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Psychological Predictors of Alcohol Misuse in Wartime Military Personnel

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Abstract

The study aimed to identify psychological characteristics associated with susceptibility to alcohol abuse and to analyze the heterogeneity of psychological profiles among military personnel who commit alcohol-related incidents while performing their official duties. The study was conducted between 2022 and 2025, and the respondents were military personnel from the Ukrainian security and defense sector. The total sample consisted of 1,760 participants, including 950 military personnel assigned to a control group characterized by normative behavior and the absence of alcohol-related incidents, and 810 military personnel who had been subject to disciplinary or administrative responsibility for offenses committed while intoxicated. Within the Case Group, several psychologically distinct subgroups were identified, exhibiting varying levels of adaptive potential, self-regulation, motivational characteristics, and resilience to combat-related stress. The results revealed substantial differences between the Control and Case groups. Military personnel without alcohol-related incidents showed a more balanced psychological profile, higher levels of self-regulation, adaptive resources, and intrinsically driven professional motivation. In contrast, the group of military personnel with alcohol-related incidents showed reduced adaptive potential, impaired self-regulation mechanisms, motivational disorganization, and increased emotional tension in the context of accumulated combat stress. The study's findings highlight the heterogeneity of the psychological pathways leading to alcohol-related behavior in wartime, confirming the multidimensionality of the psychological determinants of alcohol-related incidents in combat military personnel. The results support the conclusion that alcohol-related incidents in the military context should not be considered a uniform or merely disciplinary phenomenon, requiring psychological analysis and specific psychological support measures. They also allow for discussion of the practical importance of the study, its possible application to the development of programs for the psychological prevention of addictive behaviors, the promotion of self-regulation, and the maintenance of the psychological resilience of military personnel during prolonged wars.
Key words: military personnel, war, alcohol-related incidents, addictive behavior, self-regulation, adaptive potential, combat stress, psychological resilience.

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Novelty and Significance

What is already known about the topic?

- The risk of problematic alcohol use in military personnel increases with a greater professional and psychological workload.
- Alcohol-related incidents are associated with stress intensity, impaired emotional regulation, reduced adaptive potential, post-traumatic stress symptoms, and levels of psychological resilience and social support.

What this paper adds?

- Alcohol-related incidents have a multifactorial psychological determination associated with cumulative stress and the gradual depletion of psychological regulation.
- The study confirms the psychological heterogeneity of military personnel involved in alcohol-related incidents.
- Prevention and correction of alcohol-related incidents should be designed taking into account the underlying psychological causes of their occurrence.

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Prolonged war, as a socio-political, organizational, and psychological context, substantially transforms the conditions of military service and alters the nature of the psycho-emotional demands faced by military personnel. Unlike localized or short-term armed conflicts, prolonged warfare creates a chronic high-stress environment characterized by a persistent threat to life, information overload, personnel losses, disruption of social ties, limited opportunities for psychological recovery, enduring disturbances of sleep and rest patterns, and the necessity of sustained functioning under conditions of continuous mobilization readiness. International research consistently demonstrates that it is the cumulative nature of wartime stress, rather than isolated traumatic events, that exerts the most significant impact on the psychological functioning of military personnel (Hoge *et alii*, 2004; Adler, Britt, Castro, McGurk, & Bliese, 2011; Castro, Kintzle, Hassan & Chicas, 2014).

The impact of these factors extends not only to individuals directly involved in combat operations but also to those serving under wartime conditions without actual combat contact. Studies addressing so-called deployment-related stress indicate that presence in a zone of potential threat, prolonged anticipation of combat engagement, uncertainty about the future, and limited control over unfolding events may generate levels of psycho-emotional strain comparable to those associated with direct combat exposure (Adler, Castro, & McGurk, 2009; Milliken, Auchterlonie, & Hoge, 2007). In this context, the very structure of military service during wartime constitutes a stressogenic environment that affects processes of psychological adaptation regardless of an individual's formal status of participation in combat operations.

One of the significant consequences of prolonged wartime stress exposure is an increased risk of maladaptive forms of behavior, particularly alcohol-related incidents, including being on duty while intoxicated, consuming alcohol during the performance of official duties, violations of military discipline, failure to comply with or improper execution of orders, conflictual and aggressive behavior, negligent handling of weapons, driving vehicles under the influence of alcohol, and related misconduct. In contemporary international scientific literature, alcohol use in wartime conditions is conceptualized not merely as an individual habit or a disciplinary offense, but as a behavioral response to cumulative stress developed over the course of military service, reflecting disruptions in psychological regulation mechanisms (Jacobson *et alii*, 2008; Bray, Brown, & Williams, 2013; Ames & Cunradi, 2004). Under such conditions, alcohol often functions as a rapid but ineffective means of tension reduction, a form of emotional "anesthesia", or a temporary restoration of subjective control over one's psychological state.

Large-scale studies conducted among US military personnel have shown that following periods of deployment in armed conflict settings, the prevalence of episodic heavy alcohol consumption and alcohol-related problems increases substantially, with these changes potentially persisting for extended periods after return to permanent duty stations (Jacobson et alii, 2008; Hooper *et alii*, 2008). Importantly, these effects were observed not only among military personnel with intensive combat experience, but also among individuals whose exposure to combat was limited or indirect, underscoring the role of the broader wartime context.

Subsequent studies have confirmed that the risk of problematic alcohol use increases during prolonged wartime service even in the absence of direct involvement in combat engagements. Bray *et alii* (2013) demonstrated that tendencies toward excessive alcohol consumption and alcohol-related problems intensify during periods of active hostilities at the level of the military service system. Similar findings were reported by Ramchand *et alii* (2011), who emphasized that it is the chronic nature of service-related stress, rather than isolated combat episodes, that constitutes the key factor in the development of risky patterns of alcohol-related behavior.

Attention in international research has been devoted to the analysis of qualitative characteristics of lived experience. Wilk *et alii* (2010) showed that alcohol misuse following deployments is associated with the intensity of combat exposures, including experiences of direct threat to life, participation in extreme events, and high levels of emotional strain. At the same time, the authors emphasized that significant predictors of alcohol-related problems also include chronic service-related stressors, such as sleep disturbances, prolonged alterations in duty schedules, and a perceived lack of control over events. Similar conclusions were reported in the studies by Rona *et alii* (2007) and Sundin, Fear, Iversen, Rona, & Wessely (2010), which emphasize the role of cumulative burden and the duration of stress exposure.

European studies further corroborate these patterns. Among personnel of the United Kingdom Armed Forces, excessive alcohol consumption has been found to be associated not only with participation in combat operations, but also with overall levels of service-related stress, younger age, and lower military rank (Fear *et alii*, 2007). The authors note that military personnel at early stages of their military careers or undergoing intensive adaptation to the military role demonstrate a higher propensity for risky forms of behavior, regardless of actual participation in combat operations. In the context of prolonged war, these factors may be further intensified by mass mobilization, the rapid integration of large numbers of individuals into the military system, and limited time available for the development of stable adaptive mechanisms.

A substantial contribution to understanding this issue has been made by longitudinal studies demonstrating the existence of distinct trajectories of alcohol-related behavior following the onset or intensification of hostilities. Milliken *et alii* (2007) demonstrated that among some military personnel alcohol consumption increases and remains elevated over extended periods, among others it is transient in nature, while in certain individuals no substantial changes are observed. Similar findings were reported by Fink *et alii* (2016) and Vogt *et alii* (2013), who emphasized the heterogeneity of psychological responses to wartime conditions and the limitations of approaches based exclusively on average indicators.

