

# Psychological Distress in Iranian Military Personnel: A Qualitative Study

**Azizeh Alizadeh<sup>1</sup>**

Baghyatoolah Medical Sciences University: Baqiyatallah University of Medical Sciences

**Behnaz Dowran**

Baghyatoolah Medical Sciences University: Baqiyatallah University of Medical Sciences

**maryam azizi**

Aja University of Medical Sciences

**Seyed -Hossein Salimi** (✉ [seyhossalimi@yahoo.com](mailto:seyhossalimi@yahoo.com))

Baghyatoolah Medical Sciences University: Baqiyatallah University of Medical Sciences

---

## Research

**Keywords:** Psychological distress, military personnel, qualitative study

**Posted Date:** October 22nd, 2020

**DOI:** <https://doi.org/10.21203/rs.3.rs-95007/v1>

**License:** © ⓘ This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

---

# Abstract

**Background:** Military personnel are likely to encounter mental health problems due to High-risk occupations associated with significant levels of psychological distress. The aim of the present study was to explore psychological distress experienced by Iranian military personnel.

**Methods:** The present qualitative study was conducted on 15 Iranian military personnel. Purposeful sampling was used to select the participants and continued until data saturation was reached. Data were collected using semi-structured interviews and then the qualitative data were analyzed through direct content analysis.

**Results:** By analyzing show 395 primary codes, 2 main categories, including demands and resources were extracted from the experiences of military members. The categories included several sub-categories, which were classified according to their significant characteristics. Findings of this study ascertain that different factors affect the military member's psychological distress.

**Conclusions:** Military organization and leaders should consider the factors of psychological distress that raised by specialists, and assign policies to improve their mental health. According to the present results, it is recommended that the process of psychological distress in military members be investigated further.

## Background

High-risk occupations are associated with significant levels of psychological and physical stress. Individuals in these occupations are likely to encounter potentially traumatic events as part of their work, and studies have documented the link between experiencing such incidents and mental health problems among rescue and recovery workers, health care workers, police and military personnel (1, 2).

Protecting the borders of the countries, the armed forces are also responsible for cooperating with relief organizations in the occurrence of natural disasters and unexpected events. Therefore, it is necessary to always be properly prepared and in perfect health. On the other hand, the special nature and missions of the Armed Forces require that their organization always have the desired dynamism and efficiency. This requires that their organization be more exposed to change than other organizations, resulting in inconsistencies and stress (3).

Using the National Survey on Drug Use and Health, Golub et al. (2013) showed that between 2004 and 2010, 13.8% of veterans reported serious psychological distress (3). Psychological distress is the unfavorable objective state of depression and anxiety, which has physical and emotional manifestations and is an indicator of psychological problems that are examined in research and clinical collections with psychological, social and behavioral symptoms related to anxiety and depression (4) and an emotional suffering caused by a real or perceived physical or psychological threat that a person is experiencing. Psychological distress as a key indicator describes a person's emotional problems and psychological

responses to adaptation to the environment and negatively affects a person's job capacity, family life, and well-being (5).

Psychological distress is a mental health outcome typified by psychophysiological and behavioral symptoms that are not specific to a given mental pathology. It includes symptoms of anxiety, depressive reactions, irritability, declining intellectual capacity, tiredness, sleepiness, and so forth. Untreated, psychological distress may lead to premature morbidity and mortality. It is estimated that about 15%–20% of the population in industrialized countries are moderately or highly distressed. Individual experience of psychological distress is associated to employment status. Work organization conditions associated with skill utilization, decision authority, social support in the workplace and gratifications (i.e. pay, prestige, security, career perspective, recognition, etc.) appear to prevent psychological distress, whereas psychological, physical and contractual (i.e. long working hours, irregular work schedule) demands tend to foster it (6).

According to Job Demand Resource Model (JD-R), (Bakker and Demerouti, 2007), demands are any physical, social, psychological or organizational aspects of the job that require the employee to continually engage in physical or mental effort and resources are physical, social, psychological or organizational aspects of the job that play an intrinsic motivational role. The JD-R model is comprehensive, explaining how job demands and resources have unique and multiplicative effects on job burnout and work engagement(7). Two key underlying pathways are assumed in this model. Firstly, Job demands; a health impairment pathway, whereby badly designed jobs or chronic job demands activate an energy depletion process which can lead to negative outcomes. Secondly, Job resources; whereby carry motivational potential leading to positive outcomes (8).

The JD-R model Has been developed for military units by Bates and colleagues (2013), as Military Demand-Resource model (The MDR model) includes four primary components: 1) unit demands, 2) outcomes associated with a unit's fitness (e.g., performance and resilience), 3) resources that mitigate the impact of demands on the outcomes, and 4) feedback loops that account for interactions among factors and time, especially with regard to balancing demands and resources (Figure 1) (9).

