A descriptive study on reservations of people with alcohol dependence and alcohol use disorders towards rehabilitation treatment in Germany

Thesis

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Referat

Hintergrund: Nur etwa 14 % der Menschen mit Alkoholabhängigkeit erhalten eine Rehabilitationsbehandlung (RT) obwohl diese eine Konsumreduktion fördert. **Zielsetzung**: Vorbehalte gegenüber Rehabilitationsbehandlung sollten ermittelt werden und in einem zweiten Schritt sollte untersucht werden, ob diese Vorbehalte die Bereitschaft zur Aufnahme einer Rehabilitationsbehandlung beeinflussen. **Methoden:** Eine deskriptive Studie wurde durchgeführt. Es wurden T-Tests durchgeführt, um die Vorbehalte der teilnehmenden Personen, welche zuvor eine RT angetreten hatten, mit derer derjenigen zu vergleichen, welche keine Vorerfahrung mit RT hatten. Eine lineare Regressionsanalyse wurde durchgeführt, um Variablen zu ermitteln, die Behandlungsbereitschaft vorhersagen. **Ergebnisse:** 150 Patienten nahmen an der Studie teil. Der häufigste Vorbehalt lag der Abwesenheit von Zuhause während einer stationären RT zugrunde. Die mittlere Intensität der Vorbehalte war signifikant höher bei Personen, die noch keine Vorerfahrung mit RT hatten (mittlere Differenz = 0.43; 95%-KI 0.07 bis 0.79). Frühere RT und frühere Bewilligung zur RT zeigten sich als positive Prädiktoren für Behandlungsbereitschaft (95%-KI 0.289 bis 1.143). Die Gruppe der Vorbehalte gegenüber sozialer Angst und stationärer Behandlung zeigte sich negativ prädiktiven für Behandlungsbereitschaft (95%-KI -0.550 bis -0.019). **Schlussfolgerung:** Abwesenheit von zu Hause, stationäre Behandlung und soziale Ängste stellen gemäß der vorliegenden Studie signifikante Barrieren für eine RT dar, was auf die Bedeutung ambulanter Behandlungsoptionen hinweist. Da Patienten mit Rehabilitationsvorerfahrung weniger Vorbehalte angeben als Patienten ohne Vorerfahrung, kann eine Widerlegung von Vorbehalten während der RT angenommen werden.

Jakobi, Marie-Lise: Eine deskriptive Studie zu Vorbehalten von Menschen mit Abhängigkeit von Alkohol und schädlichem Konsum von Alkohol gegenüber einer Rehabilitationsbehandlung, Halle (Saale), Martin-Luther-Universität, Univ., Med. Fak., Diss., 64 Seiten, 2024

Abstract

Background: Albeit rehabilitation treatment (RT) has been proven to be beneficial for reducing alcohol consumption, only about 14% of people with alcohol dependency receive RT.

Aim: This study aimed to find common reservations towards RT in Germany and to investigate whether these affect the willingness to enter rehabilitation treatment (WRT).

Methods: A descriptive study was performed. T-tests were performed to compare reservations of participants who had undergone prior RT to those, who had no experience with RT. A linear regression analysis was performed to detect variables predicting WRT.

Results: 150 patients took part in the study. Not being at home due to inpatient RT was found to resemble the strongest reservation. The mean intensity of reservations was found to be significantly higher for participants, who had not undergone prior RT (mean deviation = 0.43; 95%-confidence interval 0.07 to 0.79). Prior RT and prior admission to RT positively predicted WRT (95%-CI 0.289 to 1.143). The cluster of reservations considering social anxiety and inpatient treatment was the only variable found to negatively predict WRT (95%-CI -0.550 to -0.019).

Conclusion: It appears that absence from home, inpatient treatment and social anxiety resemble significant barriers indicating the importance of outpatient RT options. As patients with previous RT experience state less reservations, a refutation of barriers during RT can be assumed.

Jakobi, Marie-Lise: A descriptive study on reservations of people with alcohol dependency and alcohol use disorders towards rehabilitation treatment in Germany, Halle (Saale), Martin-Luther-Universität, Medical Faculty, doctoral thesis, 64 pages, 2024

Table of Contents

List of abbreviations

AUD	Alcohol Use Disorder
AUDIT-C	Alcohol Use Disorder Identification Test-Concise
CI	Confidence Interval
DUI	Driving Under Influence
e.g.	Exempli Gratia
FASD	Foetal Alcohol Spectrum Disorders
FR	Former Rehabilitation treatment
GP	General practitioner
HADS	Hospital Anxiety and Depression Scale
HADS-A	Hospitality Anxiety and Depression Scale subgroup Anxiety
HADS-D	Hospitality Anxiety and Depression Scale subgroup Depression
IAM	Institute for General Practice of Martin-Luther-University
ICD-10	International Statistical Classification of Diseases and Related Health Problems Version 10
IPT&SA	Inpatient Treatment and Social Anxiety
IR	Perceived Information about Rehabilitation treatment
M	Mean
MD	Mean Deviation
PRE	PREvious approval and admittance for RT
QW	Qualified withdrawal treatment
RKI	Robert Koch Institute
RCQ	Readiness-to-Change Questionnaire
RT	Rehabilitation treatment
SAD	Social Anxiety Disorder
SBI	Short Brief Intervention
SD	Standard Deviation
WDRT	Would dislike entering rehabilitation treatment
WRT	Willingness to enter Rehabilitation Treatment
WHO	World Health Organisation

1 Introduction

1.1 Alcohol Dependence in Germany

Alcohol consumption is considered a significant part of national and regional culture, not only in Germany but also in many other countries around the world. Thus, frequent drinking of alcohol is tolerated widely, in some places and in certain situations, drinking is even expected (Schomerus et al., 2011). About 71,6% of the German population of 18 years and over report regular alcohol consumption, making it an integral part of everyday life for many (Atzendorf et al., 2019). With an average consumption of 10.2 litres of pure alcohol per capita in 2019, Germany belongs to the leading high-consumption countries world-wide (Deutsche Hauptstelle für Suchtfragen e.V [DHS]; Peacock et al., 2018). However, the stimulant ethanol has a toxic and carcinogenic effect and has the potential to cause psychological and physical dependence. Currently around 1.6 million people in Germany are considered dependent of alcohol by the standard of ICD-10 (Atzendorf et al., 2019). For people with an alcohol use disorder (AUD) or a dependency there are numerous treatment options available in Germany, which, however, are insufficiently taken advantage of (Batra et al., 2016; Keyes et al., 2010).

1.2 Social Consequences of Harmful Consumption and Dependency

For those affected, alcohol consumption has a negative impact on social issues, such as isolation through social withdrawal and the distancing from other people. AUD and dependency resemble highly stigmatised diseases (Schomerus et al., 2010). Excessive drinking can lead to increased absenteeism from work, leading to loss of employment. Many affected do thereafter remain unemployed (Marmot et al., 1993). A correlation has been seen for quantities of alcohol consumed and the occurrence of conflicts in partnerships as well as for the frequency of divorces (Leonard & Rothbard, 1999)**.** Partners and family members can be burdened due to mental health impact and domestic violence (Laslett et al., 2011; Maffli, 2001)**.** There are significant direct annual costs to society by alcohol related diseases, costs from accidents and treatment for dependency as well as indirect costs, inter alia due do sick leave, nursing and early retirement. Furthermore, attention must be given to invisible costs occurring due to environmental stress and suffering, which make up a significant burden for society (Effertz et al., 2017; Marmot et al., 1993).

1.3 Comorbidities

Comorbidities in patients with addictive disorders are of high frequency (Hasin et al., 2007). At average 2.11 additional somatic diagnoses were found in patients

undergoing in-house treatment for alcohol dependence (Fachverband Sucht e.V., 2020). Most common co-occurrence of comorbidity for alcohol dependent people is tobacco abuse with 83%, which complies to an additional health burden (DiFranza & Guerrera, 1990). Comorbid mental health issues are of high frequency and were diagnosed in 49% of males and 63% females undergoing in-patient RT treatment in 2020 (Fachverband Sucht e.V., 2020). Most commonly the personal traits depression and anxiety co-occur (Anker et al., 2019; Grant et al., 2004). Whether the presence of depression strongly raises the probability of manifestation of an addictive disease or whether an addiction increases the risk of developing depression cannot be answered unequivocally at the present time. Looking at current research, findings point towards an interaction (Boden & Fergusson, 2011; Flensborg-Madsen, 2011; Grant & Harford, 1995).

1.4 Social Anxiety Disorder

Social anxiety disorder (SAD) is a common subtype of anxiety disorder with a current prevalence of 5-10% and a lifetime prevalence of 8-15% (Koyuncu et al., 2019). A leading symptom is the fear of social situations, especially when being observed or judged by others (Leichsenring & Leweke, 2017). Co-morbidity with substance use disorders is frequent with a lifetime co-prevalence rate of around 22% and affected people show high likelihood for persisting consumption habits in the long term (Frischknecht et al., 2022; Himle & Hill, 1991; Ohayon & Schatzberg, 2010; Regier et al., 1990; Ruscio et al., 2008). For people with SAD low help seeking rates for the mental condition could be seen (Kessler, 2003) and Book et al. (2009) found people co-morbid with AUD and SAD to state low willingness to discuss personal problems with therapists and reluctance towards engaging in group therapy. In addition, the high frequency of self-medication with alcohol observed in people with SAD is problematic (Schneier et al., 2010). Treatment in form of psychotherapy and / or pharmacotherapy for SAD is available. First line treatment is cognitive behavioral therapy (CBT), showing the best long term treatment outcomes at a remission rate of 8.8-36% (Blanco et al., 2010; Schneier et al., 2010). Pharmacotherapy has shown good outcomes especially in the short-term treatment. Implemented substances are selective-serotonin-reuptake-inhibitors (SSRI) and selective-noradrenaline-reuptake-inhibitors (SNRI) (Blanco et al., 2013; Ipser et al., 2008).

1.5 Dependence Criteria According to the ICD-10

Mental and behavioural disorders due to alcohol are listed under items F10.0 - F10.9 of the World Health Organization (WHO) International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10) catalogue.

This study includes individuals with a F10.1 diagnosis, a synopsis of alcohol abuse disorders and F10.2, denoting a dependence syndrome on alcohol. Criteria for the presence of a dependency are a pronounced craving for alcohol (1.), reduced control over the frequency of consumption and/or the amounts consumed (2.), continuous substance use despite the appearance of harm (for example; impact on health, social life, family, work) (3.) and a neglect of activities, interests, and duties in favour of substance use is often present (4.). In the course of time, the person concerned develops tolerance (5) and, if alcohol is not consumed, a physical withdrawal syndrome may occur (6.) (World Health Organization & ebrary, Inc, 1993). Alcohol dependency F10.2 is diagnosed when a minimum of 3 criteria are met. To identify harmful consumption or alcohol dependence, various questionnaires can be used.

1.6 Definition of Harmful Consumption

Low-risk consumption corresponds to a maximum of 10 g of pure alcohol per day for women and a daily maximum of 20 g per day for men (Seitz & Bühringer, 2010). A 100 ml glass of wine or a 250 ml beer contains about 10 g pure alcohol (Wood et al., 2018). In 2017 in Germany, the consumption of about 15,6% men and 12,8% women exceeded these recommended limitations of alcohol, classifying their drinking patterns as harmful consumption but not necessarily meeting the criteria for diagnosis of dependency (Robert Koch-Institut, 2015). Further, complete abstinence from alcohol is increasingly being advised, as no health benefit can be demonstrated for low consumption (John et al., 2021).

1.7 Therapy for Alcohol Dependence

Treatment according to German guideline is distinguished in the acute stage and the post-acute stage treatment. Initially, a so-called short brief intervention (SBI) can take place, for example by a general practitioner (GP), which is intended to strengthen the patient's motivation to enter treatment. The following referral to treatment must be submitted by a physician. A key role in both referring to acute-phase therapy and arranging after-care services is provided by addiction counselling centres.

In the acute stage treatment is initiated, either urgently; starting with medical treatment for acute intoxication, or as elective withdrawal treatment. Gold standard for therapy in this phase is a qualified withdrawal (QW; German: qualifizierter Entzug) (Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde (DGPPN) Deutsche Gesellschaft für Suchtforschung und Suchttherapie e.V [DG-SUCHT]. The QW, which is to assure a seamless transition from

acute to post-acute treatment, shall be described in more detail in the following section. The subsequent rehabilitation therapy contains weaning from alcohol as well as maintenance of abstinence. Furthermore, objective is to increase or restore physical function, fitness and working capacity of the individuum to enable further participation in social and working life. Following rehabilitation, a stabilization phase including long-term aftercare with links to local addiction support systems is indicated and should follow.

Pharmacotherapy can be given as a supportive measure in all phases to reduce withdrawal symptoms and to avoid acute complications due to the withdrawal. Pharmacotherapy can also be used to reduce craving for alcohol, so called “anti-craving-drugs” which, if successful, can be prescribed over a longer period of time (Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde (DGPPN) Deutsche Gesellschaft für Suchtforschung und Suchttherapie e.V [DG-SUCHT].

1.7.1 Acute Phase Treatment and Qualified Withdrawal Treatment

A QW describes a prolonged multidisciplinary therapy concept, following withdrawal treatment seamlessly. A QW includes psychotherapeutic and socio-therapeutic interventions, motivation for change and coping-skill training in addition to physical detoxification, whereby the co-treatment of psychological and somatic concomitant and secondary symptoms is important. Supportive pharmacological treatment is given as prevention measures and must be increased in dosage if patients develop signs of a withdrawal syndrome (ICD-10: F10.23) during abstinence.

1.7.2 Stabilization Phase – Post-acute Treatment

Following withdrawal therapy, rehabilitation for people with alcohol dependence has become established as post-acute form of treatment in Germany as well as in other European countries. These mostly take place in psychiatric clinics but the number of outpatient treatment options are increasing. Inpatient treatment usually follows a fixed daily schedule and an interdisciplinary therapy concept as a continuation of QW. This treatment is composed of psychotherapy as well as health education around alcohol related issues (education on the effect of alcohol, discussion of critical relapse situations, support on how to handle craving, etc.), ergotherapy, occupational therapy, physiotherapy and other components to enable social reintegration, but especially to ensure continuation of work or continued participation in the job market for those affected.

In presence of favourable characteristics (for example: presence of good social network, short history of drinking, few conducted treatments) treatment can be performed

outpatient. Exclusion of factors like suicidality, severe withdrawal symptoms, pregnancy and a lack of social support, which, according to German guidelines, make inpatient treatment necessary, is mandatory prior to treatment. Inpatient rehabilitation in Germany lasts on average about 8 - 16 weeks. With an average duration of 6 to 12 months for outpatient rehabilitation, this spans a significantly longer period. Outpatient treatment can either take place full-time daily or appointments take place weekly (Deutsche Rentenversicherung, 2022). Cost of approximately 85% of RTs is born by the German pension insurance, and approximately 13% by the statutory health insurance.

Long term aftercare is recommended subsequently e.g., in form of take-up of outpatient psychotherapeutic supervision and self-help group participation (Loeber et al., 2009). Social support has been shown to be of particular importance in changing behaviour and coping with stressful situations, explaining the importance of self-help groups within the aftercare (Schwarzer & Leppin, 1991)(Balbinot et al., 2022)

1.11 Relevance of Topic

Albeit the ubiquity of alcohol consumption in society, hazardous alcohol consumption is rarely discussed and tainted with stigma even though dependence of alcohol resembles a common psychiatric diagnose in all society strata (Rehm et al., 2009). Treatment options are available in Germany but the help acceptance rate of 14% lies unsatisfyingly low (Gomes de Matos et al., 2013). The average timespan before RT treatment is initiated, lies at an average of 15,0 years of maintaining harmful drinking habits and approximately 2.4 physical withdrawal treatments (Fachverband Sucht e.V., 2020).

No previous studies have investigated barriers and reservations (these words will be used synonymously in the following) towards treatment of alcohol dependency exclusively in Germany. According to an umbrella term, several different forms of treatment were usually summarised under the term “treatment” in previous studies, meaning that the concept of German RT has not yet been explicitly investigated. Demasking common barriers resembles an important approach for practitioners in private practice as well as in the clinical sector in aim to improve treatment of people with AUD and alcohol dependency.

1.12 State of Research

Cunningham et al. (1993) compared reservations of people, who eventually sought treatment with the barriers of people, who did not seek treatment in Canada and Grant et al. (1997) interviewed a large number of people with alcohol dependency, who had failed to seek help although perceiving need for support. Both found, that common

reasons for not seeking treatment were: wanting to solve the problem by oneself, not considering consumption patterns problematic, fear of stigmatization and embarrassment if committing to treatment, negative attitude towards treatment itself and disbelief in effectiveness of treatment. Of Grant`s participants a significant fraction did not want to give up drinking. Likewise in the U.S., Saunders et al. (2006) examined barriers for people who stated perceived need for treatment. They found person related barriers (e.g. shame) to be more frequently present than treatment related barriers (e.g. costs) and found no difference of barriers by severity of consumption. Saunders`s sample stated wanting to solve the problem without treatment to be the strongest barrier, followed by lack of reasons to stop drinking and lack of motivation to change. The results of this study furtherly showed that people who had previously undergone treatment were more likely to seek treatment again. Wallhed Finn et al. (2014) conducted focus group discussions with a group of persons with alcohol dependency in Sweden, equally finding fear of stigma and refutation of abstinence to be of importance. Wallhed Finn found patients to have little knowledge about available treatment options. Probst et al. (2015) interviewed people with AUD in 6 European countries including Germany (sampling in Saxony and Berlin), finding that especially among people with low severity of consumption problem awareness was significantly lower compared to problem awareness found for people stating heavy consumption. In a study conducted in Denmark Wallhed Finn et al. (2023) found the most frequently mentioned barriers in treatment naïve people to be: not wanting to admit to have a problem, fear of being labelled when taking up treatment and worry that others will find out about drinking problem. Women stated more barriers compared to the men in the survey (Finn et al., 2023). Grant et al. (1997) found reservations of women to differ from barriers stated by men. In the listed research, treatment compromises several forms of treatment (e.g. pharmacotherapy, several forms of psychotherapy). Mental health conditions have shown to have an effect on treatment rates and post-treatment outcome (Anker et al., 2019; Grant et al., 2004). Kessler et al. (2003) found people with an SAD to show low rates of help seeking for their impaired mental health and people with SAD showed high comorbidity rates with AUD and alcohol dependency. Book et al. (2009) found people undergoing outpatient treatment for AUD who additionally suffered from SAD to show less willingness to talk about their personal problems during treatment and disliked speaking in groups such as Alcoholics Anonymous (AA). The consideration of further factors is therefore of particular importance in aim of understanding barriers towards RT and are taken into account in this study.

2 Research Objectives

The primary outcome of this study is to measure and rank reservations towards rehabilitation treatment. To answer this question a questionnaire assessing common reservations was designed, based on 3 a priori conducted interviews and the state of current research. Data was collected from 2018 to 2020 in the German federal states Mecklenburg Western Pomerania and Saxony Anhalt.

Furthermore, two secondary outcomes were defined. Concerning the assumption that reservations towards treatment decrease when treatment is performed, the present study investigates whether people who had previously undergone rehabilitation treatments state less strong reservations than participants, without prior RT experience (Cunningham et al., 1993; Saunders et al., 2006).

Hypothesis I: Participants with previous RT experience state less strong reservations towards RT.

Additionally, it is aimed to identify thematic reservation subgroups with a negative predictive effect on willingness to enter rehabilitation treatment. As the state of current research supposes people with SAD to avoid help seeking, it can be assumed, that SAD also negatively influences readiness to enter RT for people with an AUD or an alcohol dependency. A linear regression analysis is performed to examine for predictors of willingness to enter rehabilitation treatment. For this, a median split of the interval scaled variable assessing willingness to enter rehabilitation treatment was performed to distribute the participants into two groups; willingness to enter rehabilitation treatment vs. non-willingness to enter rehabilitation treatment.

Hypothesis II: Participants with symptoms of SAD are less willing to enter RT.

