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Coping strategies and stress levels assessment in students enrolled in the special operations course: a descriptive analysis

Evaluación de las estrategias de afrontamiento y los niveles de estrés en participantes del curso de operaciones especiales: un análisis descriptivo

Abstract: The objective of this study was to identify the stress levels and coping strategies most used by students enrolled in the Commando Actions Course in 2022. This is a cross-sectional study, which used the following scales: Brief-Cope; DASS-21; MOSS; and a sociodemographic data questionnaire. Measures of central tendency and dispersion, simple frequencies and Spearman correlation were used to analyze the information, considering a significance level of 5%. The mean stress levels corresponded to 10.37 (±6.81), considered within normal parameters. The most used coping strategy was Planning (mean: 4.95 ± 1.23) and the correlation between Self-distraction and stress showed a positive correlation ($r = 0.405$; $p < 0.01$), among others with significance. The analyses of these military personnel contributed to an assessment of the coping profile and its relationship with stress levels and knowledge of the profile of this population.

Keywords: Military; Psychological Adaptation; Psychological Stress; Professional Performance; Military Science.

Resumen: El objetivo de este estudio fue identificar los niveles de estrés y las estrategias de afrontamiento más utilizadas por los participantes del Curso de Acciones de Comando (CAC). Se trata de un estudio transversal, realizado con los inscritos en el CAC en 2022. Se utilizaron las escalas Brief-COPE (para evaluar el afrontamiento), DASS-21 (el estrés) y MOSS (el apoyo social), y un cuestionario de datos sociodemográficos. Para el análisis de los datos se utilizaron medidas de tendencia central y dispersión, frecuencias simples y correlación de Spearman teniendo en cuenta un nivel de significancia del 5%. La media de los niveles de estrés fue 10,37 (±6,81), considerada dentro del rango normal. La estrategia de afrontamiento más utilizada fue la planificación (media:4,95±1,23), y la correlación entre autodistracción y estrés se mostró positiva (r=0,405; p<0,01), entre otras con significación. Los resultados de este análisis pueden contribuir a una evaluación del perfil de afrontamiento y su relación con los niveles de estrés y el conocimiento del perfil de esta población.

Palabras clave: Militares, Adaptación psicológica, Estrés psicológico, Rendimiento profesional, Ciencia militar.

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1 INTRODUCTION

The Armed Forces offer several opportunities for the professional development of its members. There are career-related programs, such as undergraduate and specialization courses. Likewise, some elective or optional courses are a prerequisite for working in specific areas, such as operational courses. Among these, the Special Operations courses stand out; they are known for their complexity and difficulty in completion (Mullie *et al.*, 2018; Różański; Jówko; Tomczak, 2020).

In the Brazilian Army, the Commando Actions Course (*Curso de Ação de Comandos* – CAC) is known for training the elite Special Operations combatants. High level training and performance are required from those who wish to work in this field, as it is important to train people capable of working in complex scenarios with specific requirements (Dantas; Szelbracikowski; Silva, 2012; Lisbon, 2017).

The main goal of this course is the development of specific skills applicable for Commando Actions, which are a prerequisite to accessing Special Operations within the scope of the Army. Graduates need to be able to use their acquired knowledge in real operations, and because of this, the course is demanding, intentionally causing significant stress. It should be noted that students are subjected to physical and psychological stress in hope to develop and/or optimize their abilities to deal with these factors (Dantas; Szelbracikowski; Silva, 2012; Brazilian Army, 2016, 2017).

According to Silva *et al*. (2015), based on a study conducted with students of the Commando Actions course, physical stressors are very intense and relevant in the beginning of the course. However, psychosocial stressors gradually intensify over time, therefore concerns, family issues, and the students' support network gain prominence. Physical endurance is assessed in a predictable manner, but psychosocial stressors tend to be accentuated because of the students' isolation.

Since the course seeks to bring a real operations experience to workshops and exercises, and that psychological stress is present in all military activity, it is understandable that this type of stress is present throughout training (Montenegro, 2013; Silva *et al*., 2015; Junior, 2021).

The theoretical model developed by Richard Lazarus (1993) defines stress as a process in which stimuli and responses interconnect in a mutually influential relationship, interacting and adapting continuously. Behaviors used to cope with stress, known as coping mechanisms, are the main route in this relationship. This theoretical scope establishes that everyone's perception of and their ability in dealing with stressful situations influences their interpretation of such stressors as being more or less threatening, possibly triggering signs and symptoms related to stress (Lazarus, 1993).

Studies have indicated that efficient coping strategies and an adequate social support network are related to a decrease in dismissals from courses, in addition to improved mental health in combatants. Recent studies indicate that engaging in a greater number of healthy and adaptive

behaviors can reduce the likelihood of adverse outcomes due to the combatant's stressful activities (Montenegro, 2013; Beer; Heerden, 2014; Cooper *et al.*, 2020).