An important aspect of the problem's relevance lies in the co-occurrence of alcohol-related incidents with other forms of psychological vulnerability. International studies demonstrate a close association between problematic alcohol use, depressive symptoms, emotional dysregulation, and elevated suicide risk (Kintzle, Barr, Corletto, & Castro, 2018). Meta-analytic research further confirms that acute alcohol consumption substantially increases the likelihood of suicidal behavior regardless of pre-existing mental disorders (Borges *et alii*, 2017; Darvishi, Farhadi, Haghtalab, & Poorolajal, 2015). In the wartime context, these associations become particularly hazardous due to access to weapons, heightened responsibility, and the potentially fatal consequences of impulsive actions.

At the same time, despite the substantial body of international research, existing studies often exhibit limitations associated with a primary focus either on direct combat participants or on general prevalence indicators of alcohol-related problems, without a detailed analysis of the psychological heterogeneity of military personnel serving under wartime conditions. As a result, the psychological mechanisms underlying alcohol-related incidents among military personnel who have participated in combat operations and have been exposed to prolonged wartime stress remain insufficiently examined, as does the role of individual adaptive resources, motivation, and self-regulation (Castro & Adler, 2011).

Considering this, conducting research aimed at a comprehensive analysis of the psychological characteristics of military personnel serving under conditions of prolonged war is both timely and highly relevant. Such an approach makes it possible to move

beyond simplified interpretations of alcohol-related incidents as a homogeneous or purely behavioral phenomenon, to account for the diversity of individual and professional service experiences, and to identify both shared and specific psychological mechanisms of maladaptation that emerge under the influence of the wartime environment. The findings may provide a scientific basis for the development of differentiated preventive and corrective interventions tailored to the actual psychological needs of military personnel during wartime, considering varying levels of stress exposure, adaptive resources, and professional experience.

Method

Participants

The study was conducted between 2022 and 2025 and included 1,760 servicemen of the National Guard of Ukraine. The sample was formed in accordance with a case-control design without experimental intervention. Group 1 (comparison group) comprised 950 servicemen demonstrating normative behavior and no history of alcohol-related offenses. Group 2 (case group) included 810 servicemen who had been subjected to disciplinary or administrative liability for offenses committed while intoxicated.

Participants were recruited using a purposive sampling strategy within military units of the National Guard of Ukraine by the researchers, based on predefined inclusion criteria specifying the presence or absence of documented alcohol-related incidents (i.e., disciplinary or administrative offenses associated with alcohol use), thereby precluding self-selection. No financial or non-financial compensation was provided; participation involved neither incentives nor sanctions and had no implications for servicemen's duty performance, evaluation outcomes, or career advancement.

The sample included enlisted personnel, non-commissioned officers, and officers with varying lengths of military service. Socio-demographic characteristics considered in the analysis included military rank, length of service, marital status, and combat experience. Group 1 was characterized by a predominance of enlisted personnel (62.0%) and non-commissioned officers (28.5%), whereas junior and senior officers accounted for 8.7% and 0.8%, respectively. Most participants had up to three years of service (68.4%), 22.6% had 4-10 years, and 9.0% had more than 10 years. In terms of marital status, 71.3% were unmarried, 24.9% were married, and 3.8% were divorced. Combat experience was reported by 38.2% of participants.

Group 2 demonstrated greater heterogeneity: enlisted personnel accounted for 50.32%, non-commissioned officers for 38.71%, junior officers for 10.32%, and senior officers for 0.65%. Regarding length of service, 53.55% had up to three years, 29.68% had 4-10 years, and 16.77% had more than 10 years. Unmarried or divorced participants comprised 66.45% of the group. Combat experience was reported by 50.32% of participants.

To further examine heterogeneity within the case group, subgroups 2A, 2B, and 2C were identified. Subgroup 2A included two contrasting categories of servicemen: approximately 60% were enlisted personnel with up to three years of service (predominantly unmarried), whereas about 40% had extensive service experience (10-25 years) and combat experience; overall, approximately half had combatant status and a history of divorce. Subgroup 2B represented an intermediate socio-demographic profile (44.8% enlisted personnel, 42.1% non-commissioned officers, 12.3% officers; 58.1% with combat experience). Subgroup 2C was the most homogeneous: all participants (100%) were enlisted personnel with 1–2 years of service and unmarried; 25% had combat experience.

Design

The study employed a non-experimental observational case-control design, as it examined naturally occurring alcohol-related incidents without manipulation of variables.

The independent variable was group membership (case vs. comparison group), while the dependent variables were psychological characteristics assessed using standardized instruments.

Instruments and Measures

A battery instruments was used to assess personality traits, adaptive capacity, emotional-volitional characteristics, and motivational factors.

Determination of the Type of Accentuation of Character Traits and Temperament (DTACTT; Schmieschek, 1970). DTACTT methodology was employed to assess accentuated personality traits based on the conceptual framework of Karl Leonhard (1972). The questionnaire consists of 88 dichotomous items with a "yes/no" response format, allowing for the identification of ten types of accentuations: hyperthymic, dysthymic, cyclothymic, demonstrative, pedantic, stuck, anxious and timid, emotive, exalted, and unbalanced. The instrument's structure includes both directly worded and reverse-coded statements, which enhances measurement accuracy. Data processing involves calculating total scores for each scale, followed by the interpretation of accentuation levels. Example item: "Do you often feel an increased need for activity and communication?". According to psychodiagnostics studies (Petrescu, 2017; Schmieschek, 1970), the internal consistency of the scale's ranges from $\alpha \approx$ 0.60 to 0.80, while construct validity is supported by concordance with clinical-psychological assessments (Leonhard, 1972; Lichko, 1977; Messick, 1989).

Questionnaire of Suicidal Risk (QSR; Shmelev, 1992). QSR was utilized for a comprehensive assessment of suicidal risk, emotional tension, and coping behavior characteristics. The instrument comprises a system of scales aimed at identifying autoaggressive tendencies, levels of frustration, emotional instability, and indicators of psychological maladjustment. The response format is based on a 5-point Likert-type scale, allowing for the quantitative evaluation of the intensity of the respective states. The questionnaire includes both directly keyed and reverse-coded items, which reduces the influence of socially desirable responding. Data processing involves calculating scores for individual scales, followed by the determination of an integrated level of risk. Example item: "Sometimes I feel that my life has lost its meaning". According to the author's data (Shmelev, 1992), internal consistency indices exceed α= 0.70, while validity has been confirmed in samples of Ukrainian military personnel (Prykhodko et alii, 2020a; 2021). However, the international validation of the psychometric properties of this instrument remains limited and insufficiently explored.

Sixteen Personality Factor Questionnaire (16PF; Cattell, Cattell, & Cattell, 1993). 16PF was used for a multidimensional assessment of personality structure based on a factor-analytic approach. The questionnaire consists of 185 items with a three-option forced-choice response format and enables the evaluation of 16 primary personality factors. In accordance with the table, the following factors and their abbreviations are included: A- Introversion/Fellowship, B- Low/High Intellect, C- Emotional Instability/Stability, E- Subordination-Dominance, F- Restraint/Expressivity, G- Low/High Normativity, H- Timidity (Fearfulness)/Bravery, I- Toughness/Sensitivity, L- Credulity/Suspicion, M- Practicality/Reverie, N- Straightforwardness/Diplomacy, O- Calmness/Anxiety, Q1- Conservatism/Radicalism, Q2- Conformity/Non-conformity, Q3- Low/High Selfcontrol, and Q4- Relaxation/Tension. Additionally, the questionnaire includes an auxiliary scale: Md- Low/High Self-esteem. Example item: "I prefer to work independently rather than rely on others". Some items are reverse-coded, and data processing is carried out according to standardized procedures using normative scales. According to psychometric studies (Cattell *et alii*, 1993; Conn & Rieke, 1994; Russell & Karol, 2002), the questionnaire demonstrates satisfactory to high reliability, with internal consistency

coefficients typically ranging from $\alpha \approx 0.70$ to 0.85 and test-retest reliability from $r \approx 0.70$ to 0.90, while construct validity has been supported by extensive factor-analytic research across diverse samples (Boyle, Matthews, & Saklofske, 2016).