3 Methods and Material

This cross-sectional study was conducted at the Institute of General Practice at the Martin-Luther-University in Halle Saale (Institut für Allgemeinmedizin; IAM). The survey was performed within 2 years (from August 2018 to August 2020) and was implemented in the two federal states Saxony-Anhalt and Mecklenburg-Western Pomerania in Germany. The recruiting goal was set at 200 participants. A total of 340 questionnaires were sent out to the 11 participating institutions in the above-mentioned period of time.

3.1 Sampling Procedure

After the evaluation of the ethics committee at the Martin-Luther-University of Halle-Wittenberg, the non-necessity of an ethics vote according to §15 of professional regulations (Musterberufsordnung) for the present study design of a cross-sectional survey was stated. There were no professional or ethical concerns for the evaluation of an anonymous questionnaire and no assumed risk to patient data and interests. Prof. A. Altiner, the head of the institute of general practice at the University Rostock agreed on data collection in Mecklenburg-Western Pomerania. A pre-test with 5 patients who completed the draft questionnaire was carried out to check the questionnaires comprehensibility and feasibility. A final modification of the questionnaire was then made.

Clinics and general practitioners specialising in addiction treatment, psychiatric practices and addiction counselling centres were contacted by telephone, email or in person. The number of questionnaires requested were thereupon sent to the institutions taking part in the survey. The participants were then recruited by their supervising physicians in the partaking institutions who then handed out an informational letter about the survey. Participation was voluntary. The questionnaire had to be completed independently. Processing time for filling out a questionnaire was measured to lie at approximately 20 minutes. The IAM remunerated the cooperating institutions 6 € per completed questionnaire.

3.2 Inclusion and Exclusion Criteria

The main criterion for participation was presence of an alcohol dependency or an alcohol use disorder (AUD) according to the International Statistical Classification of Disease and Related Health Problems 10th Revision (ICD-10). Both actively drinking and abstinent people were included, as well as persons with harmful consumption confirmed by the Audit-C instrument. Participants had to be at least 18 years old and needed to have sufficient level of German language to complete the questionnaire independently.

Residence in Saxony-Anhalt or Mecklenburg-Western Pomerania was obligatory. A written informed consent about partaking had to be given.

Patients were excluded if they were cognitive impaired (e.g., due to alcohol use or dementia) as well as when language barriers were present that did not allow participants to complete the questionnaire independently due to limited understanding of the questions. Furtherly, persons for whom the attending physicians had concerns about suitability for participation were excluded; for example, due to severe mental health issues other than substance related.

3.3 Materials

The questionnaire includes 7 parts; 1st a demography part, 2nd a part measuring symptoms of anxiety and depression with the Hospitality Anxiety and Depression Scale (HADS), 3rd a part accessing the readiness to change drinking habits with the Readiness to Change Questionnaire (RCQ), 4th followed by the Alcohol Use Disorders Identification Test-Concise (AUDIT-C); a scale to measure current alcohol consumption, 5th a part accessing life incidents which occurred due to alcohol consumption, 6th a part accessing knowledge about, attitude towards and previous experience with rehabilitation treatment for alcohol dependency (RT), and 7th a part to measure reservations towards RT (see appendix for questionnaire). In the following, these scales will be presented.

3.3.1 Demography

In the demography part gender, age, current relationship status, employment status, and, in case of current unemployment, an item inquired whether participants had previously been employed.

3.3.2 Hospitality Anxiety and Depression Scale

The Hospitality Anxiety and Depression Scale by Zigmond and Snaith (1983) used in this survey is an 14 item instrument to screen for anxious and depressive symptoms. Seven items assessing depression; five of which address anhedonia and two questions addressing feelings of slowing down. The other seven items assess anxiety; five of which are markers for restlessness and tension, the two remaining items concern sensations related to autonomic anxiety. The items are Likert-scaled from 0 to 3 *("0"* = *"no"; "3" =" yes, definitely").* The measure cannot be understood as a diagnostic instrument but can be used to identify patients who profit of further psychological assessment and support. The total score can serve as a measure for assessing the general psychological stress of a person (Zigmond & Snaith, 1983). This instrument was

included in the questionnaire, as previous research has repeatedly assumed an association between mental health disorders with alcohol dependency and AUD's (Boden & Fergusson, 2011; Grant & Harford, 1995). Anker et al. (2019) suggested, that people with internalizing psychopathologies, such as anxiety disorders and depression comorbid with an AUD show higher risks for higher severity and early relapse when alcohol is consumed to cope with negative affect. Increased consultation rates did not show a positive effect on treatment rates for people with anxiety disorders, wherefore it can be assumed, that these people have strong reservations towards RT preventing these people from uptake of treatment.

In the present study the impact of anxious and depressed symptoms on total reservations was of interest, as was the question, whether these function as predictors for willingness to enter rehabilitation.

3.3.3 Readiness to Change Questionnaire

Readiness to Change Questionnaire (RCQ) by Rollnick et al. (1992) is a 12-item instrument detecting the stage of change in the process of modifying drinking habits for people consuming hazardous amounts of alcohol. The questionnaire is based on a transtheoretical model, developed on the basis of the behavioural change model in people with substance dependence by Prochaska and DiClemete (1992) and assumes four stages in the process for changing habits; *"Precontemplation", "Contemplation" and "Action""*, before establishing *"Maintenance"*. Several cycles through each phase might be required before ideally finally achieving and maintaining the stage of abstinence (Rollnick et al., 1992). The RCQ items are Likert-scaled and values range from "strongly disagree" to "strongly agree". The German version was validated by Demmel et al. (2004). However, for this study the mean score of the questionnaire was of interest, as a high overall score suggests a progressed stage of change whilst a low score indicates an early stage in process of changing behaviour. As an example, early stage might correspond absence of knowledge about risks of hazardous consumption, or even; not yet emerged understanding of current drinking habits being problematic. In the present study, the questionnaire was only evaluated for persons actively consuming hazardous quantities of alcohol (AUDIT-C above cut-off), as people stating abstinence have no need to furthermore change consumption habits.

The RCQ score has repeatedly been proven to resemble a strong prognostic factor for behavioural change and positive treatment outcome ("Matching Alcoholism Treatments to Client Heterogeneity: Project MATCH Three-Year Drinking Outcomes," 1998). To access problem awareness through to behavioural change of the participants

this scale was included in the present questionnaire. Furtherly, it was of interest, to what extent the RCQ correlates with the overall stated reservations towards RT.

3.3.4 Alcohol Use Disorders Identification Test-Concise

The Alcohol Use Disorders Identification Test-Concise (AUDIT-C) by Bush et al. (1998) is a screening instrument that reliably identifies hazardous drinkers as also those who have alcohol use disorders including dependency. It is the shortform of the highly sensitive 10-item AUDIT questionnaire, initially published in 1989 by the World Health Organization (Saunders et al., 1993). The AUDIT-C consists of 3 questions; firstly, assessing frequency of consumption, secondly, enquiring quantity consumed per day. The last question concerns the frequency of binge drinking. The items are scaled on a Likert-scale (valued 0-5 points). The cut off for hazardous drinking for females is recommended at a score >2 and at >3 for males, considering the WHO-defined sex-specific alcohol quantity limitation. In this study a gender-unspecific cut off at 4 points was chosen, which has been shown to have high sensitivity and specificity for detecting alcohol dependency, alcohol use disorders (AUD) and hazardous consumption (dependency: sensitivity 0.95; specificity 0.75, AUD and hazardous consumption: sensitivity 0.92; specificity 0.77) (Dybek, 2008). The questionnaire is categorized as "good clinical practice" in the German S3 Guidelines ("Klinischer Konsenspunkt", KKP) (Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde (DGPPN) Deutsche Gesellschaft für Suchtforschung und Suchttherapie e.V [DG-SUCHT].

The AUDIT-C was included in the present study to access the current quantity and frequency of alcohol consumption. It should be taken in account that severity of consumption has previously been shown to influence readiness for treatment positively (Wallhed Finn et al., 2014).

3.3.5 Incidents in Life due to Alcohol Consumption

The 5th scale accessing significant incidents in life due to alcohol consumption consists of 4 self-developed questions. Measuring of these serious life cuts was included in the study, as it was of interest, whether these influence reservations towards RT and willingness to enter rehabilitation treatment (WRT). The first item questions loss of driving license due to DUI, the second break-up due to alcohol, the third history of accidents under influence of alcohol and the fourth question regards hospitalization due to an alcohol-related problem

On the one hand, it was of interest whether these events have a predictive effect for WRT, on the other hand, it should be investigates whether these characteristics differ for people with prior RT experience.

3.3.6 Knowledge about, Experience with and Attitude towards Rehabilitation Treatment

In the 6th part 7 question inquire about knowledge about RT, prior experience with RT and attitude towards RT. The first 2 items inquire, whether the participant has ever heard about RT and whether RT has previously been recommended to oneself. The following 3 questions concern whether admission to treatment has previously taken place. The last 2 items access the willingness to enter RT and the refusal of RT, even if recommended by treating physicians.

3.3.7 Scale assessing Reservations and Barriers towards Rehabilitation Treatment

The 7th and final part of the questionnaire accesses reservations and barriers towards RT by self-designed items. To develop this instrument three in-depth unstructured interviews were conducted under audio recording. The patients were asked to talk about their attempts of quitting alcohol consumption, their attitude towards RT and about reservations and barriers towards RT. They were furtherly asked whether they had ever partaken in an RT or not. After analysing the three interviews six subdimensions of reservations seemed to be important for the participants to consider taking part in a rehabilitation program. Additionally, the current state of research on the topic was taken into account after performing literature research. The defined subdimensions of reservations will be discussed in the following. The design of the questionnaire was subsequently supported by the collaborating physicians of the General Practice Institute of the Martin Luther University in Halle by evaluating and adapting the questions. Of the initially drafted items, 33 were included in the questionnaire and can be seen in table 1.

Of the assessed reservations towards RT, the six following subgroups were formed to bundle the subdimensions as in the following:

1st “attitude towards full abstinence of alcohol”,

2nd “Reservations due to impairment of self-esteem”,

3rd “Reservations due to inpatient treatment and social anxiety”,

4th “Reservations due to work”,

5th “Reservations due to absence from home”,

6th “preference of solution other than RT”.

Two further barriers were included in the questionnaire that could not be subordinated into these dimensions; one accessing resignation concerning curability of condition, and the second accessing lack of insight about need for treatment. The latter one measuring the construct of readiness to change, included in the calculations by the RCQ. These two variables were included in the regression analysis within the variable "total reservations".

3.3.7.1 Attitude towards Abstinence of Alcohol

The first subgroup assesses reservations towards giving up alcohol consumption towards maintaining total abstinence (7 items). The participants were asked, whether they do not want to live without alcohol or even believe, that they "cannot live without alcohol". It is also considered, whether they believe abstinence to resemble overdemand. Furtherly, it is surveyed, whether the participants believe a necessity of alcohol to reduce stress, calm down or to overcome personal problems.

3.3.7.2 Impairment of Self-esteem

Secondly, 5 questions investigate, whether entering a rehabilitation treatment would have a negative impact on the participants self-esteem. It is assessed, whether having to tell family members or friends about entering a treatment would make the participant feel ashamed. Additionally, the fear of being treated as "an alcoholic" and fear that people distance themselves when finding out about dependency or need of RT were investigated.

3.3.7.3 Reservations towards Inpatient Treatment and Social Anxiety

In the 3rd subgroup the reservations due to the option of an in-house RT and social anxiety are concerned. In this subgroup nine questions assess, whether having to share little space with others, fear of other alcohol dependent persons or general rejection of involvement with strangers lead to reservations. Further questions thematize loss of autonomy, fear of disrespect of personal needs and fear of excessive demands during inpatient RT.

3.3.7.4 Reservations due to Work

In the 4th subgroup, 3 questions investigate work-related reservations impede help acceptance. These questions conclude not wanting to stay absent from work, not wanting colleagues to find out about diagnosis due to admittance to RT and anxiety of losing employment within the framework of diagnosis and/or the absence due to RT.

3.3.7.5 Reservations due to Absence from Home during Treatment

The 5th subgroup contains 4 questions about reservations due to absence from home during RT. On one hand, organizational problems due to absence are considered and on the other hand the need not to be away from family and friends, as well as from one's own home for a long spell of time are thematized.

3.3.7.6 Preference of solution other than Rehabilitation Treatment

In the 6th subgroup 3 items aimed to access, whether help in form of RT is rejected. The inquiring items accessed, whether participants did not believe in efficiency of RT, had not experienced success with prior health-care support and whether participants wanted to handle the problem alone without support of help services.

The list of all included items and their classification in the sub-dimensions can be found in Table 1. All items were Likert-scaled, ranging from "1" = "fully disagree" to "6" = "fully agree" (see: appendix). To avoid the tendency to the mean an even scaling was chosen.

Table 1; Reservations and Barriers

Reservations and Barriers	Subgroups
"Can not live without alcohol" *"Does not want to live without alcohol"* *"Believes to be needing alcohol for problem solving"* *"Because one does not believe an abstinent life to be a happier life"* *"Believes to need the calming effect of alcohol"* *"Because nothing else can take away the feeling of stress as fast as alcohol consumption"* *"Worried that an abstinent life resembles overdemand"*	*"Attitude towards full abstinence of alcohol"*
"Does not want to be considered "an alcoholic"" *"Would feel ashamed if family finds out about need of treatment"* *"Would feel ashamed if friends find out about need of treatment"* *"Worried that others will distance from oneself when finding out about treatment"* *"Treatment would lead to negative impact on self-esteem"*	*"Reservations due to impairment of self-esteem"*
"Because during treatment one loses his/her autarchy" *"Fear of staying in a treatment institution"* *"Does not want to involve with strangers during treatment"* *"Not able to bear sharing a sleeping room with strangers during treatment"* *"Fear that other people with alcohol dependency will misbehave"* *"Because during treatment one would not be able to independently organize leisure time"* *"Because one believes that during treatment one will become depressed"* *"Because during treatment one's needs might not be respected"* *"Worried, that the daily schedule is overdemanding"*	*"Reservations due to inpatients treatment and social anxiety"*

Table 1; Reservations and Barriers

"Because one would not be able to go to work during treatment" *"Worried that one would lose his/her job during treatment"* *"Does not want colleagues to find out about need of treatment"*	*"Reservations due to work"*
"Because during treatment one would not be able to see friends and family enough" *"Because one would not have enough time for one's hobbies during treatment"* *"Because during treatment one would be at home so little"* *"Because one would not be able to take care of responsibilities at home during treatment"*	*"Reservations due to absence from home"*
"Does not believe that a rehabilitation treatment can help" *"Does not promise success as nothing so far has helped"* *"Wants to solve problem by oneself"*	*"Preference of solution other than RT"*
"Does not believe in curability of dependency"	No subgroup; Assesses resignation
"Considers consumption habits to be unproblematic"	No subgroup; Assesses readiness to change

3.4 Statistical Analysis

Cronbach's α, means (M), standard deviations (SD), T-Tests as well as a multiple linear regression analysis were calculated with the Statistical Package for Social Sciences software (SPSS 25.0). Pairwise deleting of missing data was performed, the missing statements or statement of "I don´t know" were ignored and not included in the calculations, and analysis was executed with variables present. To compare sociodemographic characteristics, current drinking habits (AUDIT-C score), readiness to change (RCQ), anxious and depressed symptoms (HADS), life incidents due to consumption and reservations of patients with prior RT to those without treatment experience T-tests for non-parametric data were performed and mean value deviations from a *P*-value of ≤ 0.05 were considered significant. Equal procedure was conducted to compare characteristics and reservations of people stating willingness to enter RT

(WRT) and those stating dislike of admission to treatment (WDRT) after performing a median split of the variable inquiring willingness to enter RT to distribute these two groups (range: 1-6; 1 = “I agree”; 6 = “I reject/decline”; 1-3 ≙ WRT; 4-6 ≙ WDRT).

As examination of data could not surely prove for normal distribution (diagrams predominantly linear relationships instead of bell curve) a spearman’s rank correlation was computed to detect multi-collinearity as well as to assess the relationship between gender, former experience with RT, WRT and WDRT, the total score for reservations, the subgroups of reservations, the HADS -, the AUDIT-C - and the RCQ value.

To examine for subgroups of reservations predicting WRT (WRT ≙ dependent variable), all tested subgroups and surveyed characteristics were evaluated in a stepwise multiple linear regression analysis. Because heteroscedasticity was found to be significant, the assumptions for the multiple linear regression were not met. The variables which have been found to be statistically significant predicting willingness to enter rehabilitation in the stepwise multiple linear regression earlier, were thereafter investigated with 2000 bootstrap-replicates to increase robustness of the regression model.

Measures collected but not included in calculation are; “formerly perceived information about rehabilitation”, “received recommendation for RT” and “dropout of rehabilitation treatment”.

4 Results

Between august 2018 and august 2020 a total of 340 questionnaires were handed out and 150 questionnaires were returned, resulting in a response rate of 44%. Two institutions that initially expressed interest in participation did no longer answer during the course and one institution reported treating significantly more people with dependence to other substances than to alcohol, which is why a low number of questionnaires were filled out there. Two institutions requested replenishment after the initially requested questionnaires were filled out and returned.

Of the returned questionnaires 57 were filled out in Mecklenburg Western Pomerania and 93 questionnaires were returned from institutions in Saxony Anhalt. According to the type of participating institution, as can be seen in figure 1, the return rate was found to be highest in the psychiatric ambulant services (addiction counselling services and psychiatric practices) and lay at a number (N) = 64/90 corresponding to 57%, whilst the lowest return rate was found for participating clinics, with N = 40/125, corresponding to 29%. GP clinics with a specialization for treatment of substance abuse showed a rate of 43% (N = 54/125).

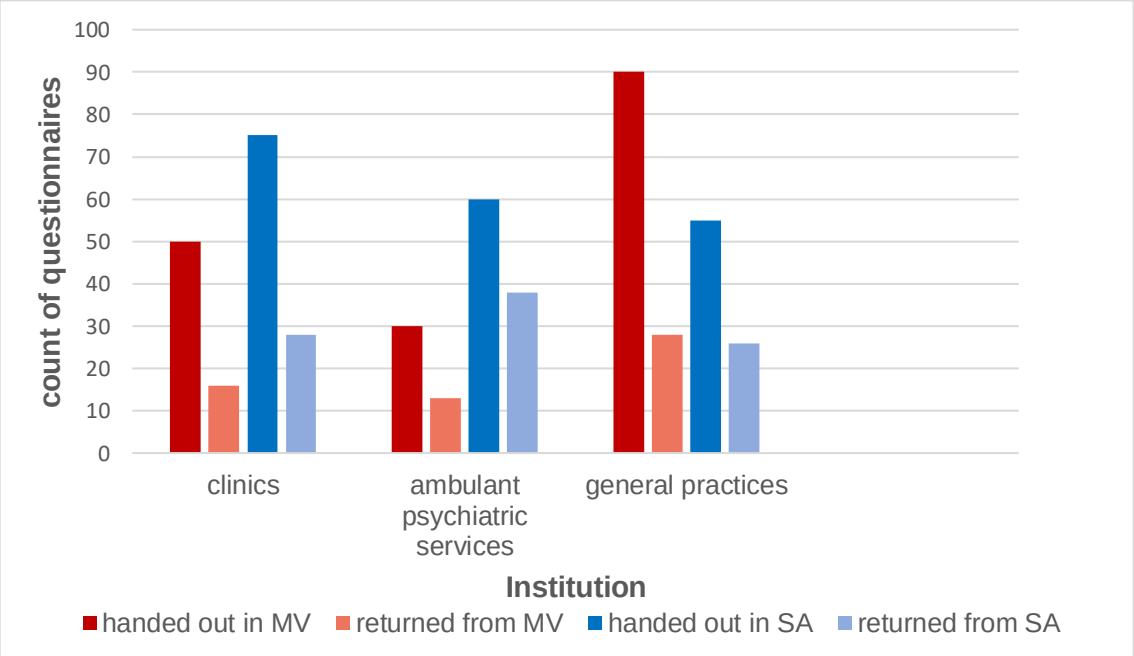

Figure 1; Total count of questionnaires handed out vs. returned by type of institution and federal state

Note: MV: Mecklenburg-Western Pomerania; SA: Saxony-Anhalt

From Mecklenburg Western Pomerania *n* = 16 questionnaires were returned from a psychiatric clinic in Parchim, *n* = 28 from general practices and *n* = 13 from an addiction counselling centre. From Saxony-Anhalt n=19 questionnaires were returned from a psychiatric practice in Halle, *n* = 26 from general practices, *n* = 19 from the psychiatric practice in Bernburg and *n* = 24 from a clinic in Elbingerode. See distribution of participants by type of institution and federal state in figure 2.

