

To Study Perceived Stress and Coping Strategies Used by Military Personnel of Remotely Located Air Base

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ABSTRACT

Military service is one of the high stressful job. Location and area of the posting if is remotely located adds to the stress level. With the immense amount of on job stress military personnel keep going and are able to maintain their mental health. Stress is quiet a subjective term. The same situation can be quiet stressful for one and a routine one for another. This study is an attempt to see the level of perceived stress and the coping strategies being employed by air crew and ground crew of a remotely located military air station.

Keywords: *Military Service, Perceived Stress, Coping Strategies*

Serving in the Military is a high-stress occupation. Numerous factors contribute in making the military as an extremely stressful service for instance rigid hierarchical structure, frequent transfers, potential or real risk to life (Armenta, Rush, Mann, 2018; Davison, 2020; Gomes & Afonso, 2020). Stress has been found to be a significant factor affecting performance in military aviation branch (Sexton, Thomas & Helmreich, 2000). Furthermore, if the military setup is remotely located the stressors get amplified. Constant stress in daily life of service can lead to strain affecting mental wellbeing of an individual. This stress can however be countered by coping strategies.

Perceived stress is an individual's view on how much stress he/she is under at a given time. Aviators and ground crew in an air base are exposed to wide range of stressors because of the operational requirements. Level of stress is not the same for everyone. There is an element of subjectivity in it. As there is a difference in the nature of job, there can be difference in the level of perceived stress. Whenever there is a stressor there is a coping response to deal with it. Coping refers to cognitive and behavioural strategies utilised by an individual to deal with the stressful events. This coping style can be adaptive or maladaptive, it can be an active way of tackling a problem or living in denial or looking for support. An adaptive or a positive coping strategy leads to constructive approach and create opportunities for growth in stress (Wood, Joseph & Linley, 2007). Maladaptive or negative coping strategies focuses on emotion focused coping where either an individual focuses on negative emotions or take an escapist approach to reduce distress caused by stress (Ding, Yang & Yang, 2015). Coping strategies in context of military personnel is generally discussed as a

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way to rehabilitate individuals who had experienced phenomenal strain resulting in mental health issues. Coping is an important psychological variable to combat stress, anxiety (Joseph Stetz et al, 2007). It is important to understand various coping strategies employed by military personnel in order to keep themselves motivated to perform their duties. Research in the field of stress and coping in military helps us understand the psychological characteristics of military tasking and performance.

Objective of the Study

This study is an attempt to understand the level of perceived stress in ground and air crew of a military air base and the kind of coping strategies utilised by them to overcome it.

Tools to Measure

To measure perceived stress, Perceived Stress Scale (PSS) by Sheldon Cohen (1983) was used. This scale is valid for Indian population (Pangtey, Basu & Bannerjee, 2016) and has been used in various studies conducted in India. For measuring coping strategies, stress coping checklist (Rao, Subbakrishna, & Prabhu, 1989) was used. This scale has been constructed for Indian population and had previously been used by Indian scientists on pilots (Joseph, 2016). This scale has seven sub scales problem solving, 5 emotion focused strategies distraction positive, distraction negative, denial, faith, acceptance and another sub scale social support.

Study Design

A sample size of 100 comprising of 51 aircrew and 49 ground crew. Personnel in low medical category for any psychiatric illness or any severe medical illness were not part of the study. All participants were informed regarding the objective of the research. Data was collected by the medical officer of the air station.

