



Seeking treatment for mental illness and substance abuse: A cross-sectional study on attitudes, beliefs, and needs of military personnel with and without mental illness

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ABSTRACT

Background: Often, military personnel do not seek treatment for mental illness or wait until they reach a crisis point. Effective, selective, and indicated prevention is best achieved by seeking treatment early.

Aims: We aimed to examine military personnel's attitudes, beliefs, and needs around seeking treatment for mental illness. We compared those who sought treatment to those who did not and those with and without the intention to seek treatment. Finally, we examined factors associated with intentions of not seeking treatment.

Method: We conducted a cross-sectional questionnaire study of military personnel with (N = 324) and without (N = 554) mental illness. Descriptive and regression analyses (logistic and ordinal) were performed.

Results: The majority of the personnel believed treatment was effective (91.6%); however, most preferred to solve their own problems (66.0%). For personnel with mental illness, compared to those who sought treatment, those who did not had a higher preference for self-management and found advice from others less important. For those without mental illness, those with no intention to seek treatment indicated a higher preference for self-management, stigma-related concerns, denial of symptoms, lower belief in treatment effectiveness and found it less important to be an example, compared to those with treatment-seeking intentions. A clear indication of where to seek help was the most reported need (95.7%). Regression analyses indicated that not seeking treatment was most strongly related to preference for self-management (OR(95%CI) = 4.36(2.02–9.39)); no intention to seek treatment was most strongly related to a lower belief that treatment is effective (OR(95%CI) = .41 (0.28–0.59) and with not having had positive earlier experiences with treatment seeking (OR(95%CI) = .34 (0.22–0.52).

Conclusions: To facilitate (early) treatment seeking, interventions should align with a high preference for self-management, mental illness stigma should be targeted, and a clear indication of where to seek treatment is needed.

1. Introduction

Worldwide, there is a treatment gap for mental illness, including substance abuse, creating a mismatch between the proportion of people

who could benefit from treatment and those who actually seek treatment (Kohn et al., 2004). People working in high-risk occupations (e.g. military, police) have increased chances of developing mental illnesses (Kyron et al., 2020) and, especially in these occupations, it is difficult to

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seek treatment (Brouwers, 2020; Stergiou-Kita et al., 2015). Approximately 60% of military personnel who experience mental illness do not seek treatment (Sharp et al., 2015), or wait until they reach a crisis point (Bogaers et al., 2020; Murphy et al., 2014). In a previous qualitative study, we showed that stigma-related concerns form a barrier to seeking treatment in the Dutch military (Bogaers et al., 2020). These included concerns about career consequences, social rejection, and discrimination. Furthermore, multiple systematic reviews on help-seeking confirmed stigma as a barrier (Clement et al., 2015; Coleman et al., 2017; Gulliver et al., 2010; Hom et al., 2017).

It is a missed opportunity to prevent worsened symptoms and dropout if personnel wait until a crisis-point to seek treatment, especially when high-quality care is available within the military. More insight is needed into the process of seeking treatment. Information from healthy personnel about factors that influence treatment-seeking intentions (prior to possible mental illness development) is important for selective and indicated prevention, as it can be used to develop interventions to facilitate early treatment seeking. Previous research has mainly focused on personnel with mental illnesses (Coleman et al., 2017). Therefore, the current study examines military personnel with and without mental illness; those without mental illness are asked about their intentions to seek treatment for possible future mental illness. The results can be used to validate and extend earlier qualitative findings (Bogaers et al., 2020). The current study aims to answer the following questions: (1) What are the attitudes, beliefs, and needs of military personnel regarding seeking treatment for mental illness? (2) Do those who have sought treatment or intend to seek treatment differ from those who do not, and if yes, how do they differ? and (3) What factors are associated with the decision and intention of not seeking treatment?

2. Method

2.1. Design

A cross-sectional observational design was used in this study. The online questionnaire examined military personnel with and without mental illness. Comparisons of demographics, attitudes, beliefs, and needs were made based on past treatment-seeking decisions for personnel with mental illness and based on treatment-seeking intention for those without. The STROBE checklist was used in this study (Von Elm et al., 2007).

2.2. Setting

In the Dutch military, healthcare is organised internally and is available relatively close to home. Personnel can seek treatment for both mental illness and substance abuse, and the costs are covered. There are sanctions for the use of soft and hard drugs (Bogaers et al., 2020). However, when substance (ab)use is reported to a mental health professional, there are confidentiality agreements (Bogaers et al., 2020). Statistics on the treatment gap within the Dutch military were not available. However, among the general Dutch working age population, two-thirds of adults with mental illness have not received help in the past 12 months (Veerbeek et al., 2012), making the treatment gap comparable to that of military personnel in the United States and the United Kingdom (Sharp et al., 2015).

2.3. Participant recruitment

Active-duty military personnel were recruited for this study. A distinction was made between those with and without mental illness, during the survey. To ensure that personnel with and without mental illness would be represented in the sample, existing data from the questionnaire that personnel had received after deployment were used. Those who had been on deployment for 30 days or longer received this questionnaire 6 months after their deployment. It includes scores on depression, aggression, alcohol abuse, and PTSD. A stratified sample, based on gender, age, military division, and rank, of personnel was considered (N = 1000 with indication of mental illness and N = 1000 without).

Data were collected between January and February of 2021. All personnel received invites simultaneously and were invited by e-mail and letter. Reminders were sent after three and five weeks. The main researcher sent invites. It was made clear that the research was in collaboration with Tilburg University and that responses to the questionnaire would be anonymous.

2.4. Measures

2.4.1. Demographics

Gender, age, marital status, education level, type of work (operational or not), military department, rank, and years of service were assessed.

2.4.2. Mental illness and substance abuse

Current mental illness. To assess current mental illness, the following measures were used: (a) the Hospital Anxiety and Depression Scale (Smar and Keefer, 2011; Weathers et al., 2013), (b) ASSIST-LITE, to measure substance abuse (Ali et al., 2013), (c) AUDIT-C, to measure alcohol abuse (Bradley et al., 2007), and (d) PTSD checklist for DSM-5 (Weathers et al., 2013). For more details on the scales and cut-off scores used, see Appendix A.