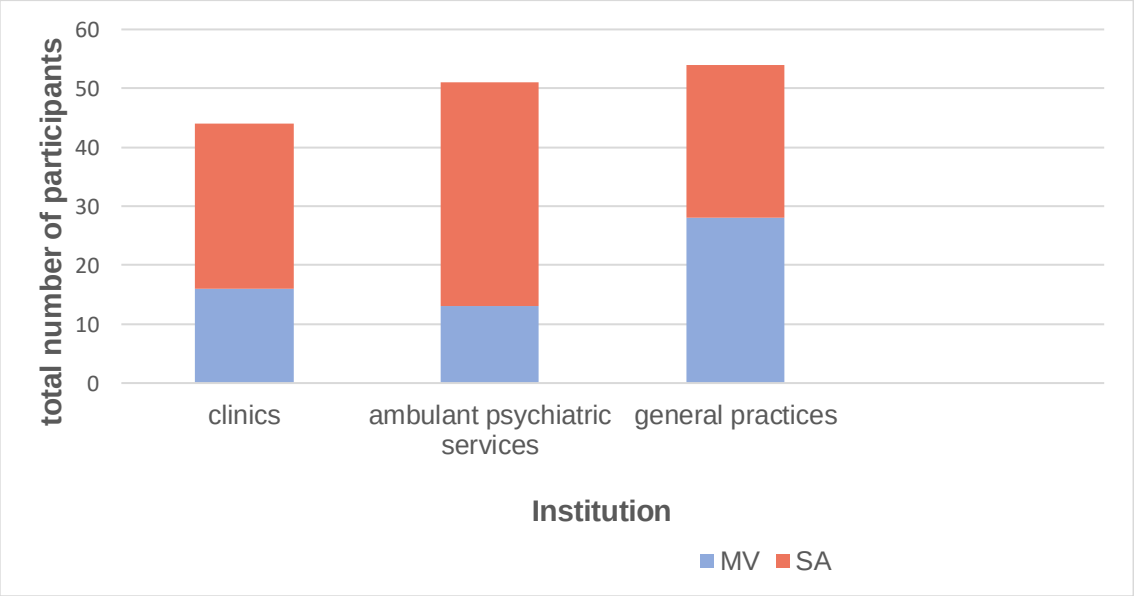

Figure 2; *Total number of participants by type of institution and federal state*

Note: MV: Mecklenburg-Western Pomerania; SA: Saxony Anhalt

4.1 Demography of the Participants

The age of participants ranged from 29 to 73 years old with an average of 51 years. Males were overrepresented with a percentage of 73% (N = 110), compared to 26,7% females (N = 40). Employment rate was at 41% (N = 61). Highest educational attainment varied (see table 2), but at a percentage of 53% (N = 80) the majority of participants stated to have fulfilled a vocational training. Slightly more than half of participants stated to currently be in a relationship (57%; N = 85). Around 41% (N = 62) of participants were currently abstinent from alcohol. A quarter (25%; N = 37) had been involved in an accident under influence of alcohol and 40% (N = 55) had previously had their driving license revoked. A percentage of 58% (N = 78) had undergone clinical treatment due to alcohol-related illness and 35% (N = 49) reported having experienced a breakup due to alcohol related topics. The sociodemographic values and life incidents due to consumption for all participants and compared by prior RT and participants without prior RT are found in table 2. Significant differences amongst these two groups were that

people who stated prior RT were less frequent in a relationship (MD = -0.26; p = .002) and reported more breakups due to alcohol related topics (MD = 0.31; p = <.001). Involvement in accident under the influence of alcohol was more common in the prior RT group (MD = 0.18; p = .013) and this group reported to have undergone clinical treatment due to alcohol related disease more often (MD = 0.53; p = <.001).

Table 2; Demography and life incidents due to alcohol consumption of all participants and compared by prior RT

Characteristics	All participants (n = 150)	Prior RT (n = 74)	No RT (n = 74)	*MD*	*p*
Age, years (N = 147)	50.8±11.1	49.2±10.5	52.8±11.4	3.56	.053
Males (N = 150)	110 (73.3%)	55 (74.3%)	54 (73.0%)	0.01	.853
Employed (N = 148)	61 (40.7%)	27 (36.5%)	33 (44.6%)	-0.08	.351
Education (N = 148)				0.32	.155
- *No graduation*	4 (2.7%)	2 (2.7%)	2 (2.7%)		
- *secondary school **	43 (28.7%)	26 (35.1%)	17 (23.0%)		
- *high school diploma*	5 (3.3%)	2 (1.4%)	3 (4.0%)		
- *vocational training*	80 (53.3%)	36 (2.7%)	43 (58.1%)		
- *university*	17 (11.3%)	8 (10.8%)	9 (12.2%)		
Currently in a relationship (N = 147)	85 (56.7%)	33 (44.6%)	51 (68.1%)	-0.26	**.002****
Currently abstinent from alcohol (N = 142)	62 (41.3%)	34 (45.9%)	28 (37.8%)	0.11	.189
Involved in accident under influence of alcohol (N = 147)	37 (25.2%)	25 (33.8%)	12 (16.2%)	0.18	**.013***
Driver's license suspension due to DUI (N = 137)	55 (40.1%)	34 (45.9%)	21 (28.4%)	0.16	.064
Clinical treatment due to alcohol-related illness (N = 134)	78 (58.2%)	58 (78.4%)	19 (25.7%)	0.53	**<.001****
Breakup due to alcohol (N = 142)	49 (34.5%)	35 (47.3%)	14 (18.9%)	0.31	**<.001****

**Note: secondary school: As this study was completed in Germany, there are three German types of secondary schools; Hauptschule, Realschule and Gymnasium. To simplify the demography here Hauptschule* (Grade 5-9) and *Realschule (Grade 5-10, with possibility to proceed to a Gymnasium) are added up within "Secondary school".*
MD: Mean Deviation; RT: rehabilitation treatment

Values in subdivision by WRT and WDRT are found in table 3. Significantly more participants who were willing to enter RT had undergone former rehabilitation treatment (MD = 0.24; p = .005).

Table 3; Demography and life incidents due to alcohol consumption by willingness to enter rehabilitation treatment

Characteristics	WRT (n = 82)	WDRT (n = 43)	*MD*	*p*
Age, years (N = 147)	51.4±10.2	49.6±11.8	-1.82	.375
males (N = 150)	66 (80.5 %)	31 (72.1 %)	0.08	.309
Employed (N = 148)	34 (41.5%)	19 (44.2%)	-0.03	.733
Education (N = 148)			-0.01	.962
- *No graduation*	1 (1.2%)	3 (7.0%)		
- *secondary school **	26 (31.7%)	10 (23.3%)		
- *high school diploma*	3 (3.7%)	1 (2.3%)		
- *vocational training*	43 (52.4%)	25 (58.1%)		
- *university*	9 (11.0%)	4 (9.3%)		
Currently in a relationship (N = 147)	48 (58.5%)	26 (60.5%)	-0.03	.720
Alcohol abstinence (N = 142)	36 (43.9%)	15 (35.0%)	0.08	.402
Former rehabilitation (N = 148)	49 (60.0%)	14 (32.6%)	0.24	**.005****
Involved in accident under influence of alcohol (N = 139)	22 (26.8%)	10 (23.3%)	0.04	.663
Driver's license suspension due to DUI (N = 146)	33 (40.2%)	15 (34.9%)	0.04	.693
clinical treatment due to alcohol-related illness (N = 148)	49 (59.8%)	18 (41.9%)	0.18	.065
breakup due to alcohol (N = 144)	24 (29.3%)	16 (37.2%)	-0.07	.457

**Note: secondary school: see table 2*

DUI: driving under influence; MD: mean deviation; WR: willingness to enter rehabilitation; WDRT: would dislike to enter rehabilitation

4.2 Evidence of Reliability

For reliability analysis, Cronbach's alpha was calculated to assess the internal consistency of the subscales toward reservations. The subgroup "*attitude towards full alcohol abstinence*" showed a Cronbach's α of 0.861, which is considered satisfying. The second subgroup "*reservations due to impact on self-esteem"* was equally satisfying with a Cronbach's α of 0.872. The subgroup "*reservations due to social anxiety and inpatient treatment"* was found highly satisfying, with a Cronbach's α of 0.938. The Cronbach's α of 0.737 for the subscale "*reservations due to work"* is considered reasonable. For the subgroup *"reservations due to absence from home"* the Cronbach's α was satisfying with a value of 0.865. For the subgroup *"preference of solution other than RT"* the Cronbach's α of 0.536 was not satisfying and therefore this subgroup was discarded and not included in further analysis.

4.3 Results of the Scale accessing Barriers and Reservations towards Rehabilitation Treatment

The mean score for reservations of the participants was found at 2.3 (SD = 1.1), which, at a range from 1 to 6 is lying below the median ("1 = reject; 6 = fully agree"). This meaning, that in general the level of reservations was perceived low by the participants. Underreporting due to social desirability is however, equally conceivable. The highest score for clustered reservations was found for the subscale "*reservations due to absence from home*" (M = 2.6; SD = 1.7), followed by "*reservations due to inpatient treatment and social anxiety*" (M = 2.4; SD = 1.5). The subgroup "*reservations due to work*" with a mean of 2.3 (SD = 1.5) and the subgroup "*reservations due to impairment of self-esteem*" with a mean of 2.2 (SD = 1.5) are at a similar level as the subgroup "*reservations due to inpatient treatment and social anxiety*". With some distance to the previous, the subgroup "*reservations due to alcohol consumption*" is lowest (M = 1.9; SD = 1.5).

At item level, the highest results were achieved with a mean of 2.9 for both the reservations: "*because during treatment one would be at home so little*" (SD = 1.5) and "*one would not be able to take care of important responsibilities at home during treatment*" (SD = 1.5). It therefore appears of highest priority amongst the barriers, that one cannot stay away from home. Following are the items: "*Wants to solve problem by oneself*" (SD = 2.1) and reservations "*because during RT one would not independently be able to organize leisure time*" (SD = 1.9) with a mean of 2.8. Not wanting to accept help for problem solving is in this sample as well found to resemble a highly perceived barrier. The items "*during RT one's needs might not be respected*" (SD = 1.9) and "*does*

not want to be considered an alcoholic" (SD = 2.0) showed a mean of 2.6. Then follows "*not able to bear sharing a sleeping room with strangers during treatment*" with a mean of 2.5 (SD = 1.8) and after, at a mean of 2.4 the items "*because one would not be able to go to work during treatment*" (SD = 1.9) and "*not being able to see friends and family enough*" (SD = 1.9) range. As only approximately 40% of participants stated current employment it should be noted that the item "*because one would not be able to go to work during treatment*" was still prioritized likewise high. Three items showed a mean of 2.3; "*Considers consumption habits to be unproblematic*" (SD = 2.0), "*Because during treatment one loses his/her autarchy*" (SD = 1.8) and "*Fear that other people with alcohol dependency will misbehave*" (SD = 1.7). Following, four items scored a mean of 2.2; "*Does not want to involve with strangers during RT*" (SD = 1.6), "*Because one would not have enough time for one's hobbies during RT*" (SD = 1.8), "*Worried that one would lose his/ er job during RT*" (SD = 1.8) and "*Because nothing else can reduce stress as quickly as alcohol*" (SD = 1.7). The items "*Does not want colleagues to find out about need of treatment*" (SD = 1.7), "*Because one believes that during treatment one will become depressed*" (SD = 1.7), "*Treatment would lead to negative impact on self-esteem"* (SD = 1.7) achieved a mean of 2.1. The variable accessing resignation; "*Does not believe in curability of dependency* ", with a mean of 2.0 (SD = 2.0) is found further down in the priority. Other variables with a mean of 2.0 are: "*Fear of staying in a treatment institution"* (SD = 1.6), "*Would feel ashamed if family finds out about need of RT*" (SD = 1.5), "*Would feel ashamed if friends find out about need of treatment*" (SD = 1.6) and "*Believes to need alcohol for problem solving*" (SD = 1.6). Followed by "*Worried that schedule of RT is overdemanding*" (SD = 1.5), "*Worried that others will distance oneself when finding out about treatment*" (SD = 1.4), "*Worried that abstinent life resembles overdemand*" (SD = 1.9), "*Believes to need the calming effect of alcohol*" (SD = 1.6) and "*Because one does not believe an abstinent life to be a happier life*" (SD = 1.6) with a mean of 1.9. "Does not promise success from RT as nothing has helped so far" (SD = 1.5) and "Does not believe that RT can help" (SD = 1.5) range in the following with a mean of 1.6. The lowest means were found with 1.6 for "*Does not want to live without alcohol*" (SD = 1.3) and M = 1.4 for "*Can not live without alcohol*" (SD = 1.0). For the tabulation of these values, see table 4.

Summarizing, as in previous studies, wanting to solve the problem by oneself and not perceiving need of treatment were found strong reasons against treatment. But barriers due to perceived stigma if family and friends find out about treatment as well as lack of trust in effectivity of treatment were found to be of lower priority in the current sample than in the previous surveys. Furtherly, in the present sample "not wanting to give up drinking" was of very low priority.

Next the reservations were compared by prior RT experience. As expected, the total mean of reservations was found significantly higher for participants who had not previously undergone RT (MD = 0.43; p = .020). This leads to the acceptance of the first hypothesis that people who have undergone former RT perceive lower reservations towards treatments. The group without prior RT showed a higher mean of reservations in all reservation subgroups, but only the difference in the two subgroups considering "reservations due to impairment of self-esteem" (MD = 0.66; p = .008) and "*reservations due to absence from home*" were found to be statistically significant (MD = 0.68; p = .016; values for other subgroups see table 4). The priority of subgroups according to the mean values varied slightly among the two groups; participants who had experience with RT ranged "*reservations due to inpatient treatment and social anxiety*" (SD = 1.4) and "*reservations due to absence from home*" (SD = 1.7) first, with a mean of 2.2 for both, followed by "*reservations due to work*" (M = 2.1; SD = 1.4). With a mean of 1.7 reservations due to "*full abstinence of alcohol*" (SD = 0.9) was found lowest after "*reservations due to impairment of self-esteem*" with a mean of 1.8 (SD = 1.2). Participants without former RT experience ranged "*reservations due to absence from home*" first priority with a mean highest by far at 2.9 (SD = 1.7). In the following were "*reservations due to work*" with a mean of 2.5 (SD = 1.7). Then, with a mean of 2.4 both, "*reservations due to inpatient treatment and social anxiety*" (SD = 1.5) and "*reservations due to impairment on self-esteem*" (SD = 1.5) follow. Like for participants with RT experience, participants without previous RT range reservations "*due to full abstinence of alcohol*" least important at a mean of 2.0 (SD = 1.2).

Considering results on level of items, in the group without prior RT a significantly higher mean could be found for "*because one would not be able to go to work during treatment*" (MD = 0.85; p = .017), "*because during treatment one would be at home so little"* (MD = 0.75; p = .043) and "*not being able to take care of responsibilities at home during treatment*" (MD = 1.02; p = .004). Furtherly, for "*does not want to be considered an alcoholic*" (MD = 1.23; p = <.001), "*wants to take care of problem by oneself*" (MD = 1.37; p = <.001) and "*considers consumption habits to be unproblematic*" (MD = 1.75; p = <.001) a significantly higher score could be seen for the group without previous RT. For "*does not promise success of RT as nothing so far has helped*" (MD = -0.71; p = .009) a significantly higher mean was found for the group who stated to previously have undergone RT, leading to the assumption, that if no improvement was noted after RT, willingness to renew RT decreases. Tabulation of these values can be seen in table 4.

Table 4; Reservations and barriers of all participants and compared by previous RT experience

Reservations and Barriers	All participants (n = 150)	Prior RT (n = 74)	No previous RT (n = 74)	*MD*	*p*	*CI 95% [LL, UL]*
Total reservations and barriers	*M* = 2.3; *SD* = 1.1	*M* = 2.0; *SD* = 1.0	*M* = 2.4; *SD* = 1.1	0.43	**.020***	[.07, .79]
Subgroup *"attitude towards full abstinence of alcohol"*	*M* = 1.9; *SD* = 1.5	*M* = 1.7; *SD* = 0.9	*M* = 2.0; *SD* = 1.2	0.29	.125	[-.08, .66]
Subgroup *"reservations due to impairment of self-esteem"*	*M* = 2.2; *SD* = 1.5	*M* = 1.8; *SD* = 1.2	*M* = 2.4; *SD* = 1.5	0.66	**.008***	[.18, 1.14]
Subgroup *"reservations due to inpatient treatment and social anxiety"*	*M* = 2.4; *SD* = 1.5	*M* = 2.2; *SD* = 1.4	*M* = 2.4; *SD* = 1.5	0.22	.382	[-.28, .72]
Subgroup *"reservations due to work"*	*M* = 2.3; *SD* = 1.5	*M* = 2.1; *SD* = 1.4	*M* = 2.5; *SD* = 1.7	0.47	.081	[-.06, .99]
Subgroup *"reservations due to absence from home"*	*M* = 2.6; *SD* = 1.7	*M* = 2.2; *SD* = 1.5	*M* = 2.9; *SD* = 1.7	0.68	**.016***	[.13, 1.24]
"Can not live without alcohol" (n = 128)	*M* = 1.4; *SD* = 1.0	*M* = 1.4; *SD* = 2.1	*M* = 1.4; *SD* = 1.0	0.03	.887	[-.33, .38]
"Does not want to live without alcohol" (n = 131)	*M* = 1.6; *SD* = 1.3	*M* = 1.5; *SD* = 1.1	*M* = 1.8; *SD* = 1.4	0.28	.221	[-.17, .73]
"Believes to be needing alcohol for problem solving" (n = 129)	*M* = 2.0; *SD* = 1.6	*M* = 2.1; *SD* = 1.7	*M* = 1.9; *SD* = 1.6	-0.14	.629	[-.71, .43]
"Because one does not believe an abstinent life to be a happier life" (n = 126)	*M* = 1.9; *SD* = 1.6	*M* = 1.6; *SD* = 1.3	*M* = 2.1; *SD* = 1.9	0.50	.080	[-.06, 1.07]
"Believes to need the calming effect of alcohol" (n = 131)	*M* = 1.9; *SD* = 1.6	*M* = 1.7; *SD* = 1.4	*M* = 2.2; *SD* = 1.7	0.52	.068	[-.04, 1.07]
"Because nothing else can take away the feeling of stress as fast as alcohol consumption" (n = 126)	*M* = 2.2; *SD* = 1.7	*M* = 2.2; *SD* = 1.8	*M* = 2.1; *SD* = 1.6	-0.07	.832	[-.67, .54]
"Worried that abstinent life resembles overdemand" (n = 122)	*M* = 1.9; *SD* = 1.7	*M* = 1.9; *SD* = 1.9	*M* = 1.8; *SD* = 1.5	-0.10	.752	[-.70, .50]
"Does not want to be considered "an alcoholic"" (131)	*M* = 2.6; *SD* = 2.0)	*M* = 2.0; *SD* = 1.7	*M* = 3.2; *SD* = 2.1	1.23	**<.001****	[.56, 1.90]
"Would feel ashamed if family finds out about need of treatment" (n = 132)	*M* = 2.0; *SD* = 1.6	*M* = 1.8; *SD* = 1.5	*M* = 2.2; *SD* = 1.7	0.39	.168	[-.17, .96]

Table 4; Reservations and barriers of all participants and compared by previous RT experience