Military training aims to improve the physical and mental preparation of the individual, therefore knowing psychosocial aspects during training helps the development of appropriate strategies to maintain operability and preserve the health of servicemen and women (Xue *et al.*, 2015; Williamson *et al.*, 2019; Bricknell; Williamson; Wessely, 2020).

Military personnel engaged in special operations routinely experience combat and conflict situations fraught with stressors. Obtaining information related to psychosocial aspects, especially in regard to stress levels and coping strategies, can influence the selection and performance of students enrolled in the Commando Actions Course. Thus, this study aims to identify coping strategies, stress levels, and sociodemographic aspects of servicemen enrolled in Commando Actions courses.

2 METHODOLOGY

A cross-sectional study was conducted in a population of military personnel enrolled in the Commando Actions Course, in February 2022, in the municipality of Niterói-RJ. This study is part of a project related to this population, with the approval of the Research Ethics Committee (CAAE no 44289621.3.0000.8928). All participants signed an informed consent form.

Data collection was performed before the beginning of the course with all enrolled students, the following instruments were used: a scale to assess coping with stress (Brief-COPE); the DASS-21 questionnaire (which measures symptoms of stress, anxiety, and depression); MOSS to assess network and social support; and a questionnaire prepared for this study, which includes sociodemographic data, lifestyle habits, and information regarding the military career.

The Brief-COPE inventory is comprised of 28 items grouped into 14 factors, which are: active coping; planning; using instrumental support; using social and emotional support; religion; positive reinterpretation; self-blame; acceptance; expressing feelings; denial; self-distraction; behavioral disengagement; substance use (medications/alcohol); and humor. These 14 factors are grouped into three independent factors: adaptive and problem-focused, adaptive and emotion-focused, and maladaptive and emotion-focused. It has four answer options in a Likert scale, ranging from one, meaning "I never do this" to four, meaning "I always do this." The scores are obtained by the sum of the two items that make up each factor, but the total of each factor is not added together. The higher the score on a given scale, the better the coping using a certain strategy. The result is a profile of the coping strategies most used by the respondent. This instrument is validated in Brazil and has been validated for the Brazilian Army's military population (Carver, 1997; Rodrigues, 2004; Baptista, 2010; Brasileiro, 2012; Silveira, 2019).

The DASS-21 scale was used to identify symptoms related to stress, anxiety, and depression (Lovibond; Lovibond, 1995). It is a self-administered scale, which includes three subsets of questions (with seven questions each) referring to symptoms related to stress, anxiety, and depression. It was based on the Likert scale, with answer options ranging from 0 to 3. Upon completion,

the values in each subscale are added together. To calculate the final score of each subscale, the scores must be multiplied by two. According to the normative table devised by the author, high scores indicate significant levels of suffering related to a certain subscale. This instrument has been validated in Brazil (Vignola, 2013; V; Tucci, 2014; Martins *et al.,* 2019)

The MOS-SSS (Social Support Scale) (Sherbourne; Stewart, 1991) scale was used to measure the participants' social network and support. This instrument has already been validated in Brazil. The first part of the questionnaire, which analyzes the social network, consists of five questions—two referring to the network of family and friends, and three referring to the leisure activity network. The second part covers five functional dimensions of social support: tangible, esteem, emotional, informational, and positive social interaction, totaling 19 items. For each question there are five answer options in a Likert scale ranging from 1 ("never") to 5 ("always"). The score of each dimension is obtained by adding the points in the questions, divided by the maximum score and compared with the normative table of validation studies with the Brazilian population (Griep *et al*., 2005).

The questionnaire developed for this study, with general information about the participants, includes the following information: name, date of birth, place of birth, city of residence, age, gender, marital status, education, skin color, number of children, smoking habits, alcohol habits, physical activity habits, length of military career, and military unit of the enrolled (Clarke-Walper; Riviere; Wilk, 2014; Zhang *et al.,* 2020).

Descriptive analysis was conducted using measures of central tendency and dispersion for continuous variables and summary measures for categorical variables.

To evaluate the variable correlation, the Kolmogorov-Smirnov normality test was initially applied. After identifying that the variables did not have a normal distribution, it was decided to apply Spearman's correlation between scales that measured stress (DASS-21), coping with stress (Brief-COPE) and social support, with a 5% significance level. Data was analyzed using the Statistical Package for Social Sciences, version 16.0.

