SYNOPSIS OF

Relationship between Stress, Coping and Health In Army Spouses during Field Posting

A thesis to be submitted for the award of the degree of DOCTOR OF PHILOSOPHY

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Abstract

The purpose of the study was to determine relationship between stress, coping strategies and health of army spouses during deployment. The study employed concurrent embedded mixed method strategy. The sample consisted of 371 army spouses. The sample included 114 officer spouses, 90 JCO spouses, and 167 NCO spouses. The participants were recruited from Mumbai, Pune, Nasik, Kirkee, Kamptee, Vadodara, Ahmedabad, Delhi, Ambala and Jalandar. All data was drawn from spouses of officer rank, junior commissioned rank (JCO) and non-commissioned ranks (NCO) of Indian Army, living in separated family accommodation (SFA) or field area family accommodation (FAFA) as their husbands were on field posting and they had no other support system in terms of extended family accessible to them. The tools used were a survey questionnaire, a semi-structured interview and Cohen-Hoberman Inventory of Physical Symptoms (CHIPS). Deployment, husband's safety, health and career of children, and burden of responsibilities have been found to be the major stressors for army spouses. If perception of stress is more, the use of coping strategies such as denial of the situation, expressing emotions, avoiding the problem, wishful thinking selfcriticism, social withdrawal, and suppression of competing activities aid in remaining healthy. The first deployment is reported to be more overwhelming compared to later ones as with experience one learns to take care of oneself. The study has significant implications on the need for greater psychological support to army spouses.

Introduction and Review of Literature

The researcher wants to study the relationship between stressors, coping strategies, and self-reported health (physical and psychological) of spouses of personnel in the Indian army by type of commissioning and number of deployment phases experienced.

Stress

Stress is a run-of-the-mill term of everyday life today. The term has lost the gravity it used to command in the 40s or 50s. The commonality of this term has resulted in many studies on the topic covering the effect and impact of it. This vast research base states that stress leads to physical and mental health troubles. In India, as an academic research, this topic was documented by Dalal and Misra (2011), who quoted ancient Vedic texts mentioning physical and mental health issues stemming out of stress. Vedic texts talk about mind-body unity, mention theories and share methods to deal with health-related issues. For example, the Atharvaveda and the Yajurveda refer to many mental conditions like unmad (insanity), vibheeti (fear from nature, water, death, etc.), moha (attachment, eroticism), gandharva and apsara syndrome (referring to sex disorders), vishada (distress associated with a particular group), and grahi (hysteria). The Atharvaveda has quoted in detail the symptoms of these disorders and their remedial measures. The relationship of certain societal conditions with mental, physical, and moral deviations was brought to notice by Mondal (1996). His study talked about the ways to treat the bodily processes as much as the supernatural spirits (Mondal, 1996). Apart, from *Vedas* mentioning the remedy of these disorders, *Ayurveda*, which is the traditional medicinal system of India, emphasizes dealing with psychological problems for better treatment of physical health issues (Dalal & Misra, 2011).

It is interesting to note that the body-mind relationship, characteristic of modern stress studies, is emphasized in the *Ayurvedic* system of medicine. A number of concepts developed

by ancient Indian scholars relate to or appear similar to current definitions of the phenomenon of stress. Some of these, for example, are *dukha* (pain, misery or suffering), *klesa* (afflictions), *kama* or *trisna* (desires), *ahman* and *ahmakara* (self and ego), *adhi* (mental aberrations) and *pranaparadha* (failure or lapse of consciousness). *Ayurvedic* therapy, aims at correcting the doshas or the imbalances and derangements of the bodily humors (namely *vata* or bodily air, *pitta* or bile, and *kapha* or phlegm) and restoring equilibrium (Dalal & Misra, 2006).

Fields (2001) reiterates the above-mentioned point, that healing involves restoration of balanced states of being within the organism, that is, at the level of the doshas or constituent principles of the mind/body complex; and between organism and environment. Equilibrium in *Ayurveda* means that our organs and systems are stable and functioning harmoniously. Further, our psyche and spirit, together with a balanced and creative relationship with other organisms and nature as a whole are also functioning harmoniously (Fields, 2001).

In modern Western psychology, the term stress was coined by Hans Selye (1956). He was among the earliest ones in the growth of modern psychology who identified the bodily responses related to stress. He defined it as "the non-specific response of the body to noxious stimuli (Selye, 1956, p.12). He then modified it to, "Stress is any external event or internal drive which threatens to upset the organismic equilibrium" (Selye, 1956, p.12), which is similar to what *Ayurveda* states. Imbalance is created in an organism which Selye identifies as stress, and the action to regain homeostasis is coping.

Cofer and Appley (1964) relate stress to the state of an organism where s/he perceives that his/her wellbeing is endangered and that s/he must direct all his/her energies to his/her protection. In 1966, Lazarus and Folkman gave the theory of stress development which

continues to be a widely used explanation till date. Lazarus (1966) referred to stress as, "a state of imbalance within an organism that is elicited by an actual or perceived disparity between environmental demands and the organism's capacity to cope with these demands; and is manifested through variety of physiological, emotional and behavioural responses." He was first of the many who talked about the relationship between stress, coping and health (Lazarus, 1966).

Put together, the definitions state that stress is produced when there are changes in internal and/or external conditions which threaten the equilibrium state of an individual.

Manifestation of this imbalance can be noticed in physiological, emotional, and/or behavioural response of the organism.

Dohrenwend, Pearlin, Clayton, and Hamburg, (1982) have given a diagrammatic representation showing the stress process and also depicts the antecedents of a stressful life Figure 1.

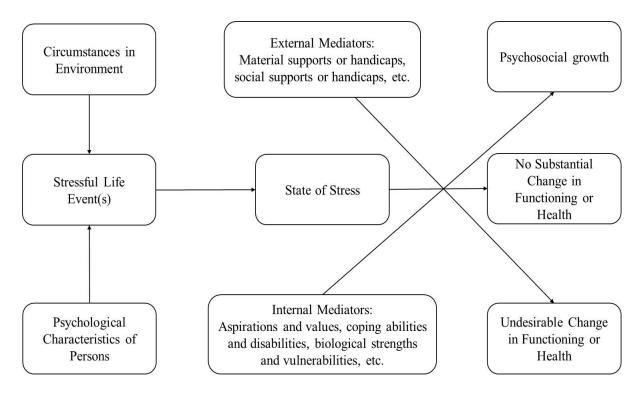


Figure 1. General paradigm of the stress process extended to include antecedents of stressful life events.

[Adapted from: Dohrenwend, et al. (1982). Stress and human health.NY: *Springer*. In: Dinges, N. G., & Joos, S. K. (1988). Stress, coping, and health: models of interaction for Indian and native populations. American Indian and Alaska Native Mental Health Research (Monographic Series), 1(1), 8–55 discussion 56–64. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/3155148]

This above Figure 1highlights the context in which life events occur which can be categorized as internal factors – personal dispositions and external factors – social conditions in which the events are experienced. Biological assets and liabilities as well as learned coping abilities are included in personal dispositions. The model presented by Dohrenwend, et al. (1982) describes the cycle directly before and closely following the experience of the stressful event; if it were to be followed indefinitely, there would be feedback loops demonstrating how the results could become an antecedent. The feedback loops or the interpretation of the stressor which the individual generates is explained in detail in the next section.

Perception of Stress

Stress is produced when unexpected or sudden event/stimuli come forth and the homeostasis is disrupted. However, it is the way we perceive the stimuli that makes it stressful or not stressful. Perception of stress is the person's assessment of one's life as stressful.

"Perceived stress is a dynamic multidimensional concept, with a wide spectrum of causative and conducive factors. The perceptions comprise medical, physical, psychological, and psychosocial aspects and are both culturally and socially context dependent" (Moore & Cooper, 1996).

The basis of Lazarus's (1966) cognitive appraisal theoryisthe importance given to the appraisal of the stressor. According to Lazarus, stress consists of three processes, primary appraisal, which is the process of perceiving a threat to oneself; secondary appraisal, which is the process of bringing to mind a potential response to the threat; and coping which is the process of executing that response (Lazarus, 1984). Lazarus (1984) developed a model to explain this concept which is presented in Figure 2.

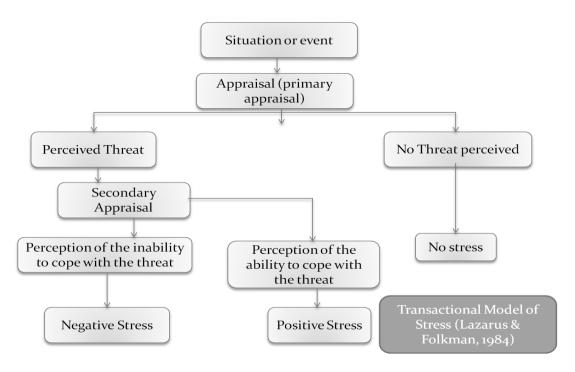


Figure 2. Transaction Model of Stress. [Adapted from: Lazarus, R. S., & Folkman, S. (1984) Stress, appraisal and coping. Springer: New York].

A number of studies in India in the area of perceived stress have focussed on adolescents and the stressors they go throughwhereas very few studies have addressed the adult population (Prabhu, & Shekhar, 2017; Augustine, Vazir, Rao, Rao, Laxmaiah, & Nair, 2011; Latha & Reddy, 2006). A study with higher secondary school students in Hyderabad attempted to find the relationship between perceived stress, life events and coping among private schools and government schools. The results indicated that government school students used avoidance coping skill more often, but both the groups perceived stress in a similar manner, (Augustine, Vazir, Rao, Rao, Laxmaiah, & Nair, 2011).

Everson (2005) conducted a study to ascertain the cumulative effect of stressors, coping ability, and definition of stressor events on quality of life among military spouses or significant others during military deployments. The study compared the deployed, not deployed, and recently deployed army spouses at the time of operation Iraqi Freedom. It was

found that there were differences based on the deployment among army spouses. Those spouses whose partners were deployed perceived higher stress regardless of the length of the deployment and same was true for their children which impacted their quality of life proportionately (Everson, 2005). However, a study done by Erickson (2012) shifts our attention to spouses perceiving stress to be more and addressing it by taking any action to handle it.

To summarize, perception of stress is a process which leads to an individual categorizing the stressor as stressful or not stressful which has an impact on their overall life.

Coping

The inter-relation of the stressors, the way they are perceived by individuals and the level of stress experienced is shared above. Next, we explore, how to manage these stressful experiences based on previous research. Coping is the execution of the response to a threat. Coping refers to active efforts to master, reduce, or tolerate the demands created by stress (Weiten & Lloyd, 2005). How well a person responds to stress is dependent on how much the person feels threatened by the situation at hand. Once coping begins the situation changes, either in terms of its objective characteristics (if the person actually does something to help deal with the situation) or in terms of how the individual subjectively views the situation (Mehta, 2012).

In the nineties, coping was viewed as a process rather than a personality characteristic (Lazarus, 1993). Lazarus gave several principles of coping as a process. These are

Coping with stressful thoughts and actions must be assessed separately from t
heir effects to independently evaluate their adaptability or maladaptability.

Coping is dependent on the individual, the specific stressor, and the outcome measure being studied; it cannot be viewed as good or bad in itself,

- 2) In studying coping, the specific threat or stressor must be identified,
- 3) Coping should be studied using a measurement that identifies the thoughts and actions used by the individual in response to a particular stressor,
- 4) Coping is defined as "ongoing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person," and
- 5) The theory of coping as a process emphasizes that there are at least two major functions of coping, problem-focused and emotion-focused. (Lazarus, 1993, p. 235-238).

New research has thrown light on multiple functions of coping, including but not limited to, the regulation of distress and the management of problems causing the distress. Coping is influenced by the appraised characteristics of the stressful context, including its controllability; by personality dispositions including optimism, neuroticism, and extraversion, and by social resources (Folkman & Moskowitz, 2000).

In the same era, in India, Pestonjee (1983) developed a model to explain how we cope with stress reactions, called the "bounce model." It states that the behavioural decompensation taking place due to stress tends to get reflected in interpersonal and other reactions. The reactions are received and analysed by the environment which in turn, bounces back the signals to the individual to bring about a change either at the organism level or at the response level.

The Bounce Model

Stressors

- I. Intrapsychic
- II. External (Physical)
- III. External (Social)
- Responses can be adjustive, effective and good
- Responses can be adaptive
- Responses can be maladaptive or leading to decompensation
- Responses can be devastating

Source: Pestonjee, 1983.

Figure 3. The Bounce Model.

[Adapted from: Pestonjee, D.M. & Singh, U.B. (1983) *EDP managers: An organizational behaviour study*. Manuscript, Indian Institute of Management, Ahmedabad]

A study done in Spain however, tried to identify the manifestation of unemployment on individuals in the form of stress and the type of coping that they have adopted. It was found that more than 90 percent had depressive symptoms and more than 50 percent had anxiety symptoms. Further they had resorted to using maladaptive coping methods to deal with their situation (Navarro-Abal, Climent-Rodríguez, López-López, & Gómez-Salgado, 2018).

To summarize, coping is what one does when there are unwanted stimuli in one's life and one wants to deal with these. Different theories explain this concept and the next step is to use some form of coping strategy to move past the stressful stimuli and without affecting the person negatively. The next section focuses on coping strategies and explains their application and impact.

Coping Strategies

Coping is demonstrated by the utilization of one or more coping strategies. Coping strategies are the mechanisms which individuals use to deal with/ process or resolve situations which disturb their homeostasis. Lazarus (1984) categorized coping strategies into two major categories, problem-focused and emotion-focused; and further divided them into eight strategies. These eight strategies are confrontative coping, distancing, self-control, seeking social support, accepting responsibility, escape-avoidance, painful problem solving and positive re-appraisal. These were deduced from the research done by Lazarus (1984) to identify what helped individuals to return to the homeostasis.

However, in certain walks of life, coping becomes challenging. One such domains is the military. Working in defence services is not easy for the individual, the spouse, or their family. McCubbin, Dahl, Lester, Benson, & Robertson (1976) found that coping strategies among spouses whose husbands were unaccounted for during the Vietnam conflict ranged from expressing personal feelings (particularly angry feelings) and seeking social support from others, to hopeful coping, religious coping, and behavioral and self-distraction.

In an Australian study, with wives who were living alone as the husbands were working on the borders or in war prone areas, it was found that the most frequent coping strategies used were acceptance, planning, active coping, religion, self-distraction, emotional support, and positive reframing (Dimiceli, Steinhardt, & Smith, 2009).

Another factor that may impact the use of certain coping strategies is the employment status of women. This was examined a study with 100 working and 100 non-working women in Pune, Maharashtra, India. The study compared coping strategies and learned helplessness of employed and non-employed educated married women and found that married employed women scored higher in cognitive coping and lower in learned helplessness than housewives (Li, Mardhekar, & Wadkar, 2012).

Categorization of coping strategies to understand the effectiveness or frequent usage was studied and established by Lazarus (1984) andwas further researched by Schneiderman, Ironson, and Siegel (2008) to see their impact on biological and mental health. They found that if there is more often or consistent use of emotion-focused coping it leads to physical and mental health issues. Their study revealed that coping skills and psychosocial resources having biological vulnerability leading to physical and psychological diseases which can be addressed and healed through psychosocial treatments.

Coping strategies used at the right time in the right situation can help one lead a healthy lifestyle. However, this may not be possible every time and this has an impact on our health. The next section enumerates in detail the relationship between stress and health.

Health

The health issues prevalent today are more often related to the amount of stress one is facing and how the stress is managed. Coping strategies that are utilized to deal with stressors in life can be either emotion focused or problem focused (Lazarus, 1984), which if not adequate will result in impacting health (Schneiderman, et al., 2008). This significant relation between coping strategies and health has been further discussed in this section. It is widely accepted that health can be divided into two broad categories, physical and mental health. This view of health is more inclusive, non-body centered, and it goes well with the notion of

human existence in terms of five sheaths (*koshas*) as described in *Taittiriya Upanishad* (Satpathy, 2018). Health is defined as a person's subjective expression of the composite evaluation of somatic sense of self (how one is feeling) and functional ability (how one is doing). The resulting judgment is manifested in the subjective experience of some degree of illness or wellness.

