
Standardabweichung = 1,854
N = 6.147
Häufigkeit
065--Botschaft 4: Anwendung

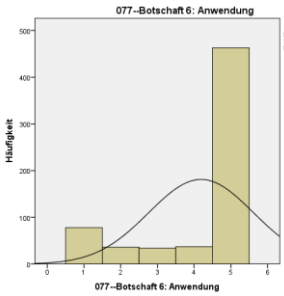

067--Botschaft 5: über IWWIT bekannt
Mittelwert = 2,04
Standardabweichung = ,608
N = 5.865
Häufigkeit
067--Botschaft 5: über IWWIT bekannt

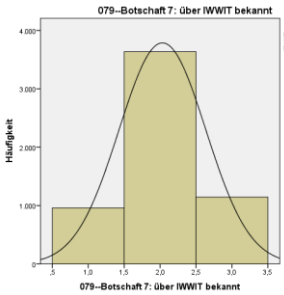

071--Botschaft 5: Anwendung
Mittelwert = 1,95
Standardabweichung = 1,386
N = 1.268
Häufigkeit
071--Botschaft 5: Anwendung

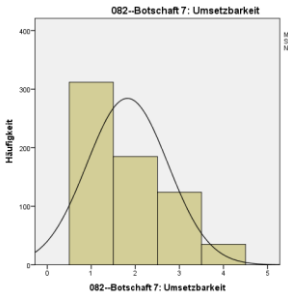

072--Botschaft 6: Bekanntheit
Mittelwert = 1,32
Standardabweichung = ,465
N = 6.213
Häufigkeit
072--Botschaft 6: Bekanntheit

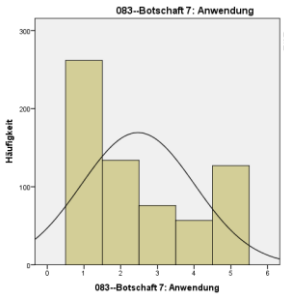

073--Botschaft 6: über IWWIT bekannt
Mittelwert = 1,99
Standardabweichung = ,65
N = 4.112
Häufigkeit
073--Botschaft 6: über IWWIT bekannt

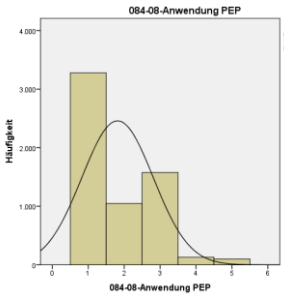

076--Botschaft 6: Umsetzbarkeit
Mittelwert = 2,37
Standardabweichung = 1,023
N = 633
Häufigkeit
076--Botschaft 6: Umsetzbarkeit

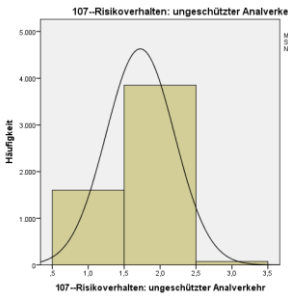

077--Botschaft 6: Anwendung
Mittelwert = 4,19
Standardabweichung = 1,428
N = 648
Häufigkeit
077--Botschaft 6: Anwendung

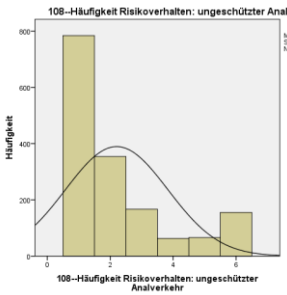

079--Botschaft 7: über IWWIT bekannt
Mittelwert = 2,03
Standardabweichung = ,605
N = 5.744
Häufigkeit
079--Botschaft 7: über IWWIT bekannt

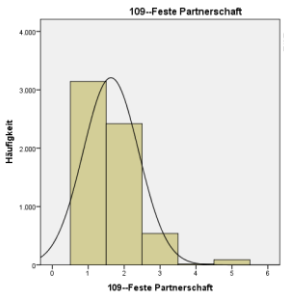

082--Botschaft 7: Umsetzbarkeit
Mittelwert = 1,82
Standardabweichung = ,92
N = 656
Häufigkeit
082--Botschaft 7: Umsetzbarkeit

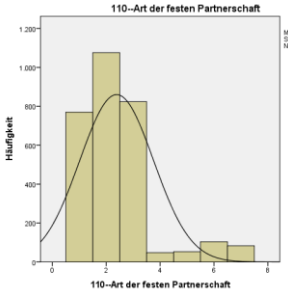

083--Botschaft 7: Anwendung
Mittelwert = 2,47
Standardabweichung = 1,545
N = 656
Häufigkeit
083--Botschaft 7: Anwendung

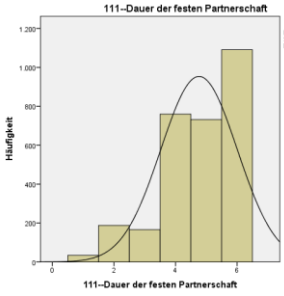

084-08-Anwendung PEP
Mittelwert = 1,81
Standardabweichung = ,995
N = 6.134
Häufigkeit
084-08-Anwendung PEP

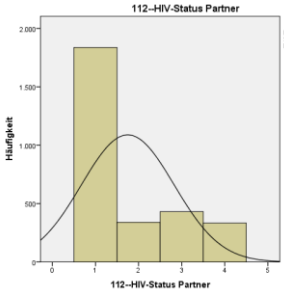

107--Risikoverhalten: ungeschützter Analverkehr
Mittelwert = 1,72
Standardabweichung = ,476
N = 5.523
Häufigkeit
107--Risikoverhalten: ungeschützter Analverkehr

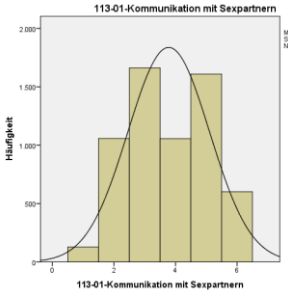

108--Häufigkeit Risikoverhalten: ungeschützter Analverkehr
Mittelwert = 2,21
Standardabweichung = 1,628
N = 1.589
Häufigkeit
108--Häufigkeit Risikoverhalten: ungeschützter Analverkehr

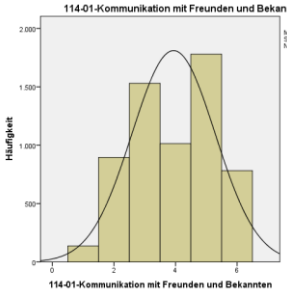

109--Feste Partnerschaft
Mittelwert = 1,63
Standardabweichung = ,772
N = 6.213
Häufigkeit
109--Feste Partnerschaft

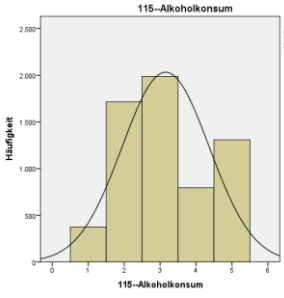

110--Art der festen Partnerschaft
Mittelwert = 2,39
Standardabweichung = 1,372
N = 2.958
Häufigkeit
110--Art der festen Partnerschaft

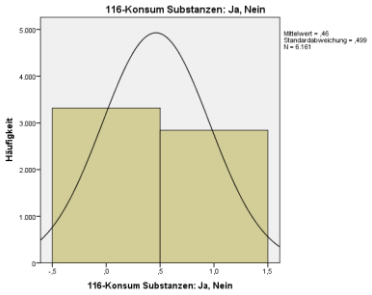

111--Dauer der festen Partnerschaft
Mittelwert = 4,76
Standardabweichung = 1,243
N = 2.971
Häufigkeit
111--Dauer der festen Partnerschaft

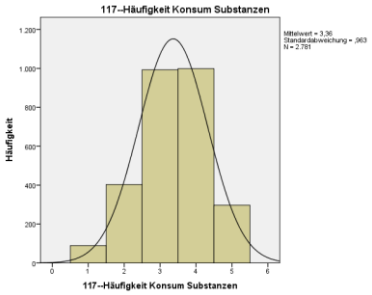

112--HIV-Status Partner
Mittelwert = 1,75
Standardabweichung = 1,078
N = 2.941
Häufigkeit
112--HIV-Status Partner