3 RESULTS

The study population consisted of 87 males enrolled in the Commando Actions Course. Most participants, 70.1%, ranged from 22 to 29 years of age, 24.3% from 30 to 34 years, and 5.6% reported being 35 years or older. Regarding marital status, 58.7% were married or lived with a partner. Regarding education, 34.5% had completed secondary education and 50.6% had completed higher education. When analyzing the skin color, it was observed that 49.5% considered themselves White, 39.1% Yellow or Brown/Mixed-race, 9.2% Black, and 1.1% Indigenous. Regarding having or not having children, 26.4% reported having children. Regarding lifestyle habits, 82.8% reported being non-smokers, 23.0% reported not consuming alcohol, and 62.3% practiced leisure physical activity four or more times a week. Regarding the length of active service in the Army, 68.0% had up to 10 years of service; 58.6% were sergeants and 41.4% were officers (Table 1).

Table 1 – Prevalence of sociodemographic data and lifestyle habits in the military population (N = 87).

Sociodemographic parameters	N (%)
Age group	
22 – 29 years	61(70.1)
30 – 34 years	21(24.3)
35 or older	05 (5.6)
Sex	
Male	87 (100.0)
Marital status	
Married	51 (58.7)
Single	36 (41.3)
Education level	
Completed secondary education	30 (34.5)
Some higher education	13 (14.9)
Completed higher education	44 (50.6)
Ethnicity	
White	43 (49.5)
Yellow / Brown	34 (39.1)
Black	08 (9.2)
Indigenous	01 (1.1)
No information available	01 (1.1)
Has Children	
Yes	23 (26.4)
No	63 (72.4)
No information available	01 (1.1)
Smoking	
Non-smoker	72 (8.8)
Active smokers	10 (11.5)
Former smoker	03 (3.4)
No information available	02 (2.3)
Alcohol consumption	
Doesn't drink	20 (23,0)
Rarely drinks	37 (42,6)
Drinks on weekends	29 (33,3)
No information available	01(1,1)
Leisure physical activity	
Up to 3 times a week	29 (37,7)
4 times per week or more	48 (62,3)
Military career time	
Up to 10 years	68 (79,0)
11 – 15 years	14 (16,5)
16 years or more	04 (4,5)
Rank:	
Officers	36 (41,4)
Sergeants	51 (58,6)

Source: The authors.

Table 2 presents descriptive statistics of the instruments used to assess depression, anxiety, and stress (DASS-21); coping strategies used (Brief-COPE); and network and social support (MOSS-SSS). The means and standard deviations of the scores obtained using the depression, anxiety, and stress scales were, respectively: 2.4 (± 3.47); 3.29 (± 3.34); and 10.37 (± 6.81). Results of the Brief-Cope instrument showed the highest averages in the items: planning with 4.95 (± 1.23), active coping with 4.71 (± 1.27), and the lowest in the behavioral disengagement item with 0.20 (± 1.01). In the scores measured by the MOSS-SSS scale, positive social interaction had the highest average, 86.03 (± 15.08), and the social support family network had an average of 2.74 (± 1.48) people.

Table 2 – Descriptive analysis of the instruments applied to the military population (N = 87).

Instruments	Mean	Standard Deviation (±)
DASS-21		
Depression	2.4	3.47
Anxiety	3.29	3.34
Stress	10.37	6.81
BRIEF-Cope		
Active coping	4.71	1.23
Planning	4.95	1.27
Instrumental support use	4.39	1.54
Emotional support use	2.89	1.56
Religion	4.07	1.94
Positive reinterpretation	4.47	1.53
Self-blame	2.43	1.57
Acceptance	3.45	1.56
Expressing feelings	1.39	1.16
Denial	0.77	1.21
Self-distraction	2.07	1.56
Behavioral disengagement	0.20	1.01
Substance use	0.26	0.85
Humor	2.16	1.59
MOSS-SSS		
Social network – relatives[1]	2.74	1.48
Social network – family members[2]	2.67	1.94
MOSS-SSS		
Tangible support	77.24	22.88
Emotional support	80.57	20.20
Informational support	81.67	16.47
Esteem support	84.60	19.72
Positive social interaction	86.03	15.08

[1] N = 84 participants. [2] N = 83 participants

Source: The authors.

Chart 1 presents prevalence statistics from the results obtained by the DASS-21 instrument, which measured levels of depression, anxiety, and stress. Following the information established in the instrument's manual, it was observed that 87.4% of participants had normal stress levels

and 12.6% had mild or moderate stress. The assessment revealed that 97.7% of the enrolled students had normal levels of anxiety, and 97.7% of respondents were within the normal range when assessing depression.

Chart 1 – Prevalence of stress, anxiety and depression found via DASS21 in the study population (N = 87).

Classification	Stress N (%)	Anxiety N (%)	Depression N (%)
Normal	76 (87.4)	85 (97.7)	85 (97.7)
Mild	08 (9.2)	02 (2.3)	02 (2.3)
Moderate	03 (3.4)	0	0

*Classification according to the normative table of the DASS21 instrument. (Lovibond).

Source: The authors.

