A STUDY OF LEVEL OF STRESS, GENERAL HEALTH, PERSONAL VALUES AND TENDENCY OF AGGRESSIVE BEHAVIOUR AMONG ADOLESCENTS OF JAMMU & KASHMIR REGIONS

THESIS
SUBMITTED FOR THE AWARD OF THE DEGREE OF Doctor of Philosophy IN PSYCHOLOGY

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ABSTRACT

Kashmir once referred to as ‘Paradise on Earth’, was quoted as the most dangerous place in the world by Clinton (as cited in Mishra, 2010), which reflects the change in the perception of people globally about Kashmir over a period of time. It is an accepted fact that Kashmir Valley has been associated with violent disputes for past few decades and the roots of this dispute can be traced back to the end of British rule in India in 1947, with the partition of India and creation of Pakistan. During partition, the people of Kashmir, were promised a freedom of choice in their decision regarding whether to joining India or Pakistan, or to remain independent, through a popular vote. That never happened, leaving the people of Kashmir in the state of betrayal and conflict. Moreover, an important decision was taken by Hari Singh, the then Maharaja of Jammu and Kashmir regarding the fate of Kashmiri people by announcing its accession to India by signing the Instrument of Accession (Schofield, 2002). Since then, the state of Jammu and Kashmir has become the issue of national identities for both India and Pakistan, which have put these two countries in the state of continuous aggression and wars. Soon after the partition of India, the first war took place between India and Pakistan over the issue of Kashmir in 1947. As a result of which two third of the state of Jammu and Kashmir, comprising Jammu, the Kashmir Valley and Ladakh came under the governance of India while as one-third remained under the administration of Pakistan. The population of Jammu region comprises of 65.23% of Hindus, 30.69% of Muslims, 3.25% of Sikhs and 0.51% of Buddhists and others, whereas, Kashmir valley comprises 97.16% of Muslim population, only 1.84% of Hindus, 0.88% of Sikhs and 0.11% of Buddhist and other population whereas, Ladakh has 47.40% of Muslim population, 6.22% of Hindus and 45.8 % of Buddhist population (“Jammu & Kashmir”, 2014), reflecting the complex and diverse nature of the state of Jammu and Kashmir. Each of these groups has different political goals and expectations, as the non-muslim section of population demand for Kashmir that is integral part of India, whereas, the muslims of this state aspire for an independent Kashmir or to be associated with Pakistan.

Movement for independent Kashmir was started by the young people of the state in the year 1989. A group of young people started a revolutionary movement against the perceived government violence and human right violations, which took an ugly turn when Indian army was brought into action to counter these young fighters.
In this manner the vicious cycle of encounter of the fighters (militants) by the Indian army and vice-versa begin and continues till date. It is important to mention here that armed insurgency was mainly centered around Srinagar and adjoining districts of Kashmir valley, while Jammu and Ladakh were relatively less affected.

The ongoing movement for independence of the state of Jammu and Kashmir has led to the huge loss of life and property, human rights violations, torture, extrajudicial killings, kidnappings, disappearances, and rape, in the hands of stakeholders involved in conflict. The unabated ongoing conflicts have also led to displacement of Kashmiri Pundits from Kashmir Valley. Not only Pundit’s but a sizeable Muslim population had also left the Valley, to escape from the consequences of the conflict. A report on Human Rights violations states that between 1989 and June 30, 2010 the number of people killed in Valley was estimated to be around 93,274. Apart from this, there have been 6,969 custodial killings, over 107,351 children have been orphaned, 22,728 women widowed, and 9,920 women gang raped. (Khan, 2010), leaving the people of Kashmir is the state of profound pain and suffering. The psychological impact of violence on the Kashmiri population can be realized from the fact that before 1989, Kashmir's suicide rate was 0.5 per 100,000 people. By 2007, the suicide rate in Kashmir was estimated to be around 20 per 100,000, which was double the all-India average at that time (Maghribi, 2010). Moreover the number of patients visiting mental health hospitals has increased from 1200 in 1989 to 100,000 in 2011. And the outpatient department of psychiatry at the State hospital in Srinagar, was found to receive an average of 150-200 patients a day, most of them young boys and girls (Sana, 2012).