"Would feel ashamed if friends find out about need of treatment" (n = 132)	*M* = 2.0; *SD* = 1.6	*M* = 1.8; *SD* = 1.4	*M* = 2.2; *SD* = 1.7	0.41	.132	[-.13, .95]
"Worried that others will distance from oneself when finding out about treatment" (n = 128)	*M* = 1.9; *SD* = 1.4	*M* = 2.0; *SD* = 1.5	*M* = 1.8; *SD* = 1.4	-0.18	.481	[-.69, .33]
"Treatment would lead to negative impact on self-esteem" (n = 128)	*M* = 2.1; *SD* = 1.7	*M* = 1.9; *SD* = 1.6	*M* = 2.3; *SD* = 1.9	0.41	.183	[-.20, 1.03]
"Because during treatment one loses his/her autarchy" (n = 126)	*M* = 2.3; *SD* = 1.8	*M* = 2.2; *SD* = 1.6	*M* = 2.5; *SD* = 1.9	0.23	.460	[-.39, .86]
"Fear of staying in a treatment institution" (n = 126)	*M* = 2.0; *SD* = 1.6	*M* = 2.0; *SD* = 1.5	*M* = 2.0; *SD* = 1.7	0.10	.746	[-.49, .68]
"Does not want to involve with strangers during treatment" (n = 127)	*M* = 2.2; *SD* = 1.6	*M* = 2.2; *SD* = 1.6	*M* = 2.1; *SD* = 1.7	-0.07	.824	[-.65, .52]
"Not able to bear sharing a sleeping room with strangers during treatment" (n = 128)	*M* = 2.5; *SD* = 1.8	*M* = 2.4; *SD* = 1.9	*M* = 2.5; *SD* = 1.9	0.17	.604	[-.48, .82]
"Fear that other people with alcohol dependency will misbehave" (n = 128)	*M* = 2.3; *SD* = 1.7	*M* = 2.2; *SD* = 1.6	*M* = 2.4; *SD* = 1.9	0.24	.824	[-.37, .85]
"Because during treatment one would not be able to independently organize leisure time" (n = 130)	*M* = 2.8; *SD* = 1.9	*M* = 2.5; *SD* = 1.7	*M* = 3.1; *SD* = 2.1	0.58	.088	[-.09, 1.24]
"Because one believes that during treatment one will become depressed" (n = 122)	*M* = 2.1; *SD* = 1.7	*M* = 2.1; *SD* = 1.6	*M* = 2.2; *SD* = 1.7	0.12	.687	[-.48, .73]
"Because during treatment one's needs might not be respected" (n = 127)	*M* = 2.6; *SD* = 1.9	*M* = 2.5; *SD* = 1.8	*M* = 2.8; *SD* = 2.0	0.29	.381	[-.37, .95]
"Worried, that the daily schedule is overdemanding" (n = 128)	*M* = 1.9; *SD* = 1.5	*M* = 2.0; *SD* = 1.6	*M* = 1.8; *SD* = 1.5	-0.18	.518	[-.71, .36]
"Because one would not be able to go to work during treatment" (n = 118)	*M* = 2.4; *SD* = 1.9	*M* = 2.0; *SD* = 1.7	*M* = 2.8; *SD* = 2.1	0.85	**.017***	[.16, 1.54]
"Worried that one would lose his/her job during treatment" (n = 117)	*M* = 2.2; *SD* = 1.8	*M* = 2.2; *SD* = 1.8	*M* = 2.2; *SD* = 1.9	0.02	.959	[-.66, .70]
"Does not want colleagues to find out about need of treatment" (n = 124)	*M* = 2.1; *SD* = 1.7	*M* = 1.9; *SD* = 1.5	*M* = 2.4; *SD* = 1.8	0.45	.141	[-.15, 1.06]

Table 4; Reservations and barriers of all participants and compared by previous RT experience

"Because during treatment one would not be able to see friends and family enough" (n = 126)	*M* = 2.4; *SD* = 1.9	*M* = 2.3; *SD* = 1.8	*M* = 2.6; *SD* = 1.9	0.36	.279	[-.30, 1.02]
"Because one would not have enough time for one's hobbies during treatment" (n = 128)	*M* = 2.2; *SD* = 1.8	*M* = 1.9; *SD* = 1.6	*M* = 2.5; *SD* = 2.0	0.55	.089	[-.08, 1.18]
"Because during treatment one would be at home so little" (n = 127)	*M* = 2.9; *SD* = 2.1	*M* = 2.5; *SD* = 1.9	*M* = 3.3; *SD* = 2.2	0.75	**.043***	[.02, 1.48]
"Because one would not be able to take care of responsibilities at home during treatment" (n = 129)	*M* = 2.9; *SD* = 2.0	*M* = 2.4; *SD* = 1.8	*M* = 3.4; *SD* = 2.1	1.02	**.004***	[.33, 1.70]
"Does not believe that a rehabilitation treatment can help" (n = 121)	*M* = 1.8; *SD* = 1.5	*M* = 1.7; *SD* = 1.4	*M* = 1.9; *SD* = 1.7	0.20	.469	[-.35, .75]
"Does not promise success as nothing so far has helped" (n = 120)	*M* = 1.8; *SD* = 1.5	*M* = 2.2; *SD* = 1.8	*M* = 1.4; *SD* = 1.1	-0.71	**.009***	[-1.24, -1.18]
"Wants to solve problem by oneself" (n = 129)	*M* = 2.8; *SD* = 2.1	*M* = 2.1; *SD* = 1.8	*M* = 3.5; *SD* = 2.1	1.37	**<.001****	[.67, 2.06]
"Does not believe in curability of dependency" (n = 124)	*M* = 2.0; *SD* = 3.1	*M* = 2.2; *SD* = 1.8	*M* = 1.8; *SD* = 4.2	-0.44	.465	[-1.59, .71]
"Considers consumption habits to be unproblematic" (n = 130)	*M* = 2.3; *SD* = 2.0	*M* = 1.5; *SD* = 1.3	*M* = 3.2; *SD* = 2.1	1.75	**<.001****	[1.13, 2.36]

Note: CI: Confidence Interval; M: Mean; MD: Mean Deviation; RT: rehabilitation treatment; SD: Standard Deviation

When comparing the participants who stated WRT to those stating WDRT, as expected a significantly higher score of reservations was found for the group stating WDRT (MD = 0.52; p = .010). On level of the subgroups likewise higher means were found in the group stating WDRT, again the difference for the subgroup "reservations due to absence from home" was found to be significant (MD = 0.68; p = .038; for all values see table 5). Both groups prioritized "*absence from home*" highest, followed by "*reservations due to inpatient treatment and social anxiety*" (MD = 0.57; p = .053), "*reservations due to work"* (MD = 0.35; p = .249) and *"reservations due to impairment of self-esteem*" (MD = 0.57; p = .055). Again, the least priority was given to reservations due to *"full abstinence from alcohol"* (MD = 0.25; p = .230) in both groups (all values see table 5). On level of the items significant divergence could be seen for the variables: *"treatment would lead to negative impact on self-esteem*" (MD = 0.75; p = .039) and "*not able to bear sharing a sleeping room with strangers during RT*" (MD = 0.99; p = .009). The predominantly organizational items "because during treatment one would not be able to independently organize leisure time" (MD = 0.89; p = .031), "because one would not be able to go to work during treatment" (MD = 0.84; p = .047) and "because one would not be able to take care of important responsibilities at home" (MD = 1.05; p = .012) were likewise found to show significant differences. Furtherly, "*wants to solve problem by oneself*" (MD = 1.61; p = <.001), "*Does not believe that RT can help*" (MD = 1.35; p = <.001) and "*considers consumption habits to be unproblematic*" (MD = 1.09; p = .008) with higher values in the group stating WDRT were found to significantly deviate. The complete values can be seen in table 5.

Table 5; Reservations and barriers of participants by willingness to enter RT

Reservations and Barriers	WRT (n = 82)	WDRT (n = 43)	*MD*	*p*	*CI 95% [LL, UL]*
Total reservations and barriers	*M* = 2.0; *SD* = 1.1	*M* = 2.5; *SD* = 1.0	0.52	**.010***	[.13, .92]
Subgroup *"attitude towards full abstinence of alcohol"*	*M* = 1.7; *SD* = 1.1	*M* = 2.0; *SD* = 1.0	0.25	.230	[-.16, .66]
Subgroup *"reservations due to impairment of self-esteem"*	*M* = 1.9; *SD* = 1.3	*M* = 2.5; *SD* = 1.6	0.57	.055	[-.01, 1.14]
Subgroup *"reservations due to inpatient treatment and social anxiety"*	*M* = 2.1; *SD* = 1.3	*M* = 2.6; *SD* = 1.6	0.57	.053	[-.01, 1-15]
Subgroup *"reservations due to work"*	*M* = 2.1; *SD* = 1.4	*M* = 2.5; *SD* = 1.6	0.35	.249	[-.25, .96]
Subgroup *"reservations due to absence from home"*	*M* = 2.2; *SD* = 1.4	*M* = 2.9; *SD* = 1.7	0.68	**.038***	[.08, 1.27]
"Can not live without alcohol" (n = 128)	*M* = 1.3; *SD* = 0.9	*M* = 1.5; *SD* = 1.1	0.22	.887	[-.20, .65]
"Does not want to live without alcohol" (n = 131)	*M* = 1.4; *SD* = 1.1	*M* = 1.8; *SD* = 1.5	0.46	.101	[-.09, 1.0]
"Believes to be needing alcohol for problem solving" (n = 129)	*M* = 1.9; *SD* = 1.5	*M* = 2.1; *SD* = 1.7	0.17	.581	[-.48, .83]
"Because one does not believe an abstinent life to be a happier life" (n = 126)	*M* = 1.6; *SD* = 1.4	*M* = 2.1; *SD* = 1.7	0.51	.125	[-.15, 1.16]
"Believes to need the calming effect of alcohol" (n = 131)	*M* = 1.7; *SD* = 1.4	*M* = 2.2; *SD* = 1.7	0.54	.097	[-.10, 1.19]
"Because nothing else can take away the feeling of stress as fast as alcohol consumption" (n = 126)	*M* = 2.0; *SD* = 1.7	*M* = 2.0; *SD* = 1.4	0.00	1	[-.60, .60]
"Worried that abstinent life resembles overdemand" (n = 122)	*M* = 1.8; *SD* = 1.7	*M* = 1.8; *SD* = 1.4	-0.03	.929	[-.64, .59]
"Does not want to be considered "an alcoholic"" (131)	*M* = 2.1; *SD* = 1.7	*M* = 3.3; *SD* = 2.2	1.19	.005	[.38, 2.0]
"Would feel ashamed if family finds out about need of treatment" (n = 132)	*M* = 1.9; *SD* = 1.6	*M* = 2.0; *SD* = 1.6	0.10	.750	[-.52, .72]

Table 5; Reservations and barriers of participants by willingness to enter RT

"Would feel ashamed if friends find out about need of treatment" (n = 132)	*M* = 1.8; *SD* = 1.4	*M* = 2.3; *SD* = 1.7	0.43	.182	[-.21, 1.07]
"Worried that others will distance from oneself when finding out about treatment" (n = 128)	*M* = 1.8; *SD* = 1.3	*M* = 1.9; *SD* = 1.5	0.12	.684	[-.45, .68]
"Treatment would lead to negative impact on self-esteem" (n = 128)	*M* = 1.8; *SD* = 1.6	*M* = 2.6; *SD* = 1.8	0.75	**.039***	[.04, 1.47]
"Because during treatment one loses his/her autarchy" (n = 126)	*M* = 2.1; *SD* = 1.6	*M* = 2.8; *SD* = 1.9	0.73	.055	[-.02, 1.47]
"Fear of staying in a treatment institution" (n = 126)	*M* = 1.8; *SD* = 1.5	*M* = 2.1; *SD* = 1.8	0.24	.468	[-.42, .90]
"Does not want to involve with strangers during treatment" (n = 127)	*M* = 1.9; *SD* = 1.4	*M* = 2.5; *SD* = 1.9	0.59	.113	[-.14, 1.33]
"Not able to bear sharing a sleeping room with strangers during treatment" (n = 128)	*M* = 2.0; *SD* = 1.6	*M* = 3.0; *SD* = 2.0	0.99	**.009****	[.25, 1.72]
"Fear that other people with alcohol dependency will misbehave" (n = 128)	*M* = 2.1; *SD* = 1.6	*M* = 2.4; *SD* = 1.9	0.28	.439	[-.44, 1.01]
"Because during treatment one would not be able to independently organize leisure time" (n = 130)	*M* = 2.4; *SD* = 1.7	*M* = 3.3; *SD* = 2.2	0.89	**.031***	[.08, 1.69]
"Because one believes that during treatment one will become depressed" (n = 122)	*M* = 1.9; *SD* = 1.5	*M* = 2.2; *SD* = 1.8	0.30	.390	[-.39, .99]
"Because during treatment one's needs might not be respected" (n = 127)	*M* = 2.3; *SD* = 1.7	*M* = 3.1; *SD* = 2.1	0.77	.060	[-.03, 1.57]
"Worried, that the daily schedule is overdemanding" (n = 128)	*M* = 1.8; *SD* = 1.3	*M* = 2.0; *SD* = 1.7	0.25	.425	[-.38, .89]
"Because one would not be able to go to work during treatment" (n = 118)	*M* = 2.1; *SD* = 1.8	*M* = 2.9; *SD* = 2.2	0.84	**.047***	[.01, 1.68]
"Worried that one would lose his/her job during treatment" (n = 117)	*M* = 2.1; *SD* = 1.8	*M* = 2.2; *SD* = 2.0	0.16	.667	[-.62, .94]
"Does not want colleagues to find out about need of treatment" (n = 124)	*M* = 2.0; *SD* = 1.5	*M* = 2.1; *SD* = 1.8	0.13	.715	[-.57, .82]

Table 5; Reservations and barriers of participants by willingness to enter RT

"Because during treatment one would not be able to see friends and family enough" (n = 126)	*M* = 2.2; *SD* = 1.7	*M* = 2.5; *SD* = 1.9	0.34	.371	[-.41, 1.08]
"Because one would not have enough time for one's hobbies during treatment" (n = 128)	*M* = 1.9; *SD* = 1.6	*M* = 2.6; *SD* = 2.0	0.65	.089	[-.10, 1.39]
"Because during treatment one would be at home so little" (n = 127)	*M* = 2.4; *SD* = 1.8	*M* = 3.3; *SD* =2.3	0.83	.064	[-.05, 1.71]
"Because one would not be able to take care of responsibilities at home during treatment" (n = 129)	*M* = 2.4; *SD* = 1.8	*M* = 3.4; *SD* = 2.1	1.05	**.012***	[.24, 1.86]
"Does not believe that a rehabilitation treatment can help" (n = 121)	*M* = 1.3; *SD* = 0.6	*M* = 2.6; *SD* = 2.6	1.35	**<.001****	[.62, 2.08]
"Does not promise success as nothing so far has helped" (n = 120)	*M* = 1.8; *SD* = 1.6	*M* = 2.0; *SD* = 1.7	0.23	.500	[-.44, .89]
"Wants to solve problem by oneself" (n = 129)	*M* = 2.1; *SD* = 1.7	*M* = 3.7; *SD* = 2.2	1.61	**<.001****	[.79, 2.43]
"Does not believe in curability of dependency" (n = 124)	*M* = 1.7; *SD* = 1.4	*M* = 2.5; *SD* = 5.4	0.77	.414	[-1.12, 2.66]
"Considers consumption habits to be unproblematic" (n = 130)	*M* = 1.9; *SD* = 1.7	*M* = 3.0; *SD* = 2.1	1.09	**.008****	[.29, 1.89]

Note: CI: Confidence Interval; M: Mean; MD: Mean Deviation; SD: Standard Deviation; WRT: Willingness to enter rehabilitation treatment; WDRT: Would dislike entering rehabilitation Treatment

4.4 Results of Hospital Anxiety and Depression Scale, Readiness to Change Questionnaire and Alcohol Use Disorders Identification Test-Concise

Values found for the HADS-, RCQ- and AUDIT-C-scale are displayed in table 6. The mean of the total HADS questionnaire for the participants was found rather low at a value of 2.3 (range 1-6; SD: 0.2). This meaning that the sample recruited did not state to suffer from a high stress level due to symptoms of anxiety and depression. The scores for the sub-scales when distinguishing between depressed symptoms (HADS-D; M = 2.2; SD = 0.3) and anxious symptoms (HADS-A; M: 2.4, SD: 0.3) were similarly low. The measure of readiness to change with the RCQ found a mean (M = 4.3; SD = 1.1) above the median at 3 (scaled 1 = disagree to 6 = fully agree), leading to the assumption, that actively drinking participants were predominantly willing to change consumption habits. For the AUDIT-C questionnaire, accessing current drinking habits, an average mean of 6.0 was found (SD = 3.5). As a score above the cut off at 4 points towards AUD's and alcohol dependency with a high level of sensitivity, the burden of current disease severity within the sample assessed should be considered to lie high. Especially when taking this value in account with respect to the finding that 41% of participants stated current abstinence from alcohol.

In a next step these values were compared by participants with prior RT experience and participants without prior RT. The values for the mean HADS (MD = 0.1; p = .109) and for HAD-D (MD = 0.0; p = .538) were not found to differ. For HADS-A a significant but diminutive divergence with a higher score for participants without previous RT could be found (MD = 0.1; p = .040). The readiness to change was found non-significantly higher in the group stating prior RT (MD = -0.4; p = .076). For the current consumption habits the score of the group stating prior RT was, again, insignificantly higher (MD = -0.4; p = .529). For all values including means and standard deviation, as for the comparison of these values depending by WRT see table 6.

Table 6; Mean RTC-, HADS- and AUDIT-C score of participants

Scale	All participants	Prior RT	No prior RT	*MD*	*p*	*CI 95% [LL, UL]*	WRT	WDRT	*MD*	*p*	*CI 95% [LL, UL]*
		N = 74	N = 74				N = 82	N = 43			
HADS total	*M*: 2.3; *SD:* 0.2	*M*: 2.3; *SD*: 0.2	*M*: 2.4; *SD*: 0.3	0.1	.109	[-.01, .14]	*M*: 2.3; *SD:* 2.3	*M*: 2.3; *SD:* 0.2	0.0	.766	[-.07, .07]
- HADS-D	*M*: 2.2; *SD:* 0.3	*M*: 2.2; *SD*: 0.3	*M*: 2.3; *SD*: 0.3	0.0	.538	[-.08, .15]	*M*: 2.2; *SD:* 0.3	*M*: 2.2; *SD:* 0.3	0.0	.657	[-.09, 1.15]
- HADS-A	*M*: 2.4; *SD:* 0.3	*M*: 2.4; *SD*: 0.3	*M*: 2.5; *SD*: 0.3	0.1	**.040***	[.01, .18]	*M*: 2.4; *SD:* 0.3	*M*: 2.4; *SD:* 0.3	0.0	.955	[-.10, .10]
RCQ	*M*: 4.3; *SD:* 1.1	*M*: 4.5; *SD*: 0.8	*M*: 4.1; *SD*: 1.2	-0.4	.076	[-.76, .04]	*M*: 4.6; *SD:* 0.9	*M*: 3.7; *SD:* 1.2	-0.8	**.002***	[-1.36, -.32]
AUDIT-C	*M*: 6.0; *SD: 3.5*	*M*: 6.2; *SD*: 3.5	*M*: 5.8; *SD*: 3.6	-0.4	.529	[-1.54, .79]	*M*: 6.4; *SD:* 3.6	*M*: 5.4; *SD:* 3.3	-1.0	.125	[-2.26, .28]

Note: AUDIT-C: Alcohol Use Disorders Identification Test-C; CI: Confidence Interval; HADS: Hospital Anxiety and Depression Scale; M: Mean; RCQ: Readiness to Change questionnaire; WRT: Willingness to enter rehabilitation treatment; WDRT: would dislike to enter rehabilitation treatment

4.5 Investigating Predictors of Willingness to enter Rehabilitation

The influence of the reservation subgroups, the HADS, the AUDIT-C, the RCQ, life events due to consumption, previous RT and admission to RT on the willingness to enter RT were investigated in a stepwise multiple linear regression analysis. WRT was chosen as dependent variable. A total of 125 of the 150 participants made a statement regarding WRT and could therefore be included in this calculation. Normal distribution of data was tested using a histogram, P-P-Plot and Shapiro-Wilk-test. Heteroscedasticity was demonstrated, therefore a bootstrapping with 2000 replicates was performed to increase robustness. Table 7 illustrates the significant result of the multiple linear regression analysis performed.