Professional Selection Motivation Questionnaire (PSMQ, Moskalenko, Kobzin, & Starodubtsev, as cited by Vorobyova *et alii*, 2016). PSMQ was used to assess motivational factors determining the choice of a military profession. The structure of the instrument includes scales reflecting internal motivation, external motivation, socio-normative motives, and pragmatic motives of professional choice. The response format is a 5-point Likert scale, allowing respondents to indicate the degree of agreement with each statement. Both directly keyed and reverse-coded items are included. Data processing involves calculating mean or total scores for each scale. Example item: "I chose the military profession because it allows me to realize my personal potential". The questionnaire has been applied in empirical research, including studies conducted on Ukrainian samples (Matsegora, Prykhodko, Vorobyova, Horelyshev, & Kazianina, 2014; Kolesnichenko *et alii*, 2021; Prykhodko *et alii*, 2022; Matsegora *et alii*, 2022), and its use has been documented in several scientific publications. According to the author's data (Moskalenko *et alii*, as cited by Vorobyova *et alii*, 2016), the internal consistency indices are $\alpha \approx 0.75$. However, the international validation of the psychometric properties of this instrument remains limited and insufficiently explored.

Self-Esteem Structures of Temperament Questionnaire (SESTQ, Smirnov, as cited in Vorobyova *et alii*, 2016). The SESTQ was used to assess basic temperament characteristics through self-report. The questionnaire consists of 48 dichotomous items with "yes/no" responses and allows for the evaluation of activity level, emotional excitability, stability of mental processes, and reactivity. The structure of the questionnaire includes reverse-coded items. Data processing involves calculating scores for the respective scales. Example item: "Do you tend to react quickly to unexpected events?" The questionnaire has been applied in empirical research, including studies conducted on Ukrainian samples (Matsegora *et alii*, 2014; Prykhodko *et alii*, 2022), and its use has been documented in a number of scientific publications, including those published in international journals. According to the author's data (Smirnov, as cited by Vorobyova *et alii*, 2016), the internal consistency indices are $\alpha \approx 0.70$ to 0.80. However, the international validation of the psychometric properties of this instrument remains limited and insufficiently explored.

Multilevel Personality Adaptability Questionnaire (MLO; Maklakov & Chermyanin, 2006). MLO was used to assess the adaptive potential of the individual and psychological resilience. The questionnaire consists of 165 dichotomous ("yes/no") items and includes scales of adaptive potential, neuropsychological resilience, communicative abilities, moral normativity, and behavioral regulation. The instrument incorporates both directly keyed and reverse-coded items. Data processing involves calculating scores for each scale. Example item: "Do you easily adapt to new social conditions?" According to the authors (Maklakov & Chermyanin, 2006), the internal consistency of the scales' ranges from $\alpha \approx 0.70$ to 0.85, while validity has been confirmed in samples of Ukrainian military personnel (Prykhodko *et alii*, 2020b).

Procedure

Psychological assessment of National Guard of Ukraine servicemen was conducted under standardized conditions in both individual and group formats over a period of 3-5 days in service facilities, following a unified protocol to minimize the influence of external and situational factors. All participants completed the same set of diagnostics instruments under standardized instructions and administration conditions; no financial compensation was provided for participation. Prior to data collection, a brief information session was conducted. Participants were informed about the study's purpose, procedures, voluntary nature of participation, and confidentiality assurances. Participants were then given a standardized instruction: "You will be asked to respond to a series of questions. Please answer honestly, selecting the options that best reflect your typical experience. Participation is voluntary, and your responses will remain confidential and used only in aggregated form". Following this, all participants provided informed consent.

The assessment session lasted approximately 60-90 minutes, with a short break provided if necessary to reduce fatigue. Group sessions included up to 20-25 participants, ensuring adequate procedural control. A researcher or trained psychologist was present throughout to monitor adherence to the protocol and provide technical clarification only, without influencing responses. Participants completed the questionnaires independently, without interaction. Upon completion, responses were checked for completeness; missing data could be completed at the participant's discretion. All procedures carried out in the study conformed to the ethical standards of the 1964 Helsinki Declaration and its later amendments. All participants have given informed consent for their data to be used in this research.

Data Analysis

Descriptive statistics, including means (M) and standard deviations (SD), were calculated. Inferential statistical analyses were conducted using a general linear model (univariate ANOVA) in SPSS (Version 22). In addition, cluster analysis was performed to identify homogeneous subgroups within the case group. Statistical significance levels were set at $p \leq .05$ and $p \leq .01$.

RESULTS

Tables 1 and 2 present the results of comparisons of character trait and temperament accentuation indicators among military personnel in Groups 1 and 2, as well as across the examined subgroups 2A, 2B, and 2C.

For hyperthymic accentuation, Group 1 (18.89±3.84) demonstrated significantly higher scores than Group 2 (16.92±4.16; $p < .01$), with Subgroups 2A (17.17±3.82) and 2B (17.07±4.10) showing intermediate values ($p < .01$) and Subgroup 2C the lowest (14.63±5.88; $p < .05$). A similar pattern was observed for the demonstrative type, with

Table 1. Indicators of character and temperament accentuations in military personnel who committed alcohol-related incidents compared with the control group (in standard points).

Scales	Group 1	Group 2	Group 2A	Group 2B	Group 2C
Hyperthymia	18.89±3.84	16.92±4.16	17.17±3.82	17.07±4.10	14.63±5.88
Stuck	11.71±2.62	11.16±2.64	11.67±2.50	11.05±2.62	12.75±3.37
Emotive	9.42±4.96	9.10±4.62	8.67±4.59	8.88±4.50	12.00±6.41
Pedantic	10.52±4.46	9.90±4.45	10.56±4.33	9.84±4.18	13.00±7.17
Anxious and Timid	3.45±3.75	3.50±4.07	4.67±5.37	3.05±3.56	7.88±4.52
Cyclothymia	9.26±3.24	9.21±3.35	10.33±3.12	8.88±3.02	13.88±4.79
Demonstrative	15.04±3.40	14.00±4.05	14.11±5.02	14.20±4.00	11.25±2.38
Unbalanced	6.09±3.89	5.86±4.09	7.50±4.96	5.24±3.46	12.38±3.74
Dysthymia	8.96±2.80	9.39±3.15	9.33±3.07	9.32±2.93	9.75±4.74
Exalted	11.21±3.32	10.18±4.40	9.67±3.65	9.93±4.35	14.25±5.50

Table 2. Indicators of significance differences in character and temperament accentuation between control and groups of military personnel who committed alcohol-related incidents (in standard points).