Table 3 shows the results of the correlation analyses of DASS-21 parameters (stress, anxiety, and depression) and other variables. Stress had a negative correlation $r = -0.310$ ($p < 0.01$) with planning and a positive correlation with self-distraction $r = 0.405$ ($p < 0.01$), denial $r = 0.287$ ($p < 0.01$), and expressing feelings $r = 0.256$ ($p < 0.01$). With regard to the network and social support parameters, only the positive social interaction parameter presented an association with statistical significance, obtaining a negative correlation with stress $r = -0.225$ ($p < 0.05$).

Table 3 – Correlation between stress, anxiety, and depression (DASS21) and independent variables (N = 87).

Instruments	Stress	Anxiety	Depression
DASS-21			
Depression	**0,484****	**0,508****	1,000
Anxiety	**0,545****	1,000	**0,508****
Stress	1,000	**0,595****	**0,501****
BRIEF-Cope			
Active coping	-0,156	**- 0,234***	**- 0,219***
Planning	**- 0,310****	**- 0,241***	**- 0,343****
Instrumental support use	- 0,021	- 0,105	- 0,144
Emotional support use	0,039	0,018	0,012
Religion	- 0,152	- 0,030	0,024
Positive reinterpretation	- 0,201	- 0,075	- 0,165
Self-blame	0,113	0,187	**0,223***
Acceptance	0,117	0,085	0,069
Expressing feelings	**0,256***	0,096	**0,220***
Denial	**0,287****	**0,352****	**0,371****
Self-distraction	**0,405****	**0,267***	**0,299****
Behavioral disengagement	0,103	0,187	**0,445****
Substance use	0,129	**0,262***	**0,243***
Humor	0,100	0,090	0,128

Continues

Tabela 3 – Continuation

Instruments	Stress	Anxiety	Depression
MOSS-SSS			
Tangible support	- 0,181	**- 0,303****	**- 0,195**
Emotional support	- 0,200	**- 0,351****	**- 0,282****
Informational support	- 0,119	**- 0,291****	**- 0,303****
Esteem support	- 0,203	**- 0,330****	**- 0,328****
Positive social interaction	**- 0,225***	**- 0,383****	**- 0,379****

$^{*}p < 0.05$ $^{**}p < 0.01$

Source: The authors.

In the analyses of the correlation between anxiety and stress coping strategies, both active coping and planning showed a negative correlation, respectively $r = -0.234$ ($p < 0.05$) e $r = -0.241$ ($p < 0.05$). Denial, self-distraction, and substance use had positive correlations, namely: denial $r = 0.352$ ($p < 0.01$), self-distraction $r = 0.267$ ($p < 0.05$), and substance use 0.262 ($p < 0.05$). The results of the association between the anxiety and the network and social support scales were all negative with $p < 0.01$; the most significant values were positive social interaction with $r = -0.383$ and emotional support with $r = -0.351$.

The depression scale results had greater negative correlations with the following coping strategies: planning $r = -0.343$ ($p<0.01$) and active coping $r = -0.219$ ($p < 0.05$). The coping strategies with the highest positive correlations were behavioral disegagement $r = 0.445$ ($p < 0.01$) and denial $r = 0.371$ ($p < 0.01$). The results of the correlations between the anxiety and the network and social support scales were all negative; the most significant values were positive social interaction with $r = -0.379$ ($p < 0.01$) and emotional support with $r = -0.328$ ($p < 0.01$).

4 DISCUSSION

By analyzing the results of this study, it was possible to observe that the students enrolled in the Commando Actions Course are male, mostly young adults, aged between 22 and 29 years, married, with complete higher education (50.6%), without children and who declared themselves White. Regarding lifestyle habits, there was a high frequency of non-smokers (82.8%) and moderate alcohol consumption. The participants are mostly sergeants (58.6%) and military personnel with less than ten years of service in the Army.

In a study conducted with students of the Special Operations Course of the Military Police of the Federal District, the following sociodemographic data of this population were recorded: 72% were privates, 59% had completed higher education, 38% were single, 38% had no children, 59% reported less than 10 years of service. All were male (Castro, 2011). Apart from the number of children per service member, the findings of this 2011 study are similar to the sociodemographic data observed in our study. In both studies, the population was comprised of male students, with a large participation of enlisted men, individuals with complete higher education, married, with less than 10 years of service.

Due to the great physical demand imposed by the rigorous physical tests for approval and enrollment in the course, participants are expected to be younger and, consequently, with a

shorter career. In the study conducted by Correia (2019), similarities with our study population are corroborated. This study was carried out with military personnel working in Special Operations of the Portuguese Army. It found that 36.36% of the participants had worked in the military for 3 years or less, 93.93% were enlisted men, 12.12% were 20 years old or younger and 36.36% were between 21 and 25 years old.