The findings of the stepwise multiple linear regression indicated a collective significant effect ($p < .001$). After examination, the significant predictors in the model indicated to be: *formerly entered rehabilitations and approved rehabilitation requests* (B = .712, 95%-CI 0.289 to 1.143; p = .001), as also *reservations regarding inpatient treatment and social anxiety* (B = -.283, 95%-CI -0.550 to -0.019; p = .04). This finding indicates, that within the survey sample reservations due to inpatient treatment and social anxiety predict WRT negatively, meaning that participants who stated high reservation levels in this subgroup were more likely not to be willing to enter RT. The second hypothesis could therefore be accepted. Previous rehabilitation treatments as well as prior approval to rehabilitation treatment predicted higher WRT. Further impact of multi-collinearity was investigated in a Spearman-rho correlation and results are displayed in the following section.

Table 7; Linear multiple regression analysis to predict willingness to enter rehabilitation [a]

Predictor	*B*	*SD*	95% CI		*p*
			LL	UL	
IR	.46	.26	-0.034	.989	.085
PRE	.71*	.22	0.289	1.143	**.001**
IPT&SA	-.28*	.14	-0.550	-.019	**.043**

Note. IR: perceived Information about Rehabilitation; PRE: previous approval and admittance for rehabilitation treatment; IPT&SA: inpatient treatment and social anxiety; CI: confidence interval; LL: lower limitation; UL: upper limitation.
[a] based on 2000 bootstrap samples.
* $p < .05$. ** $p < .001$.

4.6 Spearman-rho Correlation for Study Variables

Multi-collinearity was evaluated by assessment of a Spearman-rho correlation for non-normally distributed data among the measured constructs and variables. Harris and Hagger (2007) classified the case of multi-collinearity as given when the correlation factor exceeds a score of r=.70. This case occurred for the model-determining variable reservations towards inpatient treatment and social anxiety and the variable reservations due to absence from home (r_s=.73), so that a collinearity must be assumed. The summary of the spearman-rho coefficients for variables are shown in table 8.

Table 8; Spearman rho correlations for study variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. WRT														
2. WDRT	-.72**													
3. FR	.38**	-.33**												
4. gender	-.07	0.3	-.02											
5. RCQ	.39**	-.28**	.13	.10										
6. AUDIT-C	.14	.10	.06	-.15	.13									
7. HADS	-.14	.10	-.12	-.01	-.23*	.04								
8. HADS-D	-.07	.07	-.05	.14	-.08	.02	.81**							
9. HADS-A	-.11	.10	-.18*	-.17*	-.25**	-.02	.68**	.17*						
10. reservations & barriers	-.38**	.39**	-.17*	.18*	-.20*	.06	.23**	.25**	.08					
11. abstinence	-.20*	.20*	-.05	.11	-.23*	.17	.13	.17*	-.03	.71**				
12. self esteem	-.28**	.29**	-.20*	.14	-.13	.00	.14	.14	.06	.72**	.52**			
13. clinic & social anxiety	-.26**	.25**	-.05	.22*	-.09	.05	.24**	.26**	.05	.89**	.57**	.52**		
14. work	-.23**	.30**	-.16	.11	.01	-.01	.10	.07	.07	.68**	.41**	.59**	.56**	
15. absence from home	-.28**	.46**	-.19*	.21*	-.09	.06	.15	.18*	.05	.82**	.52**	.46**	.73**	.64**

Note: AUDIT-C: Alcohol Use Disorders Identification Test-Concise; HADS: Hospital Anxiety and Depression Scale (HADS-A: Anxiety; HADS-D: Depression); RCQ: Readiness-To-Change questionnaire; FR: former rehabilitation treatment; WDRT: would dislike to enter rehabilitation; WRT: Willingness to enter rehabilitation
Variable 11 – 15: abbreviated designation of the reservation subgroups for the sake of clarity; 11: attitude towards full abstinence; 12: reservations due to impairment of self-esteem; 13: reservations due to inpatient treatment and social anxiety; 14: work related reservations; 15: reservations due to absence from home during treatment

*p<.05. **p<.01.

5 Discussion

Rehabilitation treatment is a great factor for successful treatment to achieve abstinence over longer periods of time or even permanently for people with alcohol dependency and hazardous consumption habits (Frischknecht et al., 2022). Research has repeatedly concerned factors improving the outcome of RT such as social support, employment, comorbidities and self-efficiency (Anker et al., 2019; DiFranza & Guerrera, 1990; Grant et al., 2004; Loeber et al., 2009). Other research teams have considered barriers towards treatment, finding that especially people with lower severity of the disease prefer to deal with the problem by one-self. Furtherly, a lack of knowledge about possible treatment options is widely spread (Cunningham et al., 1993; Grant, 1997; Saunders et al., 2006; Schuler et al., 2015; Wallhed Finn et al., 2014). So far, few surveys have focused on which factors influence the willingness to enter rehabilitation and how experience with treatment influences reservations towards RT. The present study was designed to investigate this topic and attempt to answer these research questions for people in the federal states of Mecklenburg Western Pomerania and Saxony Anhalt in Germany. The results of the study suggest not being at home due to inpatient treatment and not being able to independently organize leisure time, not being able to take care of important responsibilities at home during treatment, wanting to solve the problem by oneself and fear of being considered an alcoholic are relevant reservations towards RT. These results partly confirm the previously claimed barriers, but furtherly thematize new seemingly equally important reservations towards RT. The mean intensity of reservations was found higher for participants, who had not undergone prior treatment. This finding is also in line with previous literature. The conducted regression analysis revealed a predicting negative effect on WRT by intensity of reservations due to inpatient treatment and social anxiety. Former treatment and previous admittance to RT significantly predicted higher WRT. These results contribute to a broader understanding of the topic.

5.1 Methodological Aspects

Data collection by means of questionnaires can be associated with various difficulties, for example, the detailed patient opinions must be expressed in the form of the existing questionnaire which can lead to alienation of the content. Due to the long duration needed for filling out the questionnaire concentration difficulties might have occurred, leading to a decrease of accuracy of the answers to the items or even to the skipping of difficult or uncomfortable queries. The questions about life events due to the

impact of alcohol are based on the memory of the participants, making these responses susceptible to a bias by subjective evaluation of importance of certain situations and reduced memory of events considered less important. Repression of unpleasant memories can also distort the results. Additionally, underreporting of alcohol consumption in a questionnaire is imaginable, but previous surveys found, that quantities are predominantly specified accurately and self-report was even found more precise than blood markers (Babor et al., 2000). To perform the survey the format of a questionnaire was chosen to increase the comparability of the results, and, due to the more discrete possibility for participants to provide information about life events that may be considered unpleasant to talk about. For this target group, however, a survey without bias is generally difficult to implement.

The survey period of two years prevents bias due to seasonal sampling, but a survey time-dependent variance in the statements given by individuals is conceivable. The region of the survey Saxony-Anhalt and Mecklenburg-Western Pomerania cannot be considered representative for Germany, as these federal states have an above-average per capita consumption of alcohol compared to the rest of Germany (Gesundheitsberichterstattung des Bundes, 2006; Rübenach et al., 2012). Further studies would have to confirm the effects found in the present survey for the other federal states before general conclusions can be drawn with certainty.

The response rate lay at 44%; compared to other studies it was found to be about average for this difficulty-to-reach screening clientele (Fachverband Sucht e.V., 2020) and is therefore considered satisfying. The instruments used in the present study are recommended, frequently used and well validated tools.

5.2 Participants

The average age in the study population lay at 51 years, lying slightly higher compared to findings of other authors (Gomes de Matos et al., 2013). Taking dependency into account as a life-long disease both actively drinking and abstinent persons were included in the study. The age range can therefore be considered to resemble the prevalence of alcohol dependency in society by representing people the age of 30-70 years old (Robert Koch-Institut, 2015). Simultaneously, treatment rates below average have previously been found for 21-39-year-olds by Manthey et al. (2020). A distortion of the average age due to underrepresentation of younger people in the present sample is therefore conceivable, as merely people currently in contact with the healthcare system took part. In comparison, the statistics of the German pension

insurance found average age in rehabilitation treatment from 2019 to 2021 to lie at 48 for women and 47 for men (Deutsche Rentenversicherung, 2022).

Of participants 75% were male. The fraction of 75% males vs. 25% females resembles the gender distribution found by other authors for risky consumption habits in favour of men (Bosque-Prous et al., 2017; Gomes de Matos et al., 2013; Greenfield, 2002; Seitz et al., 2019). This ratio can - among other factors - be explained by the previously higher restrictions of drinking in women, due to the social viewpoint considering women´s behaviour and their sense of responsibilities to be effected more strongly by alcohol consumption (Wilsnack et al., 2000). This so called gender-gap is currently presumably undergoing an alignment, as alcohol consumption is becoming more common amongst younger women due to an increase of social acceptability (Greenfield, 2002). However, this fact is worrying and should lead to implementation of greater awareness amongst practitioners, as damage to health and patterns of dependence occur after less time for women than for men.

Considering education, at a fraction of 53% most frequently participants had fulfilled a vocational training, but highest educational attainment varied widely. These proportions are similar to the findings of other study groups and does once again show, that alcohol dependency is a disease of all social strata (Längle et al., 1993). As no effect for educational level could be shown towards WRT in the conducted regression analysis, it can be assumed that readiness for therapy does not differ by education.

The employment rate lay under 50%, resembling the findings of Längle (1993), who found full-time employment for 42% of study participants. Keeping in mind, that the sample displays only people in contact with the healthcare system, lower rates can be assumed for particularly vulnerable groups like homeless persons or immigrated people. At this point it must be noted, that unemployed people have been found to be at 3-fold higher risk of alcohol-related mortality (Saul et al., 2022). The unemployment rate in this study must therefore be rated a worrying risk factor for those affected.

Around 2/3 of participants stated to be in a relationship. Breakup due to alcohol related causes was at 33% among all participants. A trend of increased consumption for people after divorce has been described formerly (Leonard & Rothbard, 1999; Wilsnack et al., 2000). However, the results of the present study did not assume that people's motivation to change habits is either positively or negatively affected after the ending of a relationship due to alcohol consumption.

5.3 Reservations towards rehabilitation treatment

In the following the results of the scale, assessing reservations towards RT of all participants, will be discussed and the ranking of the subscales will be looked at.

The participants stated reservations towards RT at a mean of 2.3, which can be interpreted as a low score on a scale ranging from 1 through 6. The subgroup clustering reservations towards absence from home was found to have the highest priority amongst reservations. This can have several underlying causes. On the one hand, care responsibilities for children or other family members can resemble a barrier, if no option for support is present, when the affected person enters RT. On the other hand, it is conceivable, that people may reject the idea of not staying in the own home as much as usual.

A positive correlation was found for being female and having reservations. This finding is in line with the formerly stated lower rates of help acceptance of common addiction treatment in women than in men (Brennan et al., 1993; Finn et al., 2023; Greenfield, 2002; Wallhed Finn et al., 2023). Furtherly, a correlation of being female and having reservations towards absence from home could be seen. Women live with children more often than men; this makes up a social environment that comes with more structure. Worry of consequences such as loosing time with children has previously been demonstrated to resemble an important barrier towards treatment (Finn et al., 2023). Simultaneously, for affected people who did go into treatment, childcare could be demonstrated to reduce treatment drop-out rates and predicted a better treatment outcome (Blendberg et al., 2020; Mellentin et al., 2018). Caregiving of family members overall has been found to reduce alcohol consumption and increases chance of long-term abstinence (Jessup et al., 2014). Caregiving might furthermore be a co-factor explaining comparatively lower mortality attributed to alcohol in unemployed women versus unemployed men (Saul et al., 2022). Social resources from support of children are reported more often by women than by men (Brennan et al., 1993). Due to gender role socialization caretaking responsibilities mainly concern women, although a shift in this trend due to societal change can currently be observed towards more equality in the distribution of care tasks and can be expected to continue in the coming years (Riegraf, 2017). In contrary to this assumption, Grant et al. (1997) found care responsibilities to be of lower priority amongst investigated barriers towards treatment. But when care responsibilities represented an important barrier, this did significantly more often concern women than men. The correlation in the present study of being female and having reservation towards absence from home points to the importance, currently still predominantly amongst women, that caregiving responsibility should be taken into

consideration as an argument for out-patient treatment. Further research would benefit from respecting childcare responsibilities - not only - but with particular attention to unemployed persons. Generally speaking, gender-sensitive needs regarding treatment require to be reviewed in-depth in further research.

It is also conceivable, that the strength of reservations regarding absence from home is explicable by loss of autonomy and privacy, as the items of the subscale assessed social and organizational aspects as well as disinclination of absence from the own home. Wallhed Finn et al. (2014) found their participants to describe appealing treatment to come with a high level of autonomy as well as the opportunity to maintain everyday life during the period of treatment. Therapy was even considered a threat to autonomy in treatment naïve people with AUD (Tarp et al., 2022). Affected people also stated worry that treatment will be too extensive (Wallhed Finn et al., 2023). A time-intensive, let alone inpatient, setting for RT therefore seems less appealing. The variable reservations due to absence from home showed a collinearity with the variable reservations due to inpatient treatment and social anxiety. Reservations due to inpatient treatment and social anxiety made up for the second strongest reservation and showed a significant predictive value for WRT. But when this relationship is looked at more closely, the presence of a correlation seems close to obvious as inpatient treatment inevitably leads to absence from home. Accordingly, it seems logical that these variables cannot be completely separated from one another. It does therefore not come surprising to see reservations due to inpatient treatment and social anxiety considered second priority for the participants. These reservations might partially be resulting due to lack of knowledge about treatment options, as less time-consuming treatments, such as part-time outpatient treatment, are available. But simultaneously it must be mentioned, that inpatient treatments currently continue to resemble the vast majority of treatments (Deutsche Rentenversicherung, 2022).

People with AUD's or alcohol dependency who lack problem understanding could be seen to be less willing to give up alcohol consumption in the past ("Matching Alcoholism Treatments to Client Heterogeneity: Project MATCH Three-Year Drinking Outcomes," 1998). Since it can be shown in the present study that the subgroup expressing reservations towards full abstinence was found to have the lowest priority, it can be assumed that problem awareness has arisen among the majority of participants. This assumption is supported by the high mean score for the RCQ of the participants and the negative correlation found for the RCQ with the subgroup of reservations due to alcohol abstinence. This means, that people with lower degree of problem awareness

and readiness to change are also less willing to give up drinking. However, for the present sample, the low priority of reservations towards abstinence appears relieving, as giving up alcohol consumption does not seem to be a core reservation towards treatment among participants, albeit total abstinence has previously been stated as a barrier by respondents (Cunningham et al., 1993; Grant, 1997; Saunders et al., 2006; Tarp et al., 2022; Wallhed Finn et al., 2014). Wallhed Finn et al. (2014) found lower readiness to give up alcohol consumption in participants with less severity of disease. It must be kept in mind, that a sample without contact to the healthcare system would most likely prioritize barriers differently.

When progressing from the subgroups to the item level, a similar tendency of priorities can be seen. The items of highest priority were found to be: reservations due to absence from home and reservations due to not being able to take care of important tasks at home during treatment. Not wanting to share a sleeping room with strangers was equally found to resemble a variable of high importance. As found in former research, the participants often wanted to deal with the problem by themselves (Cunningham et al., 1993; Finn et al., 2023; Grant, 1997; Probst et al., 2015; Saunders et al., 2006; Schuler et al., 2015; Wallhed Finn et al., 2014; Wallhed Finn et al., 2023). Saunders (2006) interpreted this barrier to resemble a result of self-stigmatization and fear of challenges to ones self-esteem. Wallhed Finn's (2014) participants considered needing professional help to equate to failure and therefore resembling the last option after all other attempts had failed. Social support has been found to be an important moderator for positive treatment outcome; wherefore positively experienced family support is of great value (Loeber et al., 2009; Schwarzer & Leppin, 1991). However, people wanting to manage withdrawal and weaning from alcohol on their own without professional help are at risk, as they may not only be affected by severe physical withdrawal symptoms but might also be exposed to a high level of psychological stress. This might lead to early relapse. In such a situation the role of the GPs is of great importance, as they could play a significant role for these people. On the one hand to inform about risks and possible complications of withdrawal and weaning, and on the other hand to support during the withdrawal and repeatedly offer help, if accepted in the course of weaning. In summary, it must be said that people who refuse professional help constitute a risk group and GPs should remain vigilant to identify these people.

Incomparable to the findings of this study, not wanting to be considered an alcoholic has been of importance in previous research. In Wallhed Finn's (2023) and Cunningham's (1993) samples participants mentioned the labelling of being "an

alcoholic" to be consequential in refraining from treatment. Wallhed Finn's (2014) participants did not want to resemble the social stereotype of "an alcoholic". Again, a relevant persisting influence of social stigmatization on the persons concerned can be seen. The fear that one's needs might not be respected during RT might be close at hand; as all social classes and all genders are affected a wide range of needs must be assumed. Of similar importance, the fear that other people with alcohol dependency in treatment will misbehave could be found. Again, social stratification, age, gender and the inclusion of all degrees of disease severity in RT must be taken in account for this reservation. This points out, that affected persons are also not free of a stigma towards other persons with alcohol dependence. The importance of addressing the issue in society has been stated repeatedly and does furtherly remain a goal to strive for in the aim of destigmatisation (Schomerus et al., 2010). A mass media campaign conducted in Denmark could demonstrate change in attitude of people by increasing knowledge about the condition and the possible treatment which lead to increased awareness (Wallhed Finn et al., 2022). Nevertheless, the process of changing the social image is slow and every step into this direction can be of significance to reduce stigmatization of alcohol dependency.

Not being able to go to work during treatment was prioritized highly, but with attention to the employment rate, which was found below 50% this reservation is of place value. As the reservation due to fear of losing the job was found of less priority, self-employment, indispensable functions as well as work giving day structure and identity due to profession should be considered significant for the people affected.

Finding the reservation due to loss of one's autarchy to be important is, as mentioned previously, in line with the finding of Wallhed Finn (2014), as maintaining autarchy has been stated to resemble an important factor for attractive treatment.

The emphasis of reservations due to not wanting to involve with strangers during RT supposes that on the one hand, the fear of other people with dependency due to the social image of "an alcoholic" leads to reservations, and on the other hand, a general fear and refusal of interacting with strangers resembles a barrier.

Corresponding expectations, the total score of reservations was found to correlate negatively with the RCQ score, meaning that people willing to change habits did generally state less reservations. Larger amount of alcohol consumed as well as higher frequency of consumption, as assessed by the AUDIT-C, could be found to go along with higher readiness to change and willingness to enter treatment in the current sample. So not only do people stating WRT show higher RCQ and less reservations, but it is probable, that with increasing problem understanding and readiness to change the reservations towards treatment decrease. Whether the overall reluctance towards aid

possibilities decreases, as there are various support services, or whether explicitly reservations towards RT decrease when RCQ increases, cannot be answered precisely according to these results.

Summarizing, reservations due to absence from home were found of highest priority, followed by reservations due to social anxiety and inpatient treatment. Albeit low employment rate within the sample, thirdly reservations due to work related topics and reservations due to impairment of self-esteem could be found.

5.4 Former Treatment

The following section discusses the differences between people with rehabilitation experience and those without. As participants stating former RT showed significantly less strong reservations towards RT compared to people without former treatment the first hypothesis was accepted. Due to the cross-sectional study design, it cannot be said, whether people with less strong reservations more often undergo treatment or whether reservations decrease when undergoing treatment. In any case, it can at least be assumed that RT does not increase the strength of reservations.

Around half of the participants had previously undergone RT. This percentage lies far above the national average, as currently 14% of people with alcohol related disorders undergo RT in Germany (Cohen et al., 2007; Gomes de Matos et al., 2013). The distortion is most likewise result to the recruiting procedure but is challenging to avoid, as the patient population is difficult to reach. The mean age for people with previous RT at an average of 49 years lies close to the age average of participants in RT in Germany found at 47.5 by the pension insurance (Deutsche Rentenversicherung, 2022). The participants who stated previous RT were found younger than those, who had not undergone RT, but the divergence was not found to be significant. This stands in contrast to the expectation, as on average treatment is entered after longstanding habits (Fachverband Sucht e.V., 2020).