Self-reported mental illness. Personnel were asked whether they had current or had had past mental illnesses. Group membership (i.e. current/past mental illness or no mental illness) was determined based on this. If personnel reported having a mental illness, they received a list of 15 possible types of mental illness (see Appendix B) and were asked to indicate illness presence, currently or past, similar to earlier research (Dewa et al., 2020; Janssens et al., 2021). Additionally, they were asked whether their mental illnesses were work-related and to rate the severity of their symptoms (during the worst time) on a scale of 0–10.

2.4.3. Treatment-seeking intentions

Personnel with mental illness were asked whether they had sought treatment (yes/no). Personnel without mental illness were asked whether they would seek treatment if they developed a mental illness in the future and to rate it on a 4-point scale ranging from very unlikely to very likely.

2.4.4. Attitudes, beliefs, and needs

Based on a recent qualitative study within the Dutch military (Bogaers et al., 2020) and literature reviews on barriers and facilitators for treatment seeking (Clement et al., 2015; Coleman et al., 2017; Gulliver et al., 2010; Hom et al., 2017; Sharp et al., 2015), 14 statements about attitudes and beliefs that could influence treatment-seeking (intentions) were developed (Table 2). As stigma was found to be the main

barrier to treatment seeking in an earlier qualitative study, several statements related to stigma concerns were included. Participants were asked to indicate the extent to which they agreed with the statements on a 4-point scale, ranging from completely disagree to completely agree. Examples are 'I was (would be) afraid that seeking treatment would have negative consequences for my career' and 'I preferred (would prefer) to solve my own problems'. Personnel with mental illnesses who indicated having sought treatment received the additional statements 'I had no choice, my symptoms were too severe' and 'I had no choice, I was sent for treatment by someone else, using the same 4-point scale'.

Personnel without mental illness received additional questions about their needs regarding treatment seeking if they were to develop mental illness in the future. Based on findings from an earlier qualitative study (Bogaers et al., 2020), they were given seven options (e.g. a clear indication of where to go to for help) that they would need when deciding to seek treatment and were asked to rate these on a 4-point scale ranging from 'Not at all' to 'Very much' (see Table 2).

2.4.5. Contextual measures

Familiarity. Participants were asked about mental illness in their surroundings, using an adaptation of the Level of Contact Report (Holmes et al., 1999), following earlier research (Janssens et al., 2021; van Boekel et al., 2015). The total familiarity score was used.

Previous experience. Participants were asked whether they had had previous experiences and/or had witnessed others' experiences with treatment seeking (in general). If they responded with 'yes', they were asked whether this experience was positive or negative. A dummy variable was used to compare the reference (no experience) to positive and negative experiences.

Unit cohesion. A three-item measure was used to measure perceived unit cohesion (Wright et al., 2009). The items were 'The members of my unit are ... cooperative with each other/know they can depend on each other/stand up for each other'. Items were measured on a 5-point scale ranging from 'Completely disagree' to 'Completely agree'. The mean value was used as the final measure. Participants with mental illness were asked about unit cohesion at the time they had experienced their illness.

2.5. Statistical analyses

To answer research questions 1 and 2 on attitudes, beliefs, and needs of military personnel regarding not seeking treatment, descriptive analyses were performed. Comparisons were made between the decision (intention) to seek treatment or not, using Chi-square tests and Mann-Whitney U-tests, as variables were not normally distributed. For comparisons between those who intended to seek treatment, and those who did not, 'very-unlikely' and 'unlikely' were combined, just as 'likely' and 'very-likely' were combined.

For research question 3 on factors associated with behaviour and intentions of not seeking treatment, two separate analyses were performed. For personnel with mental illness, a first logistic regression was performed, as it corrects for quasi-separation in the data and the small number of people who did not seek treatment (Heinze et al., 2013). Treatment-seeking decision was entered as the dependent variable (0 = treatment seeking, 1 = not seeking treatment). Ordinal regression was performed for personnel without mental illness. The assumption of proportional odds was violated. Therefore, for analysis, the categories 'very unlikely' and 'unlikely' were merged, resulting in the dependent variable, 'not seeking treatment intention', with categories 1 = Very likely; 2 = Likely; 3 = (Very) unlikely, meeting the assumption. To

prevent information loss, the categories 'likely' and 'very-likely' were not combined. To decrease the number of predictors, fear of negative career consequences, social rejection, discrimination, self-stigma, shame, and fear of being blamed were combined into one measure of stigma, as they are all aspects of stigma (Kim et al., 2010). Together, these items formed a reliable scale ($\alpha_{\text{personnel with mental illness}} = .882$, $\alpha_{\text{personnel without mental illness}} = .897$). The mean score was used for further analysis. All analyses were performed using SPSS, except for the first logistic regression, which was performed using R. There were no missing data, as forced response answers were used during data acquisition.

2.6. Ethical considerations

Written informed consent was obtained from all the respondents. The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008. All procedures involving human subjects/patients were approved by the Tilburg School of Social and Behavioral Sciences Ethics Review Boards (approval number RP324) and the Dutch Military Ethics Review Board.

3. Results

3.1. Participant characteristics

3.1.1. Response rate

Some of the approached personnel had left active service (mental illness = 172, $N_{\text{no mental illness}} = 134$), and several duplicates within the sample were removed (caused by personnel going on multiple deployments) (mental illness = 37, $N_{\text{no mental illness}} = 30$), leaving a total of $N = 1,627$ eligible respondents. Of those, 63% ($N = 1,025$) started the questionnaire, and 54% ($N = 878$) answered the questionnaire, fully. Only completed questionnaires were used for further analyses. Compared to those who completed the questionnaire, those who did not were predominantly females ($\chi^2(1, N = 1008) = 6.01, p = .014$), more respondents had lower and middle education levels ($\chi^2(2, N = 1008) = 7.25, p = .027$), and consisted of more non-commissioned officers ($\chi^2(2, N = 1006) = 8.26, p = .016$). With incomplete questionnaires, the majority gave up while answering the mental health questions.

3.1.2. Mental illness and treatment-seeking intentions

Overall, $N = 324$ indicated having (having had) mental illness, of which 90.7% indicated having sought treatment. A Mann-Whitney test indicated that treatment-seekers reported significantly higher symptom severity ($M = 7.17$) than those who did not seek treatment ($M = 5.83, U = 2,650.0, Z = -3.69, p < .001$). For personnel without mental illness, 83% intended to seek treatment if they were to develop mental illness. Information on reported types of mental illness and current mental illness scores, separated by treatment-seeking decisions and intentions, is in Appendix B.