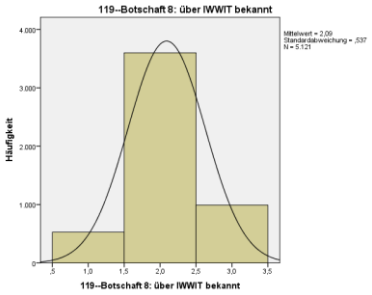

113-01-Kommunikation mit Sexpartnern
Mittelwert = 3,76
Standardabweichung = 1,327
N = 8.115
Häufigkeit
113-01-Kommunikation mit Sexpartnern

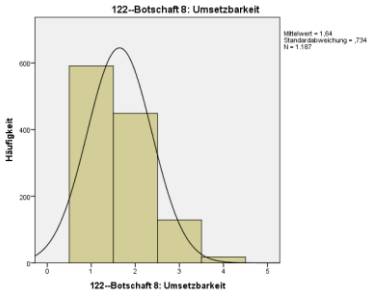

114-01-Kommunikation mit Freunden und Bekannten
Mittelwert = 3,94
Standardabweichung = 1,353
N = 8.141
Häufigkeit
114-01-Kommunikation mit Freunden und Bekannten

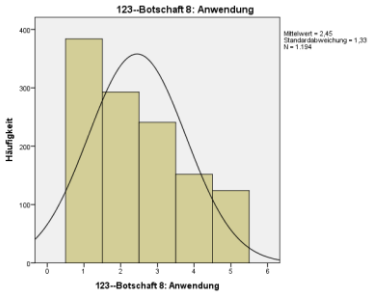

115--Alkoholkonsum
Mittelwert = 3,15
Standardabweichung = 1,213
N = 8.181
Häufigkeit
115--Alkoholkonsum

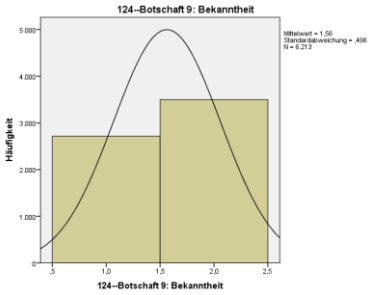

116-Konsum Substanzen: Ja, Nein
Mittelwert = ,46
Standardabweichung = ,499
N = 6.161
Häufigkeit
116-Konsum Substanzen: Ja, Nein

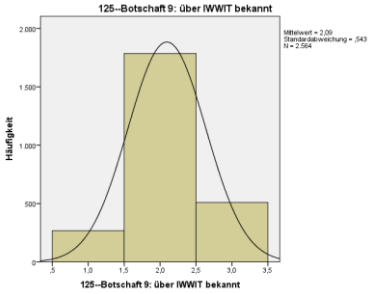

117--Häufigkeit Konsum Substanzen
Mittelwert = 3,36
Standardabweichung = ,963
N = 2.781
Häufigkeit
117--Häufigkeit Konsum Substanzen

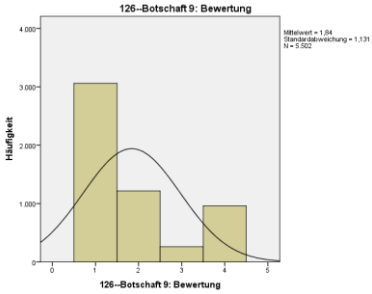

119--Botschaft 8: über IWWIT bekannt
Mittelwert = 2,09
Standardabweichung = ,537
N = 5.121
Häufigkeit
119--Botschaft 8: über IWWIT bekannt

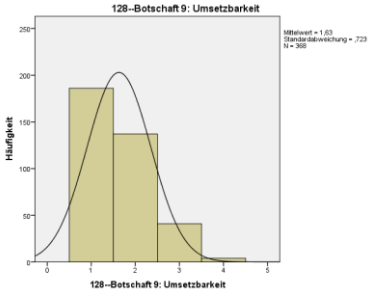

122--Botschaft 8: Umsetzbarkeit
Mittelwert = 1,64
Standardabweichung = ,734
N = 1.187
Häufigkeit
122--Botschaft 8: Umsetzbarkeit

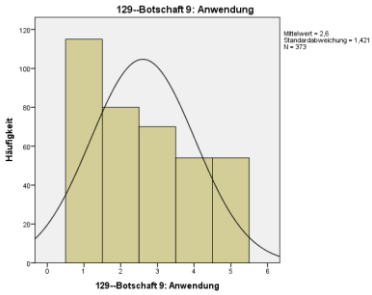

123--Botschaft 8: Anwendung
Mittelwert = 2,45
Standardabweichung = 1,33
N = 1.194
Häufigkeit
123--Botschaft 8: Anwendung

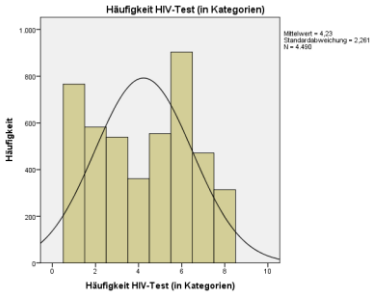

124--Botschaft 9: Bekanntheit
Mittelwert = 1,56
Standardabweichung = ,496
N = 6.213
Häufigkeit
124--Botschaft 9: Bekanntheit

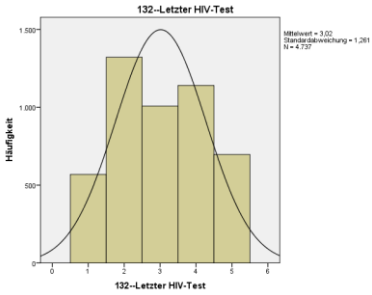

125--Botschaft 9: über IWWIT bekannt
Mittelwert = 2,09
Standardabweichung = ,543
N = 2.564
Häufigkeit
125--Botschaft 9: über IWWIT bekannt

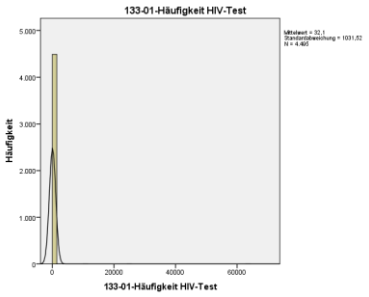

126--Botschaft 9: Bewertung
Mittelwert = 1,84
Standardabweichung = 1,131
N = 5.502
Häufigkeit
126--Botschaft 9: Bewertung

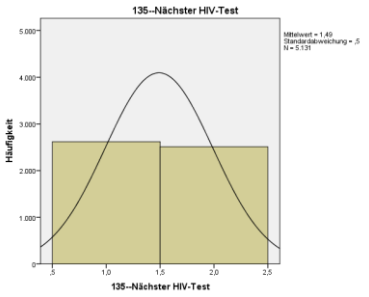

128--Botschaft 9: Umsetzbarkeit
Mittelwert = 1,63
Standardabweichung = ,723
N = 368
Häufigkeit
128--Botschaft 9: Umsetzbarkeit

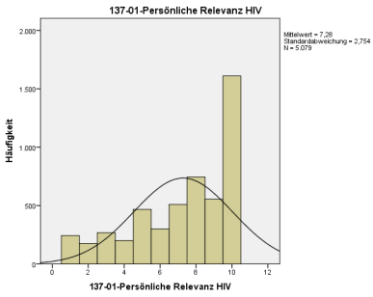

129--Botschaft 9: Anwendung
Mittelwert = 2,6
Standardabweichung = 1,421
N = 373
Häufigkeit
129--Botschaft 9: Anwendung

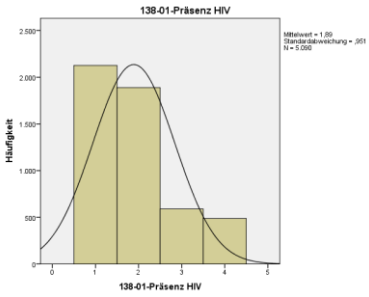

Häufigkeit HIV-Test (in Kategorien)
Mittelwert = 4,23
Standardabweichung = 2,261
N = 4.468
Häufigkeit
Häufigkeit HIV-Test (in Kategorien)