World Health Organization (1948) has defined health as, "health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." Critics argue that the WHO definition of health is utopian, inflexible, and unrealistic, and that including the word "complete" in the definition makes it highly unlikely that anyone would be healthy for a reasonable period of time. It also appears that "a state of complete physical, mental and social well-being" corresponds more to happiness than to health.

Direct link of stress and health has been studied extensively. Physiological conditions which are a manifestation of stress are ulcer, hypertension and also depression (Fauci, Braunwald, Kasper, Hauser, Longo, Jameson, & Loscalzo, 2008). Chronic work-related stress leads to lower adaptation of the immune system (Segerstrom, & Miller, 2004), increased risk of heart disease and Type 2 diabetes (Chandola, Brunner, & Marmot, 2006), and muscoskeletal issues (Bongers, de Winter, Kompier, & Hildebrandt, 1993; Carayon, Smith, & Haims, 1999).

Studies elaborating results of acute or long-term stress lead to physiological or psychological impact on health are shared in the next section. It is relevant to note that, most of the literature review is based on work related stress and not much is explored for those who are not working. However, stress can be managed and the negative impact can be reduced, prevented or delayed by using healthy coping methods. The next section elaborates on the same.

Stress, Coping and Health

Much research on stress, coping, and health focusses on the individual's employment status. An individual who has been working or has been in the grind of earning a livelihood has been found to require good social support to aid earning. Asnani, Pandey, & Sawhney, (2004) observe that it is difficult for working women to manage and balance their responsibilities. The fact that social support is fading away owing to nuclear families and at work due to automation contributes to this problem. Most women struggle through by working and fighting alone with these stressors which have been found to lead to emotional stress, thereby increasing psychosomatic complaints. Another study by Rao, Apte, and Subbakrishna (2003) resonates with the results of Asnani et al.'s (2004) observations that working women experience tremendous amount of strain with the multiple roles they play on a daily basis. The coping strategies they adopted were taken as indicators of their well-being in the study and it was found that emotion focussed coping together with good support network was significant for better well-being. However, women who were not working tend to demonstrate learned helplessness more than the working women and working women were found to be use significantly higher cognitive, physical and social coping than their nonworking counterparts (Li et al., 2012).

However, there is a dearth of research on stress and health of defence personnel and their families in India. Only one study examining the relationship between coping strategies and health related outcome in the Indian army context has been carried out by (Prakash, Bavdekar, & Joshi, 2011). The results of which indicated that multiple coping strategies were adapted by spouses and they also used preventive and remedial measures to deal with the deployment and separation. An effort by Rice (2012) to present the relationship between stress, coping and health focused on nursing and includes a chapter by Lyon (2012) who

presented a table enumerating conceptualization of stress, coping, and health through the years highlighting different schools of thought. This summary is shared in Table 1 and helps in understanding the differences and evolution of this concept through the years. The researcher has added the Indian school of thoughts of *Ayurveda* and *Vedas* to broaden the range of concepts.

Table 1

Stress, Coping, and Health Outcomes as Defined in Stress Theories						
Scientific view	Conceptualization of stress	Conceptualization of coping	Health outcomes			
Response based (Selye, 1956, 1983)	Stress is the nonspecific response to any noxious stimulus. The physiological response is always the same regardless of stimulus – the general adaptation syndrome (GAS).	There is no conceptualization of coping per se. Instead, Selye used the concept of "resistance stage," the purpose of which is to resist damage (this concept is part of the GAS).	On the basis of the assumption that each person is born with a finite amount of energy and that each stress encounter depletes energy stores that cannot be rejuvenated, it was proposed that stress causes "wear and tear on the body" that can result in various diseases based on the person's genetic propensity.			
Stimulus based (Holmes & Rahe, 1967)	The term stress is synonymous with "life event." Life events are "stress" that require adaptation efforts.	Coping is not defined.	A summative accumulation of adaptation efforts over a threshold level makes a person vulnerable to developing a physical or mental illness (operationalized as disease) within 1 year.			
Transaction based (Lazarus, 1966; Lazarus & Folkman, 1984)	The term stress is a "rubric" for a complex series of subjective phenomena, including cognitive appraisals (threat, harm, and challenge), stress emotions, coping responses, and reappraisals. Stress is	Coping is conceptualized as efforts to ameliorate the perceived threat or to manage stress emotions (emotion-focused coping and problem-focused coping).	Adaptational health outcomes are conceptualized as short term and long term. Short-term outcomes include social functioning in a specific encounter, morale in the positive and negative affect during and after an encounter, and somatic			

	experienced when the demands of a situation tax or exceed a person's resources and some type of harm or loss is anticipated.		health in symptoms generated by the stressful encounter. Long-term outcomes include social functioning, morale, and somatic health. Both short-term and long-term health outcomes encompass effective, affective, and physiological components.
Body-mind relationship. Ayurveda (approximately 800 BCE) & Vedas (approximately 6000 YBP)	Stress is the <i>dosha</i> , the imbalances and derangements of the bodily humors	Coping is through corrective measures as per Ayurvedic therapy to restore equilibrium.	Every individual tries to achieve the homeostasis of the mind-body relationship. The impact is seen in physical as well as mental health of the individual. When it hampers, we go through, klesh, dukha, ahman, ahmakara, adhi, vibheeti, unmad, etc.

Note. Adapted from: Lyon, B. L. (2012). [Stress, coping, and health: A conceptual overview (update). In V. H. Rice (Ed.), Handbook of stress, coping, and health: Implications for nursing research, theory, and practice (p. 2–20). Sage Publications, Inc.]

Worldwide, however, there have been many studies focusing on the health of defence personnel, their spouses, and exploring ways to help them lead a better life. Dimiceli and colleagues (2009), conducted a survey with military spouses in Texas, USA to identify their most stressful experiences in the last five years, their self-appraised control over these stressors, and the coping strategies used to deal with these experiences. They found that the length or number of deployments experienced was a source of stress for civilian spouses of the deployed Padden, Connors, and Agazio (2011) examined the relationships between stress, coping, general wellbeing, and socio-demographic characteristics using Lazarus and Folkman's theory of stress and coping based on the perspective of nurses who work closely with families of defence personnel. The study indicated that level of perceived stress predicts level of psychological and physical health in spouses of the deployed. Differences were found among rank groups, those who grew up in a military family, and those with a previous deployment separation in their use of coping strategies.

A review of more than 250,000 medical records of spouses of active duty army soldiers showed a significant increase in mental health diagnoses in spouses whose husbands were deployed when compared to those whose husbands were not deployed. Those experiencing prolonged deployment (greater than 11 months) had an even higher number of diagnoses (Mansfield, Kaufman, Marshall, Gaynes, Morrissey, & Engel, 2010).

The above-mentioned studies can be summarized by stating that there is significant relationship between stress and health. Further, utilization of adaptive coping strategies can help in preventing and managing the stressful situations better, in turn having a positive impact on health. A more focussed understanding of how stress impacts women is described in the next section.

Stress and Women

Research in India is mostly done on the stress experienced by women at the workplace or during or due to an illness There are researches in specific areas of nursing, IT industry, pregnant women, abused women to name a few (Lyon, 2012; Vimala & Madhavi, 2009; Nath, Venkatesh, Balan, Metgud, Krishna, & Murthy, 2019; Naidu, 2011). A survey done by Nielson in 2011 reveals that Indian women are most stressed in the world today. An overwhelming 87 percent of Indian women said they felt stressed most of the time, and 82 percent reported they had no time to relax. The reasons have been the pressure and responsibilities at the workplace as well as at the home front.

Kaila (2007) explained the nature of workplace stress that women experience. s them. In a study done on 140 female managers in Mumbai. It enumerated the number of stressors for a female manager as time crisis, relocation trauma, competition, job insecurity/uncertainty, clash with superior, uncooperative subordinates, loss of communication, and shift work problems.

The relationship between stress and health is evinced in several studies across various sectors. A studyaddressed the stresses faced in IT industry in Chennai, India. Results confirmed that women in IT companies felt moderate amount of stress which leads them to suffer depression (Vimla & Madhavi, 2009). Another case study done in Agni College of Technology in Chennai, aimed to find out the psychological and physical stress undergone by married working women. It revealed that stress in married working women is caused due to long working hours, various family and official commitments, harassments and improper work life balance. Such type of stress leads to various problems like prolonged headaches, hypertension and obesity (Bhuveneshwari, 2013).

Along similar lines, Malhotra and Shah (2015) found that women predominate men with respect to mental health issues. "The gender difference was reported in the social adjustment, age of onset of symptoms, frequency of psychotic symptoms, clinical features, course, and long-term outcome of severe mental disorders. Girls from nuclear families and women married at a very young age were found to be at a higher risk for attempted suicide and self-harm. Women who abused alcohol or drugs were more likely to attribute their drinking to a traumatic event or a stressor and were more likely to have been sexually or physically abused than other women (Malhotra & Shah, 2015).

Internationally, a study conducted by American Psychological Association on understanding the differences between genders related to stress indicated that impact of stress is more on men but women are more likely to verbalize that they are stressed and also take active steps to manage it. They make changes in their life like reading, visiting a spa, praying, shopping, or going to a mental health professional. Another study probed deeper into understanding the gender differences with relation to stress and found out that there is lower degree of cortisol in relation with stress among women compared to men (Wang, Korczykowski, Rao, Fan, Pluta, Gur, McEwen, & Detre, 2007). Cortisol, the stress hormone, has been found to effect perceptual learning (Dinse, Kattenstroth, Lenz, Tegenthoff, & Wolf, 2017) andgastric problems (Yaribeygi, Panahi, Sahraei, Johnston, & Sahebkar, 2017).

Mayor (2015) researched the disparities in gender roles and tension, and their impact on health. It has been shown that conventional socialization operates with people not only in terms of power but also in terms of economic wealth (see Eagly, Wood, & Diekman, 2000), but also in terms of health effects, including vulnerability and how they respond to stressors (Emslie, Hunt, & Macintyre, 1999; Matud, 2004; Sarrasin, Mayor, & Faniko, 2014). Earlier women were found to be handling multiple social roles and experiencing stress due to it but

now all women are capable to play multiple roles. However, a research study examining the relationship of experiencing stress due to multiple roles by Sumra, & Schillaci (2015) and found out that there is no difference in the perception of stress between women who take up multiple roles and those who do not, although it is important to note that there was positive relation between life satisfaction and role engagement.

To summarize, this section highlights the gender differences with focus on women and explains the variety and nature of stressors women face and how it impacts their health. Women tend to be utilizing coping strategies but difference is found in the manner it creates impact on their overall health. The next section will focus on women in army context and how it is different than general population.

Women and Stress: The Army Context

There are total 1,237,117 personnel active in Indian Army (Rana, 2017). Out of 1,237,117 active duty personnel army accounts for 3.89 percent women in its ranks (Press release, Ministry of Defence, 2019), which comes to roughly 48,123. If we assume even 50 percent of them are married (data not available for public) and those 50 percent being women as spouse, we have a big number of individuals requiring attention from researchers. Apart from the spouses, these active duty personnel have mothers, sisters or daughters making up their family and caring for them, which also is an important area of research. This section addresses studies that have focused specifically on spouses of army personnel.

A pioneering study by Prakash (2008) to know the psychiatric morbidity in temporarily separated wives of serving soldiers revealed that certain factors contribute for separated wives to be psycho-protective. These factors were shorter period of separation, more number of years in military, longer duration of visit of husband, older children in family, better perception and coping of the stress and absence of physical and mental illness

in family. Prakash (2008) then went on to do a meta-analysis to understand what kind of stress the wives of serving soldiers go through and how do they cope with it. He identified four types of stressors: *Ashanka* (Pre-separation), *Viraha* (Separation), *Punarmilan* (Reunion), and *Goonj* (Echoes: long-term post-war stressors). Seeking resolution and expression of feelings, maintenance of family integrity, establishment of independence and maintenance of family ties, establishment of independence through self-development, maintaining the past and dependence upon religion were the effective coping patterns used (Prakash, Bavdekar, & Joshi, 2011).

Another researcher explored the difference in the spouses' whose husbands were deployed with those whose husbands were with them. Findings from the comparative study done by Bisht and Pande (2017) indicate that officers' spouses who were not deployed had better psychological well-being compared to those officers' spouses whose husbands were deployed.

Knapp and Newman (1993) studied army wives who were facing extended period of separation due to deployment of their husbands. It was found that the collective stressors and also the perception of the stress in the defence were helpful in predicting the mental health of army wives. Along similar lines, Wheeler (2009) found characteristics of deployment as important predictors of mental health. His research on Nebraska Army National Guard spouses also found that community support and marital satisfaction may play key roles in these mental health outcomes. A recent study done by Bailey (2019) indicates that emotion coping is a strong indicator of stress, depression, anxiety among the spouses of deployed soldiers,

The unprecedented demands on life as a spouse of defence personnel brings with itself are tough to manoeuvre and it does leave an impact. The above section elaborated on how this is done by the spouses and impact on their physical and psychological health.

Highlights of Literature Review

- Stress is any disturbance in the homeostasis state of an individual. Threat to the
 homeostasis leads to interpreting the stimuli in question. The way it is perceived by an
 individual, results in the level of stress experienced. Hence, perception plays an
 important role.
- The Indian scripture the *Vedas* have talked about stress way before modern
 psychology coined the concept of stress and coping. *Ayurveda* the ancient Indian
 medicine talks about healing the psychological issues to heal the body physically.
 These concepts are shared in detail.
- Lazarus's (1986) contribution is noteworthy in the field of stress and coping. His transactional model of stress theory helps to understand the interplay of emotions and our interpretation of stimulus. He then went on classifying the coping strategies in terms of emotion focused and problem focused coping. Stress and health are interrelated and multiple studies reiterate that one needs to manage stress in life in a constructive manner so as to not affect the physical and mental health of a person. Problem focused coping strategies are found to be helping individuals maintain a healthy life compared to emotion focused but there he does not promote one over the other.

- Use of coping strategies helps prevent and manage stress and stressors in our life and if
 not managed efficiently it can have an impact on health. Various studies are quoted in
 the literature establishing and empirically sharing the physiological and psychological
 impact on health.
- The relationship of women with stress is adequately studied in the context of
 employment in India as well as outside India. There are gender differences and women
 tend to verbalize that they have stress and are better than men in actively doing
 something about it.

There is, however, limited research on stress in the army context in India. Women population of military/defence of India is the strongest force because of which India stands to have the second largest functional army in the world. However, this dearth of research work creates a gap in knowing the areas to be addressed to make the family front well-adjusted. There is dire need to attend to the health aspects and give women tools which are empirically researched to prevent and manage the stress effectively.

Theoretical Framework

The theoretical framework used in the present study is adapted from Lazarus and Folkman's (1984) Transactional Model of Stress.

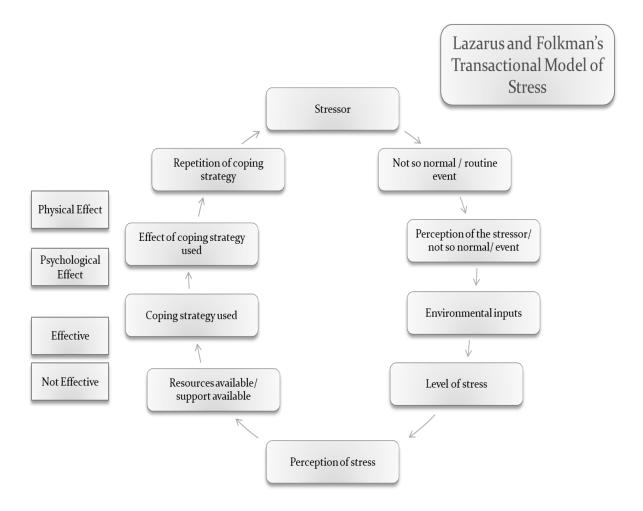


Figure 5. Theoretical framework of the research

According to this framework, when a person is faced with a stressor, she or he evaluates the potential threat (primary appraisal). Primary appraisal is a person's judgment about the significance of an event as stressful, positive, controllable, challenging or irrelevant. Facing a stressor, the second appraisal follows, which is an assessment of people's coping resources and options (Cohen, 1984). Secondary appraisals address what one can do about the situation. Actual coping efforts aimed at regulation of the problem give rise to outcomes of the coping process.