Statistical Analysis

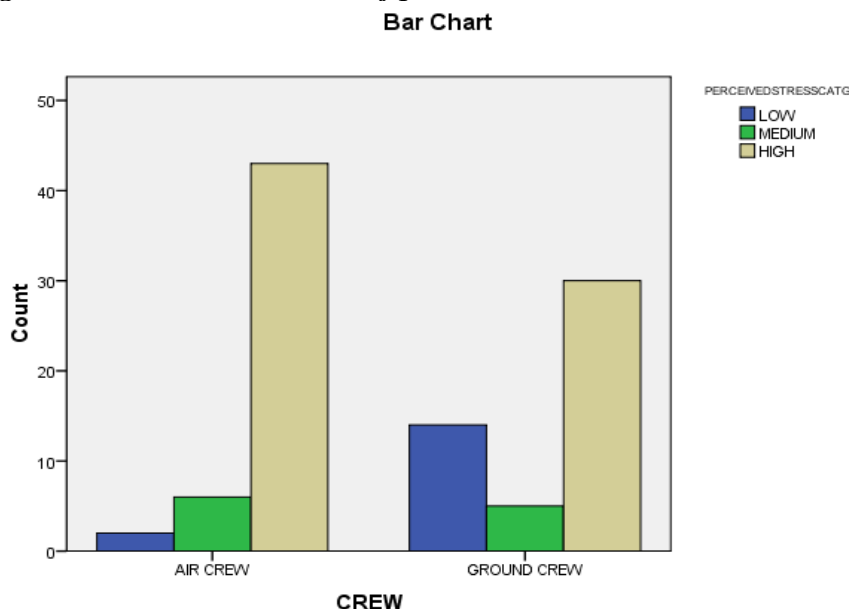
Descriptive analysis of the data was done initially to see the quantum of stress faced by air crew and the ground crew. It was found only 3.9% of air crew reported low stress, 11.76% reported medium stress and 84.31% reported high stress perception. On the other end 28.57% ground crew reported low stress, 10.20% reported medium stress and 61.22% reported high levels of stress.

Table no 1 shows percentage of perceived stress in both air crew and ground crew.

CREW	PERCEIVED STRESS CATEGORY			TOTAL
	LOW	MEDIUM	HIGH	
AIR	2 (3.90%)	6 (11.76%)	43 (84.31%)	51
GROUND	14 (28.57%)	5 (10.20%)	30 (61.22%)	49
TOTAL	16 (16%)	11 (11%)	73 (73%)	100

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Figure 1 shows various levels of perceived stress in both air crew and ground crew.



Group statistics regarding the perceived stress and various coping strategies employed by air crew and ground crew are presented in table number 2. When it comes to utilisation of different coping strategies the highest usage was of acceptance (73.62%) followed by problem solving (71.6%), social support (58.85%) and distraction positive (57.09%). The least used coping techniques were distraction positive (18.25%) followed by denial (34.53%) and faith (35.96%). The two groups² viz., air crew and ground crew were found to have non normal distribution hence in order to compare the two group on difference in perceived stress and utilisation of coping strategies non-parametric Kruskal Wallis test was used.

Table no 2 showing the group statistics for both air crew and ground crew for perceived stress and ground crew.

	CREW	N	Mean %	Std. Deviation
PERCEIVED STRESS	AIR CREW	51	18.98	4.11
	GROUND CREW	49	16.04	7.53
	TOTAL	100	17.54	6.18
PROBLEM SOLVING	AIR CREW	51	71.56	1.57
	GROUND CREW	49	71.63	1.79
	TOTAL	100	71.6	1.68
DISTRACTION POSITIVE	AIR CREW	51	54.82	1.79
	GROUND CREW	49	59.40	1.96
	TOTAL	100	57.09	1.88
DISTRACTION NEGATIVE	AIR CREW	51	14.07	1.84
	GROUND CREW	49	22.59	2.40
	TOTAL	100	18.25	2.16
ACCEPTANCE	AIR CREW	51	71.62	1.99
	GROUND CREW	49	75.69	1.66

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	TOTAL	100	73.62	1.84
FAITH	AIR CREW	51	32.17	2.60
	GROUND CREW	49	39.89	2.80
		100	35.96	2.71
DENIAL	AIR CREW	51	29.82	2.05
	GROUND CREW	49	39.42	2.35
		100	34.53	2.23
SOCIAL SUPPORT	AIR CREW	51	64.05	2.87
	GROUND CREW	49	53.42	3.42
	TOTAL	100	58.85	3.14

Chi square value for perceived stress came out to be 3.503 and was found to be significant at .06 level only hence there is no significant difference between the perceived stress level of air crew and ground crew. The same has been indicated in table no 3. The two groups were compared on utilisation of coping strategies as well. The results are reflected in table no 4. The two groups were not found to have a significant difference in any of the coping strategies.

