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2.1 INTRODUCTION

Since World War I, research on stress amongst combat veterans in battle has been done mostly by military psychiatrists. They have focused mainly on effective treatment of psychological casualties and their returning back to duty (Jones, 1995). Individual differences in response to extreme combat stress are regarded as a result of pre-existing neuroses or psychopathology (Grinker & Spiegel, 1945; Noy, 1987). In understanding what causes extreme stress reactions to combat, military research studies have put greatest importance on situational factors such as combat intensity and duration. At extreme high end of stress spectrum, as in very intense combat, individual differences in response to stress are minimal. It has been demonstrated that under stress of extreme combat conditions, everyone has a breaking point, though not precisely at same moment. From this perspective, individual combat experiences result in mental breakdown in combat (Belenky, Noy, & Solomon, 1987; Goyne, 2001; Marlowe, 1979). Few research studies have emphasized social situational factors (Labuc, 1991; Manning, 1991; Manning & Ingraham, 1987; Taylor, 1991).

Literature on military psychology suggests that psychologists have attempted to identify major stress factors besides war situations amongst military personnel (Bartone, 1998; Cotton, 2001; Cronin, 1998; Gal & Mangelsdorff, 1991; Kearney, Creamer, Marshall, & Goyne, 2001). Besides psychopathological tendencies such as neuroticism & repression (Grossman & Siddle, 2000; Noy,
even domains of normal personality of soldiers have been explored (Gal, 1983). Psychological research literature related to combat veterans illustrates that research studies have dealt with various aspects like coping resources (Dohrenwend, Neria, Turner, & Turse et al., 2004; Elder & Clipp, 1988; Mehrotra, 2006; Srivastava, 2006), altruism (Baum, 2001; Kishon-Barash, Midlarsky, & Johnson, 1999; Kumar & Mishra, 2006; Watson, 1994), religiosity (Bhandal, 2007; Fontana & Rosenheck, 2004; Pargament, 1997; Shaw, Joseph, & Linley, 2005), and self-perception (Aldwin, Levenson, & Spiro, 1994; Bartone & Kirkland; 1991; Fiedler et al., 2000; Jennings, Aldwin, Levenson, Spiro, & Mroczek, 2006; Limbert, 2004). The findings of empirical research relevant to variables, namely, stress, coping resources, altruism, religiosity, and self-perception will be considered in present study.

2.2 STRESS

“The stress of war tries humanity as no other test that has been encountered in civilized life. Like a crucial experiment, it exposes underlying physiological and psychological mechanisms of human beings” (Grinker & Spiegel, cited in Cronin, 1998, p. 113). War is becoming more stressful and of all stressors in a military environment, threat of biological and chemical weapons is perceived as most stressful (Coker, 2001).
Most research studies have grouped stressors in military operations as stressors just prior to deployment (time pressure, not having enough time to prepare family for deployment), stressors in early deployment period (isolation, fatigue, lack of sleep, uncertainty about mission), stressors in mid-deployment period (feeling confined, lack of information, worry about family), and psychological stress in military operations (isolation, ambiguity, powerlessness, boredom, and danger) (Bartone, 1996; Bartone & Adler, 1994; Doutheau et al., 1994; Gifford, Jackson, & DeShazo, 1993; Kearney et al., 2001; Miller & Moskos, 1995; Raphel, 1995; Segal & Segal, 1983; Siebold, 1996; Stokes & Jones, 1995).

In the present study, dimensions of stress in routine military life include cognitive, occupational, physical, emotional, social, and personal stress.

2.2.1 Cognitive Stress

In military environment, ability to perform physical and mental tasks quickly and accurately is essential. Besides, capacity to sustain and survive over an extended period of time under adverse conditions is also important. Performance in military context includes both individual and group tasks and functions.

Most researchers have reported battle fatigue as a broad group of physical, cognitive and emotional signs that result from heavy cognitive and emotional task of facing danger under difficult conditions in battle. Stress depends on soldier’s

Research studies have reported stressors due to downsizing and structural changes in armed forces despite workload continuing to increase. Soldiers have to grapple with stressors of role conflict, role ambiguity, and role overload and rely on cutting-edge technology which can itself be stressful (Kozlowski, Chao, Smith, Hedlund, & Walz, 1991; Payne, 1997; Plumridge & Brown, 2001; Rizzo, House, & Lirtzman, 1970; Stewart-Watt, 1996).

Several studies have noted role ambiguity as a key stressor for combat trained soldiers engaged in peacekeeping operations (Britt, 1998; Britt & Adler, 1998; Gifford et al., 1993; Litz, 1996; Miller & Moskos, 1995; Segal & Segal, 1983). Ambiguity of an unclear command structure, enforced passivity or powerlessness to act to make things better in multinational and UN operations is stressful for most soldiers (Doutreau et al., 1994; Farley, 1995; Litz, 1996; Raphel, 1995; Weisaeth & Sund, 1982).

Results of studies on cognitive task of military personnel found that sustained cognitive tasks can lead to general feelings of fatigue or weariness,
decreased output over time, and mistakes. It has been demonstrated that sleep deprivation, combined with sustained workload are more due to psychological or cognitive, rather than physical tasks (Englund & Krueger, 1985; Haslam & Abhraham, 1987; Haslam, 1982; Krueger, 1991; Martin, Bender, & Chen, 1986).

It has been suggested that vigilance tasks demand considerable effort, produce significant cognitive stress and even elicit physiological stress responses. Stress of sustained vigilance comes from maintaining a high level of alertness during a monotonous situation where there is no control over events that may occur (Davies & Parasuraman, 1982; Hancock & Warm, 1989; Thackray, 1981; Warm, 1984).

Various studies have indicated stressors due to boredom, lack of challenge, and meaningless work which act as deterrents for reenlisting (Blyth, 1985; Lundin & Otto, 1989; Weisaeth, Mehlum, & Mortensen, 1996; Motowidlo, Lawton, & Dunnette, 1980; Segal & Harris, 1993).

Research evidence has found that spreading of disinformation (e.g., realistic threat of biological and chemical weapon) to demoralize enemy troops through a willing media is a major cognitive stressor among troops from both warring sides (Bloom, 1991; Freund, 1991; Rana, 2005; Unwin et al., 1999).

In Indian context, Khan (2006b) reported an intellectual reluctance to study military personnel. Research studies have reported that armed forces personnel get alienated, frustrated and stressed because of public apathy,
politicians’ distrust, intelligentsias’ lack of interest, academicians’ negligence, and downgrading image of armed forces by its own society (Mukherjee, 2002; Parmar, 1999; Singh, 1985). Other research studies have reported cognitive stressors of information overload as well as underload, unpredictability of events and difficult judgments as major stressors (Kumar & Mishra, 2006; Misra, 2006; Nazareth, 1991).

Daniel and Bhargava (2005) studied harnessing tacit knowledge in military environment and reported that lack of transfer of tacit knowledge during turnover and rotation of military personnel from posts is a source of stress when such knowledge is not shared by other battalions and para military forces.