Adolescents of Jammu and Kashmir have been witnessing the unrest at the social and political level since their childhood, making them the worst hit generation of the society psychologically as well as socially. They are not able to make peace between the violent past and unstable present, leaving them in the state of hopelessness, despair and many psychological problems. Dubow et al. (2010) have conformed the association of exposure to political conflict and violence with post traumatic stress. A state of stress is experienced when a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being. Experiencing severe and prolonged stress seems to be capable of affecting health by causing emotional distress.
and leading to a variety of physiological and psychological adverse changes. While facing stressful events an individual finds ways to cope with the environmental demands resulting in the occurrence of different responses in the body and brain (Resick & Schnicke, 1993), which continue until the episodes of stress subsides. Re-experiencing, hyper-arousal, avoidance, and emotional numbing are the common forms of stress responses. Moreover, stress was also found to have an inimical effect on health. Lepore, Miles, and Levy (1997) have reported that ongoing stressors that are static are more detrimental to health and well-being than are episodic.

Broadly, health of an individual is defined as a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity (WHO, 1948). While as, psychological health is explained in terms of psychological distress and psychological well-being (Masse et al., 1998; Wilkinson & Walford, 1998). Research has shown that exposure to isolated, acute, repetitive or chronic events including poly-victimization to violence and trauma have a profound affect on the physical, psycho-social-emotional, and mental health well-being of individuals (Cook et al., 2007). Fitzpatrick and Boldizar, (1993) have also confirmed that youths exposed to higher levels of community violence are more distressed than those with lower exposure. As, individuals experiencing adversities during upbringing, are more likely to engage in high-risk behaviours (Finkelhor et al., 2007; Kendall-Tackett, 2002), which in turn are associated with both negative health as well as violence (Huas, Hassler, & Choquet, 2008). Moreover, mental health is in turn found to be associated with the individual’s value orientations (Maercker et al., 2009).

Values imply what is important to us and reflect a basic, indisputable aspect of what it means to be a human being. They are the codes or general principles that guide our actions as well as serve as criteria for making decisions, setting priorities and lie behind the explanations and justifications that we give for our actions. Living your life in accordance to your values makes you feel excited, energised, in control, and productive. Behaving in alignment with one’s personal values have been also found to reduce defensive responses to threatening information (Sherman, Nelson, & Steele, 2000), and perceptions of threat (Sherman &Cohen, 2002; Steele 1988; Keough, 1998), reflecting their importance in conflict areas. Durodie (2003) has further revealed that an understanding of core personality and values may better predict variations in trauma symptoms than the actual severity of a trauma. The World Health
Organisation (WHO) and value researchers, using a secondary data analysis of two independent data sets in eleven countries, observed that up to 50% of the variance of different prevalence of ICD-10 diagnoses (depression, generalized anxiety disorder, alcohol dependency) could be explained by cultural values (Maercker, 2001, 2004), suggesting that particular value patterns are specific to psychiatric disorders. Furthermore, adolescent’s endorsement of collective values is found to be negatively related to their use of overt and relational aggression, whereas positive associations are found between the endorsement of individual values and adolescent aggression (Li, Wang, Wang, & Shi, 2010).

Aggression is a behaviour intended at harming another individual who does not wish to be harmed (Baron & Richardon, 1994). It may be carried out in any behaviour actuated by intent to harm another person against that person’s wishes. These behaviours can range from subtle interpersonal acts like spreading gossips about someone with the intention of ruining that person’s reputation, to the large-scale group behaviour like hitting, damaging or destroying another’s persons property, gang violence and warfare. Thus aggression is found to constitute of three elements. These are intention, action tendency, and actual harm committed to another person (Berkowitz, 1981). Research on children have shown that exposure to violence in different situations increases the risk of the child to establish aggressive ways to deal with the situation (Guerra, Huesmann, & Spindler, 2003). Research have also documented high levels of aggression among the adolescents during war (Belsky, 2008; Klingman 1992; Ronen, Rahav, & Apple, 2003).

**Research objective**

1. To determine the relationship between stress, general health, personal values and aggressive tendency among the adolescents of Jammu and Kashmir regions.