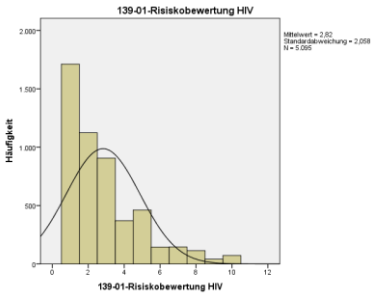

132--Letzter HIV-Test
Mittelwert = 3,02
Standardabweichung = 1,261
N = 4.737
Häufigkeit
132--Letzter HIV-Test

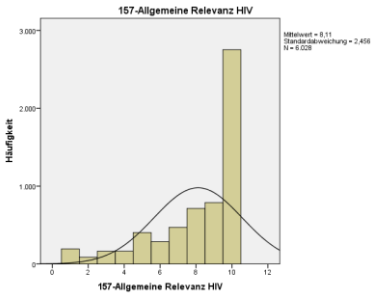

133-01-Häufigkeit HIV-Test
Mittelwert = 32,1
Standardabweichung = 1031,52
N = 4.466
Häufigkeit
133-01-Häufigkeit HIV-Test

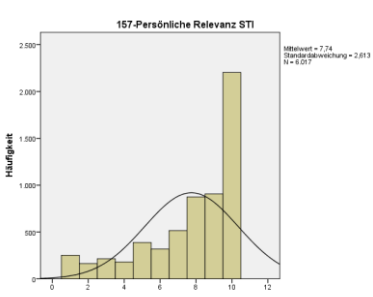

135--Nächster HIV-Test
Mittelwert = 1,49
Standardabweichung = ,5
N = 5.131
Häufigkeit
135--Nächster HIV-Test

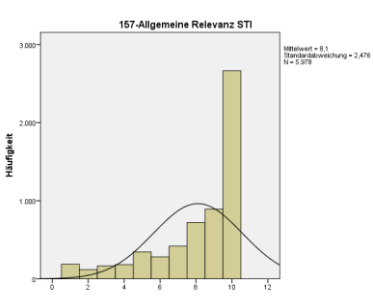

137-01-Persönliche Relevanz HIV
Mittelwert = 7,26
Standardabweichung = 2,754
N = 5.079
Häufigkeit
137-01-Persönliche Relevanz HIV

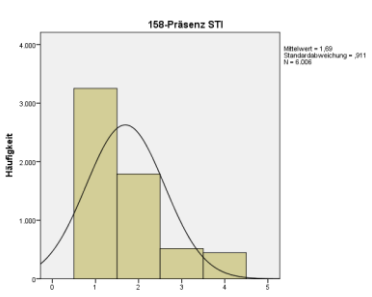

138-01-Präsenz HIV
Mittelwert = 1,89
Standardabweichung = ,951
N = 5.090
Häufigkeit
138-01-Präsenz HIV

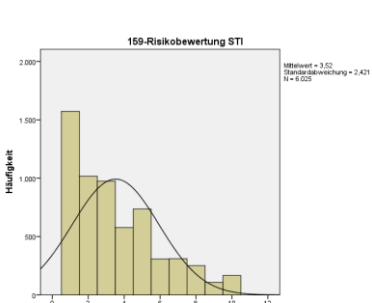

139-01-Risiskobewertung HIV
Mittelwert = 2,82
Standardabweichung = 2,059
N = 5.095
Häufigkeit
139-01-Risiskobewertung HIV


157-Allgemeine Relevanz HIV
Mittelwert = 8,11
Standardabweichung = 2,456
N = 6.028
Häufigkeit
157-Allgemeine Relevanz HIV

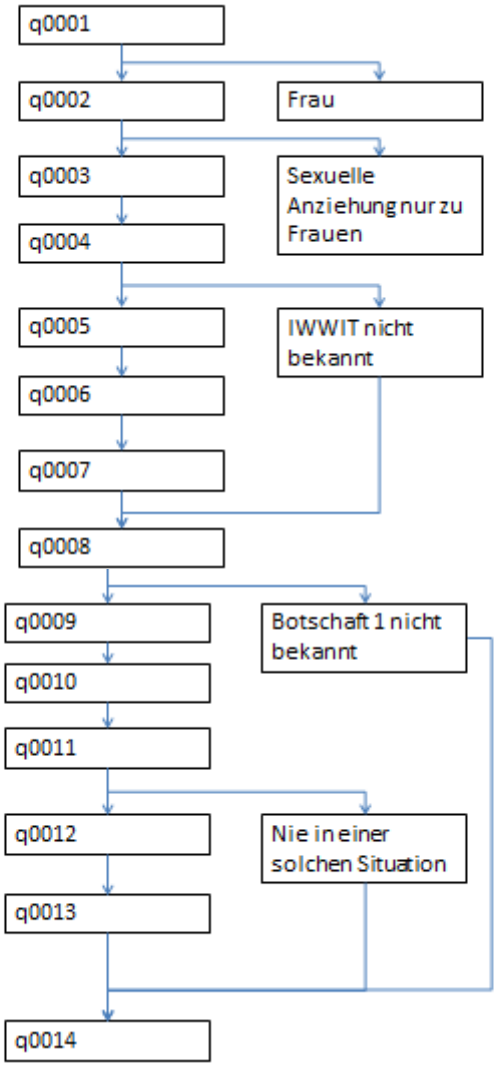

157-Persönliche Relevanz STI
Mittelwert = 7,74
Standardabweichung = 2,613
N = 6.017
Häufigkeit
157-Persönliche Relevanz STI

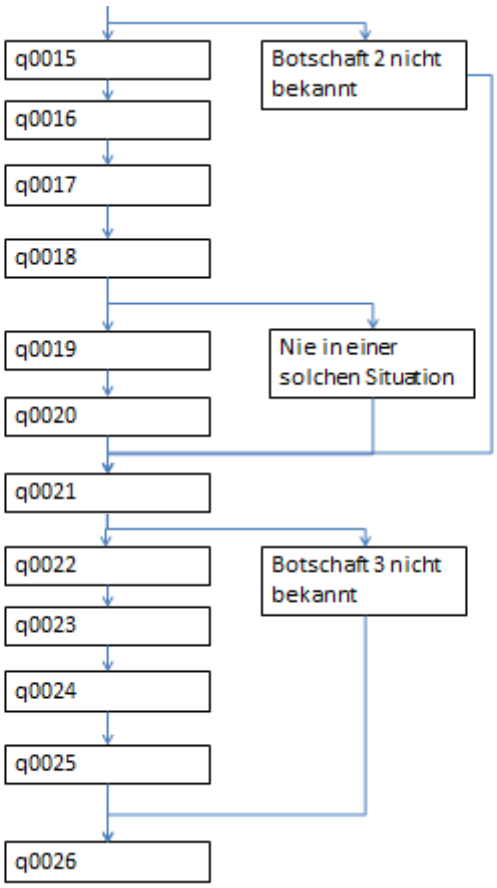

157-Allgemeine Relevanz STI
Mittelwert = 8,1
Standardabweichung = 2,476
N = 5.978
Häufigkeit
157-Allgemeine Relevanz STI

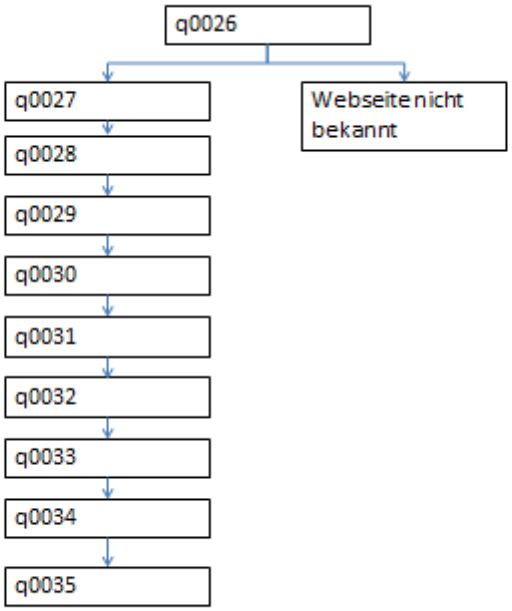

158-Präsenz STI
Mittelwert = 1,69
Standardabweichung = ,911
N = 6.006
Häufigkeit
158-Präsenz STI