Regarding lifestyle habits, 82.8% of our study population reported not smoking. In the study carried out by Lerner *et al.* (2020) with U.S. Army Special Operations servicemen, 30% were identified as non-smokers. Although most of the participants were non-smokers, it is necessary to consider aspects related to the smoking culture in the United States.

Regarding the stress, anxiety, and depression assessment, the normal rates have a frequency similar to that observed in the average of the population (Lovibond; Lovibond, 1995; Vignola; Tucci, 2014). In a study conducted in 2015 with students from the Commando Actions Course (Silva *et al*., 2015), 73.17% of the participants did not present clinical stress. For this measurement, the Lipp Stress Symptom Inventory (ISSL) was carried out at the beginning of the course. This finding is close to the stress rates observed in our population, in a similar phase of the selection process, in which 82.8% of the enrolled students were also in the normal range (Dantas; Szelbracikowski; Silva, 2012; Silva *et al.,* 2015).

Rates are expected to change during the course. That is why the first evaluation—without the effects of the course—is important; it allows us to understand each individual's profile and determine if there is a different behavior during the course. Other studies conducted with similar populations (Pelegrini *et al*., 2018; Venables; Leon, 2019) found stress levels close to normal, corroborating the results found in the Brazilian servicemen. This scenario may be justified by consecutive operational and doctrinal events experienced throughout their training and military career. Continued exposure to anxiogenic situations tends to cause an increasingly less intense response of the body to the same experiences or similar stimuli (Wright *et al.,* 2008).

According to Sales *et al*. (2017), in a study carried out with military personnel of the Portuguese Army about to start a Military Training Course, the incidence of reasonable or high levels of anxiety is natural and expected, since the expectation of the event tends to generate this state. Other authors have reported that peculiarities of the military career, such as fear of the unknown, constant alertness, and exposure to violent scenarios, cause tension and anxiety (Magalhães; Silva; Santos, 2013; SHAH *et al*., 2021). However, our population showed anxiety and depression levels within normal parameters, both at 97.7%. It is worth noting that the scale used to assess depression symptoms (DASS-21) is not intended to diagnose clinical depression or any other mood disorder, since that demands the identification of other diagnostic criteria, and the instrument only identifies symptoms experienced by the participant in the previous week (Lovibond; Lovibond, 1995; Vignola, 2013; American Psychiatric Association, 2014)

Regarding coping strategies measured in our study population, we found that the most common are planning, active coping, and positive reinterpretation, and the least used are behavioral disengagement, substance use, and denial. Denial and behavioral disengagement strategies,

despite being accessible to students in confinement during the course, are portrayed in this study as behaviors not often used to combat stress in the initial stage (Dantas; Szelbracikowski; Silva, 2012; Silva *et al.,* 2015; Brazilian Army, 2016, 2017).

A study conducted with British military personnel (Venables; Leon, 2019) identified the coping strategies most used in the situations experienced by the participants during a mission. The results showed that the most frequently observed stress coping strategies are compatible with those found in our population, namely: active coping, where active and intentional behaviors are used to try to remove or minimize the stressor; planning, which means reflecting on what would be the best way to deal with the stressor and developing decision-making strategies to deal with the problem; and positive reinterpretation, which is the cognitive strategy of identifying good aspects of the situation, seeking to enrich oneself with it—a resignification of the events (Carver; Scheier; Weintraub, 1989; Venables; Leon, 2019).

The findings indicated that some stress coping strategies seem to have a greater correlation with stress indices than others. Either for their effectiveness in reducing the effects of stress or simply for their availability at the time of the course. Self-distraction, planning, and denial had the highest correlation coefficient with stress levels. Due to the nature of the intense training and the exams taken by students, at this stage the low score in some coping strategies, such as substance use, is understandable and even predictable.

Regarding coping strategies, it was observed that planning was associated with reduced levels of stress ($r = -0.310$; $p < 0.01$). That may be explained by the participant's moment within the course; although they are all enrolled in the course, they have yet to be experience the exhausting activities foreseen in the calendar. Therefore, planning the next administrative steps or even doing a mental rehearsal of the exhausting operational activities seems to be the most accessible at this stage. On the other hand, denial and behavioral disengagement strategies showed the highest positive correlations ($p < 0.05$). This result is expected, as they are considered negative coping strategies, hence their greater relationship with higher stress, anxiety, and depression scores (Carver; Scheier; Weintraub, 1989).

The combat strategies in which servicemen in Commando Actions Courses participate in largely expose them to anxiogenic agents. The imminent death expectation associated with a permanently high level of tension means coping strategies are important to circumvent the effect that experiences in this scenario have on operational performance (Brenner *et al*., 2015). Thus, coping strategies prevent people affected by acute stress symptoms from succumbing (Liz *et al.,* 2014); on the other hand, maladaptive strategies are closely related to mental health impairment (Morgan; Hourani; Tueller, 2017; Kruijff *et al.,* 2019).