2. To investigate the difference in the adolescents belonging to Jammu region and Kashmir region in terms of their level of stress, general health, personal values and aggressive tendencies.

3. To investigate gender difference in the adolescents of Jammu region and Kashmir region in terms of level of stress, general health, personal values and aggressive tendencies.
4. To examine the role of demographic variables, stress, personal values and dimensions of aggression in the prediction of general health of adolescents of Jammu and Kashmir regions.

Research Questions

1. Is there any relationship among the variables of stress, general health, personal values and aggressive tendencies in the adolescents of Jammu and Kashmir regions (total sample)?

2. Is there any relationship among the variables of stress, general health, personal values and aggressive tendencies in the adolescents of Kashmir region?

3. Is there any relationship among the variables of stress, general health, personal values and aggressive tendencies in the adolescents of Jammu region?

4. Is there any significant difference in the level of stress between the adolescents of Jammu region and Kashmir region?

5. Is there any significant difference in the level of general health and its dimensions between the adolescents of Jammu region and Kashmir region?

6. Is there any significant difference in the personal values between the adolescents of Jammu region and Kashmir region?

7. Is there any significant difference in the level of aggressive tendencies and its dimensions between the adolescents of Jammu region and Kashmir region?

8. Is there any significant difference in the level of stress between the adolescent boys and girls of Jammu region and Kashmir region?

9. Is there any significant difference in the level of general health and its dimensions between the adolescent boys and girls of Jammu region and Kashmir region?

10. Is there any significant difference in the personal values and its dimensions between the adolescent boys and girls of Jammu region and Kashmir region?

11. Is there any significant difference in the level of aggressive tendencies and its dimensions between the adolescent boys and girls of Jammu region and Kashmir region?
12. Does demographic variables (gender, residential background, and religion), stress, personal values (power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security), and dimensions of aggression (physical aggression, hostility, verbal aggression, and anger) significantly predict general health of adolescents of Jammu and Kashmir region (total sample)?

13. Does demographic variables (gender, residential background, and religion), stress, personal values (power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security), and dimensions of aggression (physical aggression, hostility, verbal aggression, and anger) significantly predict general health of adolescents of Kashmir region?

14. Does demographic variables (gender, residential background, and religion), stress, personal values (power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security), and dimensions of aggression (physical aggression, hostility, verbal aggression, and anger) significantly predict general health of adolescents of Jammu region?

The participants of the study comprised of 627 students studying in government and private run higher secondary schools of Jammu & Kashmir regions. The age range of students was between 15 to 19 years ($M=16.17$, $SD=1.62$). Stress measuring scale by Chashoo and Khan (2009), General health Questionnaire-28 (GHQ-28) by Goldberg and Hiller, (1979), Schwartz short value scale by Lindeman and Yerkasalo (2005), and Self-developed aggression scale were administered on participants.

To meet the main research objectives, the entire data was analyzed using Pearson’s correlation co-efficient, t-test and hierarchical multiple regression with the help of SPSS 17.

Main findings of the study revealed that in the total sample of Jammu and Kashmir a significant positive correlation was found between the stress and General health ($r = .265$, $p < .01$). Stress was also found to correlate positively with personal values ($r = .321$, $p < .01$). A strong positive correlation was also found between adolescents stress level and aggression ($r = .179$, $p < .01$). General health and personal values were also found to have significant positive correlation ($r = .093$, $p < .05$).
General health was also found correlate positively with aggression ($r = .433, p < .01$). In the adolescent sample of Kashmir region a significant positive correlation between stress and general health ($r = .309, p < .01$) was found. Stress also showed a strong positive correlation with personal values ($r = .279, p < .01$). A positive relationship was also found between stress and aggression ($r = .295, p < .01$). Results further revealed a significant positive correlation between general health and aggression ($r = .322, p < .01$). In the adolescent sample from the relatively peaceful Jammu region, stress was found to be significantly, positively correlated with general health ($r = .249, p < .01$). Stress was also found to correlated positively with personal values ($r = .343, p < .01$). While as, a strong relationship was found between general health and aggression ($r = .241, p < .01$). Personal values were also found to correlate significantly with aggression but in negative direction ($r = -.189, p < .01$).