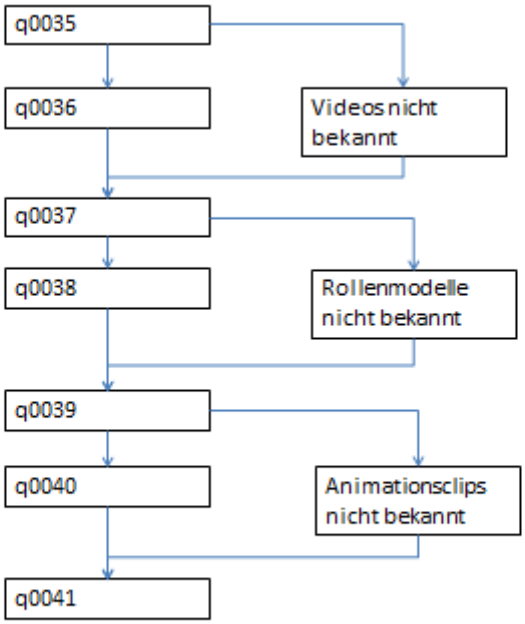

159-Risikobewertung STI
Mittelwert = 3,52
Standardabweichung = 2,421
N = 6.025
Häufigkeit
159-Risikobewertung STI

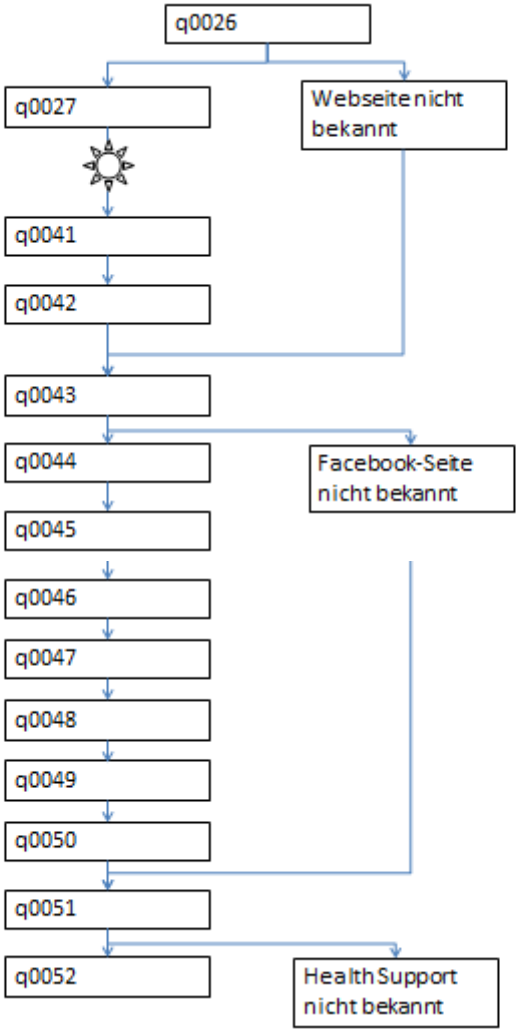
X. Flow chart of the branching technique

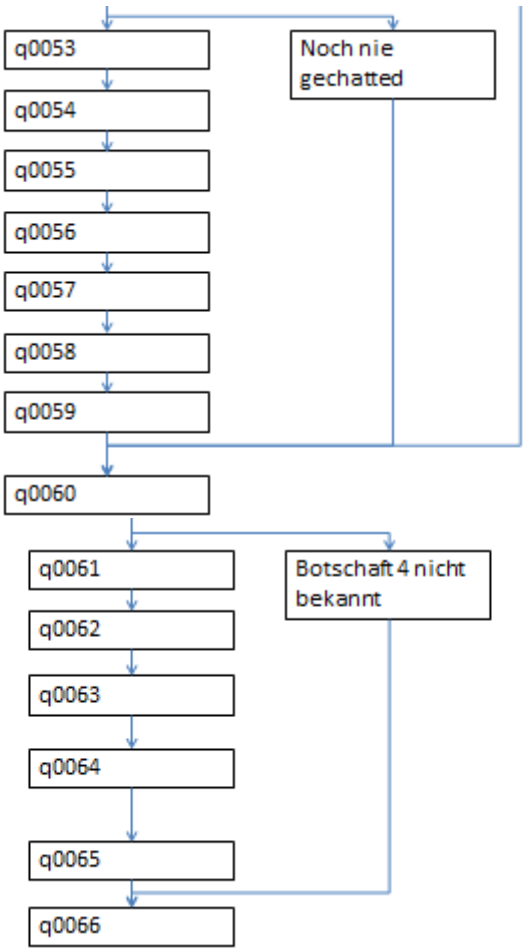


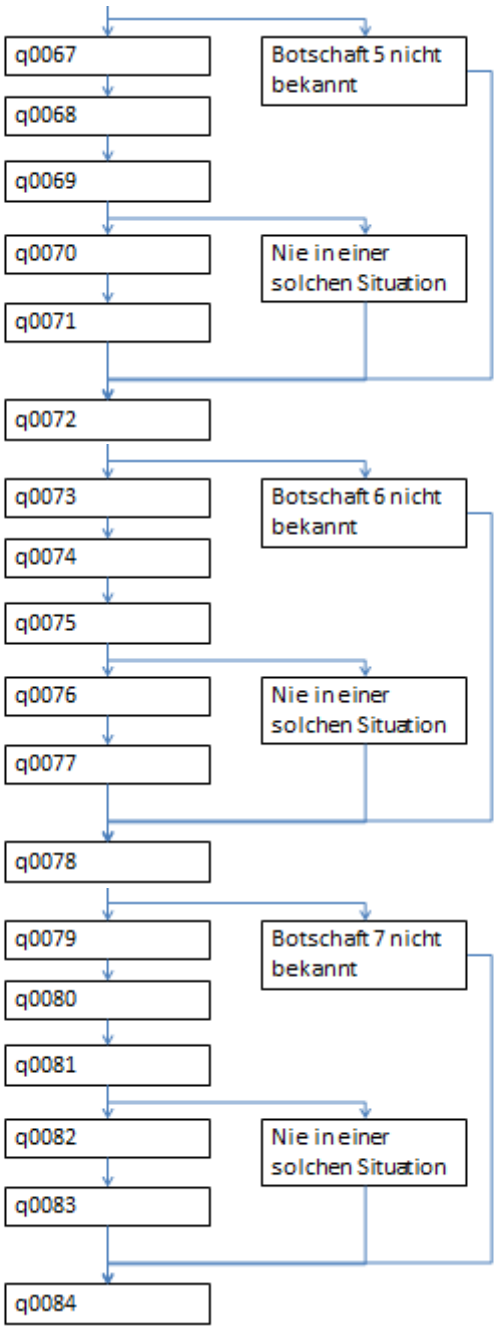

q0015
Botschaft 2 nicht bekannt
q0016
q0017
q0018
q0019
Nie in einer solchen Situation
q0020
q0021
q0022
Botschaft 3 nicht bekannt
q0023
q0024
q0025
q0026