3.1.3. Sample characteristics

Among personnel with mental illness, there was a significant association between age and treatment-seeking decisions ($\chi^2(4, N = 324) = 15.61, p = .004$) with those who do not seek treatment belonging to lower age categories; moreover, those who did not seek treatment reported significantly higher symptom severity ($Z = -3.69, p < .001$). Among personnel without mental illness, there were no significant differences in sample characteristics between personnel with or without

Table 1
Sample characteristics for military personnel with and without mental illness.

	Military personnel with mental illness				Military personnel without mental illness			
	Seeking treatment N = 294	Not seeking treatment N = 30	Total N = 324	Difference	Intention to seek treatment N = 460	No intention to seek treatment N = 94	Total N = 554	Difference
	N (%)	N (%)	N (%)		N (%)	N (%)	N (%)	
Demographics								
Sex								
Male	255 (86.7)	28 (93.3)	283 (87.3)	$\chi^2(1) = 1.07, p = .398^a$	422 (91.7)	87 (92.6)	509 (91.9)	$\chi^2(1) = .07, p = .792$
Female	39 (13.3)	2 (6.7)	41 (12.7)		38 (8.3)	7 (7.4)	45 (8.1)	
Age								
<20	0 (0.0)	0 (0.0)	0 (0.0)	$\chi^2(4) = 15.61, p = .004^b$	0 (0.0)	0 (0.0)	0 (0.0)	$\chi^2(4) = 8.19, p = .085$
21–30	20 (6.8)	7 (23.3)	27 (8.3)		53 (11.5)	12 (12.8)	65 (11.7)	
31–40	93 (31.6)	14 (46.7)	107 (33.0)		148 (32.2)	42 (44.7)	190 (34.4)	
41–50	90 (30.6)	5 (16.7)	95 (29.3)		134 (29.1)	18 (19.2)	152 (27.4)	
51–60	85 (28.9)	4 (13.3)	89 (27.5)		117 (25.4)	19 (20.2)	136 (24.6)	
>60	6 (2.1)	0 (0.0)	6 (1.9)		8 (1.7)	3 (3.2)	11 (2.0)	
Marital status								
Partner (vs. Single)	224 (76.2)	28 (93.3)	252 (77.8)	$\chi^2(1) = 4.63, p = .031$	387 (84.1)	83 (88.3)	470 (84.8)	$\chi^2(1) = 1.05, p = .305$
Educational level								
Low	30 (10.2)	0 (0.0)	30 (9.3)	$\chi^2(2) = 4.15, p = .126$	44 (9.6)	7 (7.5)	51 (9.2)	$\chi^2(2) = .50, p = .780$
Medium	155 (52.7)	20 (66.7)	175 (54.0)		241 (52.4)	49 (52.1)	290 (52.3)	
High	109 (37.1)	10 (33.3)	119 (36.7)		175 (38.0)	38 (40.4)	213 (38.5)	
Work related context								
Type of work								
Operational work (vs. non-operational)	233 (79.3)	22 (73.3)	255 (78.7)	$\chi^2(1) = .57, p = .451$	251 (54.6)	57 (60.6)	308 (55.6)	$\chi^2(1) = 1.17, p = .280$
Military branch								
Marine	21 (7.1)	1 (3.3)	22 (6.8)	N/A, >20% cells expected count below 5.	77 (16.7)	14 (14.9)	91 (16.4)	N/A, > 20% cells expected count below 5.
Army	145 (49.3)	21 (70.0)	166 (51.2)		192 (41.7)	44 (46.8)	236 (42.6)	
Air-force	79 (26.9)	5 (16.7)	84 (25.9)		116 (25.2)	19 (20.2)	135 (24.4)	
Military-police	18 (6.1)	2 (6.7)	20 (6.2)		21 (4.6)	5 (5.3)	26 (4.7)	
Staff	30 (10.2)	1 (3.3)	31 (9.6)		52 (11.3)	12 (12.8)	64 (11.6)	
Other	1 (0.3)	0 (0.0)	1 (0.3)		2 (0.4)	0 (0.0)	2 (0.4)	
Ranks								
Soldiers	36 (12.2)	8 (26.7)	44 (13.6)	$\chi^2(2) = 4.83, p = .090$	26 (5.7)	8 (8.5)	34 (6.1)	$\chi^2(2) = 2.76, p = .251$
Non-commissioned officers	152 (51.7)	13 (43.3)	165 (50.9)		220 (47.8)	37 (39.4)	257 (46.4)	
Officers	106 (36.1)	9 (30.0)	115 (35.5)		214 (46.5)	49 (52.1)	263 (47.5)	
Years of service (M(SD))								
Years	22.44 (9.23)	17.77 (9.22)	22.01 (9.32)	$Z = -2.70, p = .007.$	22.01 (9.65)	20.34 (9.74)	21.73 (9.67)	$Z = -1.49, p = .136.$
Mental health related context								
Past or current mental illness								
Past mental illness	233 (97.3)	23 (76.7)	256 (79.0)	$\chi^2(1) = .11, p = .740$	N/A	N/A	N/A	N/A
Mental illness work related								
Yes	200 (68.0)	15 (50.0)	215 (66.4)	$\chi^2(2) = 6.00, p = .050$	N/A	N/A	N/A	N/A
Severity of symptoms								
Mean severity (M, SD)	7.17 (1.96)	5.83 (2.12)	7.05 (2.01)	$Z = -3.69, p < .001^b$	N/A	N/A	N/A	N/A

Note: Military personnel with mental illness were asked about their type of work and rank at the time their mental illness started.

^a Fisher exact test used instead of Pearson chi-square because >20% of cells had expected count below 5.

^b Significant effect after Bonferroni correction ($\alpha/11$) alpha = .005.

Table 2
Attitudes, beliefs, and needs of military personnel with and without mental illness about seeking treatment and by treatment-seeking decisions and intentions.