Results also showed significant difference between the adolescents of Kashmir region and Jammu region on the variables of stress ($t=4.05, p<.000$), total general health ($t=40.17, p<.000$), and its dimensions somatic complaints ($t=35.70, p<.000$), anxiety ($t=25.42, p<000$), social dysfunction ($t=36.30, p<000$) and severe depression ($t=28.99, p<.000$). The two groups also differed significantly on the values of power ($t=3.67, p<.000$), hedonism ($t=2.46, p<.014$), self-direction ($t=2.34, p<.019$), universalism ($t=4.02, p<.000$), benevolence ($t=2.44, p<.017$), and tradition ($t=2.19, p<.029$). Adolescents of Jammu and Kashmir regions were also found to differ significantly on total aggression ($t=9.83, p<.000$) as well as on its dimensions physical aggression ($t=8.00, p<000$), hostility ($t=7.91, p<.000$), verbal aggression ($t=6.49, p<.000$), and anger ($t=7.05, p<.000$). Scores revealed that adolescents of conflict ridden Kashmir region scored significantly higher mean on the variables of stress; value of power, hedonism, universalism, benevolence and tradition; total general health and its dimension; and total aggression as well as on its dimensions than their Jammu counterparts. While as, on the value of self-direction, adolescents of Jammu region scored higher mean.

Gender-wise significant difference was found on the variable of stress in both Kashmir region ($t =2.45, p<.015$) and Jammu region ($t =5.76, p<.000$). Girls scored higher mean in both the regions. Moreover, in Kashmir region significant gender difference was found only on one dimension of general health, i.e., anxiety ($t=2.19, p<.029$). While in case of Jammu region boys and girls differed significantly on the
dimension of somatic complaints ($t=2.27, p<.024$) and anxiety ($t=2.44, p<.015$). In conflict ridden Kashmir valley, girls were found to be significantly more anxious than boys. In relatively peaceful Jammu region also girls scored higher mean than boys on the dimension of somatic complaints and anxiety. Significant gender difference was found on the values of achievement ($t=1.55, p<.121$), stimulation ($t=4.98, p<.000$), universalism ($t=5.87, p<.000$), benevolence ($t=5.24, p<.000$), tradition ($t=5.36, p<.000$), conformity ($t=5.64, p<.000$) and security ($t=3.94, p<.000$) in Kashmir region. Whereas in Jammu region, boys and girls were found to differ significantly on the values of achievement ($t=2.70, p<.007$), hedonism ($t=3.22, p<.001$), universalism ($t=3.61, p<.000$), tradition ($t=3.19, p<.002$), conformity ($t=4.41, p<.000$), and security ($t=4.88, p<.000$). Mean scores revealed that in Kashmir region, girls were found to show higher mean score on values of achievement, stimulation, universalism, benevolence, tradition, conformity and security than their boys counterpart. In Jammu region also, girls scored higher mean on the values of achievement, hedonism, universalism, tradition, conformity, and security than boys. Moreover, in Kashmir region significant gender difference was seen only on dimension of physical aggression ($t=2.01, p<.045$) and anger ($t=3.90, p<.000$). Boys were found to be significantly more aggressive than girls while girls were found to be significantly more anxious than boys. And in Jammu region significant gender difference was found on the total aggression ($t=3.76, p<.000$), and its three dimensions- physical aggression ($t=5.41, p<.000$), hostility ($t=3.71, p<.000$), and verbal aggression ($t=3.69, p<.000$). Boys were found to score higher mean on total aggression as well as on physical aggression, verbal aggression and hostility than girls.