Rationale

Women, of today, are athletes, entrepreneurs, academicians, soldiers, scientists, homemaker, leaders, daughters, mothers and wives and are achieving success like never before. Taking on such multiple roles has its impact on the health of women. National Health Portal of India website (https://www.nhp.gov.in/healthlyliving/women-s-health) lists malnutrition, lack of maternal health, suicide and domestic violence as the common issues faced by women apart from workplace discrimination and harassment in India. A study with working women found that if women use emotion focussed coping seeking support from their network would be important for their well-being (Rao, Apte, & Subbakrishna, 2003). An article published in Times of India, 2015 on their website (https://timesofindia.indiatimes.com/life-style/health-fitness/health-news/Indian-women-play-multiple-roles-but-ignore-health/articleshow/46491974.cms) cited a survey done on women who take on multiple roles, and results revealed that they tend to ignore their own health while endeavouring to do best in their life.

However, in India, we have overlooked the significant contribution a woman makes in a soldier's life. They go through extreme stress in different capacities as mother of defence personnel, defence personnel herself, daughter of defence personnel or by a wife of defence personnel. Women who are married to defence personnel tend to face extreme stressors more often than those in civilian populations. During deployment of the husband, women are responsible for the entire household, children, their education, parents' and in-law's health and social relationships. These army spouses are also required to protect their husband from such daily life stressors, lest it affects them negatively. Many studies done world over point out that women who are part of this unknown and unprecedented situation are called upon to use a wide range of coping strategies, with problem-focused coping being more common and

highlight the contributions women are making in various aspects of life. Studies are done to find what works for women, why it works, how it works, how they are and the way they are. However, studies to understand stress experiences of women in the defence services are scarce, especially in the Indian context. The present research is an effort to know the stress and coping experiences of women (army spouses) whose husbands are deployed in the Indian army, and its impact on their health. The results of this study will help prepare the new entrants in Indian army by sharing and teaching them effective coping strategies and preparing them to live a healthy life. It will also help the ones who are already part of the Indian army and are finding it difficult to adjust and cope with the stressors.

Conceptual Framework

The objective of the study is to identify the relationship among stress, coping and health (physical and psychological) in spouses of army personnel with reference to the number of deployments faced and type of commissioning.

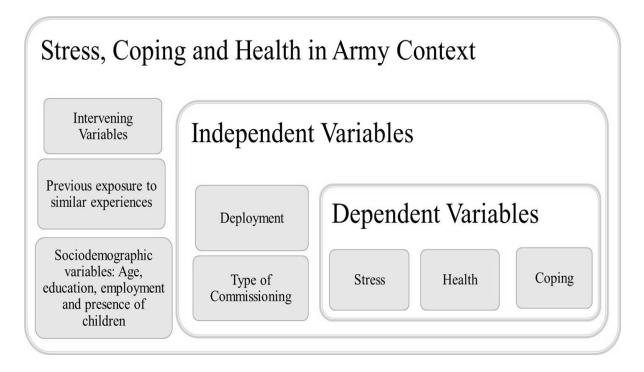


Figure 6. Conceptual framework of the research

Research Questions

- How does type of commissioning relate to stress among army spouses?
- How does type of commissioning relate to coping strategies usedamong army spouses?
- How does type of commissioning relate to health among army spouses?
- How does number of deployments faced relate to stress among army spouses?
- How does number of deployments faced relate to coping strategies used among army spouses?
- How does number of deployments faced relate to health among army spouses?

Objectives

- To find out the relationship between stressors faced by army spouses and type of commissioning.
- To find out the relationship between coping strategies used by army spouses and type of commissioning.
- To find out the relationship between the self-reported physical and psychological health of army spouses' and type of commissioning.
- To find out the relationship between stressors faced by army spouses and number of deployments faced.

- To find out the relationship between coping strategies used by army spouses and number of deployments faced.
- To find out the relationship between the physical and psychological health of army spouses' and number of deployments faced.

Hypotheses

- Army spouses are more stressed based on type of commissioning.
- Army spouses differ in using coping strategies based on type of commissioning.
- Health of army spouses differs with the type of commissioning.
- Army spouses are more stressed based on number of deployments faced.
- Army spouses differ in using coping strategies based on number of deployments faced.
- Health of army spouses differs with number of deployments faced.

Method

The present research adopted a concurrent embedded/nested strategy of mixed methods research design. The chapter begins with the purpose of the study and is followed by detailed documentation of the characteristics of the participants of the study, tools, detailed account of data collection method adapted for the research, study sites, research design, ethical considerations, and data generation, data management and analytic procedures.

Purpose of the Study

The purpose of this research was to find the relationship between stress, coping and health in army spouses during field posting. More specifically, the study aimed to understand how stress affects army spouses when their partners are in risky terrain, how they cope with the situation, and its impact on their health.

Research Design

Mixed methods research design was selected for this study to explain and interpret the relationship between research variables and to explore the phenomenon of coping among army spouses living in separated accommodation, and how the stress experienced and the coping strategies adopted impact their physical and psychological health.

Creswell and Plano Clark (2007, p. 5) gave clarity on the concept of mixed methods which is widely accepted. "Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process. As a method, it focuses on collecting, analysing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and

qualitative approaches in combination provides a better understanding of research problem than either approach alone." (Creswell & Plano Clark, 2007, p. 5)

Concurrent/ embedded/nested mixed methods research design was adopted in the present study. Concurrent embedded model has diverse purposes. For example, a researcher may benefit to gain broader perspectives. Concurrent embedded model may be employed when a researcher chooses to utilize different methods to study different groups or levels. For example, in an organization data from employees can be gathered through quantitative survey, whereas management can be interviewed qualitatively. Tashakkori and Teddlie (1998) described this approach as a multilevel design. Limitations of this method are that the two types of data may not be comparable every time, in all the conditions and if compared, it may result in discrepancies. Also, that the evidence may not be equitable and this can become a disadvantage while interpreting the results.

Concurrent embedded strategy of mixed methods is identified by single data collection collecting both quantitative and qualitative data using one as primary method guiding the study and the secondary method supporting the procedures. As the secondary method is given less priority it is embedded/nested in the primary method. This embedding can also mean that the secondary method is addressing different questions of the research study or seek information at different level of analysis, which is the case in this study as well. The secondary method, qualitative, is addressing different research questions. The objective of mixing data is to merge information and collate one data with another. Apart from this, data may not be compared but may be taken as individual case. The individual cases can then be used to answer different research questions using different methods.

Participants

All data was drawn from spouses of officer rank, junior commissioned rank (JCO) and non-commissioned ranks (NCO) of Indian Army living in separated family accommodation (SFA) or field area family accommodation (FAFA) as their husbands were on field posting and they had no other support system in terms of extended family accessible to them. The participants were recruited from Mumbai, Pune, Nasik, Kirkee, Kamptee, Vadodara, Ahmedabad, Delhi, Ambala and Jalandar.

Purposive snowball sampling was used to collect the data after taking prior permissions from the authorities. As the participation in the study was voluntary, more than 500 eligible participants were approached and only 371 valid data were obtained after excluding incomplete and illegible questionnaires (Table 2). Semi structured interview was done with 23 participants out of the study sample based on availability and accessibility (Table 3).

Table 2						
5						
Distribution of Sample - Quantitative Data						
		Faced field posting	Faced field posting more than	Total		
		once	once			
Type of Commissioning	Officer	24	90	114		
	JCO	27	63	90		
	NCO	38	129	167		
Total		89	282	371		

Table 3								
Distribution of Sample - Qualitative Data								
Participants currently living in FAFA	Faced field posting once (younger lot)	Faced field posting more than once (seasoned ones)	Total					
Officers	1	5	6					
JCOs	3	6	9					
NCOs	3	5	8					
Total	7	16	23					

Participant inclusion criteria.

- Women whose husbands have been posted in high risk field operations. (High
 risk field operations are those in which the life of the soldier or officer is at
 risk).
- Women whose husbands have faced deployment to high risk operation at least once but not more than eight times.
- Women who are living in a Separated Family Accommodation (SFA)/ Field
 Area Family Accommodation (FAFA).
- Women who do not have any (extended) family support while living in FAFA.
- Women whose husband has been away for at least 5 months.

Tools.

The researcher developed a single questionnaire to find information on (i) current rating of stress experienced, (ii) awareness of variation in level of stress, (iii) perception of stress, (iv)coping strategies adopted, and the relationship with (v) health. The questionnaire is based on Lazarus' Way of Life questionnaire (Folkman & Lazarus, 1980), Carver's COPE Inventory (Carver, 1989), David L. Tobin's Coping Strategies Inventory (Tobin, 1985, 1995), Cohen's Perceived Stress Scale (Cohen, 1994). Permissions to use the inventories were formally taken from Susan Folkman, Charles C. Carver, Elsevier Publishing Company and David Tobin. The tool includes items on: demographic details, level of stress rating and stressor description, perception of stress, coping strategies used (16): health (descriptive questions)-physical health, psychological health. The questionnaire is an adaptation and amalgamation of multiple tools, modified to include the cultural aspects and the context of the army. Locally developed tools on stress, and coping strategies repeatedly used in studies with adolescents, employed women, parents of adolescents and the like were also referred. Some of these tools were also used in the research done by Australian Defence Force, US Military servicemen to find out the relation between stress, coping strategies and health outcomes. The tool thus developed was field tested to check reliability and validity of the questionnaire as there were modifications done based on army context and culture. The tool was checked for content validity by experts in the field of Indian Army, language experts and tool development experts.

Physical Symptoms of Illness: Apart from this to find out specific information about their physical health in semi-structure interview, Cohen-Hoberman Inventory of Physical Symptoms (CHIPS) was use (Cohen, & Hoberman, 1983). The 33-item CHIPS was used to assess common physical symptoms of illness. Participants have to rate how bothered they

were by various problems in the last two weeks on a five-point Likert scale ranging from 0 (not at all) to 4 (extremely). Sample problems include nausea or vomiting, pains in the heart or chest, weight change, and muscle cramps. CHIPS too was modified to suit the context and population under study. This tool is available to be used freely. The domains that were covered in the semi-structured interview were resilience skills, sexual needs, quality of life, own identity, decision making, the difference in stress levels in times when the separation is too long and the separation is about to end, financial conditions, social responsibilities, health of children, sacrifices, own professional growth.

Field testing of the tool was carried out with 10 participants of similar demographic characteristics as the study sample. Out of 10, 5 participants were sent the questionnaire on email and the rest were made to fill face-to-face. Findings indicated that there were couple of items which needed rewording as the sample population required more explanation on them ("husband" replaced with "spouse;" "I seek comfort about the issue through meditation or prayer" with "I try to find comfort in my religion;" "I seek solitude and peace about the issue through sources that help me connect with my spirituality" with "I seek God's help;") and two items were deleted as they were seeking similar information. The tool was also reviewed by the Indian Army authorities to ensure that any questions that may compromise confidentiality were not included.

The findings of the pilot study are shared in detail below:

Sixty percent of the spouses feel high level of stress but their perception of stress falls under moderate category. Acceptance, cognitive restructuring, humor, suppression of competing activities, praying and self-control, problem solving are some of the coping strategies which were often used while dealing with stress. Substance use, behavioral disconnection and denial of the situation is rarely resorted to while dealing with stress.

According to the qualitative data provided, physical health did not have much impact, however psychological health gets affected and it affects their life.

The questionnaire used 5-point Likert scale to get responses of participants on current rating of stress experienced, awareness of variation in level of stress with husband not around, and how did they perceive stress, what kind of coping strategies did they utilized and apart from that qualitative questions about their health and significant stressor in their life were also asked. The research questionnaire was developed in two languages, English and Hindi. Few participants who did not know how to read and write were given choice to verbally answer the questions and the researcher wrote the responses. The participants went through questionnaire and recorded their responses.

Procedure of data collection.

The process of data collection started with taking prior permissions from the head of separated army quarters. Next, area wise permission was taken. Through LinkedIn, the researcher got in touch with army officers and talked to them about their marital life and home. Through friends the researcher talked to the families and found out about the coping mechanisms in times of difficulty. The researcher talked to friends who are officers and the ones who are daughters of officers and Jawans about their experiences of military life. The researcher also met the Director of Army Wives Welfare Association (AWWA) and convinced him about the research to get his support. He suggested visiting Aastha Counseling Center of AWWA which has been working actively to address the mental health of army families.

The information about a study being conducted was officially passed on to the respected area quarters. They were also informed that their participation was voluntary. Prior appointments on call were taken and the visit was scheduled with each of the participants separately.

The three categories, namely, Officer spouses, JCO spouses and NCO spouses were approached separately for collecting the data. Spouses of Officer's were approached by visiting to each one's accommodation with prior appointment and administering the tool, whereas JCO and NCO spouses were gathered area wise at a common place and the tool was administered in a group setting. The number of participants in a group ranged from four to sixty participants in some areas.

The data was collected from ten stations/areas in India. The stations were Mumbai, Pune, Ahmedabad, Vadodara, Kirkee, Nasik, Kamptee, Delhi, Ambala, and Jalandar. Researcher stayed at the location in the accommodation provided by that station and collected the data. The duration of the stay was at times 2 days and at times it was 15 day long. The data was collected across a span of 9 months.

After the participants of the study filled the questionnaire the researcher did preliminary analysis and randomly selected participants for the next phase of conducting semi-structured interviews on the basis of availability and feasibility.

Limitations

- The study assumes that army spouses experience stress.
- The study assumes that the respondents have the ability to report the information requested in an accurate and forthright manner.
- The study is based on the personal perception of the participants.
- Study sample was not equally divided in categories of Officer, JCO and NCO due to lack of numbers, and feasibility.
- The semi-structured interviews were done with limited number of participants due to logistical and administrative issues.
- No professional screening was done to check for physical or psychological illness.

Analysis

The study aims at finding differences and relationships among variables and to achieve this quantitative as well as qualitative analysis was done. Details of both are provided in the section below.

Quantitative analysis.

The following quantitative analysis was conducted to find the relationship between stress, coping strategies and health of army spouses during deployment. The plan of data analysis is shared in brief in Table 4.

Table	Table 4						
Quantitative Analysis Plan							
Sr. No.	Hypothesis	Statistical Analysis using SPSS					
1	Army spouses are more stressed based on type of commissioning.	One-way analysis of variance (ANOVA) was used to determine whether there were statistically significant differences in the means of three types of commissioning and 3 types of stress categories of the research study.					
2	Army spouses differ in using coping strategies based on type of commissioning.	ANOVA was done to determine whether there were statistically significant differences in the means of three types of commissioning and 16 types of coping strategies.					
3	Health of army spouses differs with the type of commissioning.	Chi-square was done to find relationship between type of commissioning and health.					
4	Army spouses are more stressed based on number of deployments faced.	ANOVA was done to determine whether there were statistically significant differences in the means of 2 categories of number of deployments and 3 types of stress categories of the research study.					
5	Army spouses differ in using coping strategies based on number of deployments faced.	ANOVA was done to determine whether there were statistically significant differences in the means of 2 categories of number of deployments and 16 types of coping strategies.					
6	Health of army spouses differs with number of deployments faced.	Chi-square was done to find relationship between 2 categories of number of deployments and health.					

The quantitative data analysis was done using IBM SPSS Statistics 22 windows version. Descriptive statistics was computed for all the variables and correlations were carried out between independent variables type of commissioning and number of deployments faced with dependent variable stress (current rating of stress experienced, awareness of variation in level of stress, perception of stress) and coping strategies (denial of the situation, problem solving, cognitive restructuring, expressing emotions, seeking societal support, avoiding the problem, wishful thinking, self-criticism, social withdrawal, praying, humour, substance use, acceptance, suppression of competing activities, behavioural disconnection, and self-control) as well as health (healthy, mildly sick, not healthy).

Qualitative Analysis

Qualitative data in this mixed methods research provides data on various domains such as the significant stressor/s in the life of army spouses, impact on their physical and psychological health, resilience, fulfilment of sexual needs, finances, career, decision making, and identity crisis. Some of these domains were covered in the quantitative questionnaire and others were covered in the semi-structured interview.