	Military personnel with mental illness									Military personnel without mental illness						
	Total (N = 324)	Seeking treatment (N = 294)		Not seeking treatment (N = 30)		Difference			Total (N = 554)	Intention to seek treatment (N = 460)		No intention to seek treatment (N = 94)		Difference		
	N (%) ^a	N (%)	M (SD)	N (%)	M (SD)	U	Z	Sig.	N (%)	N (%)	M(SD)	N (%)	M(SD)	U	Z	Sig.
Attitudes																
Self-management: Preference to solve own problems.	228 (70.4)	199 (67.7)	2.78 (.83)	29 (96.7)	3.57 (.57)	2098	-5.09	.000 ^b	351 (63.4)	271 (58.9)	2.65 (.72)	80 (85.1)	3.12 (.76)	14112.5	-5.79	.000 ^b
Advice from others: Importance of advice from others for decision to seek treatment.	187 (57.7)	183 (62.2)	2.64 (.98)	4 (13.3)	1.73 (.87)	2212	-4.71	.000 ^b	454 (82.0)	382 (83.0)	2.95 (.63)	72 (76.6)	2.81 (.61)	19177	-2.11	.035
Denial: Denial of mental illness symptoms.	180 (55.6)	164 (55.8)	2.54 (.91)	16 (53.3)	2.53 (.63)	4307	-.22	.823	92 (16.6)	52 (11.3)	1.83 (.62)	40 (42.6)	2.31 (.67)	13638	-6.37	.000 ^b
Self-stigma: Seeing yourself as weak due to mental illness.	170 (52.5)	155 (52.7)	2.48 (.96)	15 (50.0)	2.30 (.95)	4001.5	-.88	.381	146 (26.4)	94 (20.4)	1.90 (.73)	52 (55.3)	2.46 (.84)	13574	-6.10	.000 ^b
Shame: Shame due to mental illness.	159 (49.1)	148 (50.3)	2.44 (.96)	11 (36.7)	2.17 (.99)	3712.5	-1.49	.136	129 (23.3)	80 (17.4)	1.88 (.69)	49 (52.1)	2.39 (.90)	14429	-5.51	.000 ^b
Be example: Wanting to be a good example to others with mental illness.	125 (38.6)	120 (40.8)	2.28 (.90)	5 (16.7)	1.93 (.74)	3431.5	-2.11	.035	315 (56.9)	285 (62.0)	2.66 (.76)	30 (31.9)	2.18 (.83)	14589.5	-5.38	.000 ^b
Beliefs																
Belief in treatment: Belief that treatment is effective.	275 (84.9)	255 (86.7)	3.09 (.67)	20 (66.7)	2.73 (.79)	3316	-2.58	.010	529 (95.5)	451 (98.0)	3.31 (.53)	78 (83.0)	2.95 (.58)	15082.5	-5.56	.000 ^b
Knowledge: Knowing where to go for treatment.	269 (83.0)	244 (83.0)	3.07 (.68)	25 (83.3)	3.00 (.59)	4107.5	-.70	.484	527 (95.1)	443 (96.3)	3.46 (.61)	84 (89.4)	3.34 (.67)	19577	-1.63	.103
Social support: Support from people around you.	256 (79.0)	234 (79.6)	2.97 (.70)	22 (73.3)	2.83 (.70)	3944	-1.08	.280	533 (96.2)	445 (96.7)	3.38 (.58)	88 (93.6)	3.27 (.61)	19445.5	-1.76	.078
Social rejection: Fear of others seeing you differently (negatively) due to seeking treatment.	123 (38.0)	114 (38.8)	2.22 (.97)	9 (30.0)	1.97 (.81)	3834	-1.23	.218	94 (17.0)	62 (13.5)	1.75 (.71)	32 (34.0)	2.18 (.93)	16140	-4.21	.000 ^b
Career: Fear seeking treatment has negative consequences for career.	118 (36.4)	111 (37.8)	2.26 (.98)	7 (23.3)	1.97 (.96)	3652	-1.62	.105	132 (23.8)	90 (19.6)	1.92 (.75)	42 (44.7)	2.39 (.86)	14997	-5.07	.000 ^b
<i>Unemployment</i>	37 (N/A)	36 (N/A)	N/A	1 (N/A)	N/A	N/A	N/A	N/A	27 (N/A)	20 (N/A)	N/A	7 (N/A)	N/A	N/A	N/A	N/A
<i>Not being able to advance in career</i>	82 (N/A)	77 (N/A)	N/A	5 (N/A)	N/A	N/A	N/A	N/A	99 (N/A)	67 (N/A)	N/A	32 (N/A)	N/A	N/A	N/A	N/A
<i>Not being allowed to do what you like most</i>	78 (N/A)	75 (N/A)	N/A	3 (N/A)	N/A	N/A	N/A	N/A	64 (N/A)	41 (N/A)	N/A	23 (N/A)	N/A	N/A	N/A	N/A
Discrimination: Fear that seeking treatment leads to being treated differently (less favourably).	87 (26.9)	81 (27.6)	2.02 (.85)	6 (20.0)	1.87 (.82)	3960	-.98	.327	78 (14.1)	46 (10.0)	1.69 (.66)	32 (34.0)	2.13 (.94)	16130	-4.24	.000 ^b
Blame: Fear others see mental illness as their own fault.	87 (26.9)	81 (27.6)	2.02 (.86)	6 (20.0)	1.80 (.76)	3822	-1.28	.201	52 (9.4)	36 (7.8)	1.65 (.63)	16 (17.0)	1.91 (.68)	17239	-3.45	.000 ^b
Confidentiality: Fear that professionals will not handle what you tell them confidentially.	43 (13.3)	38 (12.9)	1.66 (.79)	5 (16.7)	1.77 (.90)	4174	-.53	.595	49 (8.8)	30 (6.5)	1.50 (.63)	19 (20.2)	1.80 (.84)	17661.5	-3.15	.002
Treatment seekers' specific statements																
Symptom severity: I had no choice; my symptoms were too severe.	202 (N/A)	202 (68.7)	2.80 (.91)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sent to care: I had no choice; I was sent for treatment by someone else.	77 (N/A)	77 (26.2)	1.97 (.93)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Needs																
A clear indication of where to go to for help.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	530 (95.7)	441 (95.9)	3.22 (.52)	89 (94.7)	3.17 (.54)	20736.0	-.78	.427
Mental health care professionals with military experience.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	489 (88.3)	411 (89.4)	3.17 (.61)	78 (83.0)	2.99 (.77)	19474.5	-1.76	.079
A discrete location to seek treatment.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	463 (83.6)	382 (83.0)	2.98 (.61)	81 (86.2)	3.03 (.66)	20349.5	-1.08	.280

(continued on next page)

Table 2 (continued)