Hierarchical regression analysis revealed that in the state of Jammu and Kashmir as a whole, (Jammu and Kashmir regions), at step one, demographic variable contributed significantly to the regression model, $F (3,623) =55.76, p<.000$, and accounted for 21.2% of the variation in general health of adolescents. Out of three demographic predictors only two i.e., religion ($\beta=-.457$) and residential background ($\beta=-.224$) emerged out as significant predictors of general health. Introducing the stress variable at step two explained an additional 6.1% of variation in general health and this change in $R^2$ was significant, $F (4,622) =58.29, p<.000$. In step two stress came out as a significant predictor ($\beta=.254$). Inclusion of the facets of personal values at step three explained an addition of 6.9% variation in general health and this change
in $R^2$ was significant, $F(14,612)=22.68, p<.000$. Out of the ten personal values, power ($\beta=.102$), achievement ($\beta=.114$), hedonism ($\beta=.136$), stimulation ($\beta=-.081$), and universalism ($\beta=-.145$) were found as significant predictors of general health. Finally, the addition of dimensions of aggression to the regression model accounted for 6.8\% variation in general health and this change in $R^2$ was also significant, $F(18,608)=23.47, p<.000$. Of the four dimensions of aggression only hostility ($\beta=177$) emerged as a significant predictor. All the four models together accounted for 41.0\% variance in general health, with religion ($\beta=-395$) emerging out to be the most significant predictor of general health.

The hierarchical regression analysis performed on the adolescents of conflict ridden Kashmir region depicted that demographic variables at step one did not predict their general health significantly, $F(3,320)=1.92, p<.125$, accounting for only 1.8\% variation in general health. At step two when the variable of stress was added, additional variation of 10.5\% was found in general health and this change in $R^2$ was significant, $F(4,319)=11.2, p<.000$. Along with stress ($\beta=.332$), residential background ($\beta=-148$) also emerged out to be the significant predictor of health at step two. Adding personal values at step third accounted for additional 5.9\% variation in general health and this change in $R^2$ was significant, $F(14,309)=4.917, p<.000$. Of the ten personal values only tradition ($\beta=-.018$) and conformity ($\beta=-.029$) were found to contribute significantly to regression model. Finally, adding dimensions of aggression at step four explained additional 9.0\% of variation in general health and the change in $R^2$ was also significant, $F(18,305)=6.34, p<.000$. Out of the four dimensions of aggression hostility ($\beta=.164$), verbal aggression ($\beta=.198$) and anger ($\beta=.146$) emerged out to be significantly contributing to general health. Moreover, in the fourth step, value of tradition did not appear to be a significant predictor of general health. All the four models together were found to account for 27.3\% variance in general health, with stress emerging out as a strong predictor of general health with beta coefficient ($\beta=.28$).

The hierarchical regression analysis performed on the adolescents representing Jammu region revealed that at step one, demographic variables did not predict general health significantly, $F(3,299)=1.26, p<.200$, accounting for only 1.2\% of variance in general health. When stress was entered at step two, additional 5.3\% of variation was seen in general health and this change in $R^2$ was significant, $F(4,298)=5.180, p<.000$. 
Stress (β=.242) appeared to be the significant predictor of general health indicating that stressed adolescents are likely to have more health problems. Adding personal values to regression equation at step third, accounted for of 4.4% variation in general health and this change in $R^2$ was found to be significant, $F(14,288)=2.521, p<.002$. No individual personal value was found to contribute to the regression model significantly. Finally, addition of dimensions of aggression at step four, explained additional 6.1% of variation to general health and this change in $R^2$ was significant $F(18,284)=3.22, p<.000$. Of the four dimensions of aggression only hostility (β=.160) emerged as a significant predictor of general health. All the four models taken together accounted for 17.0% variation in general health, with stress emerging out to be a strongest predictor of general health with beta coefficient (β=.24) in Jammu region.
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ALIGARH (INDIA)
2015
CANDIDATE’S DECLARATION

I Nila Majied, Department of Psychology certify that the work embodied in this Ph.D. thesis is my own bonafide work carried out by me under the supervision of Prof. Mahmood S. Khan at Aligarh Muslim University, Aligarh. The matter embodied in this Ph.D. thesis has not been submitted for the award of any other degree.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and the body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, result, etc. reported in the journals, books, magazines, reports, dissertations, theses, etc., or available at web-sites and included them in this Ph.D. thesis and cited as my own work.