### 2.2.2 Occupational Stress and Physical Stress

Occupational stress is the stress due to demands and constraints of operating in military environment (Staal, 2004).

Previous literature on effects of occupational stressors on soldiers’ well-being demonstrated that soldiers face a climate of increasing work demands coupled with declining resources. Major stressors include work characteristics (e.g., work quantity, diversity and complexity, time availability and deadlines), physical work environment (e.g., noise, working hours), nature of work and human environment (e.g., leadership styles, usefulness of work) (Brooks et al., 2001; Chapman, 2000; Cotton, 2001; Tucker, Sinclair, & Thomas, 2005).
Numerous studies have been conducted on stressors due to effects of hot and cold environment on military personnel. Research has demonstrated that extreme temperatures affect military personnel with respect to tasks such as vigilance, mechanical and manipulative capabilities, cognitive tasks as well as mood and behavior. It has been found that crews of armored vehicles reported thermal stress, behavioral impairment and mood changes at extreme temperature. This gets further intensified when personnel are required to wear protective clothing (Breckenridge & Levell, 1970; Fine & Kobrick, 1987; Kobrick & Johnson, 1991; Kobrick, Johnson, & McMenemy, 1988; Rauch et al., 1986; Tharion et al., 1986; Toner, White, & Goldman, 1981).

Research studies have reported stressful effects of high altitude on military personnel and found that altitudes greater than 3000m adversely affect physiological and psychological well-being, mental processes, senses, sleep, and physical work capacity (Banderet & Burse, 1991; Hackett, Rennie, Grover, & Reeves, 1986; Houston, 1987; Meehan & Zavala, 1982; Mountain, 1987; Schoene, 1987). However, perceived stress depends on prior exposure to similar environment, training, protective equipment and clothing, and rehearsing emergency procedures in high altitude environment (Bachrach, 1982).

It has been demonstrated that military personnel often operate in stressful, intense, and noisy environment. This includes long duration exposure to continuous noise, armored vehicles as well as repetitive impulsive noise exposure
from weapons and artillery fire (Broadbent, 1979; Hockey, 1986; Moore & von Gierke, 1991).

Researchers have reported stressors of military personnel operating in environment of toxic fumes and indicated that military training and combat frequently expose weapon system crewmen to mixtures of potentially toxic fumes (Ase, Eisenberg, Gordon, Taylor, & Snelson, 1985; Benignus, 1991; Dalton, 1988; Snelson, Ase, Bock, & Butler, 1983).

Several research studies have stated stressful effects of sustained acceleration and vibration of military equipment on vision, memory and central processing functions and manual control (Campise, Geller, & Campise, 2006; Von Gierke, McCloskey, & Albery, 1991).

Research literature is replete with studies on motion sickness amongst military personnel at sea (Keinan, Friedland, Witzhaky, & Moran, 1981; Pethybrigade, 1982; Rolnick, 1985; Rosenbaum & Rolnick, 1983), and in air (Fox & Arnon, 1988; Hixon, Guedry, Lentz, & Holtzman, 1983). An interesting study by Lerman (1987) in Israel is perhaps one of the very few reported research on motion sickness in tanks. Besides, studies on stressful motion sickness during simulator training have also been reported amongst military personnel (Crowley, 1987; Gower, Lilienthal, Kennedy, Fowlkes, & Baltzley, 1987; Gower & Fowlkes, 1989a, 1989b; Gower, Fowlkes, & Baltzley, 1989; Kennedy & Frank, 1984). All these research studies have demonstrated that as an uncontrolled,
stressful and aversive event, motion sickness can give rise to a helplessness reaction which is manifested through cognitive, emotional and motivational deficits.

Majority of studies on military personnel who engage in sustained and continuous military operations (SUSOPS) indicate that sophisticated night vision technology and other innovations bring about tactical doctrine of continuous operations (CONOPS). The research studies have found that such operations for long periods without rest produce stress, sleep loss and fatigue, thereby impairing performance, causing psychological battle stress casualties and reducing mission effectiveness (Angus & Heslgrave, 1985; Belenky, 1987; Heslgrave & Angus, 1985; Hughes, 2006; Krueger, 1991; Tharion, Rauch, Strowman, & Shukitt, 1987; Westcott, 2005).

Various studies have been conducted in Indian context to find major organizational stressors. It has been demonstrated that stressors include prolonged deployment in operation. This leads to inadequate opportunity to rest and recoup, intense and uncertain combat conditions with threat of death or injury to self and own troops (Mehrotra, 2006; Misra, 2006; Rajan, 2004).

As suggested by research studies, main stressors in operational area include fear of death and injury, ambiguity and uncertainty of operation and its outcome, and pressure of human rights violation. Stressors in peace location
include interference by higher military formations, over commitment and workload (Kala, 2003; Singh, 1998; Singh, 2006a)

2.2.3 Emotional Stress

Research studies on stress in dangerous military environment have found that a soldier put in risk prone environment cannot simply be assumed to be stressed since the situation may not induce stress in the soldier if individual does not perceive situation as dangerous (Eid, Johnson, & Saus, 2005; Idzikowski & Baddeley, cited in Hockey, 1986; Thompson, Vasterling, Benotsch, & Brailey, 2004). This is in consonance with Lazarus’s (1991) view of person-environment fit.

Several researchers have discussed positive aspects of female soldiers in the armed forces (Bakshi, 2005; Coker, 2001; Elderton, 2006; George, 2007; Mitra-Sinha, 1993; Randhawa, 2004, 2005; Sharma, 2005). However, other research studies have reported ‘feminization of military’ as stressors for few male military personnel who view entry of females in armed forces as a threat to traditional military culture and enfeeblement of combat effectiveness and national defense which creates frustration, anger and stress amongst male military personnel (Dansby, 1998; Mitchell, 1993; Thomas & Barry, 1997; Thomas & Vistica, 1997).

Substantial number of research has studied effects of combat on military personnel from different theater of war belonging to different countries. It has
been demonstrated that degree of stress, including vulnerability to PTSD is culture bound (Dean, 1997; Green, Grace, Lindy, & Leonard, 1989; Jones, Vermaas, McCartney, & Beech et al., 2003; Solomon, Mikulincer, & Benbenishty, 1989).

One stream of study confirms that exercising military restraint in application of destruction potential on enemy is a major stressor. The research studies reported a trend of centralization of command in military operations and found that senior officers were preventing junior officers from exercising initiative, which can be very stressful (Bartone, 1998; Dansby, 1998; Kroesen, 2001; Kumar & Mishra, 2006; Mehrotra, 2006; Misra, 2006; Nazareth, 1991).

Few research studies have found institutional discrimination issues in assignment, promotion, selection and retention and reported lack of equal opportunities to be perceived as emotional stressors amongst military personnel from minority groups (Chermol, 1985; Dansby, 1998; Moskos, 1973; Smither & Houston, 1991; St. Pierre, 1991; Thomas, 1988)

Rumour and propaganda (e.g., water contamination) as well as information warfare (also termed psychological warfare) in military environment has been reported to be a major source of emotional stress amongst military personnel (Bloom, 1991; Dyer, 1996; Freund, 1991; Marshall, cited in Idzikowski & Baddeley, 1983).
Wakin (1985) reported stressors due to false reporting, pressure to increase enemy body count and cover-up of battlefield atrocities as major emotional stressors for military personnel.