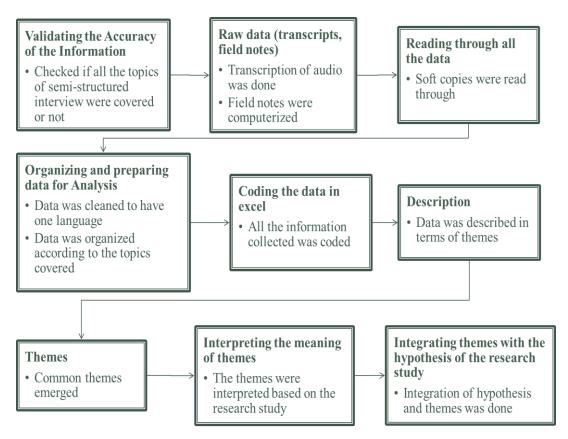


Figure 8: Qualitative data analysis process

Thematic analysis has been adapted for performing qualitative analysis for the data gathered from semi-structured interview. The process followed has been described in Figure 8. Semi-structured interviews were audio recorded for participants who voluntarily gave permission to do so and for others the researcher made handwritten notes. The audio recordings were than transcribed into a Microsoft Word document along with putting handwritten notes in Microsoft Word. Researcher went through all the data once and decided

to edit the discrepancies of language and cleaned the data to remove unwanted expressions, "hmmm, tch tch tch, talking to the house help" and the like, so that only pure content related to the research study was ready to be analyzed. Data was then organized according to the predecided topics of semi-structured interview. As the interview was not stringent on the sticking to the topics, more data was gathered on other topics as well. Once this was done, patterns in the data emerged in the form of themes and then the themes were interpreted and analyzed based on the hypothesis of the research. Open-ended data from the questionnaire was also analyzed in the similar manner.

CHIPS questionnaire used to find out if the participants were suffering from any physical ailments was analyzed by calculating percentages of participants suffering from the specified physical ailments.

All quantitative and qualitative data was then integrated to be interpreted and a conclusion can be reached about the research study and the topic in concern.

Ethical Considerations (Human Subject Protections)

- Informed consent for participation in the study.
- Informed consent for interview recording.
- Voluntary participation in the study.
- Have taken permissions from the questionnaires that I have adapted to develop my research questionnaire.
- Confidentiality will be maintained.
- Permissions from AWWA (Army Wives Welfare Association) were taken.
- Contact details of the organizations working in the field of mental health near the participants housing area were shared.

Results and Discussion

This chapter presents the findings of the study. Quantitative results are shared first, followed by the qualitative results and their interpretation. The section begins with the sociodemographic profile of the participants leading to results from analysis of variance, and chi-square, of the variables. This section then enumerates the summary of findings from quantitative analysis which then leads to thematic analysis done for qualitative data. The last section discusses the findings of the study.

Participant distribution

Table 5							
Participant Distribution							
Indopendent Verichle	Number of Deployment Faced Total						
Independent Variable	es	1	2	Total			
	Officer	24 (06%)	89 (24%)	113 (30%)			
Type of Commissioning	JCO	27 (07%)	62 (17%)	89 (24%)			
	NCO	37 (10%)	132 (36%)	169 (46%)			
Total	-	88 (24%)	283 (76%)	371			

There were total 371 participants, of which 113 belonged to Officer category, 89 belonged to JCO category and 169 belonged to NCO category based on the type of commissioning.

${\bf Sociodemographic\ Profile\ of\ the\ Participants}.$

Table 6							
Participant Socio-demographics							
Demographics	Categories	Frequency	Percentage				
	20 - 30	54	14.56				
	31 - 40	212	57.14				
Age in Years	41 - 50	101	27.22				
	51 - 60	4	1.08				
	Total	371					
	Illiterate	15	4.04				
	Up to 10 th Grade	105	28.3				
	11 th Grade	5	1.35				
Edua - 41 - 11	12 th Grade	80	21.56				
Education	Graduate	69	18.6				
	Post Graduate	94	25.34				
	PhD	3	0.81				
	Total	371					
	Less than 5 years	8	2.16				
	5 – 10 years	55	14.82				
	11 – 15 years	80	21.56				
V C.M	16 – 20 years	121	32.61				
Years of Marriage	21 – 25 years	78	21.02				
	26 – 30 years	25	6.74				
	31 - 35 years	4	1.08				
	Total	371					
	0	8	2.16				
	1	63	16.98				
Number of Children	2	245	66.04				
Number of Children	3	46	12.4				
	4	9	2.43				
	Total	371					
	Employed	40	10.78				
D. C.	Home maker	305	82.21				
Participant	Self Employed	25	6.74				
Occupation	Student	1	0.27				
	Total	371					
	No	273	73.58				
Defence Background	Yes	98	26.42				
_	Total	371					

Demographics	Categories	Frequency	Percentage
	1	88	23.7
	2	100	27.0
	3	82	22.1
Number of times	4	51	13.7
Number of times deployment faced	5	34	9.2
deployment raced	6	11	3.0
	7	4	1.1
	8	1	0.3
	Total	371	
Number of times	1	88	23.72
Number of times deployment faced	2	283	76.3
deployment raced	Total	371	
True of	Officer	113	30.46
Type of Commissioning	JCO	89	23.99
Commissioning	NCO	169	45.55
	Total	371	

Participant age distribution.

The age of participants was broadly divided in four ranges of which 212 were between 31 years to 40 years, 101 were between 41 years to 50 years, 54 participants were from 20 years to 30 years and 4 participants were from 51 years to 60 years age group.

Participant education distribution.

The educational level of participants is shown in this Table 6. There were 15 participants who were not educated, 105 participants had studied till 10th grade, 5 participants had studied till 11th grade, 80 participants had studied till 12th grade, 69 participants were graduate, 94 participants were post graduate and 3 participants were PhD out of total 371 participants.

Participant years of marriage.

There were 8 participants who had less than 5 years of marriage, 55 participants who had 5-10 years of marriage, 80 participants who had 11-15 years of marriage, 121 participants had 16-20 years of marriage, 78 were married for 21-25 years, 25 were married for 26-30 years and 4 participants were having 31-35 years of marriage out of 371 participants.

Number of children.

Out of 371 participants, 245 participants had 2 children, 63 participants had 1 child, 46 participants had 3 children, 9 participants had 4 children and there were 8 participants who did not have any child.

Participant occupation.

The total number of participants can be categorized into non-working and working.

Out of 371 participants 305 were not working, or were housewives and rest were working.

Out of 65 working participants, 1 was serving Indian Army, 25 were self-employed, 9 were doing a job, 30 were working as teacher/professor/principal and 1 was student.

Participant army background.

Out of 371 participants, 98 participants had one or the other family member in army, 273 did not have army/defence family background.

Participant facing deployment.

Out of 371 participants, 88 participants had faced deployment once, 100 participants had faced deployment twice, 82 participants had faced deployment three times, 51 participants had faced deployment four times, 34 participants had faced deployment five

times, 11 participants had faced deployment six times, 4 participants had faced deployment seven times and 1 participant had faced deployment once. After categorizing them in 1. Faced field posting once, and 2. Faced field posting more than once, the number of participants in each category are 88 and 283 respectively.

Participant type of commissioning.

Out of 371 participants, 113 belonged to Officer category, 89 belonged to JCO category and 169 belonged to NCO category based on the type of commissioning.

Results of Quantitative Data Analysis

Hypothesis 1.Army spouses are more stressed based on type of commissioning.

Table 7						
Analysis of Variance between Ty	ype of Commissioni	ing and Str	ess			
Stress			df	Mean Square	F	Sig.
	Between Groups	1.30	2	0.65	0.73	0.48
Current Rating of Stress	Within Groups	327.84	368	0.89		
	Total	329.13	370			
Awareness of Variation in	Between Groups	36.55	2	18.28	1.27	0.28
Level of Stress	Within Groups	5313.55	368	14.44		
	Total	5350.10	370			
D 1 00	Between Groups	121.17	2	60.58	4.97	0.01**
Perception of Stress	Within Groups	4485.87	368	12.19		
	Total	4607.04	370			
<i>Note.</i> *p<0.05; **p<0.01 level.						

There is no effect of type of commissioning on rate of stress and level of stress. Perception of stress varies among the three ranks. There was no significant effect of type of commissioning on rate stress, $[F(2, 368) = 0.73 \ (p>.05)]$ or on level of stress, $[F(2, 368) = 1.27 \ (p>.05)]$. There was a significant effect of type of commissioning on perception of stress, $[F(2, 368) = 4.97 \ (p \le .01)]$. The means indicate that the perception of stress among spouses of NCOs (M=13.63) is higher than that of JCO (M=13.01) and Officer (M=12.30) (for descriptive analysis refer Appendix E). This also shows that spouses of officers perceive the least amount of stress.

Hypothesis 2.Army spouses differ in using coping strategies based on type of commissioning.

Table 8						
Analysis of Variance betwe	een Type of Commissi	oning and C	oping S	Strategies		
·	· · · · · · · · · · · · · · · · · · ·	Sum of df		Mean	F	Sia
Coping Stra	negies	Squares	u1	Square	Г	Sig.
	Between Groups	31.38	2	15.69	2.84	0.06
Denial of the situation	Within Groups	2032.62	368	5.52		
	Total	2064.00	370			
	Between Groups	78.14	2	39.07	1.85	0.16
Problem Solving	Within Groups	7769.47	368	21.11		
_	Total	7847.62	370			
	Between Groups	203.99	2	102.00	4.13	0.02*
Cognitive Restructuring	Within Groups	9092.97	368	24.71		
	Total	9296.96	370			
	Between Groups	137.23	2	68.62	5.42	0.00**
Expressing Emotions	Within Groups	4656.48	368	12.65		
	Total	4793.71	370			
	Between Groups	146.00	2	73.00	4.27	0.01*
Seeking Social Support	Within Groups	6289.54	368	17.09		
0 11	Total	6435.54	370			
	Between Groups	556.23	2	278.11	15.72	0.00**
Avoiding the problem	Within Groups	6510.03	368	17.69		
2	Total	7066.26	370			
	Between Groups	61.56	2	30.78	1.42	0.24
Wishful Thinking	Within Groups	7980.44	368	21.69		
_	Total	8042.00	370			
	Between Groups	146.61	2	73.31	7.78	0.00**
Self-Criticism	Within Groups	3467.69	368	9.42		
	Total	3614.30	370			
	Between Groups	94.09	2	47.04	4.90	0.01*
Social Withdrawal	Within Groups	3535.90	368	9.61		
	Total	3629.99	370			
	Between Groups	458.24	2	229.12	21.91	0.00**
Praying	Within Groups	3848.43	368	10.46		
	Total	4306.67	370			
	Between Groups	85.42	2	42.71	6.64	0.00**
Humour	Within Groups	2367.09	368	6.43		
	Total	2452.51	370			
	Between Groups	0.14	2	0.07	0.17	0.84
Substance use	Within Groups	150.59	368	0.41		
	Total	150.73	370			

Coping Strategies		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	38.49	2	19.25	2.65	0.07
Acceptance	Within Groups	2677.62	368	7.28		
	Total	2716.11	370			
Communication of communications	Between Groups	85.08	2	42.54	5.94	0.00**
Suppression of competing activities	Within Groups	2636.46	368	7.16		
activities	Total	2721.54	370			
	Between Groups	41.45	2	20.73	2.67	0.07
Behavioural disconnection	Within Groups	2855.53	368	7.76		
	Total	2896.98	370			
	Between Groups	15.77	2	7.89	1.78	0.17
Self-control	Within Groups	1634.62	368	4.44		
	Total	1650.39	370			
<i>Note.</i> p value significant at '	*p<0.05; **p<0.01 le	evel.				

There was no significant effect of type of commissioning on the coping strategies of denial of situation [$F(2, 368) = 2.84 \ (p>.05)$], problem solving [$F(2, 368) = 1.85 \ (p>.05)$], wishful thinking [$F(2, 368) = 1.42 \ (p>.05)$], substance use [$F(2, 368) = 0.17 \ (p>.05)$], self-control [$F(2, 368) = 1.78 \ (p>.05)$], acceptance [$F(2, 368) = 2.65 \ (p>.05)$], behavioural disconnection [$F(2, 368) = 2.67 \ (p>.05)$], and self-control [$F(2, 368) = 1.78 \ (p>.05)$]. However, a significant effect was found of type of commissioning on the coping strategy of cognitive restructuring [$F(2, 368) = 4.13 \ (p<.05)$], expressing emotions [$F(2, 368) = 5.42 \ (p<.01)$], seeking societal support [$F(2, 368) = 4.27 \ (p<.01)$], avoiding the problem [$F(2, 368) = 15.72 \ (p<.01)$], self-criticism [$F(2, 368) = 7.78 \ (p<.01)$], social withdrawal [$F(2, 368) = 4.90 \ (p<.01)$], praying [$F(2, 368) = 21.91 \ (p<.01)$], humour [$F(2, 368) = 6.64 \ (p<.01)$], and suppression of competing activities, [$F(2, 368) = 5.94 \ (p<.01)$].

The means indicate that officer spouses most often use cognitive restructuring (M=25.63), expressing emotions (M=15.15), humour (M=7.23) coping strategies as compared to JCO spouses or NCO spouses. JCO spouses however have found to be using seeking societal support (M=18.62), avoiding the problem (M=20.48), self-criticism (M=9.47), Social withdrawal (M=9.80), Praying (M=11.33), suppression of competing activities coping

strategies more often than officer spouses or NCO spouses. However, there was no coping strategy which was found to be significantly used more often by NCO spouses as compared to officer spouses or JCO spouses (for descriptive analysis refer Appendix E).

Hypothesis 3.Health of army spouses differs with the type of commissioning.

b. The standardized statistic is -.003.

Table 9 Chi-Square Test between Type of Commissioning and Health Value Asymp. Sig. (2-sided) Health df 4.63^{a} Pearson Chi-Square 4 0.33 Likelihood Ratio 4.72 4 0.32 4.49 Fisher's Exact Test $.00^{b}$ Linear-by-Linear Association 1 1.00 N of Valid Cases 371.00 *Note.* a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.36.

There was no significant association between the type of commissioning and health $\chi 2$ (4) = 4.63, p (0.33) >.05. This means that the rank of army spouses had no association with one being healthy or not healthy; they are independent of each other (for descriptive analysis refer Appendix E).

Hypothesis 4.

Army spouses are more stressed based on number of deployments faced.

Table 10							
Analysis of Vario	ance between Number	of Deploymen	ets faced a	and Stress Ta	ble		
Stress Sum of Squares of Square F Sig.							
Current Rating	Between Groups	1.43	1	1.43	1.61	0.20	
of Stress	Within Groups	327.70	369	0.89			
Experienced	Total	329.13	370				
Awareness of	Between Groups	38.37	1	38.37	2.67	0.10	
Variation in	Within Groups	5311.73	369	14.39			
Level of Stress	Total	5350.10	370				
D 4: C	Between Groups	13.05	1	13.05	1.05	0.31	
Perception of Stress	Within Groups	4593.99	369	12.45			
	Total	4607.04	370				
<i>Note</i> . p value sign	Note. p value significant at *p<0.05; **p<0.01 level.						

There was no significant effect of number of deployments faced on rate stress, $[F(1, 369) = 1.61 \ (p>.05)]$, awareness of variation in the level of stress, $[F(1, 369) = 2.67 \ (p>.05)]$ or perception of stress, $[F(1, 369) = 1.05 \ (p>.05)]$ (for descriptive analysis refer Appendix E).

Hypothesis 5.

Army spouses differ in using coping strategies based on number of deployments faced.