Indeed, the rates of mental health problems in the military have been studied extensively, particularly among service members on combat deployments (1). Studies have reviewed depression, anxiety and anger. According to the literature, all of these terms are called distress, so many studies have been devoted to the study of psychological distress in different job. Surprisingly, In our search, we did not find a study that deeply explored the psychological distress. This type of military study was very rare. Therefore, It seems necessary to examine this concept in military personnel, without labeling disorder and in depth. In addition, Especially this type of study among the military personnel of the Iranian has a weak background in studies. Hence, there is a need for a better understanding of military psychological distresses. Our aim is to address in detail and fundamentally the causes and patterns of psychological distress in military personnel based on strong theoretical framework of the Job Demand-Resource Model. Therefore, in examining this concept, the question arises that from the point of view of military personnel,

what factors play a role in the occurrence of psychological distress? Therefore, in the present study, researchers have studied the factors that cause psychological distress in Iranian military personnel.

## Methods

### Study design:

This is a qualitative study of psychological distress among Iranian militarists. The researchers performed an in-depth direct analysis of militarist experiences. The results are presented as codes, subcategories, and categories using an inductive approach. Finally, the results were organized into the framework of the JD-R model.

**Participants and study setting:** Participants were selected through purposive sampling method from several university. Selection of samples was based on the objective of the study. Study samples included groups of military personnel and military psychologists. Interviews with personnel were done at their workplaces. The endpoint for sample selection was reaching data saturation. Data collection and analysis for this study were done between October 10 2019 to April 16, 2020 through in-depth semi-structured interviews with the participants. Interviews were conducted by the authors who have experience in psychological interviews and research qualitative. To design the interview questions, we used texts related to psychological distress. Interviews with participants began with an explanation of the concept of psychological distress, and according to the interview guidelines, general open-ended questions were asked, "In your opinion, what factors cause psychological distress in military personnel? Or What factors causes discomfort and anxiety in military personnel? Then, depending on the context of the responses, the interviewer continued with exploratory questions "Can you please give an example?" or "Could you explain more?" to clarify concepts for the researcher and participants. The duration of the interview ranged between 45 and 60 minutes depending on the willingness and situation of the respondent. Finally, by adding, "Would you like to add anything else, the possibility of having experiences or cases beyond the author's imagination was examined.

After each interview, verbatim transcriptions were prepared using MAXQDA 10. Each entire interview was considered as an analysis unit. The transcribed script was read several times to become familiar with the context, after which, the meaning units were identified. Then, the condensed meaning units were abstracted and labeled with a code (Table 1). Which were then compared based on differences and similarities and sorted into sub-categories and categories (Table 2). Finally, the results were organized into the framework of JD-R model.

### Trustworthiness of data

Several strategies were used to ensure the credibility of data. In this regard, data gathering lasted about 1 month and researchers were deeply oriented to data and atmosphere of the field during this time. To ensure the credibility of the data, some strategies including Peer review (data and interpretation of data

were checked by other researchers), and Member checking (data rechecked by participants and our interpretations from data were reviewed and confirmed by them) were used.

### Ethical considerations

This article is part of a doctoral dissertation approved with IR.BMSU.REC.1399.341 Ethics Code. The online version of the application is available at the following address and is open to the public: <https://ethics.research.ac.ir/IR.BMSU.REC.1399.341>. Target individuals were informed about the purpose of the study and their right to withdraw from the study at any point. Participants were free to withdraw from the study at any point. All interviews were kept confidential.

Table 1): Examples of meaning units, condensed meaning units, and codes from content analysis of the military psychologists

Meaning unit	Condensed meaning unit	Code
- Organizational relations are mainly based on hierarchy, not human. Even greetings depend on who is in the situation.	hierarchy	Military related demands
- the characteristics of the leader are very important in increasing the distress of personnel	Leadership problem	Leadership -
Is military service accepted by the family or not? If the family accepts military service, they will more easily tolerate its problems.	Family support	personal Resources

Table 2): Examples of codes, sub-categories and categories from content analysis of participants' experiences

Theme	Psychological distress		
Categories	Demands	—	Personal resources
Subcategories	Military related demands	personal demand	Personality characteristic
Codes	inflexible commands commands that are not in line with the conditions and have little flexibility lead to distress of military personnel.	Financial difficulties One of the most important causes of distress in military personnel can be	Hope the feeling of being of hopelessness leads to a lot of distress and should be avoided in order to eliminate it.

## Results

The participants of the study were 15 people, 1 women and 14 men. The participants ranged in age from 33 to 60, including 8 psychologists and 7 staffs with enough history of military experiences who were familiar with the psychological distresses of military environments. In the present study, participants referred to two general categories that contribute psychological distress of military personnel. The first category includes demands at four subcategories: Military related demands, organizational demands, leadership demands and personal demands. The second category is resources includes internal resources and external resources. The main categories each with subcategories described in Table 1. The data from interviews show 395 concepts in 6 subcategories and 2 categories were obtained in this context. Categories and subcategories are shown in table 3.