Several studies have been conducted in India to explore specific emotional stressors amongst military personnel. It has been demonstrated that anxiety producing threats due to injury, failure, loss, personal or mission failure, bereavement, boredom due to inactivity, conflicting motives like worries about home and divided loyalties, spiritual confrontation causing loss of faith are major emotional stressors (Goel, 2005; Krishnan, 2004; Misra, 2006; Rajan, 2004).

It has been reported that inability to control circumstances is a major cause of emotional stress in soldiers. Research studies indicate that Indian soldiers are very religious by nature and killing or injuring enemy soldiers is considered against ethos of non-violent religion, society and nation. This creates a moral conflict amongst soldiers and becomes a source of stress due to occupational and professional demands (Nazareth, 1991; Srivastava, 2006).

A substantial number of studies focused on breakaway from ‘Chetwodean values’ (Appendix J) by few military officers and lowering of standards of intake in officer rank. These are major stressors amongst military personnel at all levels (Chibber, 1986; Grant, 2005; Khan, 2006b; Parmar, 1999; Singh, 1985). Other research studies have reported a transition in armed forces from being an institutional force to being an occupational force as a major stressor for military
personnel amongst other countries as well, especially in officer rank (Cotton, 1981; Jans, 2001; Levitan & Alderman, 1977; Moskos, 1977; Moskos & Wood, 1988; Segal, Blair, Lengermann, & Thompson, 1983; Segal & Segal, 1983).

2.2.4 **Social Stress**

An important focus of investigation has shown that combat stress reaction amongst military personnel is directly related to unit leadership and cohesion (Bartone & Kirkland, 1991; Noy, 1991). It has been demonstrated that breaking enemies will to fight till enemy soldiers cannot endure stress any longer results in their combat stress reaction. Research indicates that when morale has been shattered and battle seems lost, when leadership is not perceived any longer to lead to victory and survival, then number of combat stress reactions are expected to be very high (Manning, 1991; Manning & Ingraham, 1987). While most soldiers go through combat without ever succumbing to stress, few are evacuated from battlefield due to combat stress reaction, while still others go through battle seemingly unaffected, only to develop post-traumatic stress disorder (PTSD) reactions later on (Hughes, Cameron, Eldridge, & Devon, et al., 2005; Noy, 1991; Reimer, 1998; U.S. Army Field Manual, 2003).

However, Turner, Kiernan, McKeachnie, and Finch (2005) who studied military casualties from war in Iraq reported that most military personnel evacuated from war zones were suffering from combat stress reactions, or were otherwise traumatized by horrors of war.
Tillet (1996) studied stress amongst Australian Defence Forces personnel from family perspective as predeparture (e.g., lack of time/pressure to prepare prior to departure), during mission (e.g., lack of communication with family) and post-return (e.g., residue of conflicts unresolved before departure). The researcher also reported stressors of isolation (e.g., lack of usual support systems), confinement (e.g., lack of privacy or own space) and group dynamics (e.g., personal differences within group).

Researchers have reported stressors of geographical mobility, separation from family, frequent transfers between jobs, overwork, sleep deprivation, irregular working hours and family disruption as few of the major psychosocial stressors in military environment (Gilbert, 1996; MacDonough, 1991; Goyne, 1999).

Various studies conducted in India demonstrate that military life places additional stressors on its personnel. These include: (a) sudden and prolonged isolation from families and established support systems (b) restriction of choice and freedom (c) imposed discipline (d) numerous interstate moves due to postings and frequent transfers (e) coping with situational stress e.g., dealing with terrorists and (f) performance anxiety related to high expectations (Husain, 2006; Khan, 2000; Parmar, 1999; Singh, 1985, 1998).

Most research studies on military personnel in India have reported major stressors due to break-up of joint family system, lack of value orientation,
conditional loyalty, irresponsible and prejudiced media, intense media glare, criticism and sensationalism of indiscipline cases by media, perceived high handedness by civil authorities, poor image of army, lack of avenues for promotion and lack of infrastructure like accommodation, medical and education facilities for military families (Ghosh, 2003; Rajan, 2004; Singh, 2006b).

2.2.5 Personal Stress

Majority of studies that consider combat stress amongst military personnel report that combat stress, fatigue, and psychological disabilities (PDs) are common battlefield conditions, but are largely preventable (Reimer, 1998; Takla, Koffman, & Bailey, 1994; U.S. Army Field Manual, 2003).

Mission stress during peacekeeping operations has been extensively studied. It has been reported that while most peacekeepers emerge with positive experience, enhanced capabilities and greater self-confidence, few soldiers have difficulty in returning to their pre-mission lives due to stress experienced by them. These research studies found that challenges of stressful experience can be met by briefing and debriefing carried out before, during, and after deployment (Deahl & Martin, 2000; Downie, 2002; Solomon, Neria, & Witztum, 2000; Zeev, Iancu, & Bodner, 2001).

According to Kodama, Nomura, and Ogasawara (2000), military personnel who were not deployed had significantly higher measures of stress than
deployed personnel. The selection process and training for deployment is
distressful for all personnel, whether deployed or not.

Research studies of Gulf War report two kinds of stressors during war, combat stress and operational stress. Combat stress includes death of a colleague and sleep deprivation during operations, bombing, mortar, rocket and missile attacks, mines and threat of improvised explosive devices. Operational or deployment stress includes working in harsh conditions including extreme temperature, loss of privacy, lack of family support in identification with cause (Caldwell & Redeker, 2005; Pivar & Field, 2004; Platoni, cited in Munsey, 2006).

An interesting study by Kipling (2005) reported combat stressors amongst U.S. military personnel returning from war in Iraq. Major stressors included lack of sleep, long deployment and sustained operations, inaccuracy of media, adjustment problems at home and fear of being stigmatized for being unable to deal with their problems on their own. It is found that soldiers returning from combat are troubled in dealing with loud noise. The researcher reported that during deployment, a soldier’s spouse takes on additional responsibilities at home and is not eager to relinquish it when the deployed soldier returns home and this shift in family dynamics is found to be stressful.

Tillet (1996) studied personal stressors amongst military personnel and found that they include competing demands (e.g., setting priorities, allocating
time, inability to have personal time or space) and expectations (e.g., of self and colleagues).

U.S. Army Field Manual (2003) reports seven major categories of stressors for military personnel. These include: (a) stressors of offensive and defensive military operations (e.g., enemy fire including shelling and landmines, perceived threat of becoming prisoner of war, wounded or killed in action), (b) stress during operations other than war (e.g., rules of engagement may prohibit firing until fired upon, lack of confidence in fighting on enemy soil), (c) stress in insurgency operations (e.g., austere and primitive living conditions, enforced inactivity with high tension), (d) stress in counterinsurgency operations (e.g., unfamiliar terrain, difficulty in identifying enemy), (e) stress due to terrorist attacks (e.g., sudden violation of familiar setting, loss of control), (f) stress in peacetime contingency (e.g., small unit activity has great political and media interest, lack of freedom of movement), and (g) stress in peacekeeping operations (e.g., isolation, boredom, cultural alienation, repetitious or routine duties).