Table 11								
Analysis of Variance between Number of Deployments faced and Coping Strategies								
•	g Strategies	Sum of	df	Mean	F	Sig.		
Coping	z Strategies	Squares	uı	Square	1.	Sig.		
Denial of the	Between Groups	2.92	1	2.92	0.52	0.47		
situation -	Within Groups	2061.08	369	5.59				
Situation	Total	2064.00	370					
D 11	Between Groups	4.30	1	4.30	0.20	0.65		
Problem -	Within Groups	7843.31	369	21.26				
Solving -	Total	7847.62	370					
C :::	Between Groups	64.69	1	64.69	2.59	0.11*		
Cognitive - Restructuring -	Within Groups	9232.27	369	25.02				
Restructuring -	Total	9296.96	370					
г .	Between Groups	59.40	1	59.40	4.63	0.03*		
Expressing	Within Groups	4734.32	369	12.83				
Emotions -	Total	4793.71	370					
Seeking	Between Groups	0.01	1	0.01	0.00	0.98		
_	Within Groups	6435.53	369	17.44				
Support	Total	6435.54	370					
A '1' 1	Between Groups	4.48	1	4.48	0.23	0.63		
Avoiding the	Within Groups	7061.78	369	19.14				
problem -	Total	7066.26	370					
XX 1 C 1	Between Groups	40.28	1	40.28	1.86	0.17		
Wishful	Within Groups	8001.72	369	21.68				
Thinking -	Total	8042.00	370					
-	Between Groups	9.89	1	9.89	1.01	0.31		
Self- Criticism	Within Groups	3604.40	369	9.77				
_	Total	3614.30	370					
G : 1	Between Groups	4.35	1	4.35	0.44	0.51		
Social	Within Groups	3625.63	369	9.83				
Withdrawal -	Total	3629.99	370					
	Between Groups	1.05	1	1.05	0.09	0.76		
_	Within Groups	4305.63	369	11.67				
	Total	4306.67	370					
	Between Groups	67.38	1	67.38	10.42	0.00**		
_	Within Groups	2385.13	369	6.46				
=	Total	2452.51	370					

Coping Strategies		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	1.24	1	1.24	3.06	0.08
Substance use	Within Groups	149.49	369	0.41		
	Total	150.73	370			
	Between Groups	5.24	1	5.24	0.71	0.40
Acceptance	Within Groups	2710.87	369	7.35		
	Total	2716.11	370			
Suppression of	Between Groups	5.85	1	5.85	0.79	0.37
competing	Within Groups	2715.69	369	7.36		
activities	Total	2721.54	370			
Daharriannal	Between Groups	0.55	1	0.55	0.07	0.79
Behavioural disconnection	Within Groups	2896.43	369	7.85		
disconnection	Total	2896.98	370			
	Between Groups	0.01	1	0.01	0.00	0.97
Self-control	Within Groups	1650.39	369	4.47		
	Total	1650.39	370			
<i>Note</i> . p value sig	gnificant at *p<0.05; *	*p<0.01 level	•			

There was no significant effect of number of deployments faced on the coping strategy of denial of situation [F(1, 369) = 0.52, (p>.05)], problem solving [F(1, 369) = 0.20, (p>.05)], cognitive restructuring [F(1, 369) = 2.59, (p>.05)], seeking social support [F(1, 369) = 0.00, (p>.05)], avoiding the problem [F(1, 369) = 0.23, (p>.05)], wishful thinking [F(1, 369) = 1.86, (p>.05)], self-criticism [F(1, 369) = 1.01, (p>.05)], social withdrawal [F(1, 369) = 0.44, (p>.05)], praying [F(1, 369) = 0.09, (p>.05)], substance use [F(1, 369) = 3.06, (p>.05)], acceptance [F(1, 369) = 0.71, (p>.05)], suppression of competing activities [F(1, 369) = 0.79, (p>.05)], behavioural disconnection [F(1, 369) = 0.07, (p>.05)], and self-control [F(1, 369) = 0.00, (p>.05)]. And a significant effect of number of deployments faced was found on the coping strategy of expressing emotions [F(1, 369) = 4.63, (p<.05)] and humour [F(1, 369) = 10.42, (p<.01)].

The means indicate that expressing emotions coping strategy was used more often by those army spouses who had faced deployment more than once (M=14.51) as compared to

those who had faced deployment only once (M=13.57), which was also the case with humour coping strategy. Army spouses who had faced deployment more than once (M=6.76) used humour more often than those who had faced deployment only once (M=5.76). These findings tell us that once you are seasoned or are used to facing deployments you tend to use these coping strategies as compared to others to cope with the stress of deployment (for descriptive analysis refer Appendix E).

Hypothesis 6.Health of army spouses differs with number of deployments faced.

Table 12							
Chi-Square Tests between Number	r of Deployment	s faced and Hea	lth				
Health	Value	df	Asymp. Sig. (2-sided)				
Pearson Chi-Square	6.77 ^a	2	0.03				
Likelihood Ratio	6.71	2	0.03				
Fisher's Exact Test	6.53						
Linear-by-Linear Association	5.66 ^b	1	0.02				
N of Valid Cases	371.00						
<i>Note.</i> a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is							
9.25.			•				
b. The standardized statistic is 2.33	80.						

There was significant association between the number of deployments army spouses have faced and their health [χ 2 (2) = 6.77, (p (0.03)<.05)]. This indicates that there is significant association between health of army spouses based on the number of deployments they have faced (for descriptive analysis refer Appendix E).

To summarize, the findings based on hypotheses:

- (Hypothesis/Objectives: 1 and 4) The results indicate that and rating of stress and awareness of variation in level of stress do not have significant relation with type of commissioning or number of deployments faced. However, perception of stress varies among the three ranks. NCOs (M=13.63) is higher than that of JCO (M=13.01) and Officer (M=12.29).
- (Hypothesis 2) Findings suggest significant effect of type of commissioning on few coping strategies like cognitive restructuring (Officer), expressing emotions (Officer), seeking societal support (JCO), avoiding the problem (JCO), self-criticism (JCO), social withdrawal (JCO), praying, humor (Officer) and suppression of competing activities (JCO).
- (Hypothesis 3) The results indicate that type of commissioning does not have a significant relation with health.
- (Hypothesis 5) Findings suggest significant effect of number of deployments faced on couple of coping strategies like expressing emotions and humor both of which are used more by army spouses who have faced deployment more than once.
- (Hypothesis 6) The results indicate that there is significant relation between number of deployments faced and health $\chi 2$ (2) = 6.77, p =0.03. Army spouses who have faced deployment more than once tend to be healthier, more mildly sick and more not healthy as compared to army spouses who are facing the deployment for the first time.

Intervening Variables

To get more in-depth understanding of the participants in the study, intervening variables age, education, years of marriage, number of children and previous exposure to defence background were correlated with dependent variables stress, coping strategies and health.

Age.

There was no significant relation found between age and current rating of stress experienced, awareness of variation in level of stress, perception of stress and health. Intervening variable of age was found to have significant positive correlation with problem solving (r=.11, p (two-tailed) <.05), cognitive restructuring (r=.14, p (two-tailed) <.01), expressing emotions (r=.18, p (two-tailed) <.01), humour (r=.16, p (two-tailed) <.01), acceptance (r=.10, p (two-tailed) <.05), and suppression of competing activities (r=.11, p (two-tailed) <.05) coping strategies. This indicates that as the age of the army spouses increases so does the use of above-mentioned coping strategies increases (for descriptive analysis refer Appendix E).

Education.

No significant correlation was found between health and current rating of stress experienced as well as few coping strategies - denial of situation, seeking societal support, wishful thinking, humour, substance use, suppression of competing activities, self-control.

Intervening variable of education was found to have significant negative correlation with coping strategies - perception of stress (r=.11, p (two-tailed) <.05), avoiding the problem (r=.21, p (two-tailed) <.01), self-criticism (r=.17 p (two-tailed) <.01), social withdrawal (r=.12, p (two-tailed) <.05), praying (r=.28, p (two-tailed) <.01) and behavioural

disconnection (r=.13, p (two-tailed) <.05) coping strategies. The results indicate that higher the education of army spouses lesser is the use of the above-mentioned coping strategies.

There was significant positive correlation between awareness of variation in level of stress (r=.12, p (two-tailed) <.05), coping strategies - problem solving (r=.17, p (two-tailed) <.01), cognitive restructuring (r=.17, p (two-tailed) <.01), expressing emotions (r=.14, p (two-tailed) <.01), acceptance (r=.13, p (two-tailed) <.05). This indicates that army spouses having higher education use the above-mentioned coping strategies more often (for descriptive analysis refer Appendix E).

Years of marriage.

There was no significant correlation found between years of marriage and current rating of stress, awareness of variation in level of stress and perception of stress. No significant correlation was also found between years of marriage and coping strategies — problem solving, seeking societal support, wishful thinking, substance use, acceptance, and self-control. Also, there was no significant correlation between years of marriage and health.

Intervening variable of years of marriage has significant positive correlation with denial of the situation (r=.13, p (two-tailed) <.05), cognitive restructuring (r=.12, p (two-tailed) <.05), expressing emotions (r=.15, p (two-tailed) <.01), avoiding the problem (r=.10, p (two-tailed) <.05), self-criticism (r=.11, p (two-tailed) <.05), social withdrawal (r=.12, p (two-tailed) <.05), praying (r=.24, p (two-tailed) <.01), humour (r=.18, p (two-tailed) <.01), suppression of competing activities (r=.12, p (two-tailed) <.05) and behavioural disconnection coping strategies (r=.11, p (two-tailed) <.05). This indicates that as army spouses become experienced in marriage, they tend to use above-mentioned coping strategies more often (for descriptive analysis refer Appendix E).

Number of children.

There was no significant correlation found between number of children army spouses have and current rating of stress, awareness of variation in level of stress and perception of stress, Number of children did not have significant correlation with problem solving, expressing emotions, seeking societal support, avoiding the problem, wishful thinking, self-criticism, humour, substance use, acceptance, suppression of competing activities, behavioural disconnection, and self-control coping strategies. Also, no significant correlation was found between number of children and health of army spouses.

Number of children however have significant negative correlation with cognitive restructuring (r=.12, p (two-tailed) <.05) coping strategy. There was significant positive correlation found between number of children and coping strategies – denial of the situation (r=.10, p (two-tailed) <.05), social withdrawal (r=.13, p (two-tailed) <.05), praying (r=.12, p (two-tailed) <.05) (for descriptive analysis refer Appendix E).

Previous exposure to defence background.

Previous background of defence did not have significant correlation with stress, coping strategies or health of army spouses. However, social withdrawal coping strategy (r=.10, p (two-tailed) <.05) was found to be significant negative correlation. This indicates that if there is previous exposure to defence background army spouses will not use social withdrawal as coping strategy (for descriptive analysis refer Appendix E).

Results of Qualitative Data Analysis

Table	20		
Themo	atic Analysis of Qual	litative Data	
Area	Theme	Sub-Themes	Percentage
		Preparing for deployment	95%
	D 1	During deployment	98%
	Deployment	Return from deployment	25%
		Uncertainty of next posting	85%
		Uncertainty of life	99%
	T 01	Overcoming emotions to face life	89%
	Fear of loss	Everything suddenly will cease to exist	70%
		Death of a soldier in the unit	13%
		Household	95%
		Children	98%
	Burden of	Social	75%
	responsibilities	Unit	50%
		Can't afford to fall sick	85%
		Education	95%
	Children	Career	23%
		Behaviour	78%
		Parenting	83%
Ors		Absence of father	65%
esse	Communication	Can't take major decisions	65%
Str	with husband not	Worried about husband's safety	98%
or	possible	Can't share everything	85%
Major Stressors	P	Right after marriage - difficult	63%
7		Clueless about how to live here	70%
	Military life	Have to follow protocol - mandate	45%
	winitery inc	Loneliness	86%
		Cannot trust anyone	36%
		Own health	80%
		Husband	85%
	Health	Parents	60%
		Children	88%
		No career aspirations	60%
		Worked and retired	2%
		Have a job	25%
		Not educated but do stitching/beautician	15%
	Sacrificing career	Had to leave	50%
	Sacrificing cureer	Forced to prioritize family	55%
		Difficult to choose line of work when whole	
		household is dependent on you	11%
		Change of career	15%

Area	Theme	Sub-Themes	Percentage
Major Stressors	Finances	Crisis	44%
		Emergency expenses	32%
		Limited resources	45%
		Army protocol – saving ensured	1%
	Relocation	Moving/shifting alone to new location	85%
		Unavailability of quarter	35%
		Process of re-admission of children to	65%
		school	
		Do not move and live alone because of	33%
		education of children	
Sexual needs	Replacement	I don't think about sex, I pray	45%
	Repression	We don't think about it as we know we can't	70%
		get it	
		Doesn't come to mind as it is on backburner	85%
	Positive Thinking	Distance keeps romance alive	35%
Identity	Own Identity	Have worked long hours to earn my name	20%
		I like it when I am referred by my husband's	45%
		name	
		Initially it was very difficult	10%
		People know me by my name	25%
Resilience	"Elephant in small bites"	Considering it as duty	75%
		I have accepted I have to live alone and take	20%
		care of children	
	Trauma	It feels as if I want to leave everything and	2%
		run away	270
		I feel scared	65%
		Sleep tends to reduce because of not having	74%
		mental peace	
	God/Religion	My belief in God takes care of everything	40%
		God gives troubles he gives happiness too	20%
		God looks after me	30%
		Sab apne aap thik ho jata hai	70%
	Courage	Whatever the stress I find solution	40%
		Sometimes instead of situations one has to	5%
		take care of one's health	
		I can handle anything; earlier used to think	50%
		were how will I handle everything	
<i>Note</i> . The data is based on the semi-structured interviews and open-ended questions			

Note. The data is based on the semi-structured interviews and open-ended questions from the questionnaire

Thematic analysis of the qualitative data resulted in the following salient themes: fear of loss, burden of responsibilities, children, communication with husband not possible,

military life, health, finances, sacrificing career, relocation, replacement, repression, positive thinking, own identity, "elephant in small bites", trauma, god/religion and courage.

Deployment.

Major stressors in the life of army spouses surrounds around deployment and all the stages related to it. Ninety eight percent of the participants mentioned the deployment phase to be stressful, the reasons shared ranged from taking care of children alone to managing a household. Preparing for deployment, when they are preparing to bid adieu to husband leaving, when they are not sure if he would return, creates a lot of stress for the army spouse and ninety five percent of the participants have shared this. Uncertainty related to next posting is also one of the major stressors leading to 85 percent of participants sharing that they are not able to take decisions related to education of children due to this, which school to get them admission in to will they be having facilities at the next station so that the child can learn music as he has now. Few verbatim comments related to this theme are shared below.

"It's difficult when he is not around, it's difficult to sleep at night. I go and check many times if the door is locked or not. Sleep is disturbed. And when he is around, I sleep peacefully as he is there to protect."

"Stress increases when he is around too, as now, I have to be a good hostess and entertain so many people, go to so many parties as they are compulsory AWWA activities."

"I get stressed when husband goes on field posting but then I leave it to God."

"Field posting leads to apprehensions and the fear of loss is always at play. Peace posting leads to a better social life and less stress."

"The feeling of getting separated is most stressful & managing house, shifting from one accommodation to another is a painful task."

"During field posting I am stressed because there are such places of field posting where they do not get even good food to eat. They are troubled by winters. And during peace posting such problems are less."

"In peace posting I keep waiting for him. We have no family time. Only I manage all things but in field posting they have proper leave program so I know when he will come, he will help me in managing things. So, field posting is better."

Fear of loss.

Uncertainty of life is a given for a defence personnel and that is a huge stressor hovering on mind all the time for them. Almost all agreed to have this fear. Another related fear of loss is losing someone from the unit (a unit consists of approximately 1000 families of soldiers). This is perceived as loss as a unit is a family that looks after each other at all times. Some of the participants' expressions related to this theme are shared below.

"Uncertainty. Feelings, fear, insecurity of what will happen, you attach so much with your husband that you can't imagine that you have to be without husband."

"He was in field that time. My parents were not able to come to support. It was one night. The news was coming and we did not have any information about him. A sensitive area. It was coming in news that one officer has gained martyrdom and we knew it is from his unit and we were not able to get in touch with him. So that was the most stressful night. It was like 90-10 situation, got it, and I knew he was there and I did not have a support system and my son was very small, he was with me. How other ladies helped me, she was a very close friend, she said...nothing doing you come and stay with

me for the night. Although we couldn't sleep, we kept talking the whole night, but she kept my mind occupied. And she was a tarot card reader also, so she took out the card and told me that nothing will happen to him. How did I handle that night. I was very young, 29 or 30.I kept fluctuating, rona bhi aaya, fikar to tha hi, now what...kind of feeling. Ab mein kya karungi, aage kya hoga, mere paas koi security nai hai, where will I go, how will I live my life. you know you start thinking na, one chain leads to the other ki agar ho gaya to ab mein kidhar. You have to have...you can't go back to your parents, you don't want to, in-laws also. You want to be independent with small child, you have to live for him. ki life khatam ho jayegi. there will be no life, that kind of feeling. you know....kind of you are finished, aisi feeling aa rahi thi. Next day morning we came to know that it's not him, it's somebody else. That's also very sad, he is also somebody's son or husband or whatever. That hurt is there but then relief was also there, it's not me. Wo is wakhat ek relief sa aaya aur dukh bhi hua, (that time I felt relief and sadness at the same time), it's a mixed feeling at the same time, sad....he was not married, he was unmarried. That's also sad for the parents. So that was it."