Due to the finding, that people with prior RT have less strong reservations towards treatment than those without prior RT leads to the acceptance of the first hypothesis. It confirms the assumption of Schneier et al. (2010), that people with treatment experience in general state less barriers. It is furtherly in line with the finding of Saunders et al. (2006), who found affected people in America who had previously undergone treatment for AUD to be more likely to seek treatment again. Refutation of reservations during treatment can be assumed. Possibly, when dreaded effects do not occur when admitting to RT. One further explanation could underly perceived benefit of

treatment due to improved coping with craving, achievement of reduced drinking, social support from affected people and so on. These benefits could cause the change of attitude towards RT. At the same time, a distortion due to the disproportionate allocation to RT of people with less reservations is conceivable. Basing on the current findings of this cross-sectional study the cause of this difference cannot be specified unequivocally.

The significantly higher score in the subgroup “reservations due to impairment of self-esteem” for the participants who had no experience with RT emphasizes the persisting negative influence of stigma and its effect on help seeking. Although not found to be a significant negative predictor for WRT, stigma due to help seeking remains an important barrier for people affected (Finn et al., 2023; Probst et al., 2015; Schomerus et al., 2010; Schomerus et al., 2011; Schomerus et al., 2014; Schuler et al., 2015; Wallhed Finn et al., 2023). Self-esteem as also self-efficacy are part of the so called core evaluations and are known to correlate strongly (Judge et al., 1998). As Loeber et al. (2009) found people with lower self-efficacy pre-treatment to show poorer outcome after RT, in fact these people are at risk that after treatment both self-efficacy and self-esteem might furtherly decrease if relapse occurs. These people therefore need particular attention to prevent this downward spiral which may lead further away from the treatment intention. Due to the assumption that fears of stigmatization did not turn into reality when entering RT, the finding that participants with prior RT state less reservations due to stigma should be evaluated encouragingly. But in the opposite Schomerus (2011) found people with AUD to experience more stigma when admitting to treatment, partially due to the underlying perception of conformation with the social image of an “alcoholic”. This fear is reflected in the current study, as “does not want to be considered an alcoholic” was a highly prioritized reservation with significantly higher score in the group of participants without previous RT. It can therefore be assumed, that people avoiding help seeking are often burdened with this worry. In the performed correlation analysis for study variables, a highly significant correlation could be found for WDRT and the subgroup of reservations due to impact on self-esteem. This further shows the relevance of stigma and impact of self-esteem for help acceptance. It remains to be said that thematization of alcohol dependency still corresponds to an important public health literacy. The subgroup “reservations due to absence from home" was found to have highest priority for the group without treatment experience. Furtherly, this reservation was also found significantly stronger for this group than for the group with prior RT, wherefore it can be assumed that obligations at home are an important barrier in this sample. For people experiencing this barrier a suiting form of treatment pleasing individual needs - like part-time or online services - must be searched. Wallhed Finn et

al. (2014) predominantly found affected people to state a negative attitude towards online services. Although these treatment forms might only be gratifying for few, they may resemble the only possible option for others.

The fact that participants with RT experience prioritized “reservations due to inpatient treatment and social anxiety” and “reservations due to absence from home” as first priority leads to the assumption that social anxiety, inpatient treatment and absence from home, as well as the loss of privacy continue to resemble relevant barriers towards treatment also after experience with RT has been gained. Albeit of significantly lower intensity. In previous research SAD was found to be present in more people undergoing outpatient RT than inpatient RT (Book et al., 2009). It can be assumed, that outpatient treatment options resemble a superior treatment form for people with SAD, specifically meaning that people with SAD more often chose outpatient treatment options. The present survey did not inquire, whether previous treatments had been performed inpatient or outpatient. It would be of further interest for future research to inquire, whether people with SAD or symptoms of SAD feel less burdened regarding anxiety in outpatient treatment options than in inpatient RT.

Not being able to work was found significantly more important for people without previous RT, but simultaneously employment was slightly higher for this group. It is conceivable, that work resembles an important framework for day structure, from which one reluctantly let’s go. Work can be part of individuality. Furthermore, indispensable functions with high degree of responsibility must be considered as a trigger for reservations. At this place it would be of interest, whether these people would commit to part-time treatment and are simply not informed about treatment options, as extra-occupational treatments currently only resemble 14% of performed RT treatments (Deutsche Rentenversicherung, 2022). Reservations due to work have so far not been investigated. Employment rates amongst people with AUD have repeatedly been found low (Längle et al., 1993). Recent research has found that positive employment status predicted treatment concluding (Green, 2023). It therefore seems clear that employed participants benefit from the possibility of part-time work during outpatient RT. It is imaginable, that absence from work resembles a strong reservation for people with employment, which is why separate looking at in future research would do more justice to this group.

The fear of being considered an alcoholic due to RT was found significantly higher in the group without previous RT. This is not a surprising effect, as people who had previously entered RT would much likely not fear a significant increase of the association

to this image with further treatment. On the other hand, finding that people without previous RT worry to conform to this social view enhances the persisting problem of stigmatization of alcohol consumption again, which might lead to delayed help seeking due to shame.

The only reservation on item level that was found to show a significantly higher mean for participants who had previously undergone RT was “not promising oneself success from RT, as so far nothing had helped”. Not believing that anyone could help resembled a significant barrier towards treatment in previous research (Grant, 1997). Controversially, this has previously been found to be a significant barrier towards treatment in treatment naïve affected people interviewed by Tarp et al. (2022). This leads to the assumption, that for participants with RT experience, who did not notice improvement or were not content with the treatment outcome, the willingness to renew RT decreased. This attitude signalizes helplessness and giving up. Participants who are in resignation are at high risk to suffer due to impact on physical and mental health, as resignation might lead to termination of attempting to reduce consumption habits. As “*not believing in curability”* was not found significantly higher for people with former RT it is conceivable, that these people generally believe in curability of AUD but possibly not in their personal case. This group of people, howsoever, resembles a challenge for treating physicians, as even in case of agreement to therapy adherence to treatment may be difficult to achieve. Resignation towards treatment did nevertheless seem to affect only a small proportion of participants as previous RT and previous admittance to RT was found to predict higher willingness to renew treatment.

Participants with prior RT showed significantly higher rates of accidents under DUI and had more often had their license suspended due to DUI, as well as reporting significantly more hospital treatments due to alcohol related illness. It is therefore assumable, that this group on average suffered from a higher severity and/ or longer duration of disease. But as the included AUDIT-C merely screens current consumption habits, this assumption cannot furtherly be verified with the current data.

The small but significant difference, that a higher score for anxious symptoms was found for people who had not undergone RT supports the assumption, that people with anxiety not only avoid to seek treatment for their mental health condition, but also have a tendency of avoiding treatment for their AUDs. This is in line with previous research (Book et al., 2009; Schneier et al., 2010). The assumption is further underscored by the negative predictive effect of reservations due to social anxiety and inpatient treatment for the willingness to enter RT. This finding will be discussed in the

corresponding section. An interesting question for further research would be to investigate, whether anxious people not undergoing treatment show more severity of disease than people with SAD committing to treatment, as Schneier et al. (2010) found people co-morbid with SAD and AUD to show high severity and persisting consumption habits and the present results found people with higher degree of anxious symptoms to not have undergone RT.

In summary, the first hypothesis was accepted due to the finding, that the 50% of the participants who had formerly undergone RT stated less intense reservations towards RT than the 50% participants without previous RT experience. People with previous treatment were found to have experienced significantly more accidents due to DUI, as well as significantly more treatments in hospital due to an alcohol related cause. A very small but significant effect was found for people without prior treatment to show more symptoms of anxiety than participants with former RT. Reservations due to absence from home were significantly more important for participants without prior RT. But this subgroup was simultaneously, together with reservations due to social anxiety and inpatient treatment, found to have highest priority also in the group with former RT experience.

5.5 Willingness to enter Treatment

In the following, the results of the side analysis comparing people stating willingness to enter treatment with those who would dislike entering treatment are discussed.

The fraction of females in the WDRT group was higher than in the WRT group, coherent with previous findings, as women have been found to search for help in mental health care or primary care facilities more frequently than accepting treatment for alcohol abuse in form of RT (Brennan et al., 1993; Greenfield, 2002; McCrady et al., 2020) and in Denmark women stated more barriers than men towards treatment (Finn et al., 2023). Timko et al. (2002) found women to be more likely to take part in *Alcoholics Anonymous* than in medical treatment offers for dependency and showed higher rates of abstinence in the follow-ups. Wilsnack et al. (2000) found women to have a higher probability than men to quit alcohol consumption and remain abstinent. Effectiveness of RT was shown to be unsatisfactory, if positive attitude and commitment towards treatment is absent, as these factors predict treatment success, when success is measured by abstinence in the follow up (Kuusisto et al., 2011). This leads to the question, whether especially women would benefit from RT mostly in form of outpatient treatment options, due to a higher degree of autarchy during treatment. At this point it would also be important to examine

the ratio of women towards men in rehabilitation programs in Germany, and investigate, whether women show less WRT due to the overrepresentation of males within these treatment programs, as outcome of treatment for AUD seems to show best outcome for women when women-only programs are provided (McCrady et al., 2020). Gender specific recovery appears to vary but randomized trials for single-gender treatments are lacking (Holzhauer et al., 2020). Additionally, as in many fields of treatment, it should be considered that RT programs are predominantly designed for male participants. Gender-segregated or female-specific RT programs are currently rare and evidence-based female-specific interventions and content – also for mixed gender treatment - is needed (McCrady et al., 2020). Further research will be needed to clarify whether female needs are met within the current available RT or whether gender specific adaptation is deficient, as adaptation might possibly increase help acceptance rates of women (McCrady et al., 2020).

As expected, the results of the scale assessing reservations towards RT show that people with high level of WRT stated significantly less reservations than participants who did not want to undergo treatment. In the WRT group the highest mean was found for the subgroup regarding reservations due to absence from home, followed by reservations due to work related issues and thirdly by reservations due to inpatient treatment and social anxiety. In the WDRT group the highest mean could also be seen for the subgroup absence from home, with a significantly higher score in the WDRT group, followed by the subgroup considering reservations due to inpatient treatment and social anxiety, and subsequently reservations due to impact on self-esteem. So, albeit small difference, not only the intensity of the reservations differs, but also does the priority of stated reservations vary partially. The result that self-esteem showed to have a higher priority for the WDRT group is in line with the finding of Keyes et al. (2010), who came to the conclusion, that people with higher perceiving of stigma were less likely to undergo treatment for dependency. This supposition is also reflected in the result, that more people without previous RT experience stated reservations due to stigma, than participants with prior RT experience.

On level of the items significant higher scores in the WDRT group could be found for the reservations due to negative impact on self-esteem, again pointing out stigmatization leading to relevant barriers. People stating WDRT were furtherly found to have significantly higher reservations due to not feeling able to bear sharing a sleeping room with strangers during treatment. This showing a need for privacy and possibly resembling a degree of social anxiety. Reservations due to not being able to take care of important responsibilities at home and not being able to organize leisure time

independently did also show significantly higher scores for the WDRT group. This effect might underly care tasks and disapproval of staying away from home for long, but at the same time it might be caused due to loss of autonomy. How ever, in the current study fear of losing autonomy was not found significantly higher for the WDRT group. Tarp et al. (2022) found treatment naïve people with AUD in Denmark to consider treatment as a threat to autonomy. Another explanation concerns the social withdrawal that occurs as a result of the disease and leads to isolation. This would also explain the desire not to leave the house, which is expressed within these reservations. A significantly higher mean of reservations due to not being able to go to work during treatment could be seen for the WDRT group compared to the WRT group. As discussed previously, it is conceivable, that this effect is result of insufficient information about treatment options, as treatment can find place extra-occupational. Whether lack of information is present because affected persons have never sought counselling and already assume from the outset that there is no treatment model that applies to them remains unclear. Furtherly, participants in the WDRT group did significantly more often state to not believe that RT could help. As no significant difference could be found for the reservation of not believing in curability of dependency, it can be supposed, that explicitly RT is rejected. Explanations for this could be unsatisfactory outcome of previous treatment, accounts from acquaintances and clichés heard. But as treatment success is influenced by a participant's attitude, treatment might not be the best suitable option for participants explicitly refusing treatment in form of RT despite sufficient education. Längle et al. (1993) found 25% of patients in the follow-up after 10 years to have participated in different kinds of treatments after absolving RT before abstaining. The desire to cope with the situation independently is reflected in the significantly higher score of wanting to solve the problem by oneself in the WDRT group. Affected people may consider it easier to cope with the situation alone or may feel ashamed to seek help due to the discussed effect of stigma. Furtherly, participants in the WDRT group significantly more often stated their consumption habits to be unproblematic, resulting in the estimate, that participants in this group had less problem awareness. This assumption is supported by the finding of a higher RCQ in the WRT group. This implicating significantly higher problem awareness and readiness to change in the WRT group. Whether the WDRT group suffered from less severity of disease cannot be answered with the current data but would resemble an explanation for the attitude of the participants.

To sum up this paragraph it can be said, that women appear to show less willingness to enter RT albeit not showing less readiness to change. Participants stating

WRT showed less reservations towards RT and barriers due to stigmatization are of particularly higher importance for participants stating WDRT.

5.6 Predictors for Willingness to enter Rehabilitation Treatment

This section discusses the results of the regression analysis examining for predictors of WRT. A significant collective effect could be found. Reservations due to social anxiety and absence from home could be shown to negatively predict WRT, whilst former RT treatment predicted WRT positively. The second hypothesis, presuming that social anxiety negatively affects willingness to undergo treatment is therefore accepted.

Reservations towards inpatient treatment and social anxiety being a strong negative predictor for WRT is interesting, as inpatient treatment is only one form of RT, however, it is still commonly regarded as the norm. Inpatient services at a percentage of 69% still resembled the majority of rehabilitation treatment type for alcohol dependency in Germany in 2020. In the same year 14% of treatments were performed extra-occupational and only 4% were performed as full time outpatient treatments (Deutsche Rentenversicherung, 2022). The finding leads to the assumption, that patients might tend to have higher levels of reservations towards RT due to lack of provided information about treatment options, with emphasis on outpatient treatment options, target groups and group sizes. Wallhed Finn et al. (2014) conducted interviews with persons suffering from alcohol dependency and found a scarce knowledge about treatment options present. Participants also stated to regard inpatient treatment being the last possibility of treatment, when all other options have failed. Seeking and accepting treatment was furtherly linked to the social image that needing help distinguished a person's failure (Wallhed Finn et al., 2014). However, the subgroup of reservations retrieving self-esteem, including items considering stigmatization, did not function as significant predictor for WRT in the present study. The finding, that reservations due to inpatient treatment and social anxiety negatively predict WRT corresponds with the findings of other authors, who showed people with co-occurrence of AUDs and social anxiety disorder to have lower treatment rates and show poorer treatment outcome (Book et al., 2009; Randall et al., 2001; Schneier et al., 2010). The prevalence of co-occurrence is frequent, as these conditions have been shown to reinforce one another (Grant et al., 2004; Hasin et al., 2007; Schneier et al., 2010). Grant et al. (2004) found people with AUDs to have twice the odds for an social anxiety disorder, compared to the general population. However, for the current population no statement about frequency of social anxiety disorder can be made, but symptoms of social anxiety, as assessed by the self-developed items, can be seen to make up for a significant cause of reservations. That inpatient treatment in particular triggers an aversion towards treatment for people with

social anxiety is not surprising. Schneier et al. (2010) found people with SAD to avoid interaction in form of therapy sessions leading to reluctance of treatment. Even for people who experience little social anxiety in everyday life, the occurrence of corresponding symptoms in the context of inpatient treatment is conceivable due to living in close quarters with other people. This is additionally underlined by the fact, that people continue to be influenced by the social image of alcohol dependency, and accordingly have a particular fear of the fellow patients. Furtherly, to commit to a treatment with a strict daily schedule resembles a tough decision and can appear overwhelming. These reasons make up for possible explanations why RT appears to continuously be looked at as the last possible therapy form when all else has failed (Wallhed Finn et al., 2014).

Quitting alcohol did also not show a predictive effect on WRT, this stands controversial to the findings of Wallhed Finn et al. (2014), whose sample largely preferred to cut down consumption instead of giving up drinking completely. The participants in the study of Saunders et al. (2006) stated lack of reasons to stop drinking alcohol and absence of motivation to give up consumption. Grant et al. (1997) also found rejection of abstinence to be a barrier towards treatment. As discussed previously, readiness for giving up alcohol can be assumed to arise when problem awareness and readiness to change emerges. However, low risk consumption has repeatedly been discussed as it might resemble an alternative treatment goal for people with mild or moderate dependency, who are not willing to strive for total abstinence (Witkiewitz, 2013). Furtherly, neither the subgroup looking at reservations due to absence from home during treatment nor the work-related reservations were found to predict WRT. The finding that social anxiety effects WRT gains importance when considering previous studies who repeatedly found AUD to show high co-occurrence with social anxiety disorders and vice versa (Bulley et al., 2016; Grant et al., 2004; Schneier et al., 2010). Randall et al. (2001) and Schneier et al. (2010) found lower treatment rates and poorer treatment outcome for people with AUD and an underlying comorbidity with a social anxiety disorder. In a broader sense it does therefore seem clear, that a social anxiety disorder resembles a relevant comorbidity that should be recorded if treatment for AUDs is to be initiated. Although it appears close at hand, it remains to be assumed that symptoms of social anxiety are of lower intensity when treatment takes place in an ambulant setting. But with the present data this cannot be distinguished. Further in-depth studies would need to regard this question.

The finding of the regression analysis that previously undergone RT and former admittance to treatment predict WRT means that patients with RT experience in the current study would comply in repeated therapy. This is in line with the finding of

Saunders et al. (2006), that affected people who had treatment experience were likely to seek treatment again. It should simultaneously be kept in mind that the finding of the present study possibly underlies the distortion of the research modus, as participants were recruited in institutions linked to the healthcare system and some participants presumably even underwent RT treatment during participation in the survey. Still this finding appears reassuring by leading to the assumption that treatment was experienced beneficial.

The life events due to alcohol consumption could not be shown to have a predictive impact on WRT in the present sample. It is conceivable, that these contexts are more complex and should be looked at in a more differentiated way. However, these questions were not main focus of the present study but could contribute to the understanding of the overall structure of the topic.

The points discussed lead to the assumption that, taking into account the negative predictive effect found, the importance of taking individual needs into account is of enormous significance. Consideration of individual needs has been found to reduce stress, not only for the person affected but also for his/her environment and could furtherly be shown to reduce costs involved (Popova et al., 2011).