Table no 3 shows difference in perceived stress among air crew and ground crew

Test Statistics^{a,b}

	PERCEIVED STRESS
Chi-Square	3.503
df	1
Asymp. Sig.	.061

a. Kruskal Wallis Test

b. Grouping Variable: CREW

Table no 4 shows difference in coping strategies employed by the air crew and ground crew

Test Statistics^{a,b}

	Problem Solving	Distraction Positive	Distraction Negative	Acceptance	Faith	Denial	Social Support
Chi-Square	.015	.954	2.889	.812	1.934	2.870	2.083
df	1	1	1	1	1	1	1
Asymp. Sig.	.902	.329	.089	.368	.164	.090	.149

a. Kruskal Wallis Test

b. Grouping Variable: CREW

The data was analysed by categorising the entire sample into three categories of low, medium and high stress based on the responses of perceived stress. Low stress was reported by 16%, medium by 11% and 73% reported high level of perceived stress. Group statistics with respect to these categories have been shown in table no 5. When the three groups were compared on utilisation of different coping strategies using Kruskal Wallis test, the only

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significant difference was found in coping strategy of faith where people who report low perceived stress uses faith as coping a lot more than those who report medium and high perceived stress. Results of Kruskal Wallis test for all three groups on various coping techniques are shown in table no 6.

Table no 5 shows group statistics for three categories of perceived stress on various coping strategies.

		N	MEAN	STANDARD DEVIATION
PROBLEM SOLVING	LOW	16	62.50	2.64
	MEDIUM	11	79.09	1.37
	HIGH	73	72.46	1.37
DISTRACTION POSITIVE	LOW	16	60.75	2.04
	MEDIUM	11	56.36	1.73
	HIGH	73	56.39	1.88
DISTRACTION NEGATIVE	LOW	16	17.93	2.09
	MEDIUM	11	13.09	2.15
	HIGH	73	19.09	2.20
ACCEPTANCE	LOW	16	75.12	1.81
	MEDIUM	11	77.90	1.16
	HIGH	73	72.64	1.93
FAITH	LOW	16	52.81	2.50
	MEDIUM	11	29.09	1.74
	HIGH	73	33.30	2.76
DENIAL	LOW	16	32.87	1.92
	MEDIUM	11	42.18	2.32
	HIGH	73	33.73	2.29
SOCIAL SUPPORT	LOW	16	55.12	4.10
	MEDIUM	11	57.54	3.09
	HIGH	73	59.86	3.01

Table no 6 shows difference in coping strategies vis-à-vis three levels of perceived stress Test Statistics^{a,b}

	Problem Solving	Distraction Positive	Distraction Negative	Acceptance	Faith	Denial	Social Support
Chi-Square	4.979	.363	1.342	.673	8.016	1.390	.048
df	2	2	2	2	2	2	2
Asymp. Sig.	.083	.834	.511	.714	.018	.499	.976

a. Kruskal Wallis Test

b. Grouping Variable: Perceived Stress Categories

DISCUSSION

Perceived stress is simply the apperception of the pressure by an individual. Various studies indicate coping strategies working as a mediator to counter the effects of stress. The mediation role of coping strategies specifically at workplace (Kitako-Higashiguchi et al, 2003) helps an individual perform. In our study both aircrew and ground crew reported high level of perceived stress however along with it there is an adequate use of appropriate coping strategies. All military personnel in our study were found to be using acceptance, problem solving and social support as the most frequently used coping style. These findings

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can be compared with the Picano (1990) finding where American military pilots were found to use more of problem solving coping strategy in comparison to general population. In our study, results differed in terms of equal usage of emotion focused strategies such as acceptance followed by social support and distraction positive. To understand this difference we need to take cognisance of the culture variable. Culture influences the social climate of the place. India is a collectivistic society which promotes social conformity and interdependence. In individualistic society control lies outside of an individual whereas in collectivistic it is focused on self as a part of the group and all efforts are as part of the group. As a result people from collectivistic culture use more of emotion focused strategies where they control their emotions, thoughts, mind and behaviour (Chun, Movs & Cronkite). Similar usage of both problem solving and emotion focussed strategies was found in non-military Indian pilots (Rao et al, 1989, Ahuja 1996, Rupa, 2011).

No significant difference between ground crew and air crew in our study for perceived stress and coping style can be attributed to two things. First the similar level of basic military training that is imparted in academies, focusing both on physical and mental well-being of the personnel. Secondly when officers are recruited in armed forces they have to match up to personality parameters. These parameters are common for both air crew and ground crew. The same sample when compared with a non-military sample might result in significant difference. Personality is an important variable to understand the use of different coping mechanisms.

In conclusion Indian military personnel uses flexible stress coping strategies with almost equal use of problem solving and emotion focussed strategies. No significant difference was found with respect to ground and air crew. These findings need to be replicated on a larger sample with other specialisation to draw clear conclusion on utilisation of different coping strategies and perceived stress.

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Conflict of Interest

The author(s) declared no conflict of interest.

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