In the Indian scenario, it has been observed that personal stressors include separation from family, mismatch between own aspirations and expectations and that of military, and individualistic needs and growth relegated to collective needs of military organization (Khan, 2000; Mehrotra, 2006; Singh, 2006b).

To sum up, research studies have shown that when soldiers fail to merge combat experience into rest of their life experience, difficulties in facing thoughts
and feelings regarding stressful event occur (Ursano & Fullerton, 1990; Pennebaker & Beall, 1986; Horowitz, 1976).

Review of above stress related literature gives an insight in understanding behavior amongst combat veterans and forces that influence such behavior. Deciphering why military personnel respond differently under similar circumstances of combat is a critical part of this endeavor.

2.3 **COPING RESOURCES**

Serving military personnel have a constant threat to life and limb. Persevering under stress of unfamiliar tasks and situational demands of combat or alternately, mental breakdown under enemy fire, is determined by a complex interplay of many factors, coping resources being one such vital aspect (Milgram, 1991). Hence, it is important to understand coping resources of combat veterans operating under stressful conditions in military environment.

In the present study, dimensions of coping resources include cognitive, social, emotional, spiritual and physical coping resource.

2.3.1 **Cognitive Coping**

Majority of studies have demonstrated that factors that help military personnel to adjust to stressors of combat include rigorous military life and training (Bartone, 1996; Csikszentmihalyi, 1975; Fontana & Rosenheck, 1998; Fotion & Elfstrom, 1986; Schnurr, Rosenberg, & Friedman, 1993), positive
cognitive appraisal (Aldwin et al., 1994; Dohrenwend et al., 2004; Jennings et al., 2006) and higher cognitive skills (Gibertson, McNulty cited in Winerman, 2006), keeping focused and fostering self worth (King, King, Vogt, Knight, & Samper, 2006; Moore, cited in Munsey, 2006; Munsey, 2006), personality factors like ideological commitment (Kanagaratnam, Raundalen, & Asbjornsen, 2005), beliefs and attitude (Britt, Castro, & Adler, 2005; Day & Livingstone, 2001; Kraaij & Garnefski, 2006; Marsella & Scheuer, 1995), fighting spirit (Hautamaki & Coleman, 2001), resilience and optimism about life (Seudfeld, 1997).

Unit cohesion has a moderating effect on relation of stress observed at individual soldier level (Bartone & Kirkland, 1991; Hunt & Phillips, 1991; Jacobs & Jaques, 1991; Lau, 1998; Manning, 1991; Salas et al., 1998). It is reported that soldiers in life threatening danger are likely to gain solidarity and cohesiveness; shared danger enhances common bond and develops strong sense of belongingness amongst troops. Research has demonstrated that support from comrades protects in traumatic situation of combat, yet entails heavy cost when valued mates and friends are lost in battle (Elder & Clipp, 1988; Griffith, 2002).

There is research evidence stating that military personnel may have a tolerance for ambiguity and work overload due to nature of their postings and regular changes in job and geographical locations. It has been found that ambiguity is inherent in military way of life which attracts certain type of people who thrive on active, dynamic, and sometimes dangerous environment. It is
reported that heavy workload is considered a challenge to military personnel who work as a team and a combination of positive affect, hard work, physical fitness, and esprit-de-corps may well provide buffer against work stress (Beehr, 1976; Plumridge & Brown, 2001; Watson, Clark, & Tellegen, 1998).

Vickers, Kolur, and Hering (1990) studied personality correlates of coping resources in military personnel. It has been found that conscientiousness is related to problem solving orientation to stress, while neuroticism is related to negative self-evaluation and wishful thinking in response to stress.

However, Desmond and MacLachlan (2006) studied coping strategies of U.K. veterans and reported that coping styles were important predictors of psychological adaptation. It has been found that avoidance is strongly associated with psychological distress and poorer adjustment. The researchers reported that seeking social support is negatively associated with symptoms of depression and positively associated with social adaptation. Similarly, in a study by Peterson, Seligman, and Vaillant (1988) on difficulties experienced by World War II combat veterans, it has been found that those with internal pessimistic style of coping with no apparent hope for escape resulted in poorer health than those veterans who described negative experiences of war with reference to external factors.
2.3.2 Social Coping

Military research studies have demonstrated that social identity plays an important role in protecting group members from adverse reactions to stress since it provides a basis for group members to receive and benefit from social support. These research studies have reported that there is a strong positive correlation between social identification and both social support and lifestyle. There is also a strong negative correlation between social identification and stress (Bartone, 2006; Sohilberg, cited in Selye, 1980).

An impressive body of evidence has found influence of leaders to be crucial in coping during military operations. It is found that military personnel showed high levels of coping, remaining healthy despite high stress levels. Research studies have identified leader’s support as a factor of coping and reported that highly effective leaders can increase resilient coping responses to stressful circumstances within their units (Adler & Dolan, 2006; Bartone, 2003, 2006; Lambert, Lambert, & Yamse, 2003; McGonigle, Casper, Meiman, & Cronin et al., 2005; Paton, Violacti, & Smith, 2003).

Behavior and support of unit and subunit leaders have been identified as crucial coping resource in stress control amongst military personnel (Gal, 1986; Kirkland, 1987; Kirkland, Furukawa, Teitelbaum, Ingraham, & Caine, 1987; Marlowe, 1985, 1986a, 1986b; Schneider, 1987; van Creveld, 1982).
Crossover effects of coping resources have, interestingly, been reported between military officers and their spouses; spouses’ sense of control is an additional source of coping resource working to benefit military personnel (Davies, 2001; Figley, 2005; Hunt & Robbins, 2001a, 2001b; Teichman & Frischoff, cited in Selye, 1980; Westman & Etzon, 1995).

Gruber (2004) studied relationship between psychosocial coping resources, stress and task completion during military training. The researcher concluded that soldiers with high psychosocial coping resources of social support, mattering, and self-efficacy were likely to perceive less stress than soldiers with less psychosocial coping resources.

Most of the studies reveal that primary source of courage to cope in combat is collective support of others, near presence or presumed presence of comrades enables soldiers to keep going with their weapons. Soldierly peer pride and confidence in each other, mutual respect and support sustain those in battlefield. These research studies found that in battle, no individual is alone by oneself; there is shared danger, shared fear surmounting and shared courage (Badr, Acitelli, Duck, & Carl, 2001; Bowen, Mancini, Martin, & Ware et al., 2003; Coalson, 1993; Marshall, 1947; Newman, 1992).