For patients with long history of dependency outpatient treatment could be shown equally effective as for inhouse performed RT in previous research, when the outcome was measured by maintenance of abstinence in the follow-up. The abstinence quote lay at 60% for both patients undergoing inhouse and outpatient treatment 6 months after discharge from RT (Bottlender & Soyka, 2005a; Mundle et al., 2001). In these mentioned investigations the only strong predictor for relapse after outpatient treatment was drop-out of treatment (Bottlender & Soyka, 2005a, 2005b). In 2021 regularly completed treatments for alcohol dependency lay at 65%, which remains below the rates of medical rehabilitations (Deutsche Rentenversicherung, 2022). The project MATCH (1998) could furtherly confirm idem outcome for both treatment options, apart from persons with psychiatric severity, for whom inpatient treatment was found to show higher treatment success in the follow up after 3 years. These findings lead to the question, whether strict retainment of current requirements for outpatient RT should be rethought, especially in the context of the current results. It must nevertheless be noted that serious indications for inpatient treatment like suicidality or otherwise psychiatric severity, severe withdrawal symptoms, pregnancy and a lack of social support should not be neglected in the context of indications for inpatient treatment. If a wider offer of outpatient treatment resembles a low-threshold treatment option, more affected people would possibly seek treatment. This is explicitly conceivable in a population that corresponds to the sample of the

present study and includes participants with presumably mild to moderate severity of dependency and, at best, persons with active contact to the healthcare system or to addiction counselling services. Future investigations should regard several treatment options in aim to find out, whether WRT varies when distinguishing by different modes of treatment. Additionally, a question to be answered, is whether social anxiety remains a significant predictor of WRT when treatment is performed in an outpatient setting. Whether education about treatment options prior to a survey would influence not only the willingness to enter treatment but also the choice of treatment form could furtherly yield important results. Information on therapeutic interventions and overall contents of treatment forms within RT should be provided. Wallhed Finn et al. (2014) concluded, that interventions via telephone or internet, as well as pharmacotherapy were unpopular amongst participants, as these treatment options merely focus on symptoms. The greatest interest was stated for psychotherapy, as this was considered to address the underlying problem. Psychotherapy is an element of RT, so this again speaks for a lack of knowledge about ambulant as well as inpatient rehabilitation therapy. But again, individual needs vary greatly. One possibility which might be able to achieve an increase of RT rates would be, that GPs as well as other treating physicians could - by increasing the consultation rates on the topic and within these inform about therapeutic options - make RT more accessible also for people, for whom inpatient treatment is no option. Such a conversation would neither bring much effort nor great cost for the practitioner. Addressing habits of alcohol consumption has repeatedly been shown to be deficient and makes up for a significant weak spot of supplying information on treatment, as physicians state high levels of insecurity in raising the topic and corresponding counselling for treatment (Fankhänel et al., 2016; Frischknecht et al., 2022). An investigation carried out in northern Germany conducted a screening and found hazardous consumption in 2.9% of the population and treatment of dependency lay at the national average of 14%. Particularly low screening and treatment rates were found for people below the age of 40 (Manthey et al., 2020). As especially younger people are found to be less willing to give up alcohol consumption, they are at large risk for further aggravation of their dependence (Wallhed Finn et al., 2014). An additional difficulty is the omnipresence of high-risk consumption and binge drinking amongst the German population (Hapke et al., 2013; Robert Koch-Institut, 2015). People with these consumption patterns represent a much larger population than those receiving a diagnosis of dependency (Hapke et al., 2013). Thus, increasing frequency of early therapeutic intervention also for people without diagnosis of AUD is of high urgency, to prevent transition from harmful use to abuse or dependence, as such interventions could be seen to show significant positive effect for people with these consumption patterns

(Behnken et al., 2002). These points underline the importance of implementing further content about addiction counselling within the medical training as well as increasing training offers for specialist staff in medical practices and hospitals, to approach an unseen problem affecting society as a whole. The findings of this study integrate in the urgently needed process of gaining understanding for needs and fears, and - accordingly, the resulting reservations towards RT of patients with alcohol dependency.

Summarizing, a negative predictive effect of symptoms of social anxiety and inpatient treatment could be seen for WRT, whilst former RT predicted WRT. These findings underline the importance of providing sufficient information about treatment options and attentive consulting to increase treatment rates by meeting individual needs. Additionally, when symptoms of social anxiety are present a referral to treatment can be of particular difficulty as affected people appear to be less willing to take up treatment.

5.7 Driving and Accidents Under Influence of Alcohol

Rates of suspended drivers licenses due to DUI amounted to 40% of all participants, and 25% reported involvement in accident under influence of alcohol. As a result, these people have a significantly increased risk for injury and premature mortality, as has been shown before (Taylor et al., 2010). Participants who had previously undergone RT had significantly more frequent been involved in accidents than people without previous treatment experience. This could underly a higher severity in the group of participants with prior RT, but likewise being involved in an accident is conceivable to lead to an increased rate of treatment initiation. No significant divergence was found for having lost the driver's license due to DUI when comparing participants with former RT and without prior RT, nor when comparing participants stating WRT and WDRT. Around a quarter of participants in both WRT and WDRT group had been involved in an accident under the influence of alcohol. According to the RKI, most frequently DUI accidents involve younger males. Incidents are less frequent after the age of 55. Statistics for accidents due to DUI show highest numbers in Mecklenburg Pomerania and in the Saarland in Germany, therewith including one of the federal states where data for this study was collected (Robert Koch-Institut, 2016). RT has been seen to decrease DUI rates for the affected people (Green, 2023). But as being involved in accidents was not found to predict WRT it can be assumed, that the relationship of involvement in accidents due to DUI and the possibly resulting behavioural change is complex. Possibly for some people the experienced trauma by involvement in an accident due to DUI leads to an adverse effect on drinking habits; as trauma has been found to lead to increased consumption in a part of individuals (Ryb et al., 2011). Further reviews might need to distinguish characteristics to find out whether involvement in accidents might lead to

consequences such as early amendment of drinking habits, emerge of problem awareness or, corresponding, increasing consumption, especially depending on age and gender of the driver.

5.8 Hospitalization due to Alcohol Consumption

Two thirds of all participants had previously undergone clinical treatment due to an alcohol related cause. A significantly higher score of incidents could be seen in the group stating prior RT than in the group not having undergone RT. More people in the WRT faction had been treated in hospital due to alcohol related illness than in the WDRT faction, but the difference was not found to be significant. These findings again let the question arise, whether people who stated previous RT suffered from more sever dependency. The finding, that the AUDIT-C score in the WRT group lay higher than in the WDRT group could explain this presumption and would be in line with the postulation of Rumpf et al. (1999) that patients being admitted to general hospital may show higher severity of dependency, poorer health and might therefore show more motivation to change behaviour. The finding of higher somatic hospitalization rates of in the group of people stating WRT and the group stating previous RT could likewise underly this effect. But this finding should not appear surprising. On the one hand, during hospitalization treating physicians should provide patient education about the risks and consequences of consumption habits, and on the other hand, emerge of insight considering harm to health by consumption habits is conceivable when confronted with alcohol related disease during hospitalization. Controversially, hospitalization was not found to predict WRT in the performed regression analysis. However, according to the results it can be assumed that, as formerly postulated by Rumpf et al. (1999), an hospitalization is an appropriate time for an intervention. The prevalence for alcohol abuse and dependency in general hospitals has been shown to lie at about 16-20%, with highest rates for medical wards (John et al., 1996). Mcqueen et al. (2015) could show stronger effectiveness for SBI in general hospital than for screening only. Unfortunately, such an intervention is though subject to structural difficulties, as Patston et al. (2017) could show that intervention rates increased in an emergency room after carrying out training for staff, however, they could also see number of performed interventions to decrease when numbers of patients rose, presumably due to higher workload. It remains to be said that it is important to more frequently implement interventions such as SBI's not only in outpatient care. A further question is, whether the education about alcohol related aetiology of the underlying disease for which concerned persons are being treated in hospital is sufficient. This may disproportionately affect people with less knowledge about possible risks of alcohol consumption, as they might not be able to derive the context.

Alternatively, patients might displace facts due to denial or even simply forgetting facts around hospitalization. Further investigation should examine, whether rates of insight about health conditions due to alcohol consumption would increase health-promoting behaviour if education on the topic by physicians would gain a higher priority.

In the context of this topic, it should be noted that the main treatment diagnoses should not be regarded as a reliable source of data, since alcohol consumption as a cause of illness is often not detected by the treating physicians (Seppä & Mäkelä, 1993). According to this, if not even the treating doctor is aware of the causality, the probability that the patient will understand his or her situation is correspondingly lower. Not only in general hospital but also in primary health care it is a current issue, that only few doctors perform short brief interventions to detect problematic alcohol consumption and less than half of the physicians who do so, do then utilize validated instruments for detecting and quantifying harmful consumption (Frischknecht et al., 2022). This may inter alia underly the fact, as stated by the German guidelines for alcohol treatment, that so far there are no guidelines on performing SBIs nor such proposing what questionnaires are to be used to screen for alcohol related disorders (Frischknecht et al., 2022). It has repeatedly been postulated, that the low rates of SBI performance hinder access to RT for people affected (Frischknecht et al., 2022).

Summarizing, it can be said, that history of hospitalization due to alcohol related illness was frequent in the current sample and speaks for a severity of the disease but could not be shown to predict WRT.

5.9 The Personality Traits Anxiety and Depression

As accessed by the HADS questionnaire, the averagely stated intensity of anxious and depressed symptoms was stated to be low. The score for symptoms of anxiety could be seen to lie minimally higher than for depressed symptoms. The perceived low symptom burden can be assessed positively for the sample, as other authors repeatedly found people with alcohol dependency to suffer from poor mental health. At this point, it should be questioned whether this effect is subject to the pre-selection of people in contact to aid services, or whether it represents a characterisation of the sample, which would conclude to a reduced representativeness for the target population. As previously mentioned, the nature of the relationship of depression, anxiety and AUD has so far not fully been understood but an interaction is assumed. Major depression and anxiety have earlier been seen to be significantly associated with alcohol abuse in previous studies (Grant & Harford, 1995; Grant et al., 2004; McHugh & Weiss, 2019) but contrastingly symptoms could be measured regredient when consumption was

reduced (Knox et al., 2019). Further research might need to differentiate by consumed quantities, as Boschloo et al. have found that the severity of dependence predicted an unfavourable course of depressive disorder (2012).

A significantly higher score of symptoms of anxiety, albeit very small difference, could be seen for participants who had not undergone RT previously. This is in line with the findings of Grotheus et al. (2008), who found patients undergoing RT to show less symptoms of anxiety. Furtherly, a significant negative correlation of HADS-A with the RCQ could be seen in this study, what leads to the question, whether people with high levels of anxiety have less readiness to change current habits. This might potentially explain the fact that people with an anxiety disorder do not show higher rates of treatment nor of abstinence although these people have more frequent contacts to their treating GPs than other patients (Grothues et al., 2008). An interpretation for this correlation is provided by the phenomena that self-medication with alcohol to control mood instabilities is common (Turner et al., 2018). This is worrying behaviour, as in the long-term the effect of consumption initially experienced as calming turns into the adverse; causing restlessness, anxiety and stress (Grant & Harford, 1995). Another explanation is that people with symptoms of anxiety are more likely to have a social anxiety disorder, leading to reluctance of interaction both with a therapist as with other affected people (Schneier et al., 2010). This assumption is in line with the results of the study, that symptoms of SAD resemble a relevant barrier preventing people from entering therapy.

For withdrawal treatment only, Oliva et al. (2018) found a worsening of depressed symptoms in females and an increase of anxious symptoms in males 6 months after discharge. Rabinowitz et al. (2023) found a higher risk for treatment dropout when anxiety symptoms were present at admittance and - based on their findings - they assumed that certain predispositions lead to unfolding of anxiety during treatment. This is in agreement with the finding of the correlation for men and anxiety in the present study leading to the presumption, that men in this population showed higher levels of anxiety. But albeit significant correlation, the effect was found rather weak. At the same time, considering the present studies' sample size, this finding may be biased and underly a distortion due to the rather small fraction of women amongst the participants.

A positive significant correlation between total score of reservations and HADS-D leads to the question, whether people experiencing depressed moods have more reservations towards RT than other participants. This finding corresponds to the previously stated difficulty of addiction treatment for people suffering from psychiatric comorbidities (Grothues et al., 2008). But Ryb et al. (2011) found no difference in

treatment outcome for patients with depressed symptoms compared to a control group. As symptoms of depression did not negatively predict WRT, it can be assumed, that despite more reservations, these people are not less willing to enter RT. Karno et al. (2002) found, that people experiencing emotional distress showed higher treatment success if the attending therapist during RT addressed emotions, but in controversy, people low in emotional stress showed better treatment outcome, when no thematization of emotional experiences took place. Again, these findings point to the need for more individual treatment to increase treatment success. The question remains speculative as to whether an assessment at the start of rehabilitation and corresponding psychotherapeutic intervention can improve treatment outcome.

The subgroup of reservations considering inpatient treatment and social anxiety correlated with HADS-D. This might likewise ask for further investigation, questioning whether people experiencing depressed symptoms bear higher levels of stress due to inpatient treatment and social anxiety. As a leading symptom of depression is made up by social withdrawal, the effect could inter alia be explained by the characteristics of the psychiatric disease.

In summary, these interrelationships appear complex. The present sample stated an overall rather low burden of symptoms of anxiety and depression. Participants without former RT showed slightly more symptoms of anxiety than participants with RT experience. Furtherly, perceiving symptoms of depression was found to correlate positively with higher level of reservations.

5.10 Readiness to Change

The mean score of the RCQ was found above the neutral median of the scale. This finding indicates that active drinkers in both groups specified willingness to change drinking habits or that they at least had a – possibly low but existing – level of problem awareness. However, corresponding to expectations, willingness to change habits is significantly higher among people who state a low level of reservations. Simultaneously, readiness to change is higher for patients with prior RT than for people who had not previously undergone treatment, but this divergence was not found significant. High scores in the RCQ have repeatedly been proven to be a strong prognostic factor for changing of behaviour and high scores furtherly reliably measure motivation (“Matching Alcoholism Treatments to Client Heterogeneity: Project MATCH Three-Year Drinking Outcomes,” 1998). The surveyed national rates of problem awareness of affected people have repeatedly been shown to lie lower than the fraction in the present sample. The predominant absence of problem understanding amongst the population is being shown

by the national survey on illicit drug use and alcohol consumption in the United States, finding the alarming result, that 94,6% of people needing but not receiving treatment for substance or alcohol abuse did not feel like they needed treatment. They did therefore not endeavour to receive help (Substance Abuse and Mental Health Services Administration, 2013). This brings to a reason why the present sample is not fully representable for people with alcohol dependency and AUD's. The distortion can be explained by the survey mode due to the institutions of data collection and likely underlies the high rate of participants with current or previous treatment for alcohol dependency.

It can be summed up that surveying in the respective institutions corresponds to a pre-selection, which possibly led to the high rate of problem understanding and readiness to change amongst participants in the present study, as measured by the RCQ.

5.11 Abstinence and Current Consumption

In the present study 40% of participants stated to be abstinent from alcohol. But this cross-sectional study does not allow any statement about the course of abstinence nor about possible relapses. The 10-year follow up after treatment by Valliant et al (1983) found relapse rates of 95%, whereas 59% obtained abstinent over a period of at least 6 months during the period under review. Längle (1993) found 51% of participants in treatment follow up after 8 years to be abstinent, of which half had initially relapsed before obtaining abstinence. Abstinence was observed to be more frequent in the prior RT than in the no prior RT group and more often in the WRT group than in the WDRT group, but the differences were not found to be significant. In general, it must be discussed which therapy goals should be determined in addiction treatment since even a quantitative reduction of consumption or phases of abstinence already lead to an improvement of health and prognosis and might be more achievable for many individuals (Witkiewitz, 2013). Regarding the stability of abstinence, questionnaires can be used to assess how secure people feel about declining alcohol in risk situations. Nevertheless, a long-term prognosis for the course of abstinence and drinking behaviour cannot be given with certainty. Interestingly, in the present study the consumed amounts of alcohol as well as frequency of consumption specified by participants stating WRT, as accessed by the AUDIT-C, lay above those amounts consumed stated by the WDRT group (MD=1). The AUDIT-C score was also found to lie slightly higher in the prior RT group than in the no prior RT group (MD=0.4), but likewise not found to be significant. This allows the assumption, that actively drinking participants who consumed big amounts of alcohol were more likely to state WRT. This is in line with the postulation of Rumpf (1999), that higher severity of disease leads to therapy motivation.

5.12 Limitations

The survey period had to be extended, as some institutions only returned the completed questionnaires after longer periods, and return rates varied widely by institution. The subject group with a number of 150 participants is rather small, so the effects found must be considered under reserve and trials with larger numbers of participants are needed to verify the findings. Some prior studies considering barriers towards treatment investigated even smaller groups (Wallhed Finn et al., 2014), which may be explicable due to the fact, that the target population is difficult to reach. Due to a return rate of 44-percent the presence of a non-response bias must be considered. Compliance bias is unavoidable due to voluntary participation. Since the survey was carried out by different medical staff in the individual institutions, it is unclear to what extent preselection has already taken place by the practitioners. This is underlined by the strong variation in rates of returned questionnaires depending on the part-taking institution. Furthermore, it must be assumed that recruitment interviews varied, this making a detection bias possible. Future studies would have to standardize recruitment for all partaking institutions to avoid a distortion, possibly by a survey team, to prevent practitioner-specific bias due to the present practitioner-patient relationship as far as possible. A further inevitable preselection, is determined by the settings of recruitment; it must be taken into account that people with alcohol related disorders, who are not undergoing treatment by physicians or who do not stand in contact with addiction counselling centres were not reached. As most participants were in contact to medical care, current or prior RT must be assumed as frequent. A certain readiness for therapy or understanding of the disease can therefore be assumed in the sample reached. This situation reduces the generalizability due to the fact - as outlined before - that only few affected people in the general population have understanding for their drinking to be a problem and reach out for treatment. It should moreover be noted, that an underrepresentation of certain particularly vulnerable groups, such as homeless and immigrated people must be assumed. There is an urgent need to study the option of people without contact to the health care system, but this will require a different study design and a pre-test would have to be performed newly to record possible deviation of reservations towards RT. The subgroup which was found to show a significant effect on WRT inter alia raises reservations due to symptoms of social anxiety. This construct was not counter-validated, so no statement can be made about the general social anxiety of the participants. A further important limitation of the study is the dichotomy in gender distribution. Future studies must respect diverse nonbinary identities. Especially, as gender and sexual minority populations have a higher risk of hazardous

consumption patterns and RT could be shown to yield improved outcome when adjusted to the individual needs (Dimova et al., 2022; Hughes et al., 2016).

Recruitment took place in Mecklenburg Western Pomerania and Saxony Anhalt, this being a federal state with low income, a lower average life expectancy and high rates of alcohol consumption in the national comparison (Gesundheitsberichterstattung des Bundes, 2006; Rübenach et al., 2012). A national survey would be interesting and might result in differently weighted effects.

Further limitations might have occurred due to self-report, this possibly having led to underreporting of alcohol consumption, as people with heavy consumption tend to underestimate the quantity consumed (Northcote & Livingston, 2011). But controversially, other authors found self-reporting on consumption to be a precise measurement and superior to lab tests (Babor et al., 2000). Additionally, underreporting the intensity of aversions towards entering RT as well as towards certain reservations due to social desirability or recall bias is conceivable. Emotional factors might likewise be understated. All these mentioned factors point to the sample being homogenous and therefore, not representative for the general population of people with alcohol related disorders. It remains to be said that a study conducted under optimized conditions, especially investigating a larger sample, could yield more valuable results, but the effort involved would be complex and it must furtherly be borne in mind that this is a difficult to reach population.

5.13 Conclusion

It is a fact that participance in rehabilitation treatment for alcohol use disorders and alcohol dependency is currently critically low in Germany even though treatment is available and the costs are largely covered by the pension insurance. In the present study, most frequent reservations of participants towards rehabilitation treatment were found to be absence from home, reservations due to social anxiety and inpatient treatment, work related reservations and reservations due to impairment of self-esteem. When comparing these findings with previous studies, similar barriers can be seen, albeit with slightly different prioritisation. Participants with rehabilitation treatment experience stated less intensity of overall reservations than participants, who had not previously undergone treatment. Reservations due to inpatient treatment and social anxiety were found to significantly predict willingness to enter rehabilitation treatment negatively, leading to the assumption, that people with symptoms of social anxiety are less likely to undergo rehabilitation treatment. Previously completed as well as former admittance to rehabilitation treatments showed a positive predictive effect for willingness to enter treatment. Overall, the readiness to change as well as the rate of previous rehabilitation treatments in the present study lay above the national average, an affect presumably caused by the recruitment modus. People without previous rehabilitation treatment experience were found to show slightly higher symptoms of anxiety than participants with former rehabilitation treatment.

In the end, the question arises as to what conclusions can be drawn from the present results. Encouragingly, the negative effect found to be significant in prediction of willingness to enter rehabilitation treatment can possibly be modified at little effort by sufficient consulting about outpatient treatment options. Addressing of individual needs must continue to be pursued. This point is particularly important for women. Further, people who have a job should be informed about extra occupational treatment options. The effort of treatment adjustment for people with poor mental health is of high importance, with particular consideration of social anxiety disorder, as this might improve not only the readiness for therapy but as well the treatment outcome for people concerned. Additionally, when embedding the results in current research, the question must be asked whether contraindications for outpatient treatment must be posed more critically in the future, as a broader availability of outpatient RT might increase willingness to enter rehabilitation treatment and could enable the person concerned to maintain a high degree of autonomy, the possibility of participance in everyday family life as well as retaining of the opportunity to continue work at a decreased pensum.