Dated............................................. Nila Majied
Enrolment no. GD-2366

Certificate from the Supervisor

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Professor Mahmood S. Khan
Department of Psychology
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(Signature of the Chairman of the Department with seal)
COURSE/COMPREHENSIVE EXAMINATION/PRE-SUBMISSION SEMINAR COMPLETION CERTIFICATE

This is to certify that Ms. Nila Majied, Department of Psychology has satisfactorily completed the course work/comprehensive examination and pre-submission seminar requirement, which is part of her Ph.D programme.

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Nila Majied
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Introduction
CHAPTER 1

INTRODUCTION

Background of the study

Kashmir once referred to as ‘Paradise on Earth’, was quoted as the most dangerous place in the world by Clinton (as cited in Mishra, 2010), which reflects the change in the perception of people globally about Kashmir over a period of time. It is an accepted fact that Kashmir Valley has been associated with violent disputes for past few decades and the roots of this dispute can be traced back to the end of British rule in India in 1947, with the partition of India and creation of Pakistan. During partition, the people of Kashmir, were promised a freedom of choice in their decision regarding whether to joining India or Pakistan, or to remain independent, through a popular vote. That never happened, leaving the people of Kashmir in the state of betrayal and conflict. Moreover, an important decision was taken by Hari Singh, the then Maharaja of Jammu and Kashmir regarding the fate of Kashmiri people by announcing its accession to India by signing the Instrument of Accession (Schofield, 2002). Since then, the state of Jammu and Kashmir has become the issue of national identities for both India and Pakistan, which have put these two countries in the state of continuous aggression and wars. Soon after the partition of India, the first war took place between India and Pakistan over the issue of Kashmir in 1947. As a result of which two third of the state of Jammu and Kashmir, comprising Jammu, the Kashmir Valley and Ladakh came under the governance of India while as one-third remained under the administration of Pakistan. The population of Jammu region comprises of 65.23% of Hindus, 30.69% of Muslims, 3.25% of Sikhs and 0.51% of Buddhists and others, whereas, Kashmir valley comprises 97.16% of Muslim population ,only 1.84% of Hindus ,0.88% of Sikhs and 0.11% of Buddhist and other population whereas, Ladakh has 47.40% of Muslim population, 6.22% of Hindus and 45.8 % of Buddhist population (“Jammu & Kashmir”, 2014), reflecting the complex and diverse nature of the state of Jammu and Kashmir. Each of these groups has different political goals and expectations, as the non-muslim section of population demand for Kashmir that is integral part of India, whereas, the muslims of this state aspire for an independent Kashmir or to be associated with Pakistan.
Movement for independent Kashmir was started by the young people of the state in the year 1989. A group of young people started a revolutionary movement against the perceived government violence and human right violations, which took an ugly turn when Indian army was brought into action to counter these young fighters. In this manner the vicious cycle of encounter of the fighters (militants) by the Indian army and vice-versa begin and continues till date. It is important to mention here that armed insurgency was mainly centered around Srinagar and adjoining districts of Kashmir valley, while Jammu and Ladakh were relatively less affected.

The ongoing movement for independence of the state of Jammu and Kashmir has led to the huge loss of life and property, human rights violations, torture, extrajudicial killings, kidnappings, disappearances, and rape, in the hands of stakeholders involved in conflict. The unabated ongoing conflicts have also led to displacement of Kashmiri Pundits from Kashmir Valley. Not only Pundit’s but a sizeable Muslim population had also left the Valley, to escape from the consequences of the conflict. A report on Human Rights violations states that between 1989 and June 30, 2010 the number of people killed in Valley was estimated to be around 93,274. Apart from this, there have been 6,969 custodial killings, over 107,351 children have been orphaned, 22,728 women widowed, and 9,920 women gang raped. (Khan, 2010), leaving the people of Kashmir is the state of profound pain and suffering. The psychological impact of violence on the Kashmiri population can be realized from the fact that before 1989, Kashmir's suicide rate was 0.5 per 100,000 people. By 2007, the suicide rate in Kashmir was estimated to be around 20 per 100,000, which was double the all-India average at that time (Maghribi, 2010). Moreover the number of patients visiting mental health hospitals has increased from 1200 in 1989 to 100,000 in 2011. And the outpatient department of psychiatry at the State hospital in Srinagar, was found to receive an average of 150-200 patients a day, most of them young boys and girls (Sana, 2012).