Scales	$t_{\text{group 1-group 2}}$	$t_{\text{group 1-group 2A}}$	$t_{\text{group 1-group 2B}}$	$t_{\text{group 1-group 2A}}$
Hyperthymia	5.39**	1.89	4.56**	2.05*
Stuck	2.33*	0.07	2.55*	0.87
Emotive	0.76	0.68	1.19	1.14
Pedantic	1.58	0.03	1.65^{0}	0.97
Anxious and Timid	0.15	0.96	1.13	2.76**
Cyclothymia	0.15	1.44	1.27	2.72**
Demonstrative	2.95**	0.78	2.17*	4.45**
Unbalanced	0.63	1.19	2.45*	4.72**
Dysthymia	1.54	0.51	1.24	0.47
Exalted	2.75**	1.78	3.09**	1.56

*Notes: *= p <.05; **= p <.01; ***= p <.001.*

higher values in Group 1 (15.04±3.40) compared to Group 2 (14.00±4.05; p <.01), intermediate values in Subgroups 2A (14.11±5.02) and 2B (14.20±4.00; p <.05), and the lowest scores in Subgroup 2C (11.25±2.38; p <.01).

For the stuck type, differences were minimal, with slightly higher values in Group 1 (11.71±2.62) compared to Group 2 (11.16±2.64; p <.05). Subgroups 2A (11.67±2.50) and 2B (11.05±2.62) showed comparable values, whereas Subgroup 2C showed a moderately higher score (12.75±3.37). Emotive (9.42±4.96; 9.10±4.62; 8.67±4.59; 8.88±4.50; 12.00±6.41) and pedantic (10.52±4.46; 9.90±4.45; 10.56±4.33; 9.84±4.18; 13.00±7.17) accentuations did not differ significantly across groups. For the anxious-fearful type, values were comparable in Group 1 (3.45±3.75), Group 2 (3.50±4.07), and Subgroup 2B (3.05±3.56), while higher scores were observed in Subgroup 2A (4.67±5.37) and particularly in Subgroup 2C (7.88±4.52; p <.01). A similar tendency was found for the cyclothymic type, where Subgroup 2C showed significantly higher values (13.88±4.79; p <.01) compared to Group 1 (9.26±3.24), Group 2 (9.21±3.35), Subgroup 2A (10.33±3.12), and Subgroup 2B (8.88±3.02). For the unbalanced type, Group 1 (6.09±3.89) and Group 2 (5.86±4.09) showed comparable values, whereas Subgroup 2C showed significantly higher scores (12.38±3.74; p <.01) compared to Subgroups 2A (7.50±4.96) and 2B (5.24±3.46). Dysthymic indicators remained stable across all groups (8.96±2.80/9.75±4.74), with no significative differences. For the exalted type, Group 1 (11.21±3.32) showed higher values than Group 2 (10.18±4.40; p <.01) and Subgroup 2B (9.93±4.35; p <.01), whereas Subgroup 2C showed the highest scores (14.25±5.50), although these differences were not statistically significant relative to Group 1.

The assessment of adaptive abilities in Groups 1 and 2, as well as in Subgroups 2A, 2B, and 2C, is presented in Tables 3 and 4.

Analysis of the validity scale indicated no significant differences between Group 1 (5.39±2.92) and Group 2 (5.57±2.87). However, Subgroup 2A showed significantly lower values (1.56±1.29; p <.01), whereas Subgroups 2B (6.07±2.56; p <.01) and 2C (4.50±1.20; p <.05) showed higher scores.

For adaptability, no differences were observed between Group 1 (27.84±9.91) and Group 2 (28.81±11.95). In contrast, significantly higher values were identified in Subgroup 2A (38.28±7.53; p <.01) and particularly in Subgroup 2C (59.00±5.40; p<.01), whereas Subgroup 2B showed lower scores (24.84±7.20; p <.01). Neuropsychological stability was comparable in Group 1 (12.01±6.14) and Group 2 (12.50±7.86). Subgroup 2A showed higher values (15.67±6.22; p <.05), Subgroup 2B lower values (10.33±4.77; p <.01), and Subgroup 2C markedly higher scores (33.00±4.14; p <.01). Communicativeness did not differ between Group 1 (8.96±3.34) and Group 2 (9.44±3.71). Higher levels

Table 3. Psychological personality-related adaptive abilities of military personnel who committed alcohol-related incidents compared with control group (in standard points).

Scales	Group 1	Group 2	Group 2A	Group 2B	Group 2C
Probability	5.39±2.92	5.57±2.87	1.56±1.29	6.07±2.56	4.50±1.20
Adaptivity	27.84±9.91	28.81±11.95	38.28±7.53	24.84±7.20	59.00±5.40
Neuropsychological resilience	12.01±6.14	12.50±7.86	15.67±6.22	10.33±4.77	33.00±4.14
Communication	8.96±3.34	9.44±3.71	12.72±2.24	8.35±2.63	17.38±3.58
Morality	6.87±2.69	6.87±2.69	9.89±2.17	6.16±2.38	8.63±1.19

Table 4. Indicators of the significance between control group and groups of military personnel who committed alcohol-related incidents (in standard points).

Scales	$t_{\text{group 1-group 2}}$	$t_{\text{group 1-group 2A}}$	$t_{\text{group 1-group 2B}}$	$t_{\text{group 1-group 2A}}$
Probability	0.71	11.78**	2.61**	2.04*
Adaptivity	0.94	5.75**	3.96**	16.00**
Neuropsychological resilience	0.73	2.46*	3.40**	14.15**
Communication	1.48	6.91**	2.22*	6.61**
Morality	0.00	5.79**	2.99**	4.05**

Notes: *= p <.05; **= p <.01; ***= p <.001.

were observed in Subgroup 2A (12.72±2.24; p <.01) and especially in Subgroup 2C (17.38±3.58; p <.01), whereas Subgroup 2B showed lower values (8.35±2.63; p <.05).

Morality scores were identical in Group 1 and Group 2 (6.87±2.69). Higher values were found in Subgroup 2A (9.89±2.17; p <.01) and Subgroup 2C (8.63±1.19; p <.01), while Subgroup 2B showed lower scores (6.16±2.38; p <.01).

The results presented in Tables 5 and 6 reflect indicators of professional choice motivation in Groups 1 and 2, as well as across the examined Subgroups 2A, 2B, and 2C.

In Group 1 pro-professional motives were significantly higher than in Group 2 and Subgroups 2A and 2B (p <.01), with no differences observed relative to Subgroup 2C. A similar pattern was identified for improvement motives, where Group 1 exceeded Group 2 and Subgroups 2A and 2B (p <.01; p <.05), while no differences were found in comparison with Subgroup 2C.

For independent professional choice, Group 1 showed higher scores than Group 2 and Subgroup 2B (p <.01), with no differences relative to Subgroups 2A and 2C.

Service prestige and romantic motives followed the same pattern, with higher values in Group 1 compared to Group 2 and Subgroups 2A and 2B (p <.01; p <.05), and no differences relative to Subgroup 2C.

Similarly, compensatory and antisocial motives were higher in Group 1 than in Group 2 and Subgroups 2A and 2B (p <.01), whereas no statistically significant differences were observed in comparison with Subgroup 2C.

Table 5. Psychological personality-related motivations for professional choice among military personnel who committed alcohol-related incidents compared with control group (in standard points).