Table3): coding of Iranian military personnel's experiences

Concepts	Subcategories	Categories	Main theme
Geographical conditions, daily practices, inflexible commands, hierarchy, and Overcoming military identity over individual identity, missions, unpredictability, lack of presence of military member in the family	Military Related Demands	Demands	Psychological distress
Ignoring the needs of staff, Unconventional working hours, Not supporting families, lack of protest rights, Social isolation, Wrong choice of employees, Job role problems, Unbalanced reward - punishment system, Injustice, mistrust to the organization	Organizational Demands		
leadership style, characteristics of leaders	Leadership Demands		
Family conflicts Negative life events Financial difficulties	Personal Demands		
Personality characteristics Health status	Internal Resources	Resources	
Social support Organizational support	External Resources		

### Demands

## 1) Military Related Demands

In the category of Military related demands, 10 codes were found. These codes include difficult geographical conditions, daily practices, inflexible commands, hierarchy, and Overcoming military identity over individual identity, missions, unpredictability, lack of presence of military member in the family.

Another concept is difficult geographical conditions; the problems caused by the difficult geographical conditions that lead to the distress of a military person were discussed. For example, participant No. 8 said, "Geographical factors, cold, heat, distance from the center, difficult working conditions are the factors that cause distress in military personnel."

In the concept of Daily practices, experts introduced exercises that military personnel are required to perform daily. Participant No. 7 said: "Practicing yourself every day can be a kind of distress for a military person."

In the hierarchy of inflexible commands, participants talked about the lack of up-to-date commands, inflexibility and strictness in executing commands. Like the participants in No. 15 who said: commands that are not in line with the conditions and have little flexibility lead to distress of military personnel.

In the hierarchical concept, participants noted that the hierarchy in the military leads to injustice and problems in interpersonal relationships and a sense of distress in staff. As participant No. 4 stated: Organizational relations are just based on hierarchy, even greetings depend on which position you are.

The next concept found in the military related demands category is the dominance of military identity over individual identity. For example, participant No. 9, who said that another argument is the role of individual identity in military personnel, individuality decreases and the military role becomes more prominent. He is an individual and his role is not his personal personality and identity.

Missions is another concept that is placed in this category. The types of missions, the incompatibility of with the culture of the mission location, their unpredictability, the separation of family, children's educational problems, were concepts that formed this category. For example, participant No. 14 said: "one of the most important causes of distress is public transfers or missions, which sometimes require staff to serve in cities that may not be compatible with cultural and subcultural contexts. It will take a long time for staff to adapt to this situation, and many of them may not be able to achieve this adaptation".

## 2) Organizational Demands

Concepts raised in the category of demands are organizational demands, which includes Ignoring the needs of staff, unconventional working hours, not supporting families, lack of protest rights, social isolation, Wrong choice of employees, job role problems, reward and punishment system, injustice, mistrust to the organization, it was placed below.

Regarding the concept of disregard for personnel needs, participants acknowledged that the lack of attention of the organization and leaders to personnel needs is one of the factors that cause psychological distress to employees. For example, participant No. 14 said, "commanders are unaware of the psychological needs of their subordinate personnel".

In the unconventional working Hours concept, participants talked about working hours that are sooner or later than usual. For example, Specialist No. 9 said "militarists usually arrive at work earlier than usual".

In the lack of support of family, participants acknowledged that in military organizations, they do not pay enough attention to families and their well-being. Like participant No. 6, who stated: In military organizations, more attention should be paid to families, welfare facilities and more time should be spent on them.

Regarding the concept of, lack of protest rights, participants acknowledged that employees in some cases could not object to the decision made or express their opinions freely. For example, participant No. 11 said: "the inability of employees to protest is not recognized so that subordinates can't express peaceful protest."

Concerning the concept of social isolation, participants acknowledged that military personnel, as they usually live in military settlements, are far from the heart of society, and that separation can lead to distress in them and their families. "Social segregation includes separate workplaces, separate living spaces," he said. People in the community have less social contact with the military, and they experience these problems in their marriages and their children.

Understanding the correct screening of participants acknowledged that incorrect screening leads to employee distress. For example, participant No. 12 said, "Another issue is the selection of individuals regardless of real talent and interests, because some people are driven without interest in military organizations, especially the military, which leads to burnout and from There is a loss of creativity and innovation in the organization".

Regarding the concept of job role problems, participants noted that sometimes people's jobs are not appropriate. For example, participant number 3 said: "management requires more than the ability and capacity of the individual". Or the No. 4 participant said:" a military person may not consider a job role appropriate for him or her, and that the role assigned to him or her may be heavier than he or she may be and more likely to expect the person to fail.

Reward and punishment system is another concept that has been raised in the field of organization and leadership. As the No. 5 participant said: "Lack of proper reward and unbalanced and unstable reward distribution system are some of the things that lead to distress."

The concept of distrust of the organization is another issue that has been raised. For example, participant No. 5 said, "I don't think there's a sense of belonging and confidence in the system. It feels like you couldn't do anything for me."