Burden of responsibilities.

Responsibilities of children and household are the top most stress areas for army spouse, more than 95 percent of them responded with these two areas being the most significant as the concern area. Further, they reported these to decrease tremendously when it's a peace posting or when the husband is back on holidays. Some of the experiences in participants' own words are shared below.

"After my first delivery, there was a time when my Iyear old son had not peed for a whole day and his private parts were swollen. I lived in village with my in-laws. I ran with my child to take him to the hospital. Husband was not there, there was no male in

the house to come along, there was no vehicle in which to go and the hospital was far.

Then somehow, I found a way, I went with my cousin in a tractor who was going towards that side and showed him at the hospital and the treatment was done. It is difficult without husband. My in-laws also never stopped me from doing anything. My in-laws are really good."

"I have recently become mother, so to take care of baby alone is difficult. To go alone to MH, all the work of baby, taking care of mother-in-law and as husband is on field posting I am always in tension and I am an employee too, so pressure of work as well."

"I have to take care of in-laws who do not keep well. If children get sick then too there is difficulty. Many a times I have to take mother-in-law to Chandigarh hospital, husband does not get leave, there is no one at home, so we both have stress."

"Shifting accommodation thrice in SF,

Condition of house,

Staying alone and managing alone with 3-year-old daughter,

So called obligations to be met,

taking care of a child as a single parent."

"Mental stress which is mounting with each passing day as some or the other thing props up. After all you marry so that you have a companion."

"We have to handle everything on our own including child career, household repairs, savings, bank work - almost everything, bill payment. Things like...telephone people purposely stop the line for her to visit their office again and again. Husband has drinking problem. She is worried about her daughter, as she visits rape sites, not confident around boys."

"I have to do all the work. Sometimes I do not understand certain things to enquire about that I have to talk to many people. And some people when asked give faulty information and we don't even realize....such problems also we have to face."

"Hota hai par hamara kam yahan hai bachon ko sambhal na wo hum acha se karte hai." (It happens but our work here is to take care of children, that we do properly).

Children.

The responsibility of children is a major concern area for army spouses and when is considered as a separate area of concern, we find out that education and parenting children alone takes up the top most places and more than 80 percent army spouses share these concerns. Some of the examples from the verbatim comments are shared below.

"He would come home in 3-4-6 months. He came for my delivery, then after 9 months. My son started walking by then, he didn't recognise him when he came home after 9 months."

"Because of children, many a times he takes the vehicle and goes out and if he doesn't come back so I keep thinking. I get stressed."

"Stress is basically related regarding the career of growing children as I have to face it alone on day to day basis and husband is not physically present around for assistance."

"When husband is not there and children fall sick then there is too much difficulty. I always think that I should not fall sick otherwise who will take care of children."

"My son had a rare condition where he was having a bone growth from the knee and it was extremely painful and odd for him. I was told to come to this station and go to the MH and show. I showed they said that they would wait for the operation till he becomes

18 years of age and then do the surgery, till that time they said let it grow, let's see how much it grows. But I don't know what but a miracle happened and the extra bone fell off by its own. Yahan bus sab ho jata hai, humein chinta nai hoti."

"Stressed about studies of children"

Communication with husband not possible.

Communication is another area which is of concern as 98 percent of army spouses responded being worried about the safety of the husband and if the spouse does not call, it plays within the brain and affects their behaviour. Another factor which is important to note is that for so many reasons, they are not to share the troubles they are facing with the husband sitting alone in a field posting in a risky situation. So, they have to hold on to the information until the husband comes home for holidays and by that time the crisis has most likely passed. Some of the verbatim examples are shared below to elaborate on the area of concern.

"During war, lack of communication affected a lot. He was in high altitude area. I lived with parents or parent-in-law. The distractions of studying and working helped in coping."

"We should not inform husband about the household situation. His career should not be on stake, we should not share sensitive information with them."

"I cannot take decisions about my career or accommodation without talking to him and he is not in an area where network is there"

"I get worried if I do not get a call from my husband, and then I become more irritable and can't concentrate on anything."

Military life.

Loneliness is one aspect of military life which is most significant and important and most of the time goes unnoticed as the spouse is busy accomplishing tasks and managing things at home. However, there are many more areas of military life which are commonly shared by many army spouses. Some of the verbatim examples are shared below.

"So, things are happening, but not everybody will have time. See there are avenues...what army has created, like if I am in trouble or I have an issue in my marital life I can reach out to a senior's wife and all but I don't know how...what point will you reach at when you actually will decide to talk to your senior. There is limited information that is shared, that is because of trust, people don't have trust anymore."

"When I got married, we went to the unit and as soon as we reached, he had to leave. That was the first time I had moved out of my mother's house and gone to a different city. And to be left alone was shocking in itself but when I realized I have to manage a household and my husband didn't give me any money, I cried and cried because I did not know what to do in such scenario. Thankfully other wives living there came to my rescue and they helped me understanding what all needs to be done, from where will I get grocery and stuff. They reported to the CO, husband was asked to send money immediately."

"Neighbours, friends help each other. It gets managed. If we are good, we will find someone or the other. If not this, next one, there would be someone that we gel with and help each other. We do not mingle with the new ones; we have others of our own."

"Fauj ki zindagi bahut achi hai aise. Aisa kuch upar niche hota hai tab aisa lagta hai, jana to sabko hi hai, dar lagta hai thoda par hum bhi unki tarah ho jate hai, "jo hoga dekha jayega". When parliament was attacked, that time everyone left, but then also we all were together. Because we were together, we don't feel that stressed. We have good friends, help each other. Those who live in village they are more stressed, we are not."

"Yes of course. Living with husband during peace posting there is no fixed time for food and water, especially in parties and late-night dinner. Whole lifestyle gets disturbed and it has a bad effect on the children as well."

"Well, I am fine. My kids are now grown up, it's time for them to leave the nest. With the husband on field posting I feel lonely, I cry and get all sorts of weird thoughts in my head. After a lot of pestering from my husband I have now finally joined class to learn singing, go for aerobics class and cycle regularly. These things are now helping."

Health.

Health is a major concern area for army spouses as they cannot afford to fall sick. If they do their household gets neglected and there is no one to take care of their children. However, the stressors that they go through impact their health and 80 percent of army spouses feel so. Apart from this, they worry about health of their children (88 percent) and husband (85 percent). Verbatim comments elaborating this aspect are shared below.

"I am an asthma patient so when my husband will get a posting at a cold place, he won't take me with him because I need a doctor and medicines. So, he would leave me at in-laws or with brother-in-law, so never felt stressed or affecting me in any manner. I had to think about myself, I am liking it here in Poona, it suits my health."

"Zyaada sochti hu to sar mein dard hota hai, baki sab thik hai. Puja late hoti hai to nashta late hota hai, fir ulti aati hai - bache hospital le jate hai drip chadti hai aur mein thik ho jati hu. How many times this happens? (kids kept laughing). Zyaada nai, kabhi kabhi. I eat one roti at dinner, my hair has started falling. Saara ghar akele shift kiya, wo hote to acha tha. Haan bachon ne madad to ki. Pura ghar shift karna aur baxe bhar ke is chote karmre mein basana mushkil hai. Bataya thodi tha ki itna chota kamra hai. Haan thakan to hoti hai ab itna kaam karenge to. Nai yaad nai aati bas madad karo aur fir jao." (When I think a lot, I get headaches, everything else is ok. If I do prayers late, then breakfast gets delayed and I vomit. Children take me to hospital and I am put on IV. How many times this happens? (kids kept laughing). Not often, sometimes. I eat one roti at dinner, my hair has started falling. I shifted the whole house alone; it would have been helpful if husband was around. Yes, children helped. Whole house to be packed and shifting to this small house is difficult. Husband didn't even share that this was this small. Yes, I do get tired if there is so much of work. No, I do not miss him, just help me out and then leave).

"I had a baby who died or was born dead then second one died after 12 days then I had the daughter then a miscarriage and then one miscarriage and then son. Ab ye beta ka do saal barbad ho gaya padhayi ka."

"During Kargil War, phone used to come after a month or in 20 days but invariably every alternate day calls from friends and relatives will come to inquire. Media had brought the war into everyone's living room. Parents and in-laws were worried all the time. I would make up stories when they would come back from market that the call came and he is fine. This made the parents and in-laws busy responding to the countless phone calls and sharing that their son/son-in-law was safe. I think I was able to do that as I was young, I am more worried now."

Finances.

Finances are a concern for one and all. However, this area does not come up in primary issues that cause stress in an army spouse. This can be because their basic necessities of shelter, safety, food, clothing are taken care. There is a savings scheme run by the army which was shared by one participant only. Either others are not aware of the same or they try and save more than that.

"Earlier had a lot of monetary issues. we would have to manage with 1 packet of refined oil for a month. His salary was low. So, after everything, there was no savings. when I got married, he was getting about 1500-2000 and 1000 is what reached my Mother in law's hand."

"Husband decision lete hai. Wo zabardasti leke dete hai. Washing machine abhi nai kharid ke deke gaye. Ho jata hai, Madam. Thoda thoda sab mein se bachate chalte hai. Padhayi likhayi mein jitna nikalna hai utna nikalna hi hai...50%. 30% khana, ghar kharch aur 20% bacha le lete hai. Kharch karna hai to pura kharch kar sakti hu par aage ka soch ke chalna hai. Bas ho jata hai...washing machine kharab ho gayi thi.... jarurat hi ho gayi na." (Husband takes decisions. He buys stuff for me forcefully. He bought me a new machine this time. It happens, Madam. Save a bit in everything. Education cannot be compromised so 50 percent, 30 percent in food, household expenses and I save 20 percent. If we want to spend it can be spent completely but we have to think of the future and save. It happens, washing machine was not functional anymore so it became a need-based expense).

"When apples are expensive, you don't need to eat them. Have the other cheaper fruits as per season. Look at people less fortunate than you. We have been given a lot. We have had better childhoods."

Sacrificing career.

Army spouses need to give priority to education of children and rank and responsibilities of the husband. The implication is that if they are able to manage their time doing a job in-between this, they may. Fifty five percent of army spouses shared that they have been somehow forced to prioritize family. However, there are other sixty percent of women who said that they did not want to have a career and are happy taking care of children. Some of their views are shared below.

"I left my job. I took a call on the name of child, being a mother, wife to leave. I was frustrated and thought of taking up my resettlement course. Worked hard to clear the entrance of IIM Ahmedabad and pleaded my family to come and stay with my daughter for my career sake. Because I was feeling potential is getting wasted, I am wasting my life babysitting. I did the course and got 4 good lucrative offers. But as it has been never easy, I wasn't able to make a choice because I was not able to communicate with my husband and make a mutual decision. This decision was to be taken mutually but I was not getting time to do that. I needed help from my husband. I did not have a support system to how to I relocate alone to a place I just know a name of. I was not able to talk to him because network was the issue. Nobody will understand my sacrifices down the lane. it's not about the money, I have the calibre. I am so sorry for getting emotional."

"I didn't make my career, I regret it."

"There is no need to do a job. Never felt like doing a job. I have studied till 12th. In Orissa. When I was posted in Secundrabad, took Hindi lessons for 6 months to be comfortable."

"I do parlour work from home. I do beauty parlour work for 8 years. There is no fixed time for work. Go to houses of whoever calls me. Have been earning like this since many years."

Relocation.

Shifting alone is a major concern area for 85 percent of army spouses. They would rather have their husband with them to help with moving to a new location, but which is not possible at most times. Apart from setting up home in a new location, the worry and concern is also about which location the next posting is in. If it is a small place the children will not have good education facility and hence, they might have to decide to stay where they are. These and many such decisions are dependent on knowing where they are going next and the information is not available beforehand to plan. This creates undue stress for both the spouses. Some of the verbatim comments related to this theme are shared below.

"There is much stress when you are between postings. Because that's the time you are not certain which location you will be going to and how will you plan ahead and especially now lot of younger generations are working and they are not easy...it's not easy to move and re-establish yourself in some way. So those kinds of decision making...the ideas you have, should you continue with your career or should you join your husband and if you are joining, where, what kind of impact it will have. Those kind of things.... I think we have only had that experience only once and it helped because he was going to a non-family station so we could easily make that decision. But in future I know it will be difficult. You can't....so I think circumstances help you arrive at your decision eventually. Definitely, I mean if you don't know what you are going to eb doing next.... I mean its small things also like...you know you have to vacate your house; you have to resettle. So, these things would create... I won't say absolute sleepless nights.

Sleepless nights would be when he is deployed somewhere.... which you don't know, you know how it will be. But yeah stress is definitely there."

Replacement.

Replacing sexual needs with responsibilities or prayers is what 45 percent of army spouses do. They know that there is no point in getting bothered by it and they are assured that the husband is going to come on holidays and it will be like honeymoon again. Some of their expressions are shared below.

"Bhagwan mein dhyaan lagati hu aur bachon ka khayal rakhte hai. Hum sab milke bhi yahi baat karte hai - jab wah aate hai to thik warna is sab mein hamara dhyaan nai jata." (I focus my attention on God and taking care of children. We all talk about this too that when husband comes then its ok bu otherwise our mind doesn't wander in the direction of sex).

"Nai aisa sab dimag mein nai aata, kam itna hota hai ki is sab ke bare mein sochne ka time hi nai milta. (Children are small.)" (No, nothing like this comes in the mind, work is too much to get time for this).

"I concentrate on God and take care of children when he is not around. Sexual needs are not thought of then."

Repression.

Eighty five percent of army spouses put sex on the backburner. They say that if it is not available, they would rather push it aside and concentrate on doing what they are supposed to be doing. They mentioned that taking care of everything alone does not t leave

you with adequate bandwidth to think about your own sexual needs. Examples from the verbatim data are shared below.

A participant when asked about her sexual needs, "Pyaar bhi bahut hai, kabhi bhi apni biwi ko wo aise nai bolte....koi kaam bhi ho to bolte hai hum karenge, chalo ghumne. Hum kar lenge, saath mein aa jate hai karne. Aisa kabhi dhyaan hi nai jata, pehle to saath mein hi nai rahe. Bachon ke piche jyaada dhyaan jata. We ladies talk about this all the time that how we just let him be less priority now and children have taken over as priority."

"Fauji wife ko pata hai jeevan kaisa hai to ye sab kabhi khayal nai aata." (An army wife knows how the life is, these things never come to mind).

"We don't feel the need for sex. We know it's not available and we are too busy to even think about all this stuff. When he comes for holidays, it's like honeymoon again. We have a number of honeymoons."

Positive Thinking.

Taking sexual needs as secondary or not even important and deferring these until the husband comes home on holidays is what these army spouses appeared to have become used to.

"No time really for sex. My husband still romances like we are newlyweds, but I have to remind him that there are children around. He jokes that lets leave the children with inlaws and we should go to his posting together. I say I can't leave my kids like that. Ye bolte the, nai aata chuti pe to thik tha, makan bhi itna chota tha. Less days together, but a lot of love from him."

"Sex was different, awkward earlier, now in fact I enjoy it more, because one is confident of oneself and one's body."

Own Identity.

Army spouses derive their identity largely from their husbands. Forty five percent expressed that "I like to be known by my husband's name". They also focus on the social status that they obtain in the role of an army spouse.

"Madam bolte hai, acha lagta hai." (I am referred to as Madam, I like it).

"Initially I was Mrs. XYZ but it's up to you how you want to live. I worked in private schools more, out of the army set up, I had my own identity."

"There is a set trend in army to be identified with husband's name, I am happy with it."

"Elephant in small bites, one day at a time."

This area focuses on the responses from 75 percent of army spouses mentioning that the husband's duty is to protect the border and their duty is to take care of the home front.

This is so deeply ingrained mothers experience guilt if they are not able to manage children well. Another aspect is accepting the fact that they have to live alone most of their life. Below are some of the verbatim examples from the data.

"During Kargil, each day passed with lots of tension and watching news elevated that pain and concern. As the day ended you think, no news is good news."