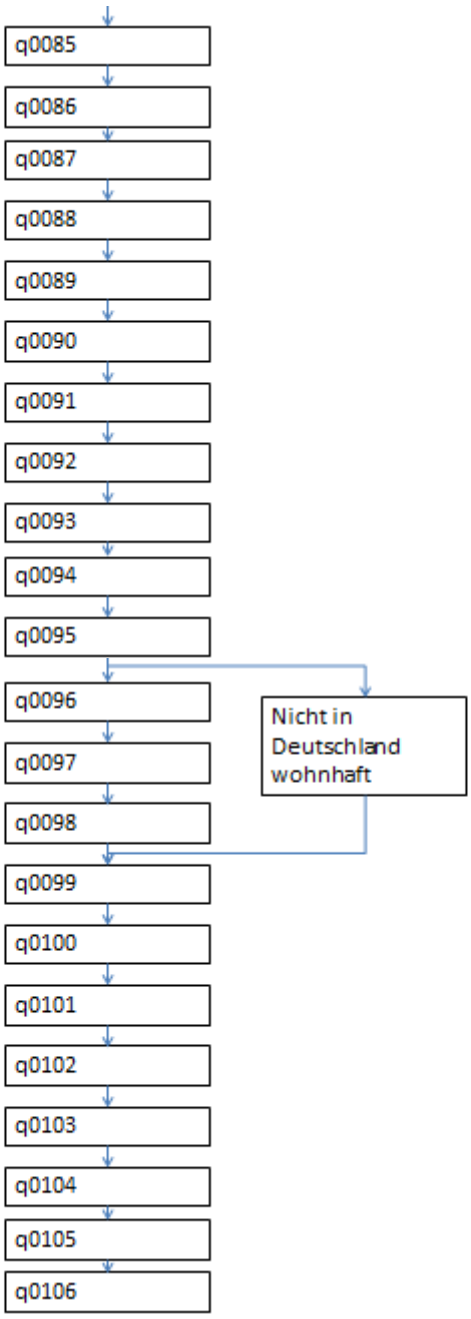

q0026
q0027
Webseite nicht bekannt
q0028
q0029
q0030
q0031
q0032
q0033
q0034
q0035

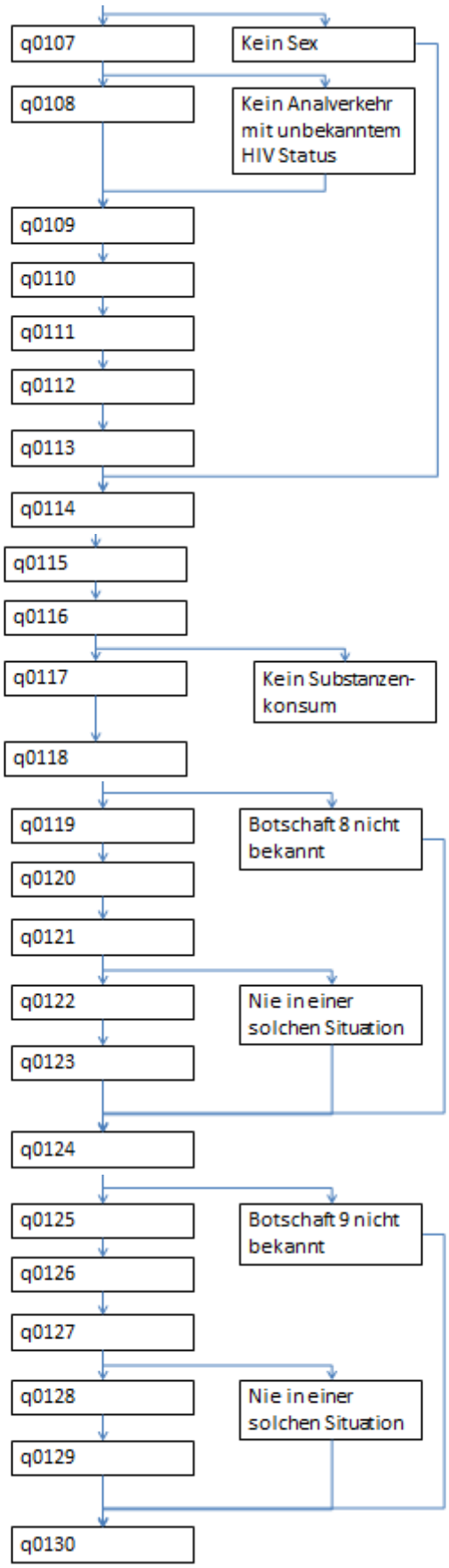

q0035
q0036
Videos nicht bekannt
q0037
q0038
Rollenmodelle nicht bekannt
q0039
q0040
Animationsclips nicht bekannt
q0041

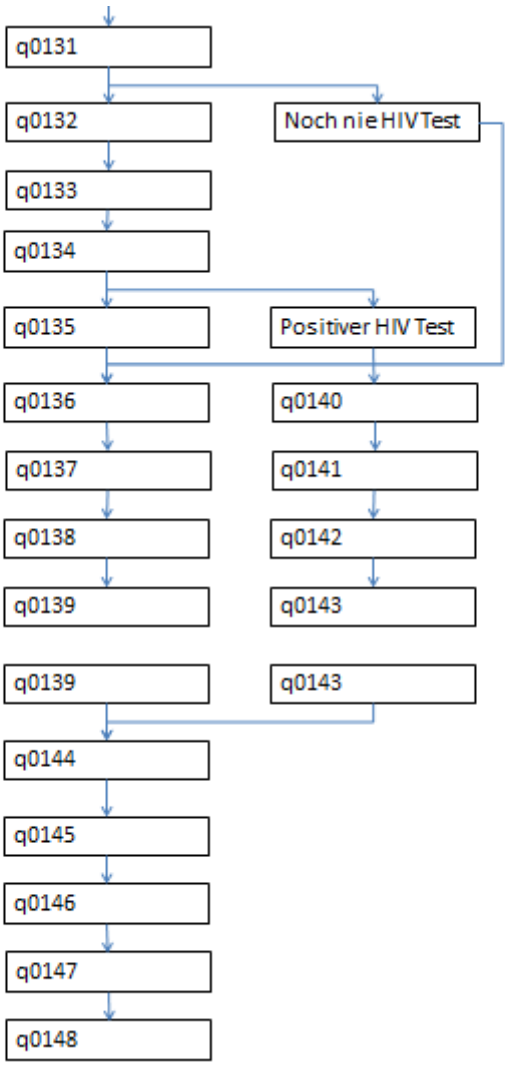

q0026
q0027
Webseite nicht bekannt
q0041
q0042
q0043
q0044
Facebook-Seite nicht bekannt
q0045
q0046
q0047
q0048
q0049
q0050
q0051
q0052
Health Support nicht bekannt


q0053
Noch nie gechatted
q0054
q0055
q0056
q0057
q0058
q0059
q0060
q0061
Botschaft 4 nicht bekannt
q0062
q0063
q0064
q0065
q0066


q0067
Botschaft 5 nicht bekannt
q0068
q0069
q0070
Nie in einer solchen Situation
q0071
q0072
q0073
Botschaft 6 nicht bekannt
q0074
q0075
q0076
Nie in einer solchen Situation
q0077
q0078
q0079
Botschaft 7 nicht bekannt
q0080
q0081
q0082
Nie in einer solchen Situation
q0083
q0084


q0085
q0086
q0087
q0088
q0089
q0090
q0091
q0092
q0093
q0094
q0095
q0096
q0097
q0098
q0099
q0100
q0101
q0102
q0103
q0104
q0105
q0106
Nicht in Deutschland wohnhaft


q0107
Kein Sex
q0108
Kein Analverkehr mit unbekanntem HIV Status
q0109
q0110
q0111
q0112
q0113
q0114
q0115
q0116
q0117
Kein Substanzen-konsum
q0118
q0119
Botschaft 8 nicht bekannt
q0120
q0121
q0122
Nie in einer solchen Situation
q0123
q0124
q0125
Botschaft 9 nicht bekannt
q0126
q0127
q0128
Nie in einer solchen Situation
q0129
q0130



XI. Scales of “target group specificity”

Feature	Items
Quality of information	32: 6-9 41: 2; 3 49: 4;5 58: 6; 8
Perceived value	31 32: 10 33: 6 36: 4 38: 6 40: 6 41: 4 48: 6 49: 2; 6; 7 56: 2

Feature	Items
Layout/user friendliness	32: 1-3 56: 3 58: 9-11
Tone	33: 3-5 36: 3 38: 3-5 40: 3-5 48: 4; 5
Intended audience	32: 4; 5; 11; 13 33: 1 36: 1 48: 1-3 49: 1; 3
Delivery channel	4 7 26 28 30 35 37 39 42: 1 43 44 45 51 58: 7