Another concept is injustice. Injustice in the distribution of facilities, injustice in the appointment of roles and a sense of discrimination are some of the things that the participants mentioned. For example, participant No. 12 said " one of the main components of psychological distress is weakness in justice and discrimination."

### **3) Leadership Demands**

Regarding the concept of leadership, the participants emphasized the leadership style and characteristics of the leaders. For example, participant No. 6 said: "the characteristics of the leaders are very important in increasing the distress of personnel. A leader creates so much hell for his staff that the distress of all the personnel increases and another commander removes the distress from the personnel due to his special companionship and management in the more difficult conditions of the leader, so the role of the leader in this distress is very important."

### **4) Personal Demands**

About the Personal demands, concepts such as financial difficulties, family conflicts, and social status are raised. Concerns about financial difficulties such as house problems, economic problems and weak welfare facilities were raised. Such as the words of the participant number 15, who said: "One of the most important causes of distress in military personnel can be financial problem. Participant No. 4, who said that housing is one of the problems of military personnel. Houses owned by the military and their facilities are poor.

Concerning family conflicts, concepts such as conflicts between family members, the transfer of stressful work environment to the family and the acceptance of military service in the family were discussed. For example, participant No. 3 who said, "Is military service accepted by the family or not? If the family accepts military service, they will more easily tolerate its problems." Or participant No. 2 who said: "the relationship between the couple and the parents Children have a huge impact on the distress of military personnel."

Regarding the concept of social status said Partner No. 4." the weak social status of the military in society, which the participant No. 10 pointed out.

## **Resources**

### **1) Internal resources**

In the category of internal resources, participants were raised two concepts: Personality characteristics and Health status.

In personality traits, the participants discussed concepts such as self-awareness, to be meaningless, hopefulness, adherence to ethics, biological readiness, creativity, emotional intelligence, attitude, and

resilience. Regarding self-awareness, participant No. 1 said: "It is very important to know people about their own abilities or weaknesses."

To be meaningless is another concept that participants introduced. For example, participant No. 5 said that the feeling that the military is doing something is worthless. They feel that what they are doing is worthless and that they do not have a tangible product.

Hope is another concept that participants have come up with. For example, participant No. 10 said that the feeling of being of hopelessness leads to a lot of distress and should be avoided in order to eliminate it.

Adherence to ethics is another concept that participants have introduced. For example, participant No. 6 said: "As a military, if I try to reach a man with morality and ethics, it means that when morality becomes the queen, many problems will be solved, but now for us individual interests are a priority and major people." The suffering they suffer is due to not achieving their individual priorities, for example, I like to be a commander and I try, but I don't get results, I get frustrated, and this leads to psychological damage.

Biological readiness was also mentioned by the participants. For example, participant No. 1 said: "Fear has a biological basis, and some people are more cautious and take less risk." The biological basis of fear is important in individuals.

Creativity was also a personality trait that was mentioned by the participants. For example, participant No. 7 said that how creative a person is very important in reducing stress.

Emotional intelligence was also a personality trait that was mentioned by the participants. For example, participant No. 8 said that a person's level of awareness of their emotions and how they manage them play a role in a person's level of distress.

Individual attitudes were also personality traits that were mentioned by the participants. For example, participant No. 3 said that people's attitude systems play an important role in distress. For example, the stress received by different people can affect a person's distress rate.

Resilience in military personnel was also a personality trait that could reduce distress. For example, participant No. 1 said that military personnel must have high resilience and strengthen it in order to perform properly in sensitive situations.

Another concept in the range of key resources is the physical and mental health of military personnel. Like the No. 8 participant who said, "The illnesses that a person suffers from and the psychological problems that people face increase their distress rate."

## **2) External resources**

The subcategories covered by the staff included social support and organizational support. Regarding social support, participant No. 15 said that the support of family, co-workers and friends can play an

important role in improving staff. This is an encouragement that reduces work problems. the participant No. 11 said: " the organization's psychological support of staff is important. For example, personnel who have a problem can be better handled if they are understood by the organization and the commander. In Figure 2, the factors from the study were included in the demand-resource model.

## Discussion

The present qualitative study examined the psychological distress factors in Iranian military personnel. A review of participants' opinions showed two main categories, including demands, and resources. As mentioned in the findings section, in category of demands we found 4 subcategories: Military related demands, Leadership demands, organizational demands and personal demands. In categories of resources were founded 2 subcategories including Social support, organizational support.