However, it has been indicated that supportive relationships at work are not likely to emerge following combat if the framework is not built beforehand (Bartone, 1998; Reimer, 2003).
Research is consistent with the idea that unit cohesion and a soldier’s relation with others are critical elements in mission accomplishment, individual survival and coping with stress in combat (Bartone, Johnsen, Eid, & Brun, et al., 2002; Bartone & Kirkland, 1991; Belenky, 1987; Gal & Mangelsdorff, 1991; Manning, 1991). These research studies found that social context variables of unit cohesion and leadership climate influence how stress gets processed in military environment. They also reported that person variables influence or moderate stress-outcome relations which includes past experience, pre-existing psychopathology, and personality characteristics.

Support from home front has known to minimize negative psychological effects of combat amongst military personnel. Research studies have demonstrated enduring influence of combat and found stress reduction perspective amongst combat veterans wherein emotional adjustment difficulties that combat veterans probably experience get themselves resolved over time (Elder & Clipp, 1988; Figley, 1985; Laufer, 1985; Segal & Segal, 1976).

Few studies on psychological well-being amongst military personnel found that coping strategies that prevented soldiers from confronting situation were associated with least positive outcomes in terms of psychological well-being. It has been indicated that perceptions of social support are associated with psychological well-being (Bartone, Vaitkus, & Adler, 1994; Hotopf et al., 2003a, 2003b; Limbert, 2004; Terry, 1994).
Card (1983) reported residual stress perspective due to combat which makes readjustment and adaptation difficult even later in life, probably in circumstances when social support is replaced by social rejection as seen by Vietnam veterans.

2.3.3 Emotional coping

A large body of research on combat veterans demonstrates that problem-focused and nonavoidant coping has been associated with better emotional functioning (Clemons, 1996; Watson & Pennebaker, 1989; Watson et al., 1998; Wolfe, Keane, Kaloupek, Mora, & Wine, 1993).

Numerous studies conducted in the area of cultural and societal factors in military organizations in UK, Israel and Soviet Russia have reported differences in morale as a cause of differences in coping resources and consequently stress casualties amongst military personnel. These research studies reported that morale of troops is an indicator of their adjustment and coping with combat. Results revealed that when morale is high, casualties are low and vice versa. By keeping soldiers occupied with purposeful activity like training, soldiers are better able to cope and see situation more objectively during stressful conditions. It is found that training as a coping resource to deal with stress reaction is also important in strengthening group cohesion (Gal, 1986; Labuc, 1991).

Hunt and Blair (1985) found that soldiers in battlefield accept inevitability of life and death, which, because of its calm effect, actually increases chance of
better fighting and survival. The researchers reported that challenge is inherent in battlefields since there is a substantial discrepancy between demands of situation and capacity soldiers have to cope with it. The more successful soldiers are in reducing this discrepancy, better are their chances for survival under combat conditions.

However, contrary findings have been reported by Livingstone (2001), who examined moderating impact of positive and negative coping styles. The researcher reported that role ambiguity, overload and lack of job stimulation were associated with increased symptoms of stress. Only negative coping styles (i.e., venting of negative emotions and denial or disengagement) were uniquely associated with symptoms of stress. The researcher found that negative coping styles were associated with higher stress regardless of amount of stressor.

Few investigators have demonstrated effects of stressors on coping and found increased pathology in those combat veterans who cope with their traumatic memories primarily via emotion-focused and avoidance strategies (Bjorck & Klewicki, 1997; Green, Lindy, & Grace, 1988; Hyer, McCranie, Boudewyns, & Sperr, 1996).

Elder and Clipp (1990) studied combat experience and emotional health of veterans of World War II and Korean conflicts. It has been found that veterans of heavy combat were at greater risk of emotional and behavioral problems in post war years. However, it is reported that these combat veterans became more
resilient and less helpless over time when compared with other military personnel without combat experience. Elder and Clipp (1988) also studied cultural differences in coping resources of US and Israeli combat veterans. It has been found that combat experience plays a major role in use of escape avoidance and emotional coping responses with combat veterans in both countries using more avoidance and emotional strategies than non-combat veterans.

2.3.4 Spiritual Coping

It has been indicated that meaning in one’s life (Visotsky, Hamburg, Goss, & Lebovitz, 1961), sense of humor (Cousins, 1979; Moody, 1978), trust in others (Barefoot et al., 1998), and religion (Contrada et al., 2004; George, Ellison, & Larson, 2002) have all been suggested as internal coping resources that may deal with stress.

Research studies on religiosity have been reviewed separately in a subsequent section since religiosity is one of the variables of the present study.

2.3.5 Physical coping

Dolan, Adler, Thomas, and Castro (2005) focused on role of wellness behavior like physical exercise and sleep as coping resources and reported that both sleep and exercise moderately impact on health. The researchers demonstrated that physical exercise is a significant moderator of work hours for both psychological and physical health outcomes, whereas sleep moderated only psychological health outcomes.
An important focus of investigation has shown that in absence of social network, writing is a form of support which provides an outlet for solace, sense making, appraisal and coping. It has been concluded that process of disclosing about stressful traumatic events like combat is essential for integration of experience by the soldier (Bartone, 1998; Bonck & Gray, 2005; Hunt, 2004; Pennebaker, Colder, & Sharp, 1990; Shalev, 1994; Shalev, Schrieber, & Galai, 1993; Smyth & Greenberg, 2001; Smyth & Helm, 2003). Other studies have found narrative therapy and art therapy amongst survivors of war and reported mediating effects of same (Tuval-Mashiach, Freedman, Bargai, & Boker et al., 2004; van der Velden & Koops, 2005).

Researchers in India have reported that strong motivation and faith in oneself as a result of training, experience, and moral support provided by immediate superior and the military organization acts as a coping resource (Bhatia, 2005b; Parmar, 1999; Singh, 1985; Srivastava, 2006).

A number of studies have shown that social support, especially from seniors at work is an important factor related to good health under stress. It is reported that although support from friends and family is helpful, support from the boss far out weighs value of support from other sources (Deusi, 2006; Kala, 2003; Kallai, 1983; Mehrotra, 2006; Singh, 1985).

A large body of researchers have reported that other than individual coping resources, social support of family and significant others as well as unit
cohesion, teamwork, training and military leadership are significant factors in enhancing coping of serving combat veterans (Chibber, 1986; Das, 1985; Deusi, 2006; Govadia, 2006b; Husain, 2006; Kshetrapal, 1999; Misra, 2006; Pasricha, 1983; Singh, 2006a).

In summary, it is seen that an increase in recent research on coping resources confirms that there is a strong relation between stressful factors and events and adaptational outcomes among combat veterans (Bartone, 1998). From review of literature, it can be concluded that effective use of coping resources is an integral aspect for psychological well-being and mental health of combat veterans. However, stress and coping resources among combat veterans need to be examined in more depth. It has been found that individual factors are not significantly associated with military performance. Individual differences in attribution style and in a propensity to dissociate significantly affect military performance during exposure to high stress situations.