Our study population had high averages in all factors related to social support, similar to what is observed in the general population. It is important to highlight that among the students who attend the CAC, those who do not have adequate external support rarely graduate. Additionally, the selection process may be responsible for the enrollment of individuals with this profile since the body responsible for the selection process may reject candidates without the social characteristics deemed appropriate. The study conducted by Cooper *et al*. (2020) compared the

mental health of conventional troops with the Special Forces. Their findings suggested that the social support network of Special Forces service members was more efficient. Zanini *et al*. (2018) identified in their sample that, on average, the levels of tangible support, esteem support, and positive social interaction were high, while the scales referring to informational and emotional support were medium.

Cooper *et al.* (2020) found that combatants who are part of the United States Army Special Forces are mentally and physically healthier than traditional troops, which may be in part due to their tendency to engage in healthy behaviors and/or to be well assisted socially. In this study, the Primary Care Evaluation of Mental Disorders Patient Health Questionnaire (PHQ) instrument was used to assess social support, among other aspects. Results showed that Special Forces military personnel are significantly less likely to report a lack of social support (AOR = 0.50, 95% CI: 0.37, 0.69) (Cooper *et al*., 2020).

Considering the limitations of this study and its cross-sectional design, we cannot establish a temporal sequence when analyzing the relationship between parameters, but the results already provide us with relevant information about possibilities of relationship between parameters. Another aspect to consider is the fact that correlation analyses do not indicate a cause-and-effect relationship, but a possibility of association between parameters. Another limiting factor, caused by the fact that this population is not very accessible for academic research, is the scarcity of studies conducted in the Brazilian population that would enable comparison with our findings.

5 CONCLUSION

The analysis of the military personnel population enrolled in the Commando Actions Course indicated that they are, for the most part, between 20 and 29 years old, married, with a higher education degree, White, non-smokers, rarely consume alcohol, are enlisted and have less than 10 years of military career. They presented psychological aspects measured by the DASS-21 scale (stress, anxiety, and depression) within normal parameters. The most frequently used coping strategies, according to the data obtained with the Brief-COPE scale, were: planning and active coping. The MOSS-SSS scale, used to assess networks and social support, showed that the item that obtained the highest score was positive social interaction.

This study raises important questions about the understanding of the psychosocial aspects of students enrolled in the CAC. The initial knowledge about these aspects can contribute to evaluating the performance of these military personnel during the course, as well as help the instruction team with the class profile. This study does not exhaust the relevant information regarding the profile of the Brazilian Army Commando Actions Course, but it is the first step in advancing knowledge about the main characteristics observed in this population.

REFERENCES

APA - AMERICAN PSYCHIATRIC ASSOCIATION. **Manual Diagnóstico e Estatístico de Transtornos Mentais - DSM-5.** 5. ed. Porto Alegre: Artmed, 2014. 992 p.

BAPTISTA, A. F. S. M. **Uma incursão com os técnicos ao mundo das famílias multiproblemáticas: as suas emoções, optimismo e estratégias de coping**. 2010. 98 p. Dissertação (Mestrado Integrado em Psicologia) - Universidade de Lisboa, Lisboa, 2010.

BEER, M.; HEERDEN, A. V. Exploring the role of motivational and coping resources in a Special Forces selection process. **SA Journal of Industrial Psychology**, Cape Town, v. 40, n. 1, p. 1-13, 2014. DOI: https://doi.org/10.4102/sajip.v40i1.1165

BRENNER, L. A. *et al*. Soldiers returning from deployment: A qualitative study regarding exposure, coping, and reintegration. **Rehabilitation Psychology**, Bethesda, v. 60, n. 3, p. 277-285, 2015.

BRASIL. EXÉRCITO BRASILEIRO. **Separata ao Boletim do Exército nº 48 de 2016**. Diretriz Reguladora para a Inscrição, Seleção, Matrícula e Execução dos Cursos do Centro de Instrução de Operações Especiais (EB 20-D-01.048). Brasília, DF: Estado Maior do Exército, 2016.

BRASIL. EXÉRCITO BRASILEIRO. **Boletim do Exército n° 16**. Brasília, DF: Comando de Operações Terrestres, 2017.

BRASILEIRO, S. V. **Adaptação Transcultural e Propriedades Psicométricas do COPE Breve em uma Amostra Brasileira**. 2012. 85 p. Dissertação (Mestrado em Ciências da Saúde) - Universidade Federal de Goiás, Goiás, 2012.

BRICKNELL, M. C.; WILLIAMSON, V.; WESSELY, S. Understanding military combat mental health. **Occupational Medicine**, London, v. 70, n. 4, p. 216-218, 2020.