XII. Scales of “HIV/STI prevention”

Feature	Items
SF-36: emotional functioning	87: 1-3 88
Rosenberg self-esteem scale	85: 1-4
Knowledge	9 15 22 61 67 73 79 84: 8 119 125

Feature	Items
Risk perception	132 133 135 137: 1 138: 1 139: 1 157: 1-3 158 159
Viability	19 64 76 82 122 128
Application	13 20 25 65 71 77 83 123 129
Communication competence	113 114
Consumption of alcohol and other substances	115 117
Sexual life style	107 110 112

XIII. Feedback of pre-testing phase

1
Ist die Zielgruppe nicht MSM?
test maria
wenn das nur fuer schwule maenner und msm ist, warum steht da dann frau als option?
3
Beziehungskisten? Ist das ein Ausdruck des 21 Jhd? Ich kenn das aus den 80ern
ich wuerde definitiv eine option ""nicht zutreffend"" machen, so dass ihr sicher sein koennt, dass die Leute nicht aus Versehen was auslassen!
Syphilis schreibt man mit einem ""l"". Ich finde diesen Einstieg etwas merkwürdig. Hier sollte wohl ein Satz dazu fallen, dass dies auch Themen der Kampagne sind, oder? Ich meine was ist ""Beziehungskisten"" denn für ein allegmeines Thema, für das ich mich interessieren könnte?
test maria
weiß nicht was mit Beziehungskisten gemeint ist
4

sollte man nicht immer ein Kondom verwenden?
test skip logic
8
Müsste dann bei Antwort nie nicht stehen weiter mit Antwort ...?
15
hier die Antwortmöglichkeit ""nein"" hinzugefügt werden, für die jenigen die zwar vor einer Bezihung sich testen lassen haben aber dies nicht in den letzten 12 Monaten war, da die Beziehung länger als 12 Monate zurückliegt. Die Antwortmöglichkeiten würde die Statistik verfälschen, für genau die Personen, weil sie gezwungen sind etwas auszuwählen, was nicht zutrifft.
19
bin mir unsicher"" hinzufügen?
22
Wieso wäre?
23
B schlägt aber nicht an
test maria
24
ich wuerde definitiv eine ""nicht zutreffend"" oder aehnliches reinmachen. Ansonsten kann man wirklich echt leicht eine Frage aus Versehen überspringen
25
26
Hinweis, dass Mehrfachantworten möglich sind
29
auf mehrfachantworten hinweisen
30
Jede(n) Woche, n zuviel
31
Andere Gründe zuerst? Oder ist hier noch eine Randomisierung drin?
auf mehrfachantworten hinweisen
in Klammer angeben das Mehrfachnennungen möglich sind!
36
syphilis schreibt man mit einem ""l
37
das bild ist nach oben gerutscht bzw. ist bei der falschen Frage
40
die frage kann man nicht an HIV Positive stellen oder doch?
45
hier fehlt das erste ""I"" bei IWWIT. Verweis(en) muss Singular sein
47
hier kommt wieder was zu HIV. Ist das ok für Positive?
48
LGBT in Klammern erklären?
49
man kann doch auch von iwwit.de chatten
54
ich würde antwortmöglichkeiten keine konkrete frage und andere konkrete Frage ans Ende stellen
55
beim letzten Item fehlt der punkt am ende
56
vielleicht noch ""Hornet"" auflisten

58
beim ersten item könnte man noch darüber nachdenken, ob man ganz korrekt ist und schreibt ""bzw. Sexual transmitted infections
wissen die Leute, was eine Pep ist?
59
das wurde doch gerade mitgeteilt. Das ist doch blöd, das erst danach zu fragen. Dann muss es ja allen bekannt sein
60
immer das gleiche/ein ähnliches Fragen-Antwort-Schema ist natuerlich ein wenig ermüdend auf DAuer
64
das ""im"" aus der Überschrift muss weg
Ist das ein Bluttest? Dann: meine letzte Blutuntersuchung auf Syphilis war... (Oder ein Abstrich?)
65
untenrum"" ersetzen durch ""Schwanz oder Arsch""? (Formulierung von iwwit.de)
69
bezieht sich die Frage darauf dass man selbst zum Arzt musste wegen Jucken oder Brennen??
71
wenn es noch nie gejuckt und gebrannt hat.. was klickt man da an?
72
das wurde auch schon mitgeteilt, also auch besser vorher abfragen
76
wenn man seit über einem Jahr positiv ist, geht das wohl kaum!?
79
das ist aber ganz schoen moralisch ...
83
kann man mehrmals in der Situation gewesen sein?
91
Die Frage macht für mich keinen Sinn
93
es fehlt noch eine kurze Einleitung. Jetzt geht es um Sie als Person oder sowas. Ich würde mit dem dritten Item starten, das ist irgendwie eingängiger.
hier faende ich noch eine Einleitung ganz gut. Das Thema wechselt ja doch sehr plötzlich
94
Hier Zahlen angeben, damit man seinen Wert besser ""findet"".
96
und was wenn man denkt das man keine Probleme hat?
97
und was wenn man denkt das man keine Probleme hat?
100
der satz ""sind die gegenwärtig.. passt nicht. Da müsste als antwort ja oder nein kommen
107
die Frage wirkt hier ein wenig komisch. sehr speziell, so getrennt von anderen ""Zugehörigkeiten"". und so am Ende. fragt man da nicht eher, ob man in einem Lang außerhalb D geboren ist und welche Sprache zuhause gesprochen wird/wurde (Familie)?
109
Die Ländernamen sind keine Antwort auf die Frage. Umformulieren: Von welchem Staat besitzen Sie die Staatsbürgerschaft oder so
Kommas entfernen
111

das finde ich jetzt aber echt ein bisschen zu persönlich. wozu müsst ihr das überhaupt wissen? Migrationshintergrund okay, aber dann wirklich noch mal unterscheiden? dann, finde ich ,koennt ihr auch die frage nach dfem ""Migrationshintergrund"" raus nehmen
113
ja, naja, erst werden voll die privaten Details abgefragt (Teil der PLZ etc, Migrationshintergrund der Mutter) und dann wird auf anonymität gepocht ... hmm ...
114
Auch hier Zahlen hinterlegen
116
zur Frage vorher: wenn das bisexuelle sind: wollt ihr dann auch wissen, wie oft sie mit Frauen Sex hatten?
117
ich habe nicht ja oder nein bei 93. angekreuzt und komme trotzdem hierher. fehlgeleitet?
118
kann man sich 100% sicher sein?
121
Weiß nicht"" nur auf mich bezogen oder weiß ich nicht, was mein Partner treibt?
123
die Frage kann mit den Kategorien nicht beantwortet werden. Es müsste heißen. Wann haben sie das letzte mal...
126
Zählt dazu auch Tabak?
127
zu 102 noch einmal: ist selten nicht was anderes als nie'? Würde das schon unterscheiden, oder?
128
was ist denn ein Anlass in dem Zusammenhang? Finde ich schwierig, das Wort
142
Hmmmpf... (siehe Anmerkung per Mail)
kann man das kästchen nach links verschieben?
143
144
145
146
wieso bei 143 keine drop down box? ich würde auch dazu schreiben, dass sie es ggf schätzen sollen
151
bekomme ich die fragen auch (123), wenn ich angekreuzt habe, dass ich hiv positv bin?
filter prüfen: HIV status keine Angabe -> wie positive. HIV. status?-> wie negative
155
HM. keine last sich mit anderen kombinieren6
156
hier noch einen Satz: sowas wie ""Achtung, hier geht es NICHT um IHRE Einstellung"". Beim letzen Item ist ein leerzeichen nach HIV zuviel
Zahlen oder Formulierungen hinterlegen (schwach, weder/noch, usw)
157
hier fehlt beim dritten ITem ANDERER sex. ü. Kr
Zahlen hinterlegen
159
Zahlen hinterlegen
165
Schreibfehler: telefonsich. ah, finde ich hart, dass ihr so viele Infos abfragt. und psyeudonymisiert.