2.4 **ALTRUISM**

Altruism is a motive to increase other’s welfare without conscious regard for one’s self-interest (Myers, 1999). Research studies indicate that willingness to help is influenced by both self-serving and selfless considerations (Batson et al., 1991). Most studies have replicated altruism-empathy hypothesis and reported that when a person feels attached to someone, one tends to empathize and
compassion motivates an individual to help (Batson, 2003; Davis, 1996; Eisenberg & Miller, 1987; Hurlbut, 2003; Manner et al., 2002).

Research evidence has shown that positive moods promote altruism (Cunningham, Steinberg, & Grey, 1980; Perlow & Weeks, 2002; Rosenhan, Salovey, & Hargis, 1981). Few studies have found that people in good mood tend to recall positive information from memory more effectively and think about positive events and experience affectively. As a result, they become more likely to perform acts associated with positive affect, as altruism (Gueguen & DeGail, 2003; Isen, Shalker, Clarke, & Karp, 1978).

McMakin, Malone, and Lundgren (2002) studied altruism amongst military personnel and reported that behavior motivated by altruism is more likely when military personnel feel a sufficient degree of personal control.

Baum (2001) studied altruism amongst different profession and found that military personnel are altruistic and committed to put well-being and lives of others ahead of their own. It has been reported that “military personnel subjugate personal needs for good of the community, often at a cost detrimental to their well-being” (Dunn, cited in Kearney et al. 2001, p. 6).

Several studies have consistently reported that altruistic behavior is associated with psychological well being. It has been found that altruistic helping amongst combat veterans is a useful strategy as a means for coping with trauma of combat experience which jeopardizes sense of meaning and bond with others.
Research evidence indicates that altruism is a significant predictor of adjustment amongst combat veterans. Helping intentions of these veterans were predicted by empathic concern and maturity of motivation. This suggests that rather than being motivated by narcissistic or approval-seeking needs, combat veterans with higher levels of help intention are concerned with needs of others and are motivated altruistically (Kahana, Harel, Kahana, & Segal, 1987; Midlarsky & Kahana, 1994; Kishon-Barash et al., 1999).

However, other studies on relations between stressors and group perceptions in military personnel have reported that stressors are negatively related with altruistic behavior (Bradshaw, Ohide, & Horne, 1994; Jex & Thomas, 2003).

Studies have demonstrated that a career in military is without negotiating appointments and transfers, neither does it have any material reward if such appointments and transfers prove difficult. It has been seen that specific employment as a calling implies a willingness to sacrifice compensation for loss of rights, such as leave, when duty calls. Being called to a career in military further implies sacrificing certain civilian rights and privileges. These research studies have observed that society requires its armed forces to demonstrate a commitment to altruistic service; interests of society must be placed before self-interest. The most significant sign of altruism is subordination of individual financial rewards to goal of serving society. It has been indicated that such a
commitment would surely be impossible for someone just looking for a job (Deacon, 1995; Downes, cited in Deacon, 1995).

Watson (1994) studied combat motivation of soldiers and reported that soldiers see themselves as the military arms or extension of their hometowns, representatives of their contribution to national cause.

Rigby (1991) reported few incidents of altruistic acts among Israeli soldiers in West Bank and Gaza Strip, even as Palestinian community was clashing against them.

Wilson (1986) found that help by Vietnam veterans with stress symptoms is not always related to psychological integrity or to sense connection with others. The researcher indicated that involvement in motor helping acts may not be as critical a predictor of mental health as altruism, wherein individual is motivated by a genuine concern for other.

Studies of Vietnam War veterans suggest that soldiers manifest an inclination to help others. Programs have been designed to involve veterans in community service and in volunteer work in the hope of helping soldiers’ to overcome stressful reactions to combat experience, including combat stress reactions and post-traumatic stress disorders. These studies reported that altruism amongst combat veterans is inversely related to stress symptoms (Herman, 1992; Johnson, Feldman, Southwick, & Charneu, 1991; Kahana, Kahana, & Harel, 1988; Laufer, Gallops, & Frey-Wouters, 1984; Midlarsky, 1991).
Not much research on altruistic behavior of military personnel or for that matter anyone has been carried out in India. Few research studies have reported that apart from having cultural values in place and commitment to others inculcated during military training, a high sense of moral responsibility and a sense of internalized social responsibility to help those who are experiencing difficulties were primary reinforcers of altruistic behavior amongst military personnel. These research studies also reported an increase in altruism amongst officers as an intrinsic quality with time and promotion in rank (Kumar & Mishra, 2006; Singh, 2006a).

Khan (2006b) reported that hardship and danger in combat gives birth to altruism and generosity that transcend ordinary individual self-interest.

Singh (1985) studied Indian army personnel and reported a majority of them to be altruistic in nature. The researcher concluded that by virtue of their outstanding altruistic characteristics and role, military personnel can serve as a reference group or a model for other sections of society.

Thus, review of literature suggests that military personnel inculcate altruism due to military training and nature of their profession. However, it is very difficult to derive any concrete conclusions on inadequate evidence on altruism. Factors’ leading to altruism amongst combat veterans in India and abroad need more scientific investigation since it has not yet been studied extensively.
2.5 RELIGIOSITY

Connection between imminent death and religious fervor has been recognized by soldiers long before scholars and researchers began to construct models around religiosity (Watson, 1994). While most studies have been carried out that find a causal relation between stress and religiosity amongst general population (Chen & Koeing, 2006), not many studies have been carried out on military personnel in this regard (Pargament, 1997). However, hardly any studies have been carried out to examine effect of combat experience on patterning of religious experiences (Stouffer et al., cited in Pargament, 1997).

Shaw (2005) and colleagues reviewed eleven studies that reported links between religion, spirituality and posttraumatic growth. The researchers found religion to be beneficial to most individuals in dealing with aftermath of stressful combat experience. Traumatic stressful experience can lead to deepening of religiosity. The studies demonstrated that positive religious coping, religious openness, readiness to face existential questions, religious participation, and intrinsic religiousness are typically associated with posttraumatic growth.

Swank (2005) reported that religiosity helps soldiers find a sense of meaning in any and all circumstances in which their services may place them. It has been found that behavior of soldiers in hostile environments is more civil, humane, ethical and honorable if military leadership provides regular and consistent religious support for all soldiers.
Psychotherapeutic effects of religiosity in combat stress control and battle fatigue have been reported. It is found that negative effects of combat stress can be lessened when a soldier is prepared physically, emotionally and religiously, prior to combat. It has been observed that religiosity helps soldiers to draw upon religious strength and share strength and confidence during intensive combat. Soldiers’ inner resources are often based on their religious and spiritual values. It is found that in combat, soldiers show more interest in their religious beliefs. When religious values are challenged during chaos of combat, soldiers may lose sight of inner resources that sustain them (Rudnick, 1997; U.S. Army Field Manual, 2003).