These concepts included, difficult geographical conditions, daily practices, inflexible commands, rigorous hierarchy, Overcoming military identity over individual identity, threats and war, missions, unpredictability, lack of military presence in the family. In military literature, these concepts are called military culture. Military culture is largely unique and defined by its organizational structure, framework, and rules. Military personnel and their family members are bound by military laws, regulations, traditions, norms, and values that differ from civilians (10). Such as ranks, uniforms, medals, salutes and ceremonies that are surface culture and the obvious and visible components of a military culture and the deeper components include beliefs which are invisible components in a military organization(11). For example, the chain of command is the hierarchical structure of seniors and subordinates. The structure of seniors and subordinates forms a chain with each individual linked to one another. Both ceremonial acts of discipline, such as shoe shining, salutes, uniforms, as well as functional discipline where service members follow rules and orders of commanders are deeply embedded within the military culture (10). The military training known as basic training or boot camp, which is known as a degrading process, where leaders deconstruct the recruits' civilian status and give them a new identity. The recruits go through a harsh, humiliating, and physically and emotionally exhausting process. They are exposed to their new norms, language, codes, and identity. Also, group formation is accomplished by cutting hair, common dress, suffering, eating, exercising and bunking together, as well as isolation from friends and family since compliance is needed in the military(10). One study found that veterans who report higher levels of military identity report higher levels of psychological distress (12).

In any form of social congruity and culture, specific worldviews are developed and shared. Sue (1978) defined worldview and its importance to the formation and maintenance of a person's identity by stating that it relates to the individual's perception of and relationship with the world. In other words, these act as a 'filter' through which one reads reality. Brown and Landrum-Brown (1995) discuss the worldview of emotional restraint vs. emotional expressiveness in making decisions about behavior. Military is a "warrior society" encompassing an authoritarian structure and stoicism, and one that exists in a constant state of "combat readiness" even in times of peace. This rigid posture become seven more pronounced post combat, where emotional expression is desired by the family members and the veteran is still in the

“zone”(i.e., combat zone) in his mind and often returns home even more defended against experiencing and expressing his or her feelings (13).

Contrary to the above opinion, Grounded in Social Identification Theory (SIT), Haslam (2004) argues that social identification plays a key role in establishing important organizational behaviors such as compliance, extra-role pro organizational behavior, loyalty, improved performance, reduced absenteeism and higher levels of physical and emotional well-being. All these elements appear fundamental to the functioning of the Armed Forces, thus linking military identity to both social identification theory and actual coping and performance. Van Dick et al. (2005) also summarized that identification plays an important role in work-related attitudes and behavior, and that the emotional component of identification is probably the best predictor of performance. Further he argues that the main prediction of SIT for organizational contexts is that the more an individual define him- or herself in terms of membership in an organizational group (as for instance the Armed Forces) the more his or her attitudes and behaviors are governed by this group membership (14).

It seems to be assumed that the stress of military life is attributable solely to such things as deployments overseas, exposure to combat, and the threat of bodily harm.

The periodic permanent change of station, stationing of personnel overseas, and lack of control over duty assignments are just a few examples of the more mundane aspects of military life that may affect the mental health of its members (15).

Another concepts raised in the context of occupational demands are leadership and organization, which includes concepts of disregard for personnel needs, unconventional working hours, lack of support of family, lack of protest rights, social isolation, incorrect selection, command problems, job role problems, reward and punishment system, injustice, mistrust to the organization, it was placed below. Numerous studies have identified the impact of leadership on employee performance and health. General leadership can be theorized as two primary styles—transformational and transactional. Overall, transformational leadership is relatively general and addresses relationship-based behaviors whereas transactional leadership is relatively narrow and focuses on domain-specific tasks and behaviors. Positive leader behaviors has typically studied transformational leadership. Transformational leadership is conceptualized as four sets of behaviors: (1) idealized influence, in which leaders behave in ethical ways; (2) inspirational motivation, in which leaders set high standards and a vision that motivates employees; (3)intellectual stimulation, in which leaders support questioning and innovative thinking; and (4) individual consideration, in which leaders focus on individual achievement and development. According to the transformational theory, engaging leaders: 1) inspire their followers, 2) Strengthening their followers, 3) Connect their followers. By inspiring, strengthening and connecting leadership, the fulfillment of staff s basic psychological needs would promote. It appears that engaging leadership has an indirect effect on prevention burnout and increasing engagement by reducing demands and increasing resources, respectively. Strengthening leaders provide their followers with work resources and development resources and monitor their qualitative and quantitative job demands. Finally, engaging

leaders connect their followers by providing them social resources (7). Studies on transformational leadership have repeatedly demonstrated an association with employee outcomes of importance to organizations such as reduced job stress and increased job satisfaction, job attitudes, and employee wellbeing (1).

About the concepts related to the organization, a large number of empirical studies have focused on organizational factors that explain the mental health problems of health care workers. These often rely on theoretical frameworks, such as the effort-reward imbalance model or the job demands-control (JD-C) model, that provide insights regarding the impact of an individual's job design. Michie and Williams (2002) showed that the most common work factors associated with psychological ill health are work demands (long hours, workload, and pressure), a lack of control over work, and poor support from managers. Also organization climate (OC) that concerns the meaning employees attach to the tangible policies, practices, and procedures they experience in their work situation Including (1) leadership characteristics, (2) group behaviors and relationships, (3) communication, and (4) structural attributes of the quality of work life. One set of models, describes OC as a job stressor that directly (healthy workplace, Kelloway and Day (2005) and indirectly (the healthy work organization, Wilson et al (2004)) influences employees' mental health (16).