	Military personnel with mental illness				Military personnel without mental illness				Difference		
	Total (N = 324)		Not seeking treatment (N = 30)		Total (N = 554)		Intention to seek treatment (N = 460)		No intention to seek treatment (N = 94)		
	N (%) ^a	M (SD)	N (%)	M (SD)	N (%)	M (SD)	N (%)	M (SD)	U	Z	Sig.
A clear front office where you can go to with your request for help.	N/A	N/A	N/A	N/A	395 (71.3)	337 (73.3)	2.80 (.66)	58 (61.7)	18384.0	-2.64	.008
External help, outside of the military.	N/A	N/A	N/A	N/A	345 (62.3)	283 (61.5)	2.65 (.64)	62 (66.0)	20148.0	-1.17	.243
A self-help application on my phone.	N/A	N/A	N/A	N/A	213 (38.5)	178 (38.7)	2.30 (.76)	35 (37.2)	20390.5	-.94	.347
Online therapy.	N/A	N/A	N/A	N/A	165 (29.8)	141 (30.7)	2.17 (.72)	24 (25.5)	18615.0	-2.32	.020

^a Presence of a certain attitude was assessed by combining 'agree' and 'completely agree'.

^b Significant effect after Bonferroni correction (0.05/21) alpha = .002. Note: Analysis of needs was performed separately from that of attitudes and beliefs.

intention to seek treatment. For a full overview of the sample's characteristics, see Table 1.

3.2. Attitudes, beliefs, and needs of military personnel who do not seek treatment

Personnel believed treatment was effective (84.9%_{with mental illness}, 95.5%_{without mental illness}); however, they also reported a high preference to solve their own problems (70.4%_{with mental illness}, 63.4%_{without mental illness}). Personnel also reported high stigma-related concerns, such as perceiving one's self as weak for seeking treatment (52.5%_{with mental illness}, 26.4%_{without mental illness}), fear of social rejection (38.0%_{with mental illness}, 17.0%_{without mental illness}), and fear of negative career consequences (36.4%_{with mental illness}, 23.8%_{without mental illness}). Finally, high importance was given to advice from others about seeking treatment (57.7%_{with mental illness}, 82.0%_{without mental illness}).

For personnel with mental illness, over half (55.6%) indicated that they had denied their symptoms at first and 68.7% of those who sought treatment indicated that they had no choice, and their symptoms were too severe. Regarding needs in relation to possible future treatment-seeking, most weight was given to having a clear indication of where to go to for help (95.7%), mental health professionals with military experience (88.3%), and a discrete location to seek treatment (83.6%).

3.3. Differences between those military personnel who seek treatment and those who do not

Both personnel who had not sought treatment and those who did not intend to seek treatment reported a significantly higher preference to solve their own problems (self-management). For personnel with mental illness, those who had not sought treatment also assigned lower importance to advice they had received from others, were younger, and had less severe symptoms.

For personnel without mental illnesses, those who did not intend to seek treatment were significantly more concerned about stigma-related consequences. They reported twice as much fear about negative career consequences (unemployment, not being able to advance in career and not being able to do what they like most), self-stigma, fear of social rejection and being blamed, and three times as much shame and fear of discrimination. Those who intended to seek treatment, and those who did not, differ significantly on all attitudes and beliefs, except for advice from others, confidentiality concerns, knowledge, and social support. Finally, there were no significant differences in the reported needs. See Table 2 for all attitudes, beliefs, and needs, including statistics.

3.4. Factors associated with decisions and intentions about not seeking treatment

Only a higher preference to solve one's problems was significantly associated with both decisions and intentions about not seeking treatment. Other variables were only significantly associated with either decisions or intentions about not seeking treatment.

For personnel with mental illnesses, the full model containing all predictors was statistically significant (LR [df = 21, N = 324] = 88.94, p = < .001). The model explained between 24.6% (Cox-and-Snell-R²) and 67.4% (Nagelkerke-R²) and correctly classified 92.9% of cases. The four predictors of not seeking treatment made a unique statistically significant contribution to the model, in addition to the preference for self-management. As observable from Table 3, variables associated with not seeking treatment were lower symptom severity, younger age, having seen a positive experience of others' seeking treatment, and less importance given to advice from others.

For personnel without mental illness, the full model containing all predictors showed a significant improvement from the null model (LRχ²(19, N = 554) = 246.51, p < .001). The model explained between 35.9% (Cox-and-Snell-R²) and 41.3% (Nagelkerke-R²) and correctly

Table 3
Firth logistic and ordinal regression for the decision and intention to not seek treatment.