"Ye fauji hai, hamara kam hai bachon ka khayal rakhna, nai rakha to aa ke puchengein. Hamein apna duty karna hai bas." (My husband is an army officer, our

work is to take care of children, if I do not take care properly my husband will question me. We have to do our duty, that's it).

"I have habit of writing a diary since 10th grade, I think that helps me reflect and get back charged."

"Take things as they come."

"Hum yahaan bachon ka khayal rakhne ke liye hai, hamari duty hai ki wo pad likh lein" (We are here to take care of children, our duty is that they get educated).

Trauma.

Army spouses tend to have a lot of sleep issues during deployment as the stressors at that time are many. Starting from husbands' safety to education of children, to running a household and managing the health of old parents/parents-in-law. Seventy four percent of army spouses have shared that their sleep gets impacted and they are not able to sleep at night.

"I get restless. I get worried. I am not able to sleep. Don't feel like eating, I just keep thinking about him."

"It feels as if I want to leave everything and run away. But can't do that I have to handle everything."

"Bada beta kam akal ka hai aur chota beta sunta nai hai, aur pati nai hai mere saath.

Kaise sambhalu pata nai chalta." (Elder son is mentally challenged and the younger one doesn't listen, and my husband is not with me. I don't know how to handle them).

"I am scared, not able to sleep. I have headache."

"Pehli baar alag rahe. Hamesha saath rehte the. (First time my husband is living separate from me. We have always lived together). I had uteriene cyst which had to be operated. Son suffered from Pinosines. Called husband for that. Son was on bed for 3 months; he was preparing for IIT for 3 years and did not get it. He told me, "Ma ab mein IITian nai ban sakta hu", I was really stressed that time. I met with an accident right before 10th and 12th grade exams of my children. My husband had to go next day. I had brain injury. Doctors were not leaving me, I had to go because next day was exam of children. I forced doctor to leave me on my promise that my house is near I will come back if there is anything wrong happening with me. My husband was also not ready to sign that document, I did it. My husband said I will not go, I told him if you don't go now, how will I attend Jhanoyi next month. My husband said, apni halat nai dekh rahi, gaon jane ki padi hai ise. All this took a month to be okay. These two incidents were very troublesome but otherwise my life has been good. If I become weak what will happen of my children, my husband, courage automatically comes."

God/Religion.

Faith in God, the higher power is what helps women pull through the responsibilities and crisis that they manage alone. About 70 percent believe that they have faith in the higher power who takes care of them,

"When the troubles weigh heavy, I find solace in the fact that the God who is sending troubles our way will also solve it and bless us with ease. That's my faith."

"You plan and God gets funny."

"Worrying is waste of time, God shows the way out."

"Sab apne aap thik ho jata hai" (Everything gets better on its own).

Courage.

Courage comes very naturally and army spouses show considerable resilient. About 50 percent said that they might not be ready for the "curve balls of life" when they started an army life, but now, they find themselves capable of handling anything and are oriented to finding solutions. Some of the verbatim examples elaborating on the same are shared below.

"I was in my 9th month of pregnancy and was alone. My mother had come to take care of me and my mother's bleeding won't stop. Carried her on shoulder, didn't realise my water broke and was 4 inch open. All this was shocking. Doctor said mother had to be operated. No one was there; father was in Canada with brother. Whom to call and ask, didn't know what decision to take, called up Mama in America he said I'm coming and next day everyone came to help. After that I went to my Gynaec and said I feel delivery ho jayegi. Nobody told me about enema to be given during pregnancy, no one talked about such stuff. I delivered a boy and called up my father saying mere ghar bacha hua hai, ladka hua hai, aap log aa jaoge? Aur Husband ko bhi bata dena ladka hua hai."

"I was pregnant during Kargil war and fell down from stairs. I was living in SF quarters. Neighbour took me to MH and my left side was paralysed. I came back home and did not tell anyone about it, if I told my husband it would impact his concentration there and that was riskier. During last days had informed my family and then they took care."

"During Kargil War, phone used to come after a month or in 20 days but invariably every alternate day calls from friends and relatives will come to inquire. Media had brought the war into everyone's living room. Parents and in-laws were worried all the time. I would make up stories when they would come back from market that the call came and he is fine. This made the parents and in-laws busy responding to the countless

phone calls and sharing that their son/son-in-law was safe. I think I was able to do that as I was young, I am more worried now."

Physical and Psychological Health

Apart from the major stressors and concerns in the life of army spouses the questionnaire inquired about the physical and psychological health of the participants using open-ended questions. CHIPS was used during the semi-structured interviews to get information on the physical and psychological health. The results of both together are presented in graphical form in Figure 10.

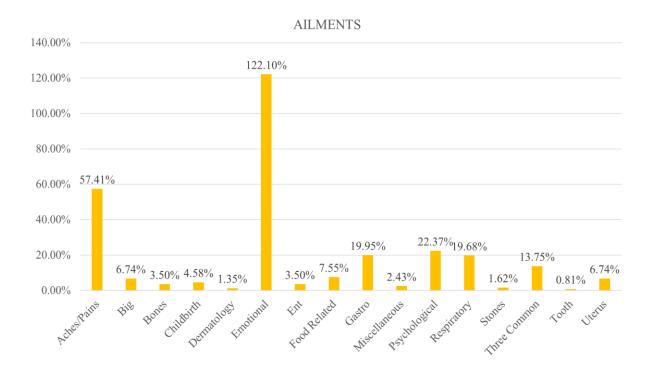


Figure 10. Ailments experienced by army spouses

The army spouses experience the following health problems: aches/pains 57.14 percent, big 6.74 percent, bones 3.5 percent, childbirth 4.58 percent, dermatology 1.35 percent, emotional 122.1 percent, ENT 3.5 percent, food related 7.55 percent, gastro 19.95

percent, miscellaneous 2.43 percent, psychological 22.37 percent, respiratory 19.68 percent, stones 1.62 percent, three common (diabetes, BP, thyroid) 13.75 percent, tooth 0.81 percent, uterus 6.74

Actions to be healthy

In the questionnaire, one open-ended questions asked the spouses what they do to remain healthy. The results of the same are presented in a graphical format in Figure 9.

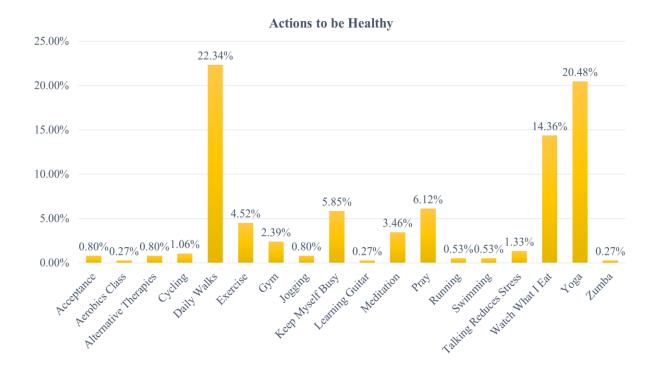


Figure 9. Actions taken to be healthy The results indicate that 22.34 percent army spouses go for walks, 20.48 percent army spouses do yoga, 14.36 percent army spouses watch what they are eating, 6.12 percent pray, 5.85 percent try and keep themselves busy by joining some classes or reading or doing some work, 4.52 percent exercise regularly, 3.46 percent meditate, 2.39 percent go to gym, 1.33 percent talk – share what they are feeling to reduce stress, 1.06 percent cycle, 0.8 percent army spouses use alternative therapies, go for jogging and have

accepted their situation, 0.53 percent go for running or swimming, 0.27 percent go for aerobic, guitar or Zumba classes. This indicates that army spouses are taking actions to take care of themselves using various modalities.

Discussion

Type of Commissioning

Stress.

- Perception of stress is more for NCO spouses compared to JCO spouses. This
 could be because JCO spouses have spent more number of years being an
 army spouse. Perceived stress has been found to have a negative correlation
 with mental and physical well-being in the research conducted by Padden
 (2011), and health has been found inversely associated with perceived stress
 (Feizi, Aliyari, & Roohafza, 2012).
- Officer spouses had the least perception of stress of the three type of
 commissioning. There was also a negative correlation between education level
 and perception of stress among army spouses. Therefore, one of the factors
 that can be attributed to lower perception of stress in officer spouses is higher
 level of education.

Coping Strategies.

Officer spouses significantly used cognitive restructuring, expressing
emotions, and humor as coping strategies more than JCO or NCO spouses.
 One of the reasons could be that officer spouses have higher education and hence may be better able to express their thought process.

 JCO spouses significantly used seeking societal support, avoiding the problem, self-criticism, social withdrawal, praying, and suppression of competing activities coping strategies more than officer or NCO spouses.

Health.

 Type of commissioning does not have a significant effect on health status of army spouses.

Number of deployments

Stress.

• Number of deployments faced does not have a significant effect on stress faced by army spouses. There can be other factors like duration of deployment and the frequency of deployments which can have impact on stress and have not been considered in the present study. Deployment and relocation are found to be most stressful (Dimiceli et al., 2010), however, background indicated a correlation with stress in the current study. Significant negative correlation was found between background and social withdrawal coping strategy.

Coping Strategies.

• Expressing emotions and humour as coping strategies are used more by army spouses who have faced deployment more than once. It is possible that through experience they learn that expressing emotions is more helpful to cope with stress of deployment. It is understandable that during the first deployment army spouses feel too overwhelmed to use humour as coping strategy.

According to Lazarus (1984), expressing emotions and humour both are

emotion focussed coping strategies and Dimiceli (2010) has found these to be predictive of more health issues.

Health.

• It is interesting to note that health has been found to have relation with deployment and not with type of commissioning. This indicates that deployment has an impact on army spouses whatever the rank of the husband may be. Deployment was also found to be a major stressor through qualitative analysis.

Type of Commissioning and Number Deployments

Stress.

 Interaction effect of type of commissioning and number of deployments is not significant.

Coping Strategies.

 Interaction effect of type of commissioning and number of deployments is not significant.

Health.

 Interaction effect of type of commissioning and number of deployments is not significant.

Conclusion

The objective of the study was to find the relationship between stress experienced, types of coping strategies used and impact on physical and psychological health of army spouses whose husbands are deployed. Deployment husband's safety, health-career of children, and burden of responsibilities have emerged as the major stressors for army spouses.

If perception of stress is more, using coping strategies such as denial of the situation, expressing emotions, avoiding the problem, wishful thinking, self-criticism, social withdrawal, and suppression of competing activities can aid in remaining healthy. Most of these coping strategies are emotion focused coping strategies and have been found to help in remaining healthy. First deployment is overwhelming compared to later ones as experience enables one to learn and cope better with the situation. Army spouses seem to have competent resilience skills which helps them to bounce back faster. This support system gives them the ability to bounce back sooner. The study has significant implications on the need for greater psychological support to spouses in the army context.

Reference

- Asnani, V., Pandey, U. D., & Sawhney, M. (2004). Social Support and Occupational Health of Working Women. *Journal of Health Management*, 6(2), 129–139. https://doi.org/10.1177/097206340400600204
- Augustine, L. F., Vazir, S., Rao, S. F., Rao, M. V. V., Laxmaiah, a, & Nair, K. M. (2011).

 Perceived stress, life events & coping among higher secondary students of Hyderabad,

 India: a pilot study. *The Indian Journal of Medical Research*, 134(July), 61–68.

 Retrieved from

 http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3171919&tool=pmcentrez&r endertype=abstract
- Bailey, T. S. (2019). The relationship between military deployment and spouses anxiety, depression, and stress. Dissertation Abstracts International: Section B: The Sciences and Engineering, 80(5-B(E)), No-Specified. Retrieved from http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=psyc16&NEWS=N&A N=2019-23495-119
- Ben-Zur, H., & Zeidner, M. (1996). Gender differences in coping reactions under community crisis and daily routine conditions. *Personality and Individual Differences*, 20(3), 331–340. https://doi.org/10.1016/0191-8869(95)00173-5. Retrieved from https://www.sciencedirect.com/science/article/abs/pii/0191886995001735
- Bhuvaneshwari, M. (2013). A case study on psychological and physical stress undergone by married working women. *IOSR Journal of Business and Management*, 14(6), 38–44.
- Bisht, P., & Pande, L. (2017). Psychological well-being of the spouses of deployed and non-deployed commissioned officers of Indian Armed Forces: A comparative study. *Asian*

- Journal of Home Science 2017 Vol.12 No.1 pp.127-130 ref.8. DOI: 10.15740/HAS/AJHS/12.1/127-130
- Bongers, P. M., de Winter, C. R., Kompier, M. A. J., & Hildebrandt, V. H. (1993).

 Psychosocial factors at work and musculoskeletal disease. *Scandinavian Journal of Work, Environment and Health*, 19(5), 297-312.
- Boyatzis, R. E. (1998). Transforming qualitative information: Thematic analysis and code development. Thousand Oaks, *CA: Sage*.
- Carayon, P., Smith, M. J., & Haims, M. C. (1999). Work organization, job stress, and work-related musculoskeletal disorders. Human Factors, 41(4).
- Carew, S. A. (2004). The psychological effects of art therapy on children who have experienced traumatic grief. South Africa: [n.p].
- Carver, C. S., (2007). COPE (complete Version). Department of Psychology, University of Miami. United States. Retrieved from: http://www.psy.miami.edu/faculty/ccarver/sclCOPEF.html
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56, 267–283.
- Chandola, T., Brunner, E., & Marmot, M. (2006). Chronic stress at work and the metabolic syndrome: prospective study. *British Medical Journal*, 332(7540), 521-525.
- Cofer, C.N. & Appley, M.H. (1964). Motivation theory and research. In: Chaturvedi, M.K. (1983) Human Stress and Stressors. Cosmo Publications. New Delhi.

- Cohen, F. (1984). Coping. In Matarazzo, J.D., Weiss, S. M., Herd, J. A., Miller, N. E., and Weiss, S.E. (eds.), Behavioral Health: A Handbook of Health Enhancement and Disease Prevention, JohnWiley and Sons, New York, pp. 261–274.
- Cohen, S. (1994). "Perceived Stress Scale. Mind Garden." Inc. Retrieved from www. mindgarden. com
- Cohen, S., & Hoberman, H. (1983). Positive events and social supports as buffers of life change stress. *Journal of Applied Social Psychology*, 13, 99-125. http://dx.doi.org/10.13072/midss.462
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *J Health Soc Behav* 1983; 24: 385-96.
- Cooper, C. L., Liukkonen, P., & Cartwright, S. (1996). Stress prevention in the workplace:

 Assessing the costs and benefits to organisations. Luxembourg: Office for official publications of the European communities.
- Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed method approaches. Sage Publications, Thousand Oaks.
- Creswell, J. W. (2011). Research design. Sage Publication, New York: Springer.
- Creswell, J. W. (2014). Research design qualitative, quantitative and mixed methods approaches (4th ed.). Thousand Oaks, CA Sage.
- Creswell, J., & Plano Clark, V. (2007). Designing and Conducting Mixed Methods Research.

 Thousand Oaks, CA: Sage

- Creswell, J. W., & Plano Clark, V. L. (2011). Designing and conducting mixed methods research. SAGE Publications. Retrieved from https://books.google.co.in/books?id=YcdlPWPJRBcC&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false
- Creswell, J. W., Plano Clark, V., Gutmann, M., & Hanson, W. (2003). Advanced mixed methods designs. In A. Tashakkori & C. Teddlie (Eds.), Handbook of mixed method research in the social and behavioral sciences (pp. 209--240). Thousand Oaks, CA: Sage.
- Dalal, A. K., & Misra, G. (2006). Psychology of health and well-being: Some emerging perspectives. *Psychological Studies*, 2(2).
- Dalal, A. K., & Misra, G. (2011). New directions in health psychology. Sage Publications.