Scales	Group 1	Group 2	Group 2A	Group 2B	Group 2C
Professional motives	23.27±2.67	20.97±5.36	19.22±6.00	21.12±5.40	20.75±5.12
Motives for improvement	21.21±2.87	18.86±4.97	17.94±5.40	19.03±4.88	18.50±7.15
Independent profession choice	20.45±3.14	19.06±5.16	19.50±5.52	19.09±5.04	16.63±7.65
Non-independent profession choice	12.51±4.84	12.21±5.01	10.89±5.11	12.25±5.06	12.63±5.01
Prestige Motives	20.32±3.04	18.03±4.76	18.06±4.63	17.93±4.95	18.38±4.21
Romantic motives	17.68±3.91	15.57±4.91	14.28±5.91	15.75±4.73	14.50±6.59
Compensatory motives	21.56±3.22	18.52±4.94	17.17±5.06	18.57±4.87	19.88±7.06
Antisocial motives	14.46±4.59	12.38±5.07	10.78±4.68	12.30±5.12	14.13±4.39

Table 6. Indicators of the significance between control group and groups of military personnel who committed alcohol-related incidents (in standard points).

Scales	$t_{\text{group 1-group 2}}$	$t_{\text{group 1-group 2A}}$	$t_{\text{group 1-group 2B}}$	$t_{\text{group 1-group 2A}}$
Professional motives	5.18**	2.86**	4.30**	1.39
Motives for improvement	5.67**	2.56*	4.78**	1.07
Independent profession choice	3.23**	0.73	2.88**	1.41
Non-independent profession choice	0.68	1.33	0.51	0.07
Prestige Motives	5.71**	2.06*	5.14**	1.30
Romantic motives	4.97**	2.43*	4.23**	1.36
Compensatory motives	7.31**	3.66**	6.50**	0.67
Antisocial motives	4.67**	3.29**	4.34**	0.21

Notes: *= p <.05; **= p <.01; ***= p <.001.

Tables 7 and 8 present a comparative characterization of personality trait indicators among military personnel in Groups 1 and 2, as well as across the examined Subgroups 2A, 2B, and 2C.

For the self-esteem factor (Md), no significant differences were observed between Group 1 (9.17±2.53), Group 2 (9.57±2.20), and Subgroup 2C (9.13±1.46). However, significantly lower values were identified in Subgroup 2A (7.50±1.95; p ≤.01), whereas Subgroup 2B showed higher scores (9.87±2.03; p ≤.01). For sociability (A), Group 1 (9.31±1.87) showed significantly higher values compared to Group 2 (8.72 ± 1.85; p ≤.01) and all subgroups (2A: 8.06±2.39; 2B: 8.89±1.70; 2C: 7.13±1.89; p ≤.05, p ≤.01).

A similar pattern was observed for intelligence (B), where Group 1 (4.21±1.46) showed higher scores than Group 2 (3.74±1.57; p ≤.01), and Subgroups 2A (3.39±1.38), 2B (3.84±1.58), and 2C (3.00±1.51; p ≤.05). For emotional stability (C), no statistically

Table 7. Psychological personality characteristics of military personnel who committed alcohol-related incidents compared with control group (in standard points).

Scales	Group 1	Group 2	Group 2A	Group 2B	Group 2C
Md (low-high self-esteem)	9.17±2.53	9.57±2.20	7.50±1.95	9.87±2.03	9.13±1.46
A (introversion-fellowship)	9.31±1.87	8.72±1.85	8.06±2.39	8.89±1.70	7.13±1.89
B (low-high intellect)	4.21±1.46	3.74±1.57	3.39±1.38	3.84±1.58	3.00±1.51
C (emotional instability-stability)	9.61±1.59	9.59±1.69	8.89±1.68	9.84±1.54	7.50±1.60
E (subordination-dominance)	6.18±2.07	5.88±1.73	5.39±1.42	5.89±1.71	6.38±2.77
F (restraint-expressivity)	5.57±1.87	5.40±1.90	5.00±2.17	5.39±1.89	6.00±1.77
G (low-high normativity)	8.52±1.95	8.42±1.94	8.72±1.90	8.39±1.99	8.38±1.19
H (timidity (fearfulness)-bravery)	8.56±1.79	8.41±1.87	8.50±1.92	8.57±1.79	7.38±2.20
I (toughness-sensitivity)	4.59±1.96	4.74±1.90	4.78±2.32	4.63±1.88	6.13±0.83
L (credulity-suspicion)	4.16±1.85	4.46±1.99	4.67±2.40	4.48±1.89	4.00±1.77
M (practicality-reverie)	4.44±2.07	5.14±1.81	5.28±2.32	5.02±1.70	6.00±1.85
N (straightforwardness-diplomacy)	5.22±1.89	5.35±1.78	5.78±1.66	5.25±1.80	6.63±1.92
O (calmness-anxiety)	4.04±2.48	3.93±2.20	4.56±2.41	3.72±2.11	5.75±0.71
Q1 (conservatism-radicalism)	6.31±2.24	6.12±2.06	5.28±2.37	6.30±2.01	5.50±1.77
Q2 (conformity-non-conformity)	3.97±1.88	4.61±1.80	5.39±1.79	4.50±1.68	5.50±2.39
Q3 (low-high self-control)	7.31±1.77	7.66±1.51	7.17±1.42	7.68±1.51	7.88±1.96
Q4 (relaxation-tension)	3.33±1.78	3.52±1.83	3.56±1.76	3.47±1.79	4.75±1.83

Table 8. Indicators of the significance between control group and groups of military personnel who committed alcohol-related incidents (in standard points).

Scales	$t_{\text{group 1-group 2}}$	$t_{\text{group 1-group 2A}}$	$t_{\text{group 1-group 2B}}$	$t_{\text{group 1-group 2A}}$
Md (low-high self-esteem)	1.94	3.56**	3.32**	0.09
A (introversion-fellowship)	3.59**	2.21*	2.50*	3.26**
B (low-high intellect)	3.40**	2.48*	2.35*	2.24*
C (emotional instability-stability)	0.12	1.79	1.56	3.69**
E (subordination-dominance)	1.86	2.29*	1.62	0.20
F (restraint-expressivity)	0.98	1.09	0.92	0.69
G (low-high normativity)	0.56	0.45	0.63	0.33
H (timidity (fearfulness)-bravery)	0.90	0.14	0.02	1.52
I (toughness-sensitivity)	0.88	0.35	0.24	5.05**
L (credulity-suspicion)	1.67	0.88	1.71	0.26
M (practicality-reverie)	4.20**	1.51	3.34**	2.36*
N (straightforwardness-diplomacy)	0.84	1.40	0.15	2.06*
O (calmness-anxiety)	0.54	0.90	1.47	6.38**
Q1 (conservatism-radicalism)	1.01	1.82	0.01	1.27
Q2 (conformity-non-conformity)	3.97**	3.32**	3.13**	1.80
Q3 (low-high self-control)	2.50*	0.41	2.43*	0.81
Q4 (relaxation-tension)	1.17	0.53	0.76	2.18*

Notes: *= $p < .05$; **= $p < .01$; ***= $p < .001$.

significant differences were found between Group 1 (9.61±1.59), Group 2 (9.59±1.69), and Subgroups 2A (8.89±1.68), and 2B (9.84±1.54). In contrast, Subgroup 2C showed significantly lower values (7.50±1.60; $p \leq .01$). For sensitivity (I), comparable values were observed across Group 1 (4.59±1.96), Group 2 (4.74±1.90), and Subgroups 2A (4.78±2.32) and 2B (4.63±1.88), whereas Subgroup 2C showed significantly higher scores (6.13±0.83; $p \leq .01$). For dreaminess (M), significantly higher values were identified in Group 2 (5.14±1.81; $p \leq .01$), Subgroup 2B (5.02±1.70; $p \leq .01$), and Subgroup 2C (6.00±1.85; $p \leq .05$) compared to Group 1 (4.44±2.07). For anxiety (O), no significant differences were observed between Group 1 (4.04±2.48), Group 2 (3.93±2.20), and Subgroups 2A (4.56±2.41) and 2B (3.72±2.11). However, Subgroup 2C showed significantly higher values (5.75±0.71; $p \leq .01$). For nonconformism (Q2), significantly higher scores were found in Group 2 (4.61±1.80; $p \leq .01$), Subgroup 2A (5.39±1.79; $p \leq .01$), and Subgroup 2B (4.50±1.68; $p \leq .01$) compared to Group 1 (3.97±1.88), whereas differences for Subgroup 2C (5.50±2.39) did not reach statistical significance. For self-control (Q3), Group 1 (7.31 ± 1.77) showed significantly lower values than Group 2 (7.66±1.51;

$p \leq .05$) and Subgroup 2B (7.68±1.51; $p \leq .05$), with no differences observed relative to Subgroups 2A (7.17±1.42), and 2C (7.88±1.96).