	Military personnel with mental illness (0 = treatment, 1 = no treatment)						Military personnel without mental illness (Treatment seeking 1 = very likely, 2 = likely, 3 = (very)unlikely)					
	B	SE	χ^2	Sig.	OR	CI 95%	B	SE	χ^2	Sig.	OR	CI 95%
Intercept	-2.96	2.98	.89	.345	.05	[0.00–17.66]	N/A	N/A	N/A	N/A	N/A	N/A
Threshold: = 1 ((very) unlikely)	N/A	N/A	N/A	N/A	N/A	N/A	-2.84	1.19	5.61	.018	.06	[-.07 – .61]
Threshold: = 2 (likely)	N/A	N/A	N/A	N/A	N/A	N/A	.37	1.19	.09	.759	1.44	[1.14–14.97]
Health context												
Addiction (vs. other mental illness)	.14	.64	.05	.829	1.16	[.33–4.04]	N/A	N/A	N/A	N/A	N/A	N/A
Severity symptoms	-.31	.13	5.70	.017	.73	[-.57 – .94]	N/A	N/A	N/A	N/A	N/A	N/A
Personal context												
Gender (0 = male, 1 = female)	.12	.83	.02	.897	1.12	[.22–5.71]	.04	.34	.01	.916	1.04	[.53–2.03]
Age	-.56	.26	4.62	.032	.57	[-.34 – .95]	-.04	.10	.18	.676	.96	[.79–1.16]
Marital status (0 = single, 1 = partner)	1.68	.87	3.81	.051	5.38	[.98–29.46]	.20	.26	.57	.449	1.22	[.73–2.02]
Familiarity	.11	.17	.35	.557	1.11	[.80–1.54]	.04	.07	.35	.556	1.04	[.91–1.19]
Experience with seeking treatment												
Negative	-.38	1.27	.07	.786	.69	[.06–8.33]	.57	.47	1.51	.220	1.77	[.71–4.40]
Positive	-.84	.77	.07	.786	.43	[.10–1.96]	-1.09	.22	24.70	<.001	.34	[[.22 – .52]
None	0				1		0				1	
Seen experience of others seeking treatment												
Negative	.99	1.05	.78	.376	2.70	[.35–21.0]	-.06	.38	.03	.866	.94	[.44–1.98]
Positive	1.32	.58	5.16	.023	3.73	[1.20–11.57]	-.42	.22	3.69	.055	.66	[.43–1.01]
None	0				1		0				1	
Work context												
Rank	-.13	.35	.12	.725	.88	[.44–1.76]	-.05	.16	.10	.749	.95	[.70–1.29]
Unit cohesion	.22	.31	.42	.519	1.24	[.68–2.29]	-.37	.12	9.43	.002	.69	[[.55 – .88]
Attitudes and beliefs												
Importance of advice from others	-.93	.27	11.84	<.001	.40	[[.23 – .67]	.16	.16	1.09	.296	1.18	[[.88–1.59]
Belief that treatment is effective	-.18	.34	.27	.606	.83	[[.43–1.63]	-.90	.19	21.63	<.001	.41	[[.28 – .59]
Wanting to be an example for others	-.33	.31	.97	.324	.72	[[.39–1.33]	-.36	.13	7.54	.006	.70	[[.54 – .90]
Preference of self-management	1.47	.39	15.70	<.001	4.36	[[2.02–9.39]	.53	.14	13.97	<.001	1.70	[[1.29–2.24]
Confidentiality concerns	.43	.35	1.25	.263	1.53	[[.77–3.04]	-.01	.16	.00	.970	.99	[[.72–1.37]
Denial of symptoms	-.01	.34	.00	.981	.99	[[.51–1.95]	.71	.17	17.27	<.001	2.04	[[1.46–2.85]
Stigma related concerns	-.77	.45	2.73	.098	.46	[[.19–1.12]	.55	.22	6.06	.014	1.73	[[1.12–2.66]
Knowledge of where to find help	-.46	.38	1.32	.251	.63	[[.30–1.32]	.10	.16	.39	.532	1.11	[[.81–1.51]
Social support	-.28	.42	.39	.534	.76	[[.34–1.71]	.04	.17	.05	.817	1.04	[[.74–1.45]

Note: Earlier experiences, both own and others, were each represented as three dummy variables with ‘none’ serving as the reference group.

classified 65.3% of cases. Six predictors made a unique statistically significant contribution to the model, in addition to the preference for self-management. As indicated in Table 3, the following variables were associated with intentions of not seeking treatment: lower unit cohesion, lower belief that treatment works, a lesser desire to be an example to others, higher denial of symptoms, higher stigma-related concerns, and lack of positive earlier experience with seeking treatment.

4. Discussion

This study aimed to examine attitudes, beliefs, needs, and factors associated with treatment-seeking intentions in military personnel with and without mental illness. Overall, a large majority believed that treatment was effective, but personnel also preferred to solve their own problems. There were stigma-related concerns, and high importance was attached to others’ advice about seeking treatment. Most personnel with mental illness sought treatment because their symptoms were too severe to deal with by themselves. As for needs, most weight was given to having a clear indication of where to go to for help, the availability of mental health professionals with military experience, and a discrete location to seek treatment. Overall, a higher preference for self-management and having earlier experience with seeking treatment by one’s self or having seen others’ experiences were associated with decisions and intentions to not seek treatment. For personnel with mental illness, the importance given to others’ advice was negatively associated with decisions to not seek treatment. For personnel without mental illness, lower unit cohesion, lower belief that treatment is effective, less desire to be an example to others, higher denial of symptoms, and higher stigma-related concerns were associated with intentions to not seek treatment.

4.1. Belief in treatment effectiveness and preference for self-management

A large majority of personnel believed that mental health treatment is effective (91.6%). Even though a lower belief that the treatments work was associated with an intention not to seek treatment, more than three-quarters of personnel who had no intentions to seek treatment, believed treatment is effective, which is in line with previous research about the Dutch military (Bogaers et al., 2020). Hence, interventions aimed at overcoming the treatment gap should not focus on promoting the effectiveness of treatments.

While personnel believed treatment is effective, most still prefer to solve their own problems. This was illustrated by the finding that most personnel with mental illness reported seeking treatment only once symptoms were severe, and that they had no other choice. Preference for self-management was found to be a barrier to seeking treatment in previous research, both in personnel with and without mental illness and among (Dutch) civilians (Bogaers et al., 2020; Hom et al., 2017; Jennings et al., 2015; Vanheusden et al., 2008). Given the reported importance of self-management, more self-help applications or personal recovery programmes could facilitate seeking treatment and give them the feeling that they are managing their own problems. There are currently different pilots with such applications and ongoing programmes, for example, with wellness recovery action planning (WRAP) (Cook et al., 2012). These applications and programmes should, however, also encourage seeking treatment from professionals, especially for more severe symptoms. Additionally, future research should examine the effects of framing treatment-seeking behaviour as managing one’s own problems. Previous research has already shown significant effects of framing during referrals on treatment attendance (Mavandadi et al., 2018).

4.2. Stigma and seeking treatment

If personnel decide that they cannot solve their own problems and need to seek treatment, they still face the stigma associated with seeking treatment. Personnel who did not intend to seek treatment reported twice as much concern about career consequences and (almost) triple as much concern about social rejection and discrimination, compared to personnel who intended to seek treatment. Stigma-related concerns, however, were only significantly associated with treatment-seeking intentions, not actual decisions. Previous studies, both in civilian and military populations, have reported that even though stigma is reported by many as a barrier to seeking treatment, it may not be significantly associated with actual treatment seeking (Jennings et al., 2015; Sharp et al., 2015). This could be explained by military personnel's tendency to seek treatment at a crisis point (Bogaers et al., 2020; Murphy et al., 2014). If symptoms are very strong and undeniable, the need for professional help is stronger than the concern about stigma. However, as the current study was cross-sectional, future research should further examine this relationship longitudinally. In this way, it could be examined whether personnel who are concerned about stigma wait longer to seek treatment compared to those who are not.