An organizational climate encompasses a broad range of individual and contextual level factors that form the immediate environment of individual workers. Organizational justice (distributive, procedural, informational and interpersonal justice) is a key aspect of a supportive climate. Organizational justice (distributive, procedural, informational and interpersonal justice) has been found to influence organizational outcomes such as well-being, satisfaction, emotional exhaustion, and performance (17).

In general, Judge and Colquitt (2004) noted that "justice has the ability to reduce the uncertainty and lack of control that are at the heart of feelings of stress". Also organizational justice theories implicitly include stress mechanisms. equity theory proposes that the imbalance produces distress and motivation to change the situation. Presumably injustice is strongly related to anticipated threat and is thereby similar to what Lazarus and Folkman (1984) have considered to lie at the heart of the primary appraisal processes (18).

About Personal demand (PD), To get higher performance and behavior, individuals set requirements for them that force them to exert efforts in their work and are consequently connected with physical and psychological costs, and these requirements are termed as PD. As per Bakker, (2016), PD and PR should be studied together, and, argued that nature of the PD will define the process as motivational process or health impairment process. PD is considered as challenge for the employee which energize or motivate employees to engage in their work. Similarly, PR also behave positively with work environment, which is obvious from different studies. PD and PR would create an opportunity to fulfill basic need satisfaction, which would in turn generate a positive link with work environment (19).

According to conservation of resources (COR) theory, people are motivated to obtain, retain, and protect valued resources included personal energies—physical, mental, and emotional. when they Individuals

threatened with resource loss, or fail to gain resources following resource investment, experience strain (e.g., work fatigue) and consequent strain-related outcomes. In contrast, to the extent that individuals experience job and personal resource gain, their energies are protected or renewed, thereby resulting in reductions in work fatigue. All work demands require the investment of one or more sources of energetic resources—physical, mental, or emotional. Consistent with this, meta-analytic reviews reported evidence for a bivariate association between these findings suggest that physical, mental, and emotional work fatigue are highly prevalent among non-deployed RCAF military personnel. The nine predictor variables of physical, mental, and emotional work fatigue represent job demands (role overload, role ambiguity, and abusive supervision), job resources (distributive justice, interpersonal justice, and perceived organizational support), and personal resources (physical activity, sleep quantity, and sleep quality). Similarly, this study explore the simultaneous and independent associations of the three types of work fatigue to four consequences of importance to both military leaders and personnel (military morale, workplace cognitive failures, turnover intentions, and work-to-family conflict). In terms of predictors, job demands were positively associated, and distributive justice, perceived organizational support, physical activity and sleep quality were negatively associated with each type of work fatigue, whereas role ambiguity was positively associated with mental and emotional work fatigue, and interpersonal justice was negatively associated with physical and emotional fatigue. Abusive supervision and sleep quantity were unrelated to work fatigue. In terms of outcomes, the three types of fatigue were positively associated with workplace cognitive failures and work-to-family conflict. In contrast, mental and emotional work fatigue were negatively related to military morale and positively associated with turnover intentions. This study demonstrates that work fatigue is a critical issue among military personnel in non-deployed settings, and an essential issue for military policy development (20).

Drawing on the Job Demand-Control-Support (JDACS) model framework, the present study tested the strain and is strain hypotheses. Specifically, the direct effect of job demands on depression, as well as the moderating role of job control, social support and their joint effect (job control x social support) on the job demand-depression link, was investigated. Social support and, to a partial extent, job control buffered the negative effects of job demands on depression. High social support intensifies the buffering effect of job control on the organizational demands-depression link. The results partially support the notion of the JDACS model and provide further insight into processes leading to ill health among police officers in the workplace (21). The majority of participants were male and selected from Tehran Province, which were our study limitations.

## Conclusions

Understanding of demands and resources in military members and their mental health demands might help to improve their motivation and performance. Our results suggest that suggested that in order to improve psychological distress, more attention be paid to reducing job demands and enriching the internal and external resources of military personnel. It is better to review the findings of this study with a quantitative method.

# Declarations

## Ethics approval and consent to participate

This article is part of a doctoral dissertation approved with IR.BMSU.REC.1399.341 Ethics Code. The online version of the application is available at the following address and is open to the public: <https://ethics.research.ac.ir/IR.BMSU.REC.1399.341>. All participants were informed about the study and only those providing a written informed consent were enrolled in the study.

## Consent for publication

Not applicable

## Availability of supporting data

Readers who wish to gain access to the data can write to the Corresponding author [seyhossalimi@yahoo.com](mailto:seyhossalimi@yahoo.com) to request access.

## Competing interests

The authors declare that they have no competing interests.

## Funding

This work was supported by Baqiyatallah University of Medical Sciences. Our funders had no role in the design or execution of the study, data analysis or interpretation, or writing of this manuscript.