Adolescents of Jammu and Kashmir have been witnessing the unrest at the social and political level since their childhood, making them the worst hit generation of the society psychologically as well as socially. They are not able to make peace between the violent past and unstable present, leaving them in the state of hopelessness, despair and many psychological problems. Moreover, Guerra, Huesmann, and Spindler (2003) are of the opinion the child who has been exposed to
violence in different situations increases the risk of the child to establish aggressive ways to deal with the situation. Exposure to persistent violence may also influence adolescents’ value system, because it is this period during which values are revaluated and renegotiated (Marcia, 1980).

The present thesis thus aims to “Study the level of Stress, General Health, Personal Values and Tendency of Aggressive Behaviour among Adolescents of Jammu and Kashmir regions”.

**Stress: Concept and Literature review**

Stress is a universal human experience which refers to the sum total of physical, mental, emotional strains or tension on an individual. When an individual interacts with its environment and perceives it as taxing their adaptive capacities thereby threatening their well-being, a state of stress is experienced. Although stress has negative connotation, but the fact is that stress is not always bad, in fact it is the basic ingredient of life. Stress enables individuals to develop the skills required to cope with and adapt to a variety of potentially threatening situations throughout life. But when stress is severe enough to overwhelm one’s ability to cope effectively its positive aspects start declining. Severe and prolonged stress is capable of affecting health by causing emotional distress and leading to a variety of physiological and psychological changes.

Stress has been defined in many ways, and these explanations partially overlap each other, but by no means converge on a common definition (Appley & Trumbull, 1967). Ancient Greek text referred to stress as a vague notion of ill health (Kugelmann, 1992 & Newton, 1995). In the 14th century, the term stress was used to denote hardship, straits, adversity or affliction (Lumsden, 1981). Hooke (as cited in Hinkle, 1973, 1977) used the word stress in the context of the physical science. He defined stress as the ratio of internal force created by external force (Load), and strain as the deformation or distortion of the object. Walter B. Cannon, the American Physiologist, in 1929 introduced the term stress as an acute emergency reaction that could help the organism mobilize energy for fight-or-flight responses in dangerous situations. While as, Selye (1956) was the first to introduce the concept of stress in life sciences, and described it as threatening conditions capable of producing chronic changes in the homeostatic balance of organisms if lasting long enough.
To gain the comprehensive understanding of the concept of stress, it has been conceptualized in three ways; as a response (a psychophysiological reaction); as a stimulus (an event or accumulation of events); or as a transactional process, in which a person and the environment interact to produce an appraisal of threat or loss (Caltabiano, Sarafino, & Byrne, 2008).

**Stress as a Response:** The response-based orientation was initially put forward by Hans Selye (1956). He viewed stress as a response to noxious stimuli or environmental stressors and defined it as the nonspecific response of the body to noxious stimuli. These stress responses may in turn act as a stimulus for the production of further responses (Frankenhaeuser, 1975). This definition has been widely used in understanding of health-related effects of stress.

**Stress as a Stimulus:** Stimulus based definitions of stress describes it in terms of the stimulus characteristics of environments which are recognised as disturbing or disruptive in some way. The stimulus-based concept of stress was proposed by Masuda and Holmes (1967) and Holmes and Rahe (1967). They defined stress as the adjustment or adaptation required by selected major life changes or events. They also developed the Social Readjustment Rating Scale (SRRS) and Schedule of Recent Experiences, both of which were supposed to measure stress. The core of this definition is that too many life changes in a comparatively short period of time increase one’s susceptibility to illness.

**Stress as a Transaction:** Lazarus (1966) argued that stress did not exist in the event, but rather is a result of a transaction between a person and his/her environment. Transactional definition given by Lazarus and Folkman (1984) defines psychological stress as a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being. According to this definition, stress is subjective by nature, as it involves an appraisal of individual experiences. Lazarus (1974) also categorized stress as eustress and distress. When stress improves the physical or mental functioning it may be considered eustress. Whereas the constant stress that is not settled down through coping or adaptation may be termed as distress and can lead to many physical and mental diseases. Eustress or distress is caused as the result of discrepancies
between an experience (real or imagined), personal expectations, and resources to cope with stress.