As stigma concerns were prevalent and associated with intentions not to seek treatment, destigmatising interventions could facilitate early treatment seeking. For instance, actual discrimination and negative career consequences should be targeted at a policy level. Additionally, supervisors should receive training to understand and support the mental health needs of employees, as this has been found to be associated with non-stigmatising attitudes (Gayed et al., 2018). Such training is currently being developed and implemented in the Dutch military. Finally, destigmatising interventions targeting the general population could also lower public stigma surrounding mental illness (Corrigan et al., 2012). Together, these adaptations will make it easier for personnel to seek treatment at an early stage, thereby improving sustainable employment and well-being at work, for those with mental illness (van Beukering et al., 2021).

4.3. Social encouragement

Treatment seekers were almost five times as likely to report that advice from others had an influence on their decision and a quarter of personnel who had sought treatment indicate that they were sent to seek care by others. Our finding was supported by another study (in the Dutch military) that identified the importance of social encouragement to facilitate treatment seeking (Bogaers et al., 2020). Additionally, peer support was found to be important in earlier research (Coleman et al., 2017). Peer-to-peer programmes can be used to provide treatment-seeking advice and are currently being implemented in the Dutch military (Greden et al., 2010). Furthermore, wanting to be an example to others is important for treatment-seeking intentions and is not found in previous research. Involving personnel who have sought treatment, in peer-to-peer programmes would allow them to be examples to others and thereby help them seek treatment. Additionally, they could speak at more general military events to target those who could benefit from treatment but have not yet sought treatment and are not in peer-to-peer programmes.

The military is known for high social cohesion, making the social aspect of seeking treatment important (Black et al., 2019). On the one hand, receiving advice from others facilitates treatment seeking; on the other hand, there is also fear of social rejection due to treatment-seeking behaviour. Interventions that increase social support could eliminate fears of social rejection. Previous research also indicated that social support is associated with treatment-seeking behaviours (Black et al., 2019). A way of targeting social support would be through unit cohesion. Lower unit cohesion was associated with intentions to not seek treatment. Increasing unit cohesion could increase social support, thereby dispelling fears of social rejection and increasing early

treatment seeking. Previously, higher unit cohesion has been associated with lower stigma (Jones et al., 2018) and protection against developing mental illness (Campbell-Sills et al., 2020), making unit cohesion important for both selective and indicated prevention. However, previous research has revealed a tendency for personnel to provide help within the group, instead of advising someone to seek treatment (Bogaers et al., 2020), which could be strengthened by higher unit cohesion. Training on mental illness in the military should therefore include information on the importance of professional treatment and explain that sometimes the best way to help colleagues is to advise them to seek professional treatment.

It should be noted that seeking treatment and intentions to seek treatment were high in this study, especially compared to other studies on the military (Sharp et al., 2015). This could, partly, be due to a self-selection bias and the sample including personnel with severe symptoms, as discussed in the Strengths and limitations section. However, it also suggests that steps taken in the Dutch military to destigmatise mental illness and offer support, such as supervisor training and peer-to-peer programs, might already be successful, which is very encouraging.

4.4. Earlier experiences

Having a positive earlier experience with seeking treatment is associated with higher treatment-seeking intentions. Thus, ensuring high quality (general) health care could facilitate earlier treatment seeking for mental illness. Interestingly, having seen the positive experiences of others was positively associated with not seeking treatment for personnel with mental illness. Previous research has mainly focused on respondents' previous experiences, not on the experiences of others (Hom et al., 2017). It is possibly the experiences seen were those of colleagues who were seen as outsiders. Perhaps, personnel did not want to be associated with them, and thus did not seek treatment. However, as this effect was surprising and the sample of those not seeking treatment was small, future research should further examine this.

4.5. Strengths and limitations

The first strength of this study is that it included personnel with mental illness who had not sought treatment; thus, providing insight into interventions. Second, it included both personnel with and without mental illness, thereby providing insights from personnel who may develop mental illness in the future.

The sample was not representative of the entire military, as personnel were selected based on earlier mental illness scores. This also caused the sample to include only personnel who had been deployed. As they have had training on mental illness related to deployment, this group might have more positive attitudes towards seeking treatment compared to those who have not been deployed. In addition, despite stratification, the current study included a sample of older, highly educated, and higher-ranking personnel. Comparisons showed that lower ranking and less educated personnel were less likely to complete the questionnaire once started, and most abandoned the process during the mental health questions. Perhaps these questions were difficult to answer. There might also be a bias as those who have sought treatment may be more inclined to participate in this type of study. Additionally, those with mental illness reported high symptom severity, making it more likely that they had to seek treatment, leading to the underrepresentation of personnel with mild symptoms and those who have not sought help. This may have caused an underestimation of the associations, as the effects were mainly driven by symptom severity. To minimise the effects of a small sample size, a correction was used during the analysis. Finally, as this study was cross-sectional, further longitudinal research is needed to examine causality in relationships.

4.6. Implications

To facilitate early treatment seeking, and thereby prevention, interventions should align with a high preference for self-management and should not focus on increasing treatment effectiveness beliefs, but on decreasing stigma. Social encouragement can facilitate, while fear of social rejection can be a barrier to seeking treatment; supervisor and peer-to-peer training is needed, as it can both decrease stigma and increase social encouragement (Gayed et al., 2018; Greden et al., 2010). Finally, a clear indication of where to seek treatment at a discrete location, and with professionals with military experience, should be provided. Future research should further examine treatment seeking, longitudinally, to examine which factors, such as stigma, affect the various phases of symptom development to better understand treatment seeking.

Author contributions

R.I. Bogaers: As the PhD student on the project, R.I. Bogaers was involved in all aspects of the study. **S.G. Geuze:** Was involved by advising R.I. Bogaers during the formulating of research question(s) and designing the study. Also, he provided multiple rounds of feedback on the manuscript of the paper. **N. Greenberg:** Was involved by advising R. I. Bogaers during designing the study and provided two critical rounds of feedback on the manuscript of the paper. **F.R.M. Leijten:** Was involved by advising R.I. Bogaers during the formulating of research question(s) and designing the study and provided two critical rounds of feedback on the manuscript of the paper. **P.K. Varis:** Was involved by advising R.I. Bogaers during the formulating of research question(s) and designing the study and provided one critical round of feedback on the manuscript of the paper. **J. van Weeghel:** Was involved by advising R.I. Bogaers during the formulating of research question(s) and designing the study. Also, he provided multiple rounds of feedback on the manuscript of the paper. **H. van de Mheen:** Was involved by advising R.I. Bogaers during the formulating of research question(s) and designing the study and provided two critical rounds of feedback on the manuscript of the paper. **A.D. Rozema:** Was involved by advising R.I. Bogaers during the formulating of research question(s) and designing the study and provided two critical rounds of feedback on the manuscript of the paper. **E. P.M. Brouwers:** Is project leader who wrote the research proposal. Was involved by advising R.I. Bogaers during the formulating of research question(s) and designing the study. Provided multiple rounds of critical feedback on the manuscript of the paper.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jpsychires.2022.01.028>.