Finally, for tension (Q4), values were comparable across Group 1 (3.33±1.78), Group 2 (3.52±1.83), and Subgroups 2A (3.56±1.76) and 2B (3.47±1.79). Subgroup 2C showed significantly higher scores (4.75±1.83; $p \leq .05$).

Tables 9 and 10 present a comparative characterization of indicators of individual psychological temperament characteristics among military personnel in Groups 1 and 2, as well as across the examined Subgroups 2A, 2B, and 2C.

Analysis of the extraversion-introversion scale revealed no statistically significant differences between Group 1 (18.05±4.03) and Group 2 (17.31±4.25), nor between Subgroups 2A (16.44±3.65) and 2B (17.88±3.93). Although Subgroup 2C showed lower values (14.13±6.22), these differences were not statistically significant.

For the rigidity-plasticity scale, Group 1 (9.50±3.78) showed significantly higher values compared to Group 2 (8.44±3.96; $p \leq .01$) and Subgroup 2B (8.25±3.75; $p \leq .01$), whereas no significant differences were observed relative to Subgroups 2A (9.11±4.32) and 2C (10.50±2.39). For emotional excitability-balance, values were comparable across Group 1 (3.18±3.20), Group 2 (3.59±3.73), and Subgroups 2A (4.06±2.44) and 2B (3.06±3.18). In contrast, Subgroup 2C showed markedly higher scores (11.50±4.44; $p \leq .01$). Reaction rate did not differ significantly between Group 1 (12.79±3.57), Group 2 (12.43±3.66), Subgroup 2A (13.17±3.00), and Subgroup 2B (12.65±3.65). However, Subgroup 2C showed lower values (10.88±2.36; $p \leq .05$). For activity level, no differences were observed between Group 1 (18.87±5.01), Group 2 (19.10±5.68), Subgroup 2A (17.44±7.11), and Subgroup 2B (19.81±5.26), whereas Subgroup 2C showed significantly lower values (16.13±2.85; $p \leq .01$).

Finally, sincerity scores did not differ between Group 1 (7.56±5.07) and Group 2 (7.97±4.92). Subgroup 2A showed significantly higher values (13.00±3.40; $p \leq .01$), Subgroup 2C also showed elevated scores (10.63±4.31; $p \leq .05$), whereas Subgroup 2B (7.14±4.56) did not differ significantly.

Table 9. Indicators of temperament characteristics of military personnel who committed alcohol-related incidents compared with control group (in standard points).

Scales	Group 1	Group 2	Group 2A	Group 2B	Group 2C
Extraversion-introversion	18.05±4.03	17.31±4.25	16.44±3.65	17.88±3.93	14.13±6.22
Rigidity-flexibility	9.50±3.78	8.44±3.96	9.11±4.32	8.25±3.75	10.50±2.39
Emotional anxiety-poise	3.18±3.20	3.59±3.73	4.06±2.44	3.06±3.18	11.50±4.44
Reaction rate	12.79±3.57	12.43±3.66	13.17±3.00	12.65±3.65	10.88±2.36
Activity	18.87±5.01	19.10±5.68	17.44±7.11	19.81±5.26	16.13±2.85
Sincerity scale	7.56±5.07	7.97±4.92	13.00±3.40	7.14±4.56	10.63±4.31

Table 10. Indicators of differences between control group and groups of military personnel who committed alcohol-related incidents (in standard points).

Scales	$t_{\text{group 1-group 2}}$	$t_{\text{group 1-group 2A}}$	$t_{\text{group 1-group 2B}}$	$t_{\text{group 1-group 2A}}$
Extraversion-introversion	1.96	1.83	0.44	1.78
Rigidity-flexibility	3.02**	0.38	3.38**	1.17
Emotional anxiety-poise	1.27	1.50	0.38	5.29**
Reaction rate	1.09	0.53	0.39	2.26*
Activity	0.46	0.84	1.83	2.67**
Sincerity scale	0.93	6.59**	0.92	1.99*

Notes: *= $p < .05$; **= $p < .01$; ***= $p < .001$.

DISCUSSION

The present study revealed a clear differentiation of psychological characteristics among military personnel depending on their affiliation with Group 1, Group 2, and Subgroups 2A, 2B, and 2C. The identified differences encompass character accentuations, adaptive potential, motivational domains, personality traits, and temperament parameters. Taken together, these findings indicate a pronounced heterogeneity of psychological

profiles and point to the existence of distinct mechanisms of psychological regulation underlying alcohol-related incidents. This supports the view that alcohol-related behavior in military settings is not a unitary phenomenon but rather arises from multiple interacting factors, including individual predispositions and situational influences. This interpretation is consistent with previous research demonstrating that alcohol misuse among military personnel develops through diverse psychological pathways rather than a single causal mechanism (Bray *et alii*, 2013).

Military personnel in Group 1 were characterized by a relatively balanced and socially integrated psychological profile. This group demonstrated higher levels of emotional stability, self-regulation, and intrinsic professional motivation, along with more pronounced socio-communicative capacities. Such characteristics are widely recognized in the literature as protective factors against the development of maladaptive behaviors, including substance misuse. Longitudinal studies have shown that social support, internalized motivation for service, and effective coping strategies significantly reduce the likelihood of alcohol misuse under both combat and non-combat conditions (Jacobson *et alii*, 2008; Fear *et alii*, 2007). The present findings extend these observations to wartime conditions, suggesting that the preservation of these psychological resources plays a crucial role in maintaining normative behavior despite prolonged exposure to stress and life-threatening situations.

In contrast, military personnel in Group 2 demonstrated a less integrated and more variable psychological profile, characterized by reduced socio-communicative abilities, greater emotional instability, and diminished self-regulatory capacity. These features correspond to theoretical models of emotional dysregulation, according to which alcohol consumption may serve as a short-term mechanism for reducing psychological distress in the context of limited cognitive and behavioral control (Wilk *et alii*, 2010). This interpretation is further supported by evidence indicating that emotional exhaustion, difficulties in adaptation, and depletion of self-regulatory resources are associated with an increased risk of alcohol misuse among military personnel (Milliken *et alii*, 2007). Thus, alcohol use in this group can be conceptualized as a maladaptive coping strategy emerging in response to cumulative stress and insufficient regulatory resources.

The results also indicate that alcohol-related incidents were more frequently observed among lower-ranking military personnel. This pattern is consistent with findings reported in international studies, which attribute higher levels of risky alcohol use among lower-ranking servicemen to factors such as reduced social stability, limited access to institutional resources, and weaker identification with organizational norms (Bray *et alii*, 2013). These findings suggest that structural and hierarchical factors within the military environment may interact with individual psychological characteristics in shaping risk behavior.