 Retrieved from http://perspectivesclinic.com/health-psychology/
- Darr, W., & Johns, G. (2008). Work strain, health, and absenteeism: A meta-analysis., 13.
- Das, S. (2018). A comparative analysis of the perceived and actual stress and its symptoms among the nurses working in intensive care unit of selected hospitals in Odisha. Shiksha o Anusandhan University. Shodhganga@INFLIBNET. Retrieved from http://hdl.handle.net/10603/233802
- Dimiceli, E. E., Steinhardt, M. A., & Smith, S. E. (2009). Stressful experiences, coping strategies, and predictors of health-related outcomes among wives of deployed military servicemen. *Armed Forces & Society*, 36(2), 351–373. doi:10.1177/0095327X08324765
- Dinges, N. G., & Joos, S. K. (1988). Stress, coping, and health: models of interaction for Indian and native populations. American Indian and Alaska Native Mental Health

- Research (Monographic Series), 1(1), 8–55 discussion 56–64. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/3155148
- Dinse, H. R., Kattenstroth, J. C., Lenz, M., Tegenthoff, M., & Wolf, O. T. (2017). The stress hormone cortisol blocks perceptual learning in humans. *Psychoneuroendocrinology*, 77, 63–67. https://doi.org/10.1016/J.PSYNEUEN.2016.12.002
- Dohrenwend, B. P., Pearlin, L, Clayton, P., & Hamburg, B. (1982). Panel report on stress and life events. In G. R. Elliott and C. Eisdorfer (Eds.), Stress and human health: Analysis and implications of research. New York: Springer.
- Eagly A. H., Wood W., Diekman A. B. (2000). "Social role theory of sex differences and similarities: a current appraisal." In: The developmental social psychology of gender, (Eds.) Eckes T., Trautner H. M., editors. (Mahwah, NJ: Lawrence Erlbaum Associates Publishers;), 123–174.
- Eatough, E. M. (2010). Understanding the relationships between interpersonal conflict at work, perceived control, coping, and employee well-being. Graduate Theses and Dissertations. https://scholarcommons.usf.edu/etd/1623
- Emslie, C., Hunt, K., & Macintyre, S. (1999). Gender differences in minor morbidity among full time employees of a British university. Journal of epidemiology and community health, 53(8), 465–475. https://doi.org/10.1136/jech.53.8.465
- Everson, R. B. (2005). Quality of life among army spouses: parenting and family. The Florida State University, ProQuest Dissertations Publishing. 3183061.

- Fauci, A. S., Braunwald, E., Kasper, D. L., Hauser, S. L., Longo, D. L., Jameson, J. L., & Loscalzo, J. (Eds.). (2008). Harrison's principles of internal medicine (17th ed.). New York, NY: McGraw-Hill. ISBN-13: 978-0071466332; ISBN-10: 0071466339.
- Field, A. (2009) Discovering statistics using SPSS. 3rd Edition, Sage Publications Ltd., London.
- Fields, G.P. (2001). Religious therapeutics: Body and health in yoga, Ayurveda and tantra.

 Albany: State University of New York Press.
- Folkman, S., & Moskowitz, J. T. (2000). Stress, positive emotion, and coping. *Current Directions in Psychological Science*, 9(4), 115–118. http://doi.org/10.1111/1467-8721.00073
- Globalfirepower. (2018). Total available active military manpower by country. Retrieved from https://www.globalfirepower.com/active-military-manpower.asp
- Government of India (2019, June 26). Women in armed forces. Ministry of Defence Press Information Bureau. Retrieved from https://pib.gov.in/Pressreleaseshare.aspx?PRID=1575770
- Houston, D., & Allt, S. K. (1997). Psychological distress and error making among junior house officers. *British Journal of Health Psychology*, 2, 141-152.
- Indian women most stressed in the world: Nielsen survey. June (2011). Retrieved from http://articles.economictimes.indiatimes.com/2011-06-29/news/29717262_1_indian-women-stress-workplaces.

International encyclopaedia of the social sciences, 2nd edition

- Joseph, A. L., & Afifi, T. D. (2010). Military wives' stressful disclosures to their deployed husbands: The role of protective buffering. *Journal of Applied Communication Research*, 38(4), 412–434. https://doi.org/10.1080/00909882.2010.513997
- Moore, K. A., & Cooper, C. L. (1996). Stress in mental health professionals: a theoretical overview. *International Journal of Social Psychiatry*, 42(2), 82–89. https://doi.org/10.1177/002076409604200202
- Kahn, R. L., & Byosiere, P. (1992). Stress in organizations, In: Dunnette, MD and Hough,
 LM (Eds) Handbook of Industrial and Organizational Psychology, Vol. 3. In M. D.
 Dunnette & L. M. Hough (Eds.), Handbook of Industrial and Organizational (2nd ed.,
 Vol. 3, pp. 571-650). Palo Alto, CA: Consulting Psychologists Press.
- Kaila, H. L. (2007). Women managers in Indian organizations. *Journal of the Indian Academy of Applied Psychology*, *33*(1), 93–102. Retrieved from http://search.proquest.com/docview/621625865?accountid=44542 LA English
- Knapp, T. S., & Newman, S. J. (1993). Variables related to the psychological well being of army wives during the stress of an extended military separation. *Military Medicine*, 158, 77-80.
- Latha, K.S., & Reddy, H. (2006). Patterns of stress, coping styles and social supports among. *J. Indian Assoc. Child Adolesc. Ment. Health 2006*; 3(1): 5-10. Retrieved from https://jiacam.org/ojs/index.php/JIACAM/article/view/246/239
- Lazarus, R S, (1966). Psychological stress and the coping process. New York: McGraw-Hill.
- Lazarus, R. S. (1993). Coping theory and research: Past, present, and future. *Psychosomatic Medicine*, 55, 234-247.

- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. Journal of Health and Social Behavior, 21(3), 219–239. https://doi.org/10.2307/2136617
- Lazarus, R. S., & Folkman, S. (1984). Stress, Appraisal and Coping. New York: Springer.
- Li, M., Mardhekar, V., & Wadkar, A. (2012). Coping strategies and learned helplessness of employed and nonemployed educated married women from India. *Health Care for Women International*, 33(5), 495-508. doi:10.1080/07399332.2011.646373
- Lyon, B. L. (2012). Stress, coping, and health: A conceptual overview (update). In V. H. Rice (Ed.), Handbook of stress, coping, and health: Implications for nursing research, theory, and practice (p. 2–20). Sage Publications, Inc.
- Malhotra, S., & Shah, R. (2015). Women and mental health in India: An overview. *Indian Journal of Psychiatry*, 57(Suppl 2), S205–S211. https://doi.org/10.4103/0019-5545.161479
- Mansfield, A. J., Kaufman, J. S., Marshall, S. W., Gaynes, B. N., Morrissey, J. P., & Engel,C. C. (2010). Deployment and the use of mental health services among U.S. Armyspouses. New England Journal of Medicine, 362, 101-109.
- Matud, M. P. (2004). Gender differences in stress and coping styles. *Personality and Individual Differences*, *37*(7), 1401–1415. doi:10.1016/j.paid.2004.01.010
- Mayor E. (2015). Gender roles and traits in stress and health. *Frontiers in psychology*, 6, 779. https://doi.org/10.3389/fpsyg.2015.00779

- McCubbin, H. I., Dahl, B. B., Lester, G. R., Benson, D., & Robertson, M. L. (1976). Coping repertoires of families adapting to prolonged war-induced separations. *Journal of Marriage and the Family*, 38, 461-471.
- Mehta, M. (2012). A study of stress and stress coping strategies of entrepreneurs with regard to their multi-tasking roles. The M. S. University of Baroda.
- Miles, M. B., Huberman, M. A., & Saldaña (2014). Qualitative data analysis: a methods sourcebook and the coding manual for qualitative researchers. Thousand Oaks, CA: SAGE.
- Mondal, P. (1996). Psychiatry in ancient India: Toward an alternative standpoint. *NIMHANS Journal*, 14(3), 166–99.
- Naidu, M. (2011). Indian women in marriage: When the sacred marriage thread becomes a noose. *Routledge Taylor & Francis Group*, (December), 37–41. https://doi.org/10.1080/10130950.2011.575587
- Nath, A., Venkatesh, S., Balan, S., Metgud, C. S., Krishna, M., & Murthy, G. (2019). The prevalence and determinants of pregnancy-related anxiety amongst pregnant women at less than 24 weeks of pregnancy in Bangalore, Southern India. International journal of women's health, 11, 241–248. https://doi.org/10.2147/IJWH.S193306
- National Health Portal. (2015, April 2). Women's Health. Retrieved from https://www.nhp.gov.in/healthlyliving/women-s-health
- Navarro-Abal, Y., Climent-Rodríguez, J. A., López-López, M. J., & Gómez-Salgado, J. (2018). What does work signify for those in search of labor? Meaning of work for the

- unemployed who attend an employee orientation program. *Frontiers in psychology*, 9, 1788. https://doi.org/10.3389/fpsyg.2018.01788
- Nixon, P. G. (1976). The human function curve. Practitioner. 217:765-9, 935-44.
- Padden, D. L., Connors, R. A, & Agazio, J. G. (2011). Stress, coping, and well-being in military spouses during deployment separation. Western Journal of Nursing Research, 33(2), 247–67. doi:10.1177/0193945910371319
- Pastò, L., McCreary, D., & Thomson, M. (2002). Deployment stressors, coping, and psychological well-being among peacekeepers. Command and Control Research Program (U.S.). Retrieved from https://www.hsdl.org/?abstract&did=761067
- Pestonjee, D.M. and Singh, U.B. (1983). EDP managers: An organizational behaviour study.

 Manuscript, Indian Institute of Management, Ahmedabad, Gujarat, India.
- Pestonjee, D. M. (1999). Stress and coping: The Indian experience. Second edition. Sage Publications Indian Pvt. Ltd. pp. 321. New Delhi.
- Prabhu, S.G., & Shekhar, R. (2017). Resilience and perceived social support among school-going adolescents in Mangaluru. *Indian J Soc Psychiatry* 2017;33:359-64.
- Prakash, J. (2008). Psychiatric morbidity in temporarily separated wives of serving soldiers.

 AFMC Pune.
- Prakash, J., Bavdekar, R., & Joshi, S. (2011). The woes of waiting wives: Psychosocial battle at homefront. Medical Journal Armed Forces India, 67(1), 58–63. doi:10.1016/S0377-1237(11)80016-X

- Press Trust of India. (2015, March 8). Indian women play multiple roles, but ignore health.

 Times of India. Retrieved from https://timesofindia.indiatimes.com/life-style/health-fitness/health-news/Indian-women-play-multiple-roles-but-ignore-health/articleshow/46491974.cms
- Rana, U. S. (2017, December 27). 20% Sailor Shortage in Navy, 15% Officer Posts Vacant In Army, Nirmala Sitharaman Tells Parliament. News18.com. Retrieved from:

 http://www.news18.com/news/india/20-sailor-shortage-in-navy-15-officer-posts-vacant-in-army-nirmala-sitharaman-tells-parliament-1616303.html
- Rao, K., Apte, M., & Subbakrishna, D. K. (2003). Coping and subjective wellbeing in women with multiple roles. *The International Journal of Social Psychiatry*, 49(3), 175–184. https://doi.org/10.1177/00207640030493003
- Rice, V. H. (Ed.). (2012). Handbook of stress, coping, and health: Implications for nursing research, theory, and practice (2nd ed.). Sage Publications, Inc.
- Saracci R. (1997). The World Health Organisation needs to reconsider its definition of health. BMJ (Clinical research ed.), 314(7091), 1409–1410. doi:10.1136/bmj.314.7091.1409
- Sarrasin, O., Mayor, E. & Faniko, K. (2014). Gender traits and cognitive appraisal in young adults: the mediating role of locus of control. *Sex Roles* **70**, 122–133 (2014). https://doi.org/10.1007/s11199-013-0336-6
- Satpathy. B. (2018). Pancha kosha theory of personality. *International Journal of Indian**Psychology, 6(2), 33-39. DIP:18.01.105/20180602, DOI:10.25215/0602.105

 (12) (PDF) Pancha Kosha Theory of Personality. Retrieved from

- https://www.researchgate.net/publication/326258350_Pancha_Kosha_Theory_of_Person ality [accessed Feb 14 2020].
- Schneiderman, N., Ironson, G., & Siegel, S. D. (2008). Stress and health: Psychological, behavioral, and biological determinants. *Annual review of clinical psychology*. doi: 10.1146/annurev.clinpsy.1.102803.144141 Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2568977/?report=classic
- Segerstrom, S. C., & Miller, G. E. (2004). Psychological stress and the human immune system: a meta-analytic study of 30 years of inquiry. *Psychological Bulletin*, 130(4), 601–630. https://doi.org/10.1037/0033-2909.130.4.601
- Selye, H. (1956). The stress of life. New York. McGraw-Hill.
- Spera, C. (2009). Spouses' ability to cope with deployment and adjust to Air Force family demands: Identification of risk and protective factors. *Armed Forces & Society*, 35(2), 286-306.
- Spielberger, C. (1979). Understanding stress and anxiety. Harper and Row Publishers, New York.
- Streubert, H. J., & Carpenter, D. R. (1995). Qualitative research in nursing: Advancing the humanistic imperative. Philadelphia: J. B. Lippincott.
- Suman, M. (2010). Women in the armed forces. *Indian Defence Review*. Vol 25.1 Jan-Mar 2010.
- Suman, M. (2017). Women in the armed forces: misconceptions and facts. *Indian Defence Review*. Issue: Vol 25.1 Jan-Mar 2010 | Date: 09 Mar, 2015. Retrieved from http://www.indiandefencereview.com/print/?print_post_id=2301

- Sumra, M. K., & Schillaci, M. A., (2015). Stress and the multiple-role woman: Taking a closer look at the "Superwoman". *PLoS ONE 10(3): e0120952*. https://doi.org/10.1371/journal.pone.0120952
- Tashakkori, A., & Teddlie, C. (1998). Mixed methodology: Combining qualitative and quantitative approaches. Thousand Oaks, CA: Sage.
- Tobin, D. L., Holroyd, K.A., Reynolds, R. V.C, & Wigal, J. (1985). The hierarchical structure of coping. Presented at the meeting of the Society of Behavioral Medicine, New Orleans.
- Tobin, D. L., & Griffing, A. S. (1995). Coping and depression in Bulimia Nervosa. *International Journal of Eating Disorders*, 18(4), 359-363.
- Tobin, D.L. (2001). User Manual for the COPING STRATEGIES INVENTORY.
- Van Hooff, M., McFarlane, A. C., Davies, C. E., Searle, A. K., Kate Fairweather-Schmidt, A., Verhagen, A., Benasi, H., & Hodson, S. E. (2014). The Australian defence force mental health prevalence and wellbeing study: design and methods. *European Journal of Psychotraumatology*, 5, 1–12. https://doi.org/10.3402/ejpt.v5.23950
- Vimala, B., & Madhavi, C. (2009). A study on stress and depression experienced by women IT professionals in Chennai, India. *Psychology Research and Behaviour Management*, 2, 81–91. Retrieved from http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3218769&tool=pmcentrez&r endertype=abstract.
- Wang, J., Korczykowski, M., Rao, H., Fan, Y., Pluta, J., Gur, R. C., McEwen, B. S., & Detre, J. A. (2007). Gender difference in neural response to psychological stress. Social

- cognitive and affective neuroscience, 2(3), 227–239. https://doi.org/10.1093/scan/nsm018
- Weiten, W., and Lloyd, M. A. (2005). Psychology applied to modern life: Adjustment in the 21st century. 8th edn, Thomson Wadsworth Publishing, Belmont, CA.
- Wheeler, A. R. (2009). While they are at war: Stress and coping in army national guard spouses. ProQuest LLC. University of Nebraska.
- WHO Definition of Health. (2003). Retrieved from http://www.who.int/about/definition/en/print.html
- Wong, K. F. E., Yik, M., and Kwong, J. J. (2006). Understanding the emotional aspects of escalation of commitment: The role of negative affect. *Journal of Applied Psychology*, 91, 2, 15.
- Yaribeygi, H., Panahi, Y., Sahraei, H., Johnston, T. P., & Sahebkar, A. (2017). The impact of stress on body function: A review. *EXCLI journal*, 16, 1057–1072.
 https://doi.org/10.17179/excli2017-480
- Yerkes, R.M., & Dodson, J.D. (1908). The relation of strength of stimulus to rapidity of habit formation. *Journal of Comparative Neurology & Psychology*, 18, 459–482. https://doi.org/10.1002/cne.920180503
- Yolanda Navarro-Abal, José Antonio Climent-Rodríguez, María José López-López, & and Juan Gómez-Salgado. (2018). Psychological coping with job loss. Empirical study to contribute to the development of unemployed people. *International Journal of Environmental Research and Public Health*. https://doi.org/doi:10.3390/ijerph15081787