Appendix

Appendix A

Measures used to assess current mental illness and substance abuse.

Scale	Information	Cut-off score used	References
The hospital anxiety and depression scale (HADS).	A 14-item scale measuring anxiety and depression.	A cut-off score of >8 was used for depression and anxiety, as recommended by earlier research.	(14), (36).
PTSD checklist for the DSM-5 (PCL-5)	A 20-item scale measuring posttraumatic stress disorder symptoms. Participants received a question screening whether they had experienced extremely stressful events (examples were provided), and if yes, they received the full PCL-5.	A cut-off of >33 was used as an indication of PTSD, following the guidelines.	(15)
ASSIST-LITE	Measure to assess a wide range of substance (ab)use. This questionnaire consists of 6 items, one per substance, and 2–3 follow up questions in case a substance is used by the participant in the past 3 months.	A cut-off of >=2 was used for all substances except for alcohol, where the cut-off was >=3, following the user manual.	(16)
AUDIT-C	A 3-item scale, to assess alcohol abuse.	A cut-off of >=8 was used, as recommended for military population.	(17), (37)

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Data availability

The data that support the findings of this study are available from the corresponding author, R.I. Bogaers, upon reasonable request.

Declaration of competing interest

R.I. Bogaers reports grants from The Dutch Ministry of Defence, during the conduct of the study. **Dr. Geuze** has nothing to disclose. **Prof. Greenberg** is the Royal College of Psychiatrists Lead for Trauma and the Military; however, all views expressed are his own. **Dr. Leijten** has nothing to disclose. **Dr. Varis** reports grants from The Dutch Ministry of Defence, during the conduct of the study. **Prof. van Weeghel** reports grants from The Ministry of Defence, during the conduct of the study. **Prof. van de Mheen** reports grants from Dutch Ministry of Defence, during the conduct of the study. **Dr. Rozema** reports grants from The Dutch Ministry of Defence, during the conduct of the study. **Prof. Brouwers** reports grants from The Dutch Ministry of Defence, during the conduct of the study; other from the Netherlands School of Public and Occupational Health, the Occupational Psychologists’ organisation As-cender, the occupational Healthcare provider Humantotalcare and the Employer network Transvorm, outside the submitted work.

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Appendix B

Mental illness and substance abuse scores separated by treatment seeking decisions or intentions.

Military personnel who indicated having (had) mental illness	Total		Treatment seeking			No treatment seeking		
	N	%	N	%/total	%/treatment seekers	N	%/total	%/non-treatment seekers
	324	36.9	294	90.7	100	30	9.3	100.0
Type of mental illness as reported by military personnel themselves (past and/or current)								
Anxiety (incl. OCD)	111	34.3	104	93.7	35.4	7	6.3	23.3
Depression (incl. manic + bipolar)	146	45.1	134	91.8	45.6	12	8.2	40.0
Burn-out	176	54.3	166	94.3	56.5	10	5.7	33.3
Stress	260	80.3	240	92.3	81.6	20	7.7	66.7
Exhaustion	205	63.3	189	92.2	64.3	16	7.8	53.3
PTSD	55	17.0	53	96.4	18.0	2	3.6	6.7
Psychotic disorders	3	.9	3	100.0	1.0	0	0	0
Personality disorder	77	23.8	71	92.2	24.2	6	7.8	20.0
Autism	16	5.0	15	93.8	5.1	1	6.3	3.3
ADHD	34	10.5	34	100.0	11.6	0	0	0
Eating disorder	10	3.1	9	90.0	3.1	1	10	3.3
Addiction	56	17.3	49	87.5	16.7	7	12.5	23.3
Current type of mental illness based on measures of mental health								
HADS_depression	59	18.2	54	91.5	18.4	5	8.5	16.7
HADS_anxiety	65	20.1	61	93.9	20.8	4	6.2	13.3
Assist_lite_tobacco	48	14.8	46	95.8	15.6	2	4.2	6.7
Assist_lite_alcohol	50	15.4	43	86.0	14.6	7	14.0	23.3
Assist_lite_cannabis	1	.3	1	100.0	0.3	0	0.0	0.0
Assist_lite_amfetamin	2	.6	2	100.0	0.7	0	0.0	0.0
Assist_lite_sleepdrugs	8	2.5	8	100.0	2.7	0	0.0	0.0
Assist_lite_streetdrugs	0	0.0	0	0.0	0.0	0	0.0	0.0
Audit_C	13	4.0	11	84.6	3.7	2	15.4	6.7
PCL-5 score	19	5.9	19	100.0	6.5	0	0.0	0.0
Military personnel who indicated not having (had) mental illness								
	Total		Intention to seek treatment			Intention to not seek treatment		
	N	%	N	%/total	%/treatment seekers	N	%/total	%/non-treatment seekers
	554	63.1	460	83.0	100	94	17	100
Current type of mental illness based on measures of mental health								
HADS_depression	18	3.3	9	50.0	2.0	9	50.0	9.6
HADS_anxiety	14	2.5	9	64.3	2.0	5	35.7	5.3
Assist_lite_tobacco	79	14.3	68	86.1	14.8	11	13.9	11.7
Assist_lite_alcohol	38	6.9	33	86.8	7.2	5	13.2	5.3
Assist_lite_cannabis	3	.5	3	100.0	.7	0	0.0	0.0
Assist_lite_amfetamin	0	0.0	0	0.0	0.0	0	0.0	0.0
Assist_lite_sleepdrugs	2	.4	2	100.0	.4	0	0.0	0.0
Assist_lite_streetdrugs	0	0.0	0	0.0	0.0	0	0.0	0.0
Audit_C	19	3.4	14	73.7	3.0	5	26.3	5.3
PCL-5 score	2	.4	2	100.0	.4	0	0.0	0.0

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