CARVER, C. S.; SCHEIER, M. F.; WEINTRAUB, K. J. Assessing Coping Strategies: A Theoretically Based Approach. **Journal of Personality and Social Psychology**, Bethesda, v. 56, n. 2, p. 267-283, 1989.

CARVER, C. S. You want to measure coping but your protocol's too long: Consider the brief COPE. **International Journal of Behavioral Medicine**, Bethesda, v. 4, n. 1, p. 92-100, 1997.

CASTRO, P. A. L. **Os convencionais e os especiais: um estudo sobre a construção da identidade dos integrantes do Batalhão de Operações Especiais da PMDF**. 2011. 50p. Dissertação (Mestrado em Sociologia) - Universidade de Brasília, Brasília, DF, 2011.

CLARKE-WALPER, K.; RIVIERE, L. A.; WILK, J. E. Alcohol misuse, alcohol-related risky behaviors, and childhood adversity among soldiers who returned from Iraq or Afghanistan. **Addictive Behaviors**, London, v. 39, n. 2, p. 414-419, 2014.

COOPER, A. D. *et al*. Mental health, physical health, and health-related behaviors of U.S. Army Special Forces. **PLOS ONE,** New York, v.15, n. 6, e0233560, 2020. DOI: 10.1371/journal.pone.0233560. Disponível em: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7269. Acessado em: 27 dez. 2022.

CORREIA, D. G. **A liderança dos comandantes de unidades tarefa de operações especiais e de destacamentos operacionais**. 2019. 110 p. Dissertação (Mestrado Integrado em Ciências Militares) - Universidade de Lisboa, Lisboa, 2019.

DANTAS, J. B.; SZELBRACIKOWSKI. A. C.; SILVA, A. M. M. **Avaliação psicológica do curso de ações de comandos**. Rio de Janeiro: Centro de Estudos de Pessoal e Forte Duque de Caxias, 2012.

DIAS, E. N.; PAIS-RIBEIRO, J. L. O Modelo de Coping de Folkman e Lazarus: Aspectos Históricos e Conceituais. **Revista Psicologia e Saúde**, Campo Grande, n. 11, p. 55–66, 2019.

GRIEP, R. H. *et al*. Validade de constructo de escala de apoio social do Medical Outcomes Study adaptada para o português no Estudo Pró-Saúde. **Cadernos de Saúde Pública**, Rio de Janeiro, v. 21, n. 3, p. 703-714, 2005.

GRIER, T. *et al*. Sleep duration and musculoskeletal injury incidence in physically active men and women: A study of U.S Army Special Operation Forces soldiers. **Sleep Health**, Bethesda, v. 6, p. 1-6, 2020.

JUNIOR, E. F. M. **Saúde mental dos militares - Estresse ocupacional e síndrome de burnout em policiais**. 2021. 50 p. Trabalho de Conclusão de Curso (Especialização em Direito Militar) - Centro Brasileiro de Estudos e Pesquisas Jurídicas, Rio de Janeiro, 2021.

KRUIJFF, L. G. M. *et al*. Coping strategies of Dutch servicemembers after deployment. **Military Medical Research**, New York, v. 6, n. 1, p. 1-7, 2019.

LAZARUS, R. S. Coping theory and research: past, present, and future. **Psychosomatic Medicine**, New York, v. 55, n. 3, p. 234-247, 1993.

LISBOA, R. A. P. A relevância das operações especiais no contexto dos conflitos contemporâneos. **Doutrina Militar Terrestre**, Rio de Janeiro, v. 5, p. 36–45, 2017.

LOVIBOND, S. H.; LOVIBOND, P. F. **Manual for the Depression Anxiety Stress Scales**. Sydney: Psychology Foundation, 1995. 42 p.

MAGALHÃES, J.; SILVA, G. A.; SANTOS, Y. R. Os efeitos do stresse e burnout em militares: uma breve revisão bibliográfica para a identificação da problemática. **PSIQUE**, Lisboa, v. 9, p. 75-97, 2013.

MARTINS, B. G. *et al*. Depression, anxiety, and stress scale: Psychometric properties and affectivity prevalence. **Jornal Brasileiro de Psiquiatria,** Rio de Janeiro, v. 68, n. 1, p. 32-41, 2019.

MONTENEGRO, F. G. A.; Preparação de equipes de alta performance sob estresse. **DefesaNet**, [*s. l.*], 27 nov. 2013. Disponível em: https://www.defesanet.com.br/sof/preparacao-de-equipes-de-alta-performance-sob-estresse/#google_vignette. Acesso em: 10 jan. 2023.

MORGAN, J. K.; HOURANI, L.; TUELLER, S. Health-related coping behaviors and mental health in military personnel. **Military Medicine**, Oxford, v. 182, n. 3, p. e1620-e1627, 2017.