The study was able to confirm results of previous surveys and the findings are meaningful in the context of current research where only few prior investigations have concerned this topic. Further research should investigate whether the lower intensity of reservations for people with rehabilitation treatment experience occur due to a decrease of barriers during the cause of treatment. Additionally, an intervention in form of an informational consulting should be performed, to see whether willingness to enter rehabilitation treatment increases when participants have more knowledge about treatment - with particular emphasis on outpatient treatment options. The conclusion of the study contributes German data on barriers towards rehabilitation treatment for alcohol use disorders and alcohol dependency and adds a step towards understanding the reasons for currently low rehabilitation treatment participance in Germany.

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7 Theses

1. The cluster of reservations due to absence from home followed by the subgroup of reservations due to inpatient treatment and social anxiety are of highest priority amongst participants.
2. Rates of readiness to change and rates of previous treatment amongst participants lie above the national average.
3. Participants with previous rehabilitation treatment experience state less reservations towards rehabilitation treatment than people without previous rehabilitation treatment (mean deviation: 0.43; 95%-confidence interval [.07 to .79]).
4. Participants with previous rehabilitation treatment experience state significantly less symptoms of anxiety than participants without former treatment (mean deviation: 0.1; 95%-confidence interval [.01 to .18]).
5. Having undergone prior rehabilitation treatment predicts willingness to enter rehabilitation treatment (B: .71; 95%-CI 0.289 to 1.143).
6. The subgroup of reservations due to social anxiety and inpatient treatment have a negative impact on willingness to enter rehabilitation treatment (B: -.28; 95%-CI -0.550 to -0.019).
7. Due to the recruitment mode achieving a representative sample of people with alcohol dependency and alcohol use disorders was limited as only people in touch with the healthcare system were included in the study.

Appendix

Questionnaire

IAM INSTITUT ALLGEMEIN MEDIZIN

MARTIN-LUTHER-UNIVERSITÄT
HALLE-WITTENBERG

Sehr geehrte Studienteilnehmerin,
sehr geehrter Studienteilnehmer,

vielen Dank, dass Sie sich entschieden haben, an unserer Befragung des Forschungsprojektes “Vorbehalte von Patienten in Mecklenburg-Vorpommern und Sachsen-Anhalt gegenüber einer Entwöhnungsbehandlung“ teilzunehmen.

Ihre Beantwortung des Fragebogens erfolgt anonym.
und wird etwa 15-20 Minuten in Anspruch nehmen. Bitte füllen sie den Fragebogen sorgfältig aus; lesen und beantworten Sie jede Frage, auch wenn einige Fragen ähnlich klingen.

Uns interessiert Ihre ganz persönliche Meinung zu diesem Thema. Bitte äußern Sie Ihre Gedanken frei, ohne Sorge vor dem, was andere dazu sagen oder denken würden.

Möglicherweise sind einige der Fragen für Sie ungewohnt oder sehr persönlich. Bitte wählen Sie trotzdem ohne viel nachzudenken die Antwortmöglichkeit aus, die am ehesten Ihrem Gefühl entspricht. Es gibt keine richtigen oder falschen Antworten.
Wenn Sie noch Fragen zum Thema haben oder etwas anmerken möchten, wenden Sie sich gerne an Ihren Hausarzt.

Sie können den Fragebogen vor Ort oder zuhause ausfüllen. Für Ihren ausgefüllten Fragebogen erhalten Sie einen unbeschrifteten Briefumschlag, den Sie bitte in den vorgesehenen Behälter Ihrer Hausarztpraxis einlegen.
Wahlweise können Sie den Fragebogen auch direkt per Post an das Institut für Allgemeinmedizin schicken.

Herzlichen Dank für Ihre Teilnahme!

Marie-Lise Jakobi, Doktorandin — Prof. Dr. Thomas Fankhänel

Institut für Allgemeinmedizin, Medizinische Fakultät
Martin-Luther-Universität Halle-Wittenberg
Magdeburger Str. 8
06112 Halle (Saale)

Zuerst bitten wir um einige Angaben zu Ihrer Person:

Ihr Geschlecht: weiblich ◯ männlich ◯

Ihr Alter: _____ (in Jahren)

Ihr Familienstand: in einer Partnerschaft lebend ◯ alleinlebend ◯

Ihr höchster Bildungsabschluss:

◯ kein Abschluss
◯ Hauptschule
◯ Realschule
◯ (Fach-) Abitur
◯ Berufsausbildung
◯ Hochschulabschluss

aktuell erwerbstätig Ja ◯ nein ◯

wenn nein; waren Sie jemals erwerbstätig gewesen Ja ◯ nein ◯

Man weiß heute, dass körperliche Erkrankungen und seelisches Befinden eng miteinander zusammenhängen. Die ersten Fragen beziehen sich deshalb auf Ihre seelische Verfassung.

Bitte beantworten Sie jede Frage so, wie es für Sie persönlich **in der letzten Woche** am ehesten zutraf. Machen Sie bitte **ein** Kreuz pro Frage und lassen Sie keine Frage aus!

1. Ich fühle mich angespannt oder überreizt.
   - ◯ meistens
   - ◯ oft
   - ◯ von Zeit zu Zeit/ gelegentlich
   - ◯ überhaupt nicht

2. Ich kann mich heute noch so freuen wie früher.
   - ◯ ganz genau so
   - ◯ nicht ganz so sehr
   - ◯ nur noch ein wenig
   - ◯ kaum oder gar nicht

3. Mich überkommt eine ängstliche Vorahnung, dass etwas Schreckliches passieren könnte.
   - ◯ ja, sehr stark
   - ◯ ja, aber nicht allzu stark
   - ◯ etwas, aber es macht mir keine Sorgen
   - ◯ überhaupt nicht

4. Ich kann lachen und die lustige Seite der Dinge sehen.
   - ◯ ja, so viel wie immer
   - ◯ nicht mehr ganz so viel
   - ◯ inzwischen viel weniger
   - ◯ überhaupt nicht

5. Mir gehen beunruhigende Gedanken durch den Kopf.
   - ◯ einen Großteil der Zeit
   - ◯ verhältnismäßig oft
   - ◯ von Zeit zu Zeit, aber nicht allzu oft
   - ◯ nur gelegentlich/ nie

6. Ich fühle mich glücklich.
   - ◯ überhaupt nicht
   - ◯ selten
   - ◯ manchmal
   - ◯ meistens

7. Ich kann behaglich dasitzen und mich entspannen.
   - ◯ ja, natürlich
   - ◯ gewöhnlich schon
   - ◯ nicht oft
   - ◯ überhaupt nicht

8. Ich fühle mich in meinen Aktivitäten gebremst.
   - ◯ fast immer
   - ◯ sehr oft
   - ◯ manchmal
   - ◯ überhaupt nicht

9. Ich habe manchmal ein ängstliches Gefühl in der Magengegend.
   - ◯ überhaupt nicht
   - ◯ gelegentlich
   - ◯ ziemlich oft
   - ◯ sehr oft

10. Ich habe das Interesse an meiner äußeren Erscheinung verloren.
    - ◯ ja, stimmt genau
    - ◯ ich kümmere mich nicht so sehr darum, wie ich sollte
    - ◯ möglicherweise kümmere ich mich zu wenig darum
    - ◯ ich kümmere mich so viel darum wie immer

11. Ich fühle mich rastlos, muss immer in Bewegung sein.
    - ◯ ja, tatsächlich sehr
    - ◯ ziemlich
    - ◯ nicht sehr
    - ◯ überhaupt nicht

12. Ich blicke mit Freude in die Zukunft.

- ◯ ja, sehr
- ◯ eher weniger als früher
- ◯ viel weniger als früher
- ◯ kaum bis gar nicht

13. Mich überkommt plötzlich ein panikartiger Zustand.

- ◯ ja, tatsächlich sehr oft
- ◯ ziemlich oft
- ◯ nicht sehr oft
- ◯ überhaupt nicht

14. Ich kann mich an einem guten Buch, einer Radio- oder Fernsehsendung freuen.

- ◯ oft
- ◯ manchmal
- ◯ eher selten
- ◯ sehr selten

Als nächstes folgen nun einige Fragen zu Ihrem Alkoholkonsum.

Wir bitten Sie bei allen Fragen mit einem Antwortformat mit sechs Antwortmöglichkeiten jene Antwortmöglichkeit anzukreuzen, welche Ihrer Meinung nach am besten auf Sie zutrifft bzw. Ihrer Meinung am meisten entspricht.

Hierbei steht:

die „6“ für volle Zustimmung,

die „5“ für weitgehende Zustimmung,

die „4“ für geringe Zustimmung,

die „3“ für geringe Ablehnung,

die „2“ für weitgehende Ablehnung

und die „1“ für volle Ablehnung.

.

15. Ich trinke nicht zu viel.

lehne ab			stimme zu			weiß nicht
①	②	③	④	⑤	⑥	◯

16. Ich versuche weniger zu trinken, als ich es gewöhnlich tue.

lehne ab			stimme zu			weiß nicht
①	②	③	④	⑤	⑥	◯

17. Ich genieße es zu trinken, aber manchmal trinke ich zu viel.

lehne ab			stimme zu			weiß nicht
①	②	③	④	⑤	⑥	◯

18. Manchmal denke ich, ich sollte mein Trinken reduzieren.

lehne ab			stimme zu			weiß nicht
①	②	③	④	⑤	⑥	◯

19. Es ist verschwendete Zeit, über mein Trinken nachzudenken.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

20. Ich habe kürzlich mein Trinkverhalten geändert.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

21. Jeder spricht darüber, dass er etwas gegen das Trinken unternehmen möchte, aber ich tue aktuell etwas dagegen.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

22. Ich bin an dem Punkt angelangt, an dem ich darüber nachdenken sollte, weniger Alkohol zu trinken.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

23. Mein Trinken ist manchmal ein Problem.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

24. Es gibt keinen Grund für mich, mein Trinkverhalten zu ändern.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

25. Ich ändere grade mein Trinkverhalten.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

26. Weniger Alkohol zu trinken wäre sinnlos für mich.

lehne ab					stimme zu	weiß nicht
①	②	③	④	⑤	⑥	◯

27. Wie oft trinken Sie Alkohol?

- ◯ Nie. Seit _____ (Datum bitte ergänzen!)
- ◯ etwa 1 mal pro Monat
- ◯ 2-4 mal pro Monat
- ◯ 2-3 mal pro Woche
- ◯ 4 mal oder häufiger pro Woche

28. Wenn Sie an einem Tag Alkohol trinken, wie viele alkoholische Getränke trinken sie dann typischerweise? (ein alkoholisches Getränk entspricht etwa: 0,33 Liter Bier oder 0,15 Liter Wein/Sekt oder 0,02 Liter Spirituosen)

- ◯ 1 oder 2
- ◯ 3 oder 4
- ◯ 5 oder 6
- ◯ 7 oder 8
- ◯ 10 oder mehr

29. Wie oft haben Sie im letzten Jahr an einem Tag 6 oder mehr alkoholische Getränke getrunken? (ein alkoholisches Getränk entspricht etwa: 0,33 Liter Bier oder 0,15 Liter Wein/Sekt oder 0,02 Liter Spirituosen)

- ◯ Nie
- ◯ seltener als 1 mal pro Monat
- ◯ 1 mal pro Monat
- ◯ 1 mal pro Woche
- ◯ täglich oder fast täglich

30. Ist es bei Ihnen schon einmal aufgrund von Alkohol zu einem Führerscheinverlust gekommen?

◯ trifft zu

◯ trifft nicht zu

◯ keine Antwort

31. Wurden Sie bereits ein- oder mehrmals im Krankenhaus behandelt aufgrund einer mit Alkohol in Zusammenhang stehenden Erkrankung?

◯ trifft zu

◯ trifft nicht zu

◯ nicht sicher

◯ keine Antwort

32. Waren Sie selbst schon mal unter Alkoholeinfluss in einen Unfall verwickelt?

◯ trifft zu

◯ trifft nicht zu

◯ keine Antwort

33. War Alkohol bei Ihnen schonmal ein Grund für die Beendigung einer Beziehung?

◯ trifft zu

◯ trifft nicht zu

◯ keine Antwort

Für Patienten mit einer Suchterkrankung wie Alkoholabhängigkeit gibt es die Möglichkeit, nach der Entgiftungsbehandlung (z.B. in einem Krankenhaus oder ambulant über den Hausarzt) noch eine sogenannte Entwöhnungsbehandlung in Anspruch zu nehmen.
Diese Entwöhnungsbehandlung wird auch als Rehabilitation bezeichnet und meist in einer dafür spezialisierten Klinik durchgeführt. Sie dauert in der Regel 12 Wochen und umfasst unter anderem eine medizinische, psychologische und ergotherapeutische Behandlung.

Während dieser Zeit ist es nicht erlaubt, Alkohol zu trinken. Kommt es dennoch zu Verstößen, so wird in aller Regel die Behandlung seitens der Klinik beendet und der Patient entlassen.

Als nächstes wollen wir von Ihnen wissen, inwieweit Sie bereits über die Möglichkeit einer Entwöhnung informiert wurden bzw. schon eigene Erfahrungen gemacht haben. Bitte beantworten Sie die folgenden Fragen.

34. Ich habe noch nie von einer Entwöhnungsbehandlung (Reha) gehört.

◯ trifft zu
◯ trifft nicht zu
◯ weiß nicht

35. Ich wurde bereits einmal über die Möglichkeit einer Entwöhnungsbehandlung informiert.

◯ trifft zu
◯ trifft nicht zu
◯ weiß nicht

36. Mein Arzt hat mir bereits einmal die Aufnahme einer Entwöhnungsbehandlung empfohlen.

◯ trifft zu
◯ trifft nicht zu
◯ weiß nicht

37. Für mich wurde bereits ein- oder mehrmals eine Entwöhnungsbehandlung beantragt. und auch genehmigt.

◯ trifft zu
◯ trifft nicht zu
◯ weiß nicht

38. Ich habe bereits ein- oder mehrmals eine Entwöhnungsbehandlung angetreten.

◯ trifft zu
◯ trifft nicht zu
◯ weiß nicht

39. Ich habe bereits einmal eine Entwöhnungsbehandlung angetreten, diese aber vorzeitig beendet.

◯ trifft zu
◯ trifft nicht zu
◯ weiß nicht

40. Ich würde eine Entwöhnungsbehandlung antreten, wenn mir dies mein Hausarzt empfehlen würde.

lehne ab					stimme zu	weiß nicht
①	②	③	④	⑤	⑥	◯

41. Ich würde nur ungern eine Entwöhnungsbehandlung antreten, selbst wenn mir mein Hausarzt dies empfehlen würde.

lehne ab					stimme zu	weiß nicht
①	②	③	④	⑤	⑥	◯

Als nächstes würden wir gern von Ihnen wissen, was Sie persönlich am meisten an einer Entwöhnungsbehandlung stören würde bzw. was die Gründe wären, warum Sie auf gar keinen Fall eine solche Behandlung antreten würden.
Ich würde auf eine Entwöhnungsbehandlung vor allem verzichten…

1) ... weil ich nicht ohne Alkohol leben kann.

lehne ab			stimme zu			weiß nicht
①	②	③	④	⑤	⑥	◯

2) ... weil ich nicht ohne Alkohol leben möchte.

lehne ab			stimme zu			weiß nicht
①	②	③	④	⑤	⑥	◯

3) …weil ich meinen Alkoholkonsum als unproblematisch einschätze.

lehne ab			stimme zu			weiß nicht
①	②	③	④	⑤	⑥	◯

4) …weil ich glaube, dass ich es auch ohne fremde Hilfe schaffen kann, ohne Alkohol zu leben.

lehne ab			stimme zu			weiß nicht
①	②	③	④	⑤	⑥	◯

5) …weil ich es ablehne, als Alkoholiker behandelt zu werden.

lehne ab			stimme zu			weiß nicht
①	②	③	④	⑤	⑥	◯

6) …weil es meiner Selbstachtung schaden würde, wenn ich in eine Suchtklinik ginge.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

7) …weil ich mich gegenüber meinen Bekannten schämen würde, wenn ich in eine Suchtklinik ginge.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

8) …weil ich mich schämen würde, wenn ich meinen Angehörigen mitteilen müsste, dass ich in eine Suchtklinik muss.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

9) …weil ich nicht riskieren möchte, dass meine Arbeitskollegen wissen, dass ich in eine Suchtklinik gegangen bin.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

10) …weil ich Angst habe, dass sich Menschen von mir distanzieren, wenn ich in eine Suchtklinik gehe.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

11) …weil mir bisher nichts geholfen hat, was mir angeboten wurde, um meine Sucht in den Griff zu bekommen.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

12) …weil ich nicht mehr daran glaube, dass meine Alkoholkrankheit heilbar ist.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

13) …weil ich nicht glaube, dass mir eine Entwöhnungsbehandlung helfen kann.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

14) …weil ich den Alkohol zur Bewältigung meiner Probleme brauche.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

15) …weil ich die beruhigende Wirkung von Alkohol auch weiterhin genießen möchte.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

16) …weil mir nichts so schnell den Stress nimmt, wie es der Alkohol tut.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

17) …weil ich während einer stationären Entwöhnungsbehandlung so lange Zeit nicht zuhause sein kann.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

18) …weil ich während der Dauer der Entwöhnungsbehandlung meinen Hobbies nicht nachgehen könnte.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

19) …weil ich glaube, dass mich eine abstinente Lebensweise überfordert.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

20) …weil ich nicht daran glaube, dass mich ein Leben ohne Alkohol glücklich macht.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

21) …weil ich mich für die Dauer der Entwöhnungsbehandlung nicht um wichtige Dinge zuhause kümmern kann.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

22) …weil ich während der Entwöhnungsbehandlung nicht auf Arbeit gehen kann.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

23) …weil ich aufgrund einer Entwöhnungsbehandlung meinen Job verlieren kann.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

24) …weil ich während der Entwöhnungsbehandlung meine Freunde und Angehörigen nicht so viel sehen kann.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

25) …weil ich Angst vor dem Aufenthalt in einer Suchtklinik habe.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

26) …weil ich es nicht ertragen würde, mit anderen, vor allem fremden Menschen auf engem Raum zusammenzuleben.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

27) …weil ich Angst habe, dass sich die anderen Suchtpatienten nicht gut benehmen.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

28) …weil ich während der Entwöhnungsbehandlung mit fremden Menschen abgeben müsste.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

29) …weil ich während der Entwöhnungsbehandlung meine Freizeit nicht selbstbestimmt gestalten kann.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

30) …weil ich Sorge habe, dass mir während der Entwöhnungsbehandlung die Kontrolle über mein Leben genommen wird.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

31) …weil ich befürchte, dass meine persönlichen Bedürfnisse während der Entwöhnungsbehandlung nicht beachtet werden.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

32) …weil ich befürchte, dass mich der straffe Tagesablauf in der Suchtklinik überfordert.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

33) …weil ich glaube, dass ich durch die Entwöhnungsbehandlung depressiv werden könnte.

lehne ab stimme zu weiß nicht

① ② ③ ④ ⑤ ⑥ ◯

Sollten Sie Fragen oder Anmerkungen zum Fragebogen haben, kontaktieren Sie uns gerne.

Wenn Sie noch Fragen zum Thema haben, wenden Sie sich gerne an Ihren Hausarzt.
Wir bedanken uns herzlich für Ihre Teilnahme!

Declaration on oath

I hereby certify that I have conducted this thesis without illicit assistance of third parties or the use of other than indicated aids.

The thoughts, data and concepts taken directly or indirectly from other sources are marked with the authors' names.

I assure that I have not made use of any paid assistance for the preparation of the content of this thesis.

Bern, January 2024

Marie-Lise Jakobi

Declaration on previous attempts at a doctorate

I am submitting the application for the opening of the doctoral examination procedure for the first time to the Medical Faculty of the Martin Luther University Halle-Wittenberg. There has been no previous attempt on my part to obtain a doctorate. Furthermore, I affirm that I have not submitted the present dissertation thesis for doctoral studies in any domestic or foreign university.

Bern, January 2024

Marie-Lise Jakobi