## Authors' contributions

BD, AA, SHS and MA designed the study and the data analysis, MA and AA conducted the interviews and performed the data analysis. AA, BD and SHS interpreted the data and drafted the manuscript. All authors read and approved the final manuscript prior to submission.

## Acknowledgments

The authors thank the research participants for their participation in the study.

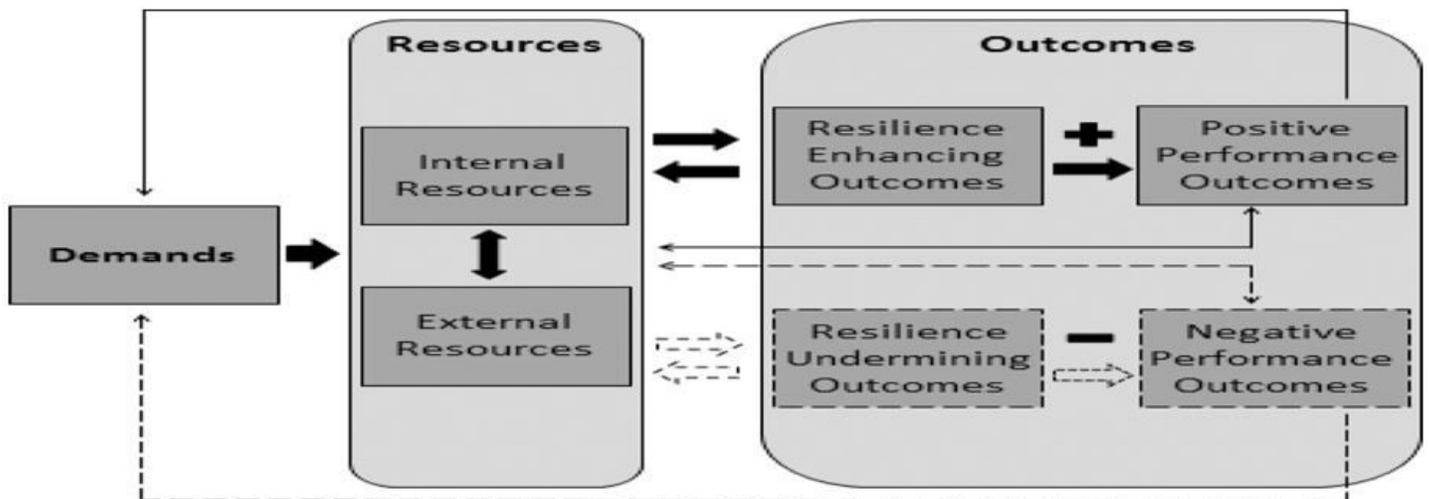
# References

1. Adler A, Saboe KN, Sipos ML, Anderson J. Behavioral Health Leadership: New Directions in Occupational Mental Health. *Curr Psychiatry Rep.* 2014;16(10):484.
2. Alizadeh A, Khankeh HR, Barati M, Ahmadi Y, Hadian A, Azizi M. Psychological Distress among Iranian Health-Care Providers Exposed to Coronavirus Disease 2019 (COVID-19): A Qualitative Study. *BMC Psychiatry.* 2020;In press.

3. Balouchi M, Amini M, Azad E, Shirmardi A. The mental health promotion programs and strategies used in US, UK, Russia and Iran's military organizations: systematic review. *Journal of Military Medicine*. 2019;21(3):298-20.
4. Bessaha ML. Factor Structure of the Kessler Psychological Distress Scale (K6) Among Emerging Adults. *Research on Social Work Practice*. 2017;27(5):616-24.
5. Fortin M, Bravo G, Hudon C, Lapointe L, Dubois M-F, Almirall J. Psychological Distress and Multimorbidity in Primary Care. *Ann Fam Med*. 2006;4(5):417–22.
6. Marchand A, Drapeau A, Beaulieu-Prévost D. Psychological distress in Canada: The role of employment and reasons of non-employment. *Int J Soc Psychiatry*. 2012;58(6):596–604.
7. Schaufeli WB. Applying the job demands-resources model. *Organizational Dynamics*. 2017;2(46):120-32.
8. Rattrie LTB, Kittler MG. The job demands-resources model and the international work context – a systematic review,. *Journal of Global Mobility*, Emerald Group Publishing. 2014;2(3): 260-79.
9. Bates MJ, Jon J, Fallesen Wesley S, Huey, Packard GA, Ryan DM, Burke CS, Smith DG, et al. Total Force Fitness in Units Part 1: Military Demand-Resource Model. *Military Medicine*. 2013;178(11):1164–82.
10. Redmond SA, Wilcox SL, Campbell S, A. Kim KF, Barr K, Hassan AM. A brief introduction to the military workplaceculture. *Work*. 2015;50(1):9-20.
11. McAuliffe G. *Culturally alert counseling : a comprehensive introduction*. 2nd ed ed: Los Angeles : SAGE; 2013.
12. Zwiebach L, Lannert BK, Sherrill AM, Sweeney LBM, Sprang K, Goodnight JRM, et al. Military cultural competence in the context of cognitive behavioral therapy *The Cognitive Behavior Therapist*. 2019;12(5):1-13.
13. Weiss E, Coll JE. The Influence of Military Culture and Veteran Worldviews on Mental Health Treatment: Practicelmplications for Combat Veteran Help-seeking and Wellness. *THE INTERNATIONAL JOURNAL OF HEALTH, WELLNESS AND SOCIETY*. 2011;1(2):75-86.
14. Johansen RB, Martinussen M, Kvilvang N. THE INFLUENCE OF MILITARY IDENTITY ON WORK ENGAGEMENT AND BURNOUT IN THE NORWEGIAN ARMY RAPID REACTION FORCE. *Journal of Military Studies*. 2015;6(1).
15. Anand K, Nagle Y, Misra N, Dangi S. Influence of Organizational Role Stress on Perceived Burnout among Military Aircrew. *International Journal of Scientific and Research Publications*. 2013;3(2):1-5.
16. Bronkhorst B, Tummers L, Steijn B, Vijverberg D. Organizational Climate and Employee Mental Health Outcomes: a Systematic Review of Studies in Health Care Organizations. *Health care management review* 2014;40(3).
17. Trinkner R, TylerMacklin TR, Goff PA. Justice from within: The relations between a procedurally just organizational climate and police organizational efficiency, endorsement of democratic policing, and officer well-being. *Psychology, Public Policy, and Law*. 2016;22(2):158-72.