speichert ihr eigentlich ip-adressen? wuerde ich ausschalten und auch reinschreiben. oder steht das schon irgendwo?
166
hier ist die Frage falsch. Da würde man jetzt ""ja"" reinschreiben. Man muss hier nochmal nach der E.mailadresse fragen
nl6000@gmx.de
167
bei 133: wuerde dann sagen, dass sie eine Emailadresse eingeben sollen: der Bogen ist wirklich lange!!! und z.T. auch nicht so abwechslungsreich. aber wenn die Leute es ausfuellen, bekommt ihr sicherlich spannende daten! wobei schon verhaeltnismaessig wenige Fragen zu IWwit gestellt werden; ihr koennt ja deren Verhalten jetzt nicht 1:1 auf Iwwit infos oder nicht zurueckfuehren. Also, geht es nicht nur um die Evaluation? da werden richtig viele Daten erhoben, die sicherlich spannend sind - aber hilft das alles iwwit? Viel Erfolg dabei ;-)
Der Test dauert eeeeeeeewig. Gefahr von Abbruch durch die Teilnehmer!!!
kann man die box auch über die Kontaktdaten ziehen? wieso ist man hier erst bei 90% Fortschritt? Das macht doch keinen Sinn...

XIV. Results of EFA “target group specificity”

Item	Component				Communalities
	1	2	3	4	
004--IWWIT Bekanntheit	,397				,170
007--IWWIT Bewertung	,443				,215
026--Webseite Bekanntheit	,819				,737
028--Webseite Nutzungshäufigkeit	,863		,316		,877
030--Webseite Bewertung	,961				,982
031--Webseite Hilfreich	,954				,976
032-01-Webseite Übersicht	,953				,971
032-02-Webseite Orientierung	,952				,972
032-03-Webseite farbliche Gestaltung	,950				,961
032-04-Webseite Inhalte	,952				,974
032-05-Webseite persönliches Interesse an Themen	,946				,964
032-06-Webseite neue Inhalte	,906				,893
032-07-Webseite vielfältige Informationen	,948				,968
032-08-Webseite zu großes Informationsangebot	,924				,903
032-09-Webseite fehlende Informationen	,934				,922
032-10-Webseite Anstoß zu Besorgnis	,912				,890

Item	Component				Communalities
	1	2	3	4	
032-11-Webseite Spaßfaktor	,939				,955
032-13-Webseite Bilder: Gefallen	,951				,969
033-01-Webseite Texte: Gefallen	,954				,979
033-03-Webseite Texte: Sexualisierung	,943				,946
033-04-Webseite Texte: zu brav	,930				,923
033-05-Webseite Texte: zu belehrend	,939				,946
033-06-Webseite Texte: hilfreich	,952				,975
036-01-Webseite Videos: Gefallen	,329		,741		,690
036-03-Webseite Videos: zu belehrend	,319		,743		,678
036-04-Webseite Videos: hilfreich	,329		,747		,698
038-03-Webseite Rollenmodelle: zu sexualisiert	,453		,692		,710
038-04-Webseite Rollenmodelle: zu brav	,450		,691		,703
038-05-Webseite Rollenmodelle: zu belehrend	,454		,699		,722
038-06-Webseite Rollenmodelle: hilfreich	,458		,705		,739
040-03-Webseite Animationsclips: zu sexualisiert	,329		,768		,709
040-04-Webseite Animationsclips: zu brav	,321		,760		,690
040-05-Webseite Animationsclips: zu belehrend	,328		,762		,698
040-06-Webseite Animationsclips: hilfreich	,337		,762		,706
041-02-Webseite Inhalt: nützliche Tips zum Leben mit HIV	,951				,969
041-03-Webseite Inhalt: Informationen als Hilfe zur Entscheidung	,879				,853
041-04-Webseite Inhalt: Förderung von Toleranz Lebensstile	,895				,892
042-01-Webseite als Gesprächsthema bei peers	,788				,747

Item	Component				Communalities
	1	2	3	4	
043--Facebook-Seite: Bekanntheit		,747			,569
044--Facebook-Seite: Relevanz		,941			,922
045--Facebook-Seite: Bewertung		,971			,975
048-01-Facebook Posthäufigkeit		,931			,897
048-02-Facebook interessante Posts		,961			,960
048-03-Facebook verständliche Posts		,971			,975
048-04-Facebook zu sexualisierte Posts		,953			,939
048-05-Facebook zu brave Posts		,937			,908
048-06-Facebook Posts verursachen Gesundheitssorgen		,938			,907
049-01-Facebook-Seite: Glaubwürdigkeit		,974			,979
049-02-Facebook-Seite: hilfreich		,970			,973
049-03-Facebook-Seite: Zugehörigkeit		,955			,948
049-04-Facebook-Seite: nützliche Tips zum Leben mit HIV		,967			,966
049-05-Facebook-Seite: nützliche Tips zum Schutz vor HIV/STI		,972			,977
049-06-Facebook-Seite: Aufbau von Kontakten zu peers		,867			,791
049-07-Facebook-Seite: Förderung von Toleranz		,911			,872
051--Health Support: Bekanntheit					,057
056-02-Health Support: hilfreiche Informationen				,979	,961
056-03-Health Support: gute Erreichbarkeit				,979	,960
058-06-Health Support: Berater hat ausreichend Fachwissen				,978	,959
058-07-Health Support: Bewertung der Beratung				,981	,966
058-08-Health Support: nicht die nützlichste Quelle				,944	,893
058-09-Health Support: telefonische Erreichbarkeit				,933	,872

Item	Component				Communalities
	1	2	3	4	
058-10-Health Support: Wunsch Videokonferenz				,973	,949
058-11-Health Support: Wunsch Webinare etc.				,935	,876
035--Webseite Videos: Bekanntheit	,883		,374		,942
037--Webseite Rollenmodelle: Bekanntheit	,884		,380		,947
039--Webseite Animationsclips: Bekanntheit	,879		,385		,938

XV. Results of EFA “HIV/STI prevention”

Item	**Component**						**Communalities**
	1	**2**	**3**	**4**	**5**	**6**	
009--Botschaft 1: über IWWIT bekannt			,558				,326
013--Botschaft 1: Anwendung		,612					,436
015--Botschaft 2: über IWWIT bekannt			,638				,416
019--Botschaft 2: Umsetzbarkeit		,612				,399	,543
020--Botschaft 2: Anwendung		,638				,354	,552
022--Botschaft 3: über IWWIT bekannt			,562				,357
025--Botschaft 3: Geimpft	,447						,225
061--Botschaft 4: über IWWIT bekannt			,672				,489
064--Botschaft 4: Umsetzbarkeit	,482						,291
065--Botschaft 4: Anwendung	,758						,599
067--Botschaft 5: über IWWIT bekannt			,705				,500

Item	Component						Communalities
	1	2	3	4	5	6	
071--Botschaft 5: Anwendung		,369					,157
073--Botschaft 6: über IWWIT bekannt	,351		,530				,406
076--Botschaft 6: Umsetzbarkeit		,663					,446
077--Botschaft 6: Anwendung		,673					,461
079--Botschaft 7: über IWWIT bekannt			,688				,482
082--Botschaft 7: Umsetzbarkeit		,443					,335
083--Botschaft 7: Anwendung		,472					,324
084-08-Anwendung PEP	,427						,261
107--Risikoverhalten: ungeschützter Analverkehr		,529					,373
110--Art der festen Partnerschaft						-,747	,562
112--HIV-Status Partner						-,671	,538
113-01-Kommunikation mit Sexpartnern	,496						,293
114-01-Kommunikation mit Freunden und Bekannten	,520						,313
115--Alkoholkonsum							,065
117--Häufigkeit Konsum Substanzen				,489			,301
119--Botschaft 8: über IWWIT bekannt			,501				,279
122--Botschaft 8: Umsetzbarkeit				,797			,655
123--Botschaft 8: Anwendung				,813			,683
125--Botschaft 9: über IWWIT bekannt			,365				,219
128--Botschaft 9: Umsetzbarkeit				,776			,615