Religion as a social function among soldiers is known to compensate for absence of families and friends. It has been reported that within army, religious devotion could replace worldly pleasures of camp and this sacrifice becomes evidence of a soldier’s virtue and character. Faith and company of other soldiers gives the pious soldier a wholesome occupation for one’s spare time and counters demoralizing effects of loneliness, uncertainty, and anxiety. Research studies have reported consolation as another understandable function religion has for soldiers at war- for fear, for killing, for watching other soldiers die. It has been reported that community, compensation, and consolation take different shapes at different stages of a combatant’s experience. All three aspects come into play before battle: compensation of a just cause and self-affirming rituals, enhanced cohesion
produced by participation in these rituals and anticipation of a community of consolations. The effect of community religiosity contributes to unit morale and cohesion, while consolation explains events (i.e., deaths) and maintains discipline. This diagnostic-therapeutic process continues even after battle as soldiers attempt to understand why death spared them and took their colleagues (Linderman, cited in Watson, 1994; Watson, 1994).

According to Gordon, cited in Watson (1994), religiosity helps in infusing a spirit of endurance and determination in soldiers that no hardship, no suffering, can undermine or breakdown. Research has demonstrated that religiosity is one of the most powerful agents sustaining morale of troops in battle.

However, Witvliet, Phipps, Feldman, and Beckham (2004) studied posttraumatic, mental, and physical health correlates of forgiveness and religious coping in military veterans of combat. The researchers reported that difficulty forgiving oneself and negative religious coping is related to depression, anxiety, and PTSD symptom severity, but not anxiety. Positive religious coping is associated with stress including PTSD symptom severity.

Fontana and Rosenheck (2004) studied change in strength of religious faith, and mental health service amongst combat veterans treated for stress. The researchers found that veterans’ experience of killing others and failing to prevent death weakened their religious faith, both directly and as mediated by feelings of guilt. The researchers found that veterans’ pursuit of mental health services
appears to be driven more by their guilt and weakening of their religious faith than deficits in social functioning.

Studies have reported that religious coping activities are significant predictors of psychological stress in combat situations. Religious avoidant coping is associated with an increased stress. It is found that stressful experience serves as a religious coping mobilizer and that efficacy of religious coping methods may change over time. These studies reported that influence of religion declined significantly under strain of war (Fontana & Rosenheck, 2004; Wiley, cited in Watson, 1994).

However, Koing et al. (2006) examined effects of religious affiliation and religious coping on survival of injured combat veterans in U.S. and found that religious coping was unrelated to survival. The researcher concluded that neither religious affiliation nor dependence on religion as a coping behavior predicted survival amongst injured combat veterans. Similarly, Gallaway (1988) found that religiosity was not all powerful, whether bolstering or sapping soldiers willingness to fight in battle.

Stouffer and colleagues (1965) were perhaps the first researchers to study religiosity amongst soldiers in different theater of operation during World War II. The researchers found partial support for religion as stress moderator but no test of religion as a stress deterrent.
Research on religiosity of military personnel in India reported that successful military leadership in combat requires strong and positive interpersonal bond of interconnectedness between leaders and troops they take into battle. It has been reported that condition of selflessness and ‘leader led religiosity’ can help reduce uncertainty, ambiguity, and insecurity under condition of severe physical and psychological stress of battle. The researchers found that religiosity provides greater sense of meaning, purpose, connectedness, tolerance, and understanding amongst combat veterans (Bhandal, 2007; Singh 1985).

Several research studies have indicated that soldiers have deep faith in religion. It has been noticed that any major unit activity in Indian army is preceded by a religious ceremony (Bhatia, 2005a; Chibber, 1986; Khan, 2006b; Parmar, 1999; Singh, 1985).

Govadia (2006a) studied religiosity among military personnel in Indian army and found that it is a unifying binding factor that motivates troops in combat. The researcher reported that religion builds character, moral rearmament and provides mental peace to military personnel.

A number of studies have shown an increase in religious practices and beliefs during and immediately following combat experience (Govadia, 2006a; Meisenhelder, 2002; Schumm & Rotz, 2001; Singh, 2006a).

An interesting co-existence of diverse religions among troops in India has been discovered. It has been reported that all religious occasions are celebrated
together with national pride by all military personnel. Research studies have found that exploiting commonality in practices and customs of diverse religious and co-location of various religious institutions in close proximity brings religious harmony and tolerance leading to improved standard of national unity and integration in army units (Bhatia, 2005a; Govadia, 2006a).

However, studies on religiosity amongst combat veterans have also found that combat experience and death of close friends cause military personnel to lose faith that God has any power to help. It is found that young soldiers, potentially overwhelmed with fear, grief and guilt, control their vulnerability by hardening themselves to loss of friends killed by enemy fire and have emotional disturbances (Misra, 2006).

On the other hand, Rajan (2004) reported that military personnel place national pride above unit’s prestige, own self respect and religion. The researcher reported that fighting in name of religion is now an antiquated concept and found no correlation between religiosity and stressors of combat.

Thus, review of literature suggests that military personnel with combat experience are more likely to display religious inclination. From the studies, it is evident that religion helps military personnel to integrate their combat experience and give meaning to their life which helps them cope with stressors of military life.
2.6 **SELF-PERCEPTION**

Self-perception is part of one’s personality and awareness about self by which individual forms attitudes and opinion about oneself (Greenberg, 1996).

In the present study, dimensions of self-perception include general adjustment and general maladjustment.

### 2.6.1 General Adjustment

A substantial amount of research on combat exposure amongst military personnel has reported that stress, even extremely traumatic stress, may pose both risks and benefits. It has been found that although combat can have lifelong negative consequences, perception of positive benefits from military experience can mitigate negative effects of combat on mental health. These studies indicate that how soldiers appraise and cope with problems may be more important in prediction of positive adaptation than simple occurrence of stress (Aldwin et al., 1994; Boesel & Richards, 1982; Elig, Gade, & Shields, 1982; Goldman & Worstine, 1980; Jennings et al, 2006; Meissner & Puzicha, 1981; Motowidlo et al., 1980).

Dirkzwager, Bramsen, and van der Plorg (2005) studied self-perception of military soldiers from Netherlands deployed in former Yugoslavia as well as Cambodia. The researchers surprisingly, reported positive consequence of deployment (e.g., broadening of their horizons, increased self-confidence).
War-zone exposure and adjustment amongst combat veterans have been extensively studied and reasonably high levels of satisfaction and attainment amongst combat veterans have been found. It is indicated that there is an interaction between problem-focused coping and outcomes of achievement and lifetime adaptation. This form of coping is most strongly related to adjustment at moderate levels of combat exposure (Clemons, 1996; Limbert, 2004; Watson & Pennebaker, 1989; Watson et al., 1998; Wolfe et al., 1993).

A large body of literature has demonstrated that increased educational levels and higher expectations of military personnel demand a shift from transactional leadership to transformational leadership to inspire and improve leadership effectiveness and thereby lead to stress reduction and better adjustment amongst military personnel (Atwater & Yammarino, 1993; Atwater, Dionne, Avolio, Camobreco, & Lau, 1996; Bass, 1985; Clover, 1989; Curphy, 1992; Tichy & Devanna, 1986).