MULLIE, P.; CLARYS, P.; BRY, W.; GREERAERTS, P. Energy availability and nutrition during a Special Force Qualification Course (Q-Course). **Journal of the Royal Army Medical Corps**, London, v. 165, n. 5, p. 325-329, 2018.

PELEGRINI, A.; CARDOSO, T. E.; CLAUMANN, G. S.; PINTO, A. A.; FELDEN, E. P. G. Percepção das Condições de Trabalho e Estresse Ocupacional em Policiais Civis e Militares de Unidades de Operações Especiais. **Caderno Brasileiro de Terapia Ocupacional**, São Carlos, v. 26, n. 2, p. 423-430, 2018.

RIBEIRO, J. P.; RODRIGUES, A. P. Questões acerca do coping: A propósito do estudo de adaptação do Brief COPE. **Psicologia, Saúde & Doenças**, Lisboa, v. 5, n. 1, p. 3-15, 2004. Disponível em: http://www.scielo.mec.pt/pdf/psd/v5n1/v5n1a01.pdf. Acesso em: 10 jan. 2023.

RÓŻAŃSKI, P.; JÓWKO, E.; TOMCZAK, A. Assessment of the levels of oxidative stress, muscle damage, and psychomotor abilities of special force soldiers during military survival training. **International Journal of Environmental Research and Public Health**, London, v. 17, n. 13, p. 1-10, 2020.

LIZ, C. M. *et al*. Características ocupacionais e sociodemográficas relacionadas ao estresse percebido de policiais militares. **Revista Cubana de Medicina Militar**, Havana, v. 43, n. 4, p. 467-480, 2014.

SALES, C. M. D.; SARAIVA, A.; FAÍSCA, L. Treino da resistência psicológica na recruta militar em Portugal: o papel da coesão militar, da autoestima e da ansiedade na resiliência. **Avances en Psicología Latinoamericana**, Buenos Aires, v. 35, p. 317-337, 2019.

SHERBOURNE, C. D.; STEWART, A. L. The MOS social support survey. **Social Science and Medicine**, Amsterdam, v. 32, n. 6, p. 705-714, 1991.

SILVA, A. M. M.; DANTAS, J. B.; GIOLO, M. A. S.; RODRIGUES, D. V. Estressores, níveis de estresse e representações pictóricas. **Revista Naval: Psicologia em Destaque**, Rio de Janeiro, v. 3, n. 3, p. 12-21, 2015.

SILVEIRA, C. R. **Bem-Estar dos Militares do Exército Brasileiro em Missão de Paz no Haiti**. 2019. 218 p. Tese (Doutorado em Psicologia) - Universidade de Lisboa, Lisboa, 2019.

SOUZA, K. L. A. O.; SIQUEIRA, H. D. S.; SILVA, W. C. *et al*. Factors associated with the emergence of anxiety/depression in military police officers: an integrative review. **Research, Society and Development**, São Paulo, v. 10, n. 10, p. e201101018702, 2021.

VENABLES, N. C.; LEON, G. R. Stress and Coping in Extreme Environments: Implications for a Mars Mission. **Revista Cubana de Investigaciones Biomédicas**, Havana, v. 38, n. 3, 2019.

VIGNOLA, R. C. B. **Escala de Depressão, Ansiedade e Estresse (DASS): adaptação e validação**. 2013. Dissertação (Mestrado em Ciências da Saúde). Universidade Federal de São Paulo, São Paulo, 2013.

VIGNOLA, R. C. B.; TUCCI, A. M. Adaptation and validation of the depression, anxiety and stress scale (DASS) to Brazilian Portuguese. **Journal of Affective Disorders**, [*s. l.*], v. 155, n. 1, p. 104-109, 2014.

WILLIAMSON, V.; GREENBERG, N.; STEVELINK, S. A. M. Perceived stigma and barriers to care in UK Armed Forces personnel and veterans with and without probable mental disorders. **BMC Psychology**, London, p. 1-7, 2019.

WRIGHT, J. H.; BASCO, M. R.; THASE, M. E. **Aprendendo a terapia cognitivo-comportamental: um guia ilustrado**. Porto Alegre: Artmed, 2008. 244 p.

XUE, C.; GE, Y.; TANG, B.; LIU, Y.; KANG, P. WANG., M.; ZHANG, L. A meta-analysis of risk factors for combat-related PTSD among military personnel and veterans. **PLOS ONE**, New York, v. 10, n. 3, p. 1–21, 2015.

ZANINI, D. S; PEIXOTO, E. M.; NAKANO, T. C. Escala de Apoio Social (MOS-SSS): Proposta de Normatização com Referência nos Itens. **Temas em Psicologia**, São Paulo, v. 26, p. 387-399, 2018

ZHANG, Y. *et al*. Relationship between depression, the family environment, and the coping styles of military recruits: A cross-section study. **Medicine**, Bethesda, v. 99, n. 38, p. 1-6, 2020.


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