An important contribution of the study is the confirmation of the internal heterogeneity of military personnel involved in alcohol-related incidents. The identification of distinct subgroups within Group 2 indicates that such behavior is associated with different dominant psychological mechanisms. In Subgroup 2A, the observed pattern suggests the presence of a normative-value conflict, which may arise during processes of secondary military socialization. Under wartime conditions, such conflicts may be intensified by uncertainty, role ambiguity, and discrepancies between personal values and institutional demands. In this context, alcohol use may function as a means of temporarily reducing internal tension associated with value dissonance, a mechanism that has been described in studies of military adaptation (Kintzle *et alii*, 2018).

Subgroup 2B is characterized by a combination of relatively preserved cognitive functioning and reduced motivational engagement. The findings suggest the presence

of identity-related difficulties, including a lack of clear professional orientation and a subjective sense of unrealized potential. Previous research indicates that weak professional identification and low motivational involvement are significant predictors of maladaptive behaviors, particularly among military personnel without extensive combat experience (Green, Beckham, Youssef, & Elbogen, 2014). In this subgroup, alcohol-related behavior may reflect compensatory mechanisms associated with dissatisfaction and unmet expectations.

The most vulnerable psychological profile was identified in Subgroup 2C, which demonstrated low adaptive capacity, reduced stress resilience, and heightened emotional reactivity. In this subgroup, alcohol appears to function as a short-term coping mechanism aimed at alleviating intense emotional distress, while simultaneously contributing to the development of more severe psychological outcomes. This pattern is consistent with empirical findings linking alcohol misuse to increased suicide risk and broader psychological vulnerability in military populations (Darvishi *et alii*, 2015). The presence of such characteristics underscores the importance of early identification and targeted intervention for individuals at heightened risk.

Overall, the findings of the study indicate that alcohol-related incidents in wartime conditions are determined by a complex interplay of psychological and situational factors. Prolonged exposure to combat stress, constant threat to life, cumulative losses, and sustained mobilization readiness create conditions under which adaptive regulatory mechanisms may become depleted. In such contexts, alcohol use may emerge as an accessible but maladaptive means of coping with emotional overload and psychological strain.

These results have important practical implications for the development of preventive and intervention strategies. The observed heterogeneity of psychological profiles suggests that uniform approaches to prevention are unlikely to be effective. Instead, differentiated strategies are required, taking into account the dominant mechanisms underlying maladaptation. Such strategies may include facilitating successful military socialization, reducing normative-value conflicts, strengthening professional identity and intrinsic motivation, and implementing systems for early detection of psychological vulnerability. Particular attention should be paid to the prevention of high-risk behaviors, including alcohol misuse and associated outcomes.

At the same time, several limitations of the present study should be acknowledged. The reliance on self-report measures may have introduced bias related to social desirability, particularly in the assessment of sensitive behaviors. The cross-sectional design limits the ability to establish causal relationships between psychological characteristics and alcohol-related incidents. In addition, the sample was restricted to military personnel within a specific national context, which may limit the generalizability of the findings to other military populations. Furthermore, the study did not account for variability in combat exposure, operational roles, or organizational factors, which may significantly influence both psychological functioning and patterns of alcohol use. Future research should address these limitations through longitudinal designs and the inclusion of broader contextual variables.

In conclusion, the present study expands current scientific understanding of the psychological determinants of alcohol-related incidents in wartime conditions. The results highlight the role of prolonged combat stress as a key contextual factor and demonstrate that alcohol-related behavior reflects distinct patterns of psychological maladaptation rather than isolated disciplinary violations. The identification of differentiated psychological profiles provides a foundation for the development of targeted interventions aimed at enhancing resilience, maintaining operational effectiveness, and ensuring the psychological well-being of military personnel under conditions of war.

References

Adler AB, Britt TW, Castro CA, McGurk D, & Bliese PD (2011). Effect of transition home from combat on risk-taking and health-related behaviors. *Journal of Traumatic Stress*, *24*, 381-389. Doi: 10.1002/jts.20665

Adler AB, Castro CA, & McGurk D (2009). Time-driven battlemind psychological debriefing: A group-level early intervention in combat. *Military Medicine*, *174*, 21-28. Doi: 10.7205/milmed-d-00-2208

Ames G, & Cunradi C (2004). Alcohol use and preventing alcohol-related problems among young adults in the military. *Alcohol Research & Health*, *28*, 252-257

Borges G, Bagge CL, Cherpitel CJ, Conner KR, Orozco R, & Rossow I (2017). A meta-analysis of acute use of alcohol and the risk of suicide attempt. *Psychological Medicine*, *47*, 949-957. Doi: 10.1017/S0033291716002841

Boyle GJ, Matthews G, & Saklofske DH (2016). *The SAGE Handbook of Personality Theory and Assessment*. London: Sage.

Bray RM, Brown JM, & Williams J (2013). Trends in binge and heavy drinking, alcohol-related problems, and combat exposure in the U.S. military. *Substance Use & Misuse*, *48*, 799-810. Doi: 10.3109/10826084.2013.796990

Castro C, & Adler A (2011). Reconceptualizing combat-related posttraumatic stress disorder as an occupational hazard. In *APA Handbook of Military Psychology*. Doi: 10.1037/12300-009

Castro C, Kintzle S, Hassan A & Chicas J (2014). The state of the American veteran: The Los Angeles County Veterans Study. *Research Report*. Doi:10.13140/RG.2.1.4268.7848

Cattell RB, Cattell AK, & Cattell HEP (1993). *Sixteen Personality Factor Questionnaire (5th Ed.)*. Champaign, IL: Institute for Personality and Ability Testing.

Conn SR & Rieke ML (1994). *The 16PF Fifth Edition technical manual*. Champaign, IL: Institute for Personality and Ability Testing.

Darvishi N, Farhadi M, Haghtalab T, & Poorolajal J (2015). Alcohol-related risk of suicidal ideation, suicide attempt, and completed suicide: A meta-analysis. *PLOS One*, *10*, e0126870. Doi: 10.1371/journal.pone.0126870

Fear NT, Iversen A, Meltzer H, Workman L, Hull L, Greenberg N, Barker C, Browne T, Earnshaw M, Horn O, Jones M, Murphy D, Rona RJ, Hotopf M, & Wessely S (2007). Patterns of drinking in the UK Armed Forces. *Addiction*, *102*, 1749-1759. Doi: 10.1111/j.1360-0443.2007.01978.x

Fink DS, Calabrese JR, Liberzon I, Tamburrino MB, Chan P, Cohen GH, Sampson L, Reed PL, Shirley E, Goto T, D'Arcangelo N, Fine T, & Galea S (2016). Retrospective age-of-onset and projected lifetime prevalence of psychiatric disorders among U.S. Army National Guard soldiers. *Journal of Affective Disorders*, *202*, 171-177. Doi: 10.1016/j.jad.2016.05.025

Green KT, Beckham JC, Youssef N, & Elbogen EB (2014). Alcohol misuse and psychological resilience among U.S. Iraq and Afghanistan era veterans. *Addictive Behaviors*, *39*, 406-413. Doi: 10.1016/j.addbeh.2013.08.024

Hoge CW, Castro CA, Messer SC, McGurk D, Cotting DI, & Koffman RL (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *The New England Journal of Medicine*, *351*, 13-22. Doi: 10.1056/NEJMoa040603