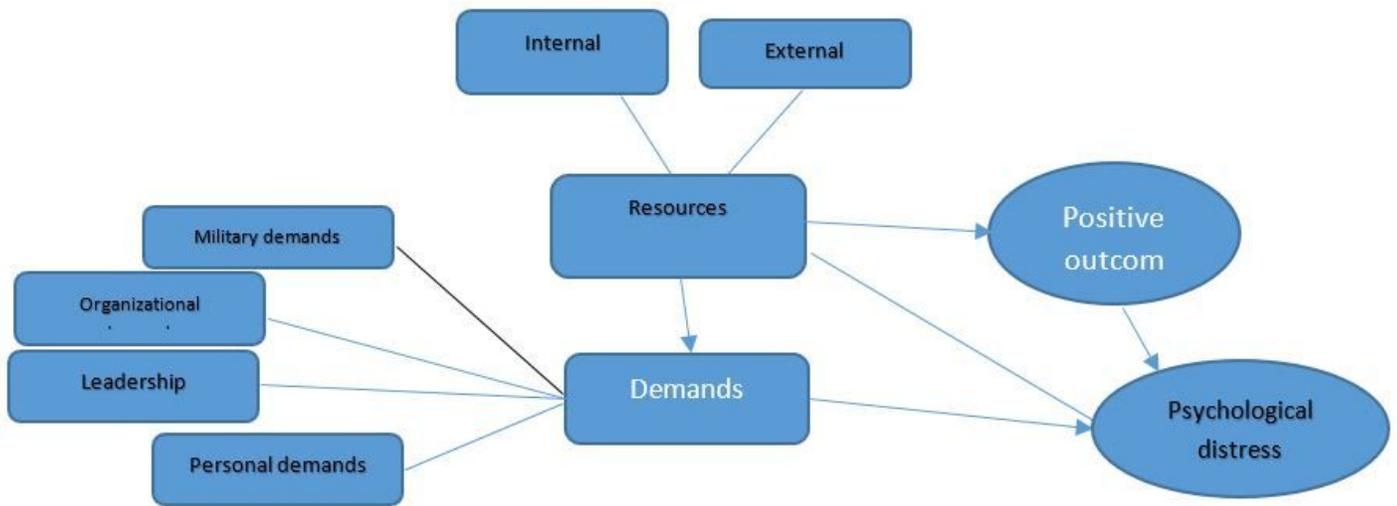
18. Lang J, Lang JWB, Adler A, Bliese PD. Work Gets Unfair for the Depressed: Cross-Lagged Relations Between Organizational Justice Perceptions and Depressive Symptoms. *Journal of Applied Psychology*. 2011;96(3):602-18.
19. Waqas M, Anjum Z-U-Z, Naeem B, Anwar. F. How Personal Resources and Personal Demands Help in Engaging Employees at Work? Investigating the Mediating role of Need Based Satisfaction. . *Economics, Business and Management (EBM 2017)* 2017; XI 143-57. .
20. Frone MR, Blais A-R. Work Fatigue in a Non-Deployed Military Setting: Assessment, Prevalence, Predictors, and Outcomes. *Int J Environ Res Public Health*. 2019;16(16):2892.
21. Baka L. Types of job demands make a difference. Testing the job demand-control-support model among Polish police officers. *The International Journal of Human Resource Management*,. 2018.

## Figures



**Figure 1**

Military demand-resource model(9) .



**Figure 2**

Final Iranian military JD-R model