Item	Component						Communalities
	1	2	3	4	5	6	
129--Botschaft 9: Anwendung				,775			,613
132--Letzter HIV-Test	,748						,587
133-Häufigkeit HIV Test	,766						,610
135--Nächster HIV-Test	,578						,431
137-01-Persönliche Relevanz HIV	,333				,653		,592
138-01-Präsenz HIV	,507	-,303				,337	,539
139-01-Risiskobewertung HIV	,373	-,388				,390	,499
157-01-Allgemeine Relevanz HIV					,866		,778
157-02-Persönliche Relevanz STI					,792		,673
157-03-Allgemeine Relevanz STI					,870		,778
158-Präsenz STI	,386						,318
159-Risikobewertung STI	,302	-,421				,333	,433

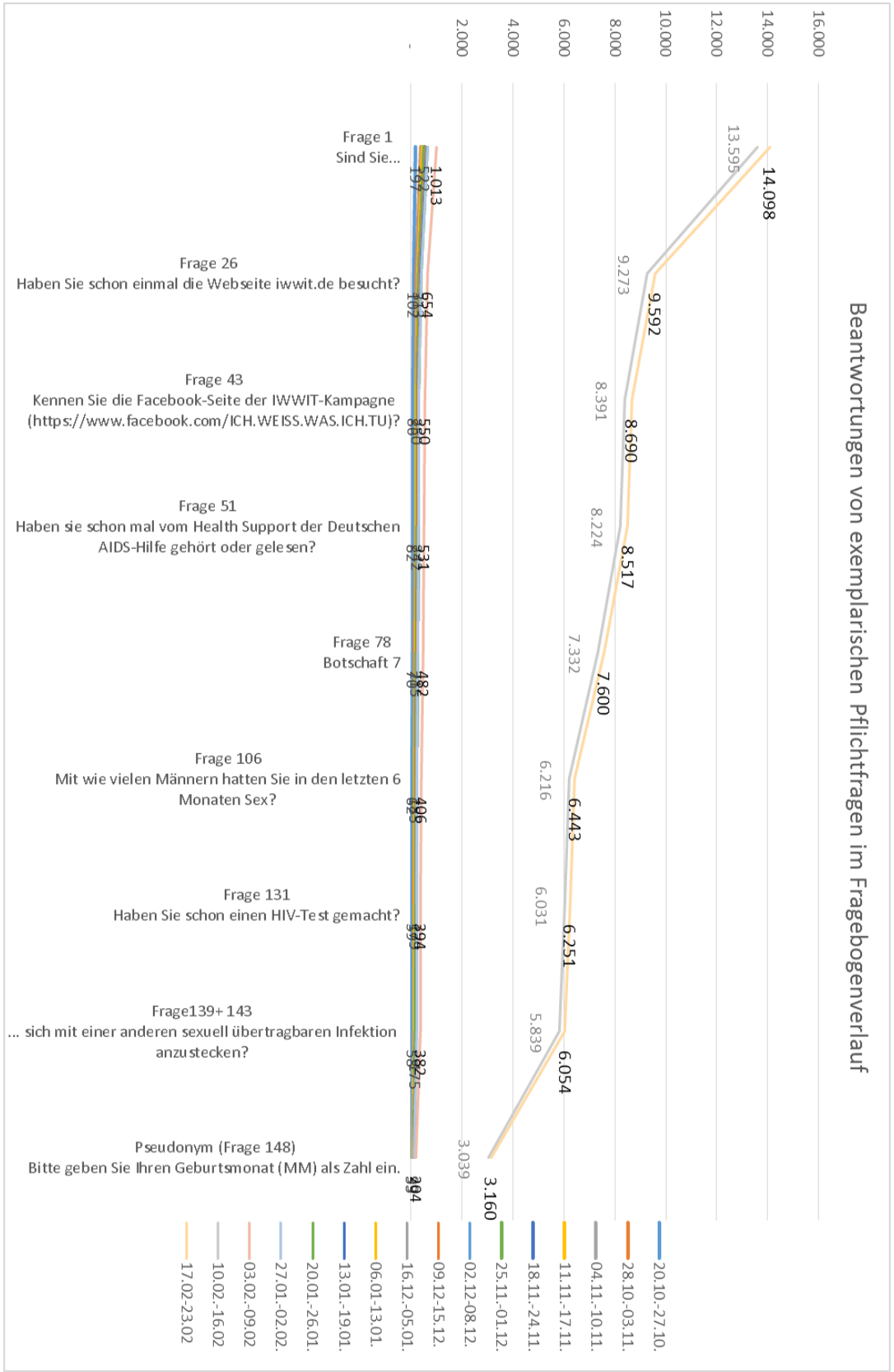
XVI. Exerpt from participants´ feedback

- Ich habe eben via GayRomeo eine Einladung zu eurer aktuellen Umfrage erhalten. Ich bin immer gerne bereit, mich an solchen Umfragen zu beteiligen, so auch bei dieser. Doch leider finde ich die Fragestellungen und die Antwortmoeglichkeiten aeusserst absurd und man bekommt keinen Kontext zustande. Bitte ueberarbeitet das noch einmal, sofern natuerlich moeglich. Ich habe die Umfrage jetzt zwei Mal abgebrochen! Vielleicht stelle ich mich auch einfach nur dumm an, aber ich habe es nicht hinbekommen!
- Die Umfrage ist an keinem Punkt korrekt gegendert.
- Ich haette zwischendrin abgebrochen, aufgrund der genannten Gruende, hatte aber gehofft am Ende dieses Feedback loswerden zu koennen. Ich hoffe, ihr

kommt an eure Ergebnisse, mit derlei Fragestellung. Vielleicht beachtet ihr ja dieses Feedback bei kommenden Umfragen

- Ich hatte an Ihrer Umfrage zu IWWIT.DE auf Gayromeo teilgenommen. Die Teilnahme aber nach ca. 20 Minuten und erreichten 38% Zielerreichung abgebrochen. Die Anzahl der Fragen und die damit verbundene Dauer lassen fuer mich einen Schluss zu, dass mindestens 50% der Befragten die Befragung mittendrin abbrechen
- Bei teilweise sehr intimen Fragen in Kombination laesst eine solche Fuelle an Fragen ein sehr genaues Probandenbild entstehen, welches allein schon aus datenschutzrechtlichen Aspekten nicht als unbedenklich einzustufen ist.
- Hatten Sie selbst schon an der Befragung teilgenommen, ohne daran zu ermueden und auch an der Art der Fragestellung die sich wie eine Gebetsrolle darstellt anstatt "modern und informativ" zu wirken.
- Zumindest bei mir hat die Beantwortung sehr viel laenger gedauert als die bei GayRomeo angekuendigten 20 Minuten. Das finde ich nicht sauber.
- Nun zu meinem Hauptproblem: als ich schon sehr weit fortgeschritten war, bin ich in Fragen geraten, die fuer mich nicht passten, so als haette ich versehentlich auf der vorangegangenen Seite etwas Falsches angeklickt. Es ging um sexuell uebertragbare Krankheiten.
- Mein letzter Punkt betrifft die Zielrichtung der Befragung. Mein Eindruck ist , dass es eher darum geht, die Teilnehmer fuer die Homepage zu interessieren und dazu zu bringen, sich das Angebot moeglichst umfassend anzuschauen. Das ist schon legitim, aber auch ein bisschen manipulativ und damit aergerlich. Man kann die verschiedenen Bestandteile der Homepage nur bewerten, oder angeben, der Punkt sei einem nicht aufgefallen. Damit fuehlt man sich genoetigt, sich das Kapitel anzuschauen. Ein recht zeitintensives Unterfangen. Dieser manipulative Eindruck liesse sich verhindern, wenn man als Antwortmoeglichkeit auch anbietet, "habe ich nicht gelesen". Das muss man schon auch duerfen, nicht alles interessiert jeden gleichermassen.

XVII. Analysis of dropouts



Statutory declaration

I hereby declare that I have authored this thesis independently, that I have not used other than the specified sources/resources. I have explicitly marked all material which has been quoted either literally or by content from other sources.

Date	Pia Khan