Hooper R, Rona RJ, Jones M, Fear NT, Hull L, & Wessely S (2008). Cigarette and alcohol use in the UK Armed Forces, and their association with combat exposures: A prospective study. *Addictive Behaviors*, *33*, 1067-1071. Doi: 10.1016/j.addbeh.2008.03.010

Jacobson IG, Ryan MA, Hooper TI, Smith TC, Amoroso PJ, Boyko EJ, Gackstetter GD, Wells TS, & Bell NS (2008). Alcohol use and alcohol-related problems before and after military combat deployment. *JAMA*, *300*, 663-675. Doi: 10.1001/jama.300.6.663

Kintzle S, Barr N, Corletto G, & Castro CA (2018). PTSD in U.S. veterans: The role of social connectedness, combat experience and discharge. *Healthcare*, *6*, 102. Doi: 10.3390/healthcare6030102

Kolesnichenko O, Matsegora Ya, Prykhodko I, Larionov S, Bolshakova A, Bilyk O, Izbash S, Kuzina V, Panok V, & Kramchenkova V (2021). Content, hierarchy, intensity of motives and their possibility to be implemented in servicemen with various levels of effectiveness of service activity. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12, 374-410. Doi: 10.18662/brain/12.4/256.

Leonhard K (1972). *Accentuated personalities*. New York: Wiley.

Lichko AE (1977). *Psychopathies and accentuation of character in adolescents*. Leningrad: Medicine.

Maklakov AG & Chermyanin SV (2006). Mnogourovnevyiy lichnostnyiy oprosnik «Adaptivnost» (MLO) [Multilevel Personality Questionnaire "Adaptability" (MLO)]. In DYa Raygorodskiy (Ed.), *Prakticheskaya psikhodiagnostika* [Practical psychodiagnostics] (pp. 549-672). Samara: Bahrah-M.

Matsegora Ya, Kolesnichenko O, Prykhodko I, Izbash S, Panok V, Marushchenko K, Rumiantsev Yu, Miloradova N, Kuznietsov M, & Sohan I (2022). Typology and structure of servicemen motivation. *Romanian Journal of Military Medicine*, *4*, 693-707. Doi: 10.55453/rjmm.2022.125.4.22.

Matsegora YaV, Prykhodko II, Vorobyova IV, Horelyshev SA, & Kazianina NA (2014). *Psykholohichnyy monitorynh profesiyno vazhlyvykh yakostey kursantiv vyshchoho viys'kovoho navchal'noho zakladu Ministerstva vnutrishnikh sprav Ukrayiny* [Psychological monitoring of professionally important qualities of cadets of higher military educational institutions of the Ministry of Internal Affairs of Ukraine]. Kharkiv: Academy of Internal Affairs of Ukraine.

Messick S (1989). Validity. In RL Linn (Ed.), *Educational Measurement* (pp. 13-103). New York: Macmillan.

Milliken CS, Auchterlonie JL, & Hoge CW (2007). Longitudinal assessment of mental health problems among active and reserve component soldiers returning from the Iraq war. *JAMA*, *298*, 2141-2148. Doi: 10.1001/jama.298.18.2141

Petrescu C (2017). Accentuated personalities related to daily cigarettes smoking in Romanian college students: A case-control study. *CBU International Conference Proceedings*, *5*, 377-383. Doi: 10.12955/cbup.v5.953.

Prykhodko I, Horielyshev S, Matsehora Ya, Lefterov V, Larionov S, Kravchenko O, Baida M, Halkina O, & Servachak O (2022). Automation of psychological selection procedures for personnel to specific activities. *Pertanika Journal of Science and Technology*, *30*, 761-776. Doi: 10.47836/pjst.30.1.41.

Prykhodko I, Matsehora Y, Kolesnichenko O, Bolshakova A, Bilyk O, & Haydabrus AV (2020a). The main factors and personality characteristics to predict the risk of suicide by military personnel in hostilities. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, *11*, 72-87. Doi: 10.18662/brain/11.3/110

Prykhodko I, Matsehora Y, Kolesnichenko O, Pasichnik V, Kuruch O, Yurieva N, Kravchenko O, Radko O, & Prikhodko D (2021). Psychological markers of suicides in military service during wartime: A contemporary example. *International Journal of Psychology & Psychological Therapy*, 21, 47-57.

Prykhodko II, Bielai SV, Hrynzovskyi AM, Zhelaho AM, Hodlevskyi SO, & Kalashchenko SI (2020b). Medical and psychological aspects of safety and adaptation of military personnel to extreme conditions. *Wiadomości Lekarskie*, *73*, 679-683. Doi: 10.36740/WLek202004110.

Ramchand R, Miles J, Schell T, Jaycox L, Marshall GN, & Tanielian T (2011). Prevalence and correlates of drinking behaviors of previously deployed military personnel and matched civilian population. *Military Psychology*, *23*, 6-21. Doi: 10.1080/08995605.2011.534407

Rona RJ, Fear NT, Hull L, Greenberg N, Earnshaw M, Hotopf M, & Wessely S (2007). Mental health consequences of overstretch in the UK armed forces: First phase of a cohort study. *British Medical Journal*, *335*, 603. Doi: 10.1136/bmj.39274.585752.BE

Russell MT & Karol DL (2002). *16PF Fifth Edition administrator's manual*. Champaign, IL: Institute for Personality and Ability Testing.

Schmieschek H (1970). Questionnaire for the determination of accentuated personalities. *Psychiatrie, Neurologie und Medizinische Psychologie*, *22*, 378-381.

Shmelev AG (1992). Oprosnik suitsidalnogo riska [Suicide Risk Questionnaire]. In SR Pantileeva (Ed.), *Praktikum po psikhodiagnostike. Prikladnaya psikhodiagnostika* [Workshop on psychodiagnostics] (pp. 3-8). Moscow: Moscow University Publishing House.

Sundin J, Fear NT, Iversen A, Rona RJ, & Wessely S (2010). PTSD after deployment to Iraq: Conflicting rates, conflicting claims. *Psychological Medicine*, *40*, 367-382. Doi: 10.1017/S0033291709990791

Vogt D, Smith BN, King LA, King DW, Knight J, & Vasterling JJ (2013). Deployment risk and resilience inventory-2 (DRRI-2): An updated tool for assessing psychosocial risk and resilience factors among service members and veterans. *Journal of Traumatic Stress*, *26*, 710-717. Doi: 10.1002/jts.21868

Vorobyova IV, Prykhodko II, Poltorak ST, Rutin VV, Timchenko OV, Lipatov II, Matsegora YV, Horelyshev SA, & Pobereznyi AA (2016). *Avtomatyzovanyy psyhodiahnostychnyy kompleks vyznachennya profesiynoyi prydatnosti kandydativ na viys'kovu sluzhbu u vnutrishni viys'ka MVS Ukrayiny i navchannya u vyshchykh viys'kovykh navchal'nykh zakladakh MVS Ukrayiny* [Automated psychodiagnostic complex for determining the professional suitability of candidates for military service in the Internal Troops of the Ministry of Internal Affairs of Ukraine and training in higher military educational institutions of the Ministry of Internal Affairs of Ukraine] (pp. 61-62). Kharkiv: National Academy of the National Guard of Ukraine.

Wilk JE, Bliese PD, Kim PY, Thomas JL, McGurk D, & Hoge CW (2010). Relationship of combat experiences to alcohol misuse among U.S. soldiers returning from the Iraq war. *Drug and Alcohol Dependence, 108,* 115-121. Doi: 10.1016/j.drugalcdep.2009.12.003

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