Studies on impact of homecoming reception on adaptation of military personnel following deployment found that repose of family and community members at homecoming has a significant restorative role in adaptation of combat soldiers. Most researchers have reported that adjustment to deployment is positively related to homecoming reception (Bolton, Litz, Glenn, & Orsillo, et al., 2002; Day & Livingstone, 2001; Figley, 1994; Kraaij & Garnefski, 2006; Marsella & Scheuer, 1995).
Suvak, Vogt, Savarese, and King, et al. (2002) in a study on self-perception of military personnel found that religiosity provides a framework for understanding stressful experience in military life and thus may reduce its negative impact. It has been indicated that self-perception of military personnel who are religious provides them with coping resources and a means of promoting greater well-being and mental health.

Most studies reveal that even though decorated war heroes reported highest exposures to battlefield stressors, they functioned better and had better general psychological health (Dekel, Solomon, Ginzburg, & Neria, 2003; Ginzburg, Solomon, Dekel, & Neria, 2003; Neria, Solomon, Ginzburg, & Dekel, 2000).

In approaching problems of adjustment to stress in military context, most studies have reported a useful, psychological framework of ‘interactionism’ which emphasizes interaction of situation and person variables in determining behavior. In addition to identifying types of stressors troops are exposed to during operations, research reveals effects of such stressors on health and adjustment outcomes (Derogates, 1982; Godwin, 1986; Magnusson & Endler, 1977). Cronin (1998) reported a growing interest among researchers in identifying both situational and person variables that can account for why individuals adjust differently and respond to stress in military environment.
Persian Gulf War in 1991 provided an opportunity for research on soldiers’ health and adjustment under stress of a combat deployment (Bartone, 1993; Gifford, Martin, & Marlowe, 1991; Gifford, Martin, Marlowe, Wright, & Bartone, 1996). It has been demonstrated that social context variables that might influence how stressors get processed in military environment are unit cohesion and leadership climate. Person variables that could influence or moderate stress-outcome relation include past experience, person perception and personality characteristics (Bartone & Kirkland, 1991; Caminiti, 1995; Griffith, 1985; Kanagaratnam et al., 2005; Kirkland, 1987; Kirkland et al., 1987; Manning, 1991; Manning & Ingraham, 1987; Marlowe, 1986a, 1986b; Salas et al., 1998).

Numerous studies conducted on military personnel reveal that adjustment is related to morale- a term used to describe mental fitness, adjustment and motivation of individuals and groups in the military (Labuc, 1991; Labuc, & Ellis, 1983; Levav, Greenfeld, & Baruch, 1979; Manning, 1991; Noy, 1989; Noy, Nardi, & Solomon, 1986).

Studies on self-perception of soldiers over a period of time reported recognizable and meaningful changes in how self-perception is structured. These studies demonstrated that soldiers in new units display an unidentified, global perspectives, while in more mature units, perception about self, peers, leaders and weapons form a more coherent and meaningful pattern (Bartone, 1988, 1989; Bartone, Marlowe, & Hoover, 1987; Marlowe, 1985).
2.6.2 General Maladjustment

Taking into account relevant theoretical findings, numerous studies on maladjustment have reported that war-zone exposure has negative implications for post deployment adjustment of veterans. These studies reported detrimental effects of having experienced combat among soldiers (Blake et al., 1990; Figley, 1985; Hermann & Eryavec, 1994; Kulka et al., 1990; Stellman, Stellman, & Koenen, 2000; Vogt, Pless, King, & King, 2005).

Several research studies demonstrate three outcome variables which may be influenced by stress amongst military personnel: performance, social adjustment and health. Stress can lead directly to impaired performance (Eid & Morgan, 2006; Krueger, 1991), can contribute to a variety of physical and mental health difficulties, and can also result in variety of social adjustment problems such as family violence and divorce (Newby et al., 2005; Prier & Gulley, 1987), and substance abuse (Cronin, 1998; Harig, 1991; Long, Hewitt, & Blane, 1976; Whitehead & Simpkins, 1983).

Recent literature on combat veterans has demonstrated that nearly all survivors exposed to traumatic events briefly exhibit one or more stress related symptoms which dissipate within a reasonable amount of time. However, symptoms persisting for a prolonged period following combat experience increases probability of developing maladjustment and stress related disorders.
Research has shown that toxic leadership can be a major cause of maladjustment and stress amongst military personnel (Ambrose, 1992; Lau, 1998; Reed, 2004).

An important area of investigation has found that emotion focused coping and use of wishful thinking is strongly associated with maladjustment at moderate levels of combat exposure (Suvak et al., 2002; Vogt, King, King, & Savarese, et al., 2004).

One stream of research focuses on exposure to traumatic war events and has found a mediating role of attributing meaning. It has been demonstrated that experience of wartime stress may change a certain aspect of an individual’s personality, in particular, personality trait of neuroticism, defined as, proneness to distressing emotional states such as anxiety, depression and anger. The studies found that relationship between wartime stress and personality trait of neuroticism turned out to be fully mediated by development of a negative world view (Bradshaw et al., 1994; Bramsen, van der Ploeg, van der Kamp, & Ader, 2002; Fiedler et al., 2000; Freeman & Roca, 2001).

Psychological stress in military operations can have a range of serious consequences, including increased risk of death and serious injury from accidents, inattentiveness and errors of judgment, exposure (cold injuries), friendly-fire
incidents, and suicide. Research has demonstrated that psychological maladjustment can also increase risk of soldier misconduct, alcohol abuse, and violations of rules of engagement, as well as diminish soldiers’ mental health, morale, and psychological readiness to carry out mission (Cronin, 1998; Perconte, Wilson, Pontius, & Dietrick, et al., 1993; Reimer, 1998).

Khan (2006a) studied armed forces and society in India and reported that since military personnel are physically fit, robust, and young; they develop confidence in themselves with military training which improves their self-perception over time.

Khan (2006b) reported that unless self-perception and self-esteem of a soldier is high, the soldier’s personal sense of honour will be low and will not be individually able to preserve national prestige. The researcher concluded that self-perception of military personnel can be improved by raising prestige, honour and ethos of the soldier.

Thus, in conclusion, it can be stated that self-perception among military personnel is a reflection of image they have in their society. Review of literature provides evidence that self-perception of military personnel is greatly influenced by their confidence in military training and respect and support society has for them.
2.7 **SUMMARY**

The field of psychology owes a great deal for its growth to military research. Studies on military personnel emanated after World Wars and a lot of research has been done all over the world ever since then. In recent years, research studies have explored various aspects of combat, especially after the Gulf War in 1990’s and more recently, war in Iraq.

The chapter focused on relevant review of recent literature pertaining to stress, coping resources, altruism, religiosity and self-perception amongst combat veterans. An overall review of studies found that there are marked differences among combat veterans and other military personnel on psychological aspects considered in present study.

Review of studies in Indian context suggests that although researchers have shied away from research on military personnel, there are few studies assessing stress and religiosity of combat veteran. However, coping resources, altruism and self-perception have not been widely studied in India. There is a deliberate need to study combat veterans in more detail.