All of the above three approaches to define stress, contribute to a complete understanding of the concept (Cox, 1978; McGrath, 1970). And on the basis of above definitions it is clear that environmental circumstances that threaten, challenge, exceed or harm the psychological or biological capacities of individuals constitute the main aspect of all the definitions of stress.

After defining the term stress it becomes now imperative to define the term stressor. Any stimulus or event that induces a stress response in an organism is called a stressor. Levi (1996) defines stressor as an inadequate fit between what we need and what we are capable of, and what our environment offers and what it demands of us. It is equally true that different types of events can act as stressors, and what is stressful for one may not be stressful for other. Although, the exposure to some stressors is considered as a normal part of development and may be stimuli for growth and development, the effect of cumulative and simultaneous stressors can threaten the well-being and healthy development of children and adolescents (McLaughlin & Hatzenbuehler, 2009).

Stressors experienced during adolescence are usually divided into three broad categories. These categories are normative events, non-normative events and daily hassles (Suldo, Shaunessy, & Hardesty, 2008). **Normative events** are those events that are experienced by all adolescents, but usually within a relatively predictable timescale (Coleman & Hendry, 1999; Suldo, Shaunessy, & Hardesty, 2008). These events include changes related to pubertal development, psychosocial changes related to school, family, peers and academic demands. **Non-normative events** refer to the events affecting one adolescent or only a smaller group of adolescents, and can occur at less predictable points in the life course (Grant et al., 2003). Events like divorce, illness, injury or natural disasters are included in Non-normative events. The last category of stressors faced by adolescents are **daily hassles**, which includes minor, irritating, and frustrating events that are typical of daily interactions between individuals and their environments. Even though these events are minor in scale, the sum and duration of these events may result to have a negative impact on adolescent’s well-being (Carter, Garber, Ciesla, & Cole, 2006).
Hetherington (1989) was of the view that among adolescents stressful events must be considered in terms of family history, individual or family characteristic and resources, the social and physical context, and the interpretation or appraisal of the event. According to him, identification of events as stressful or non-stressful depends on the complex interaction between the individual and its environment. Whereas, Rutter (1979) pointed out that it is the frequency of the stressful events which makes a difference in the life of adolescents. He asserts that when children and adolescents experience a single stress it carries no appreciable risk, but when they are exposed to series of stressors, the adverse effects increase rapidly.

**Models of stress**

**General adaptation syndrome (GAS):** Selye’s (1956) General adaptation syndrome (GAS) is considered as a most inclusive model to explain the stress phenomenon. This three-stage model explains that when an organism encounters a threatening situation, the general physiological responses occur in following three stages.

**Alarm reaction:** The alarm reaction is similar to the fight or flight response to an emergency. The first stage of alarm reaction is characterized by autonomous excitability, adrenalin discharge, increased heart rate, muscle tone, and blood content; and gastro-intestinal ulceration. **Resistance stage:** Maximum adaptation occurs during this stage. The somatic symptoms developed during the alarm reaction disappear at this stage, and the resistance increases to levels above normal. If the stressor persists, or the defensive reactions prove ineffective, the organism deteriorates to the next stage. **Exhaustion stage:** At this stage adaptation energy is exhausted. Signs of the alarm reaction recur and the resistance level starts to decline permanently. If the stress continues, disease and physiological damage become increasingly likely, and death may result.

Selye’s (1956), GAS model has been criticized for not being taken into consideration the role of psychological factors in stress, such as person’s emotional state or the way a person thinks about the stressors (Appley & Trumbull, 1986; Lazarus & Folkman, 1984).

**Stimulus model of stress:** Stimulus model of stress developed by Masuda and Holmes (1976) and Holmes and Rahe (1967) states that life changes or life events are the stressors to which a person responds. This model is based on few assumptions: a)
life changes are normative and that each life change results in the same readjustment demands for all persons, b) change is stressful regardless of the desirability of the event to the person, and c) there is a common threshold of readjustment or adaptation demands beyond which illness will result.

Transactional model of stress: Incorporating the psychological factors, Lazarus and Folkman (1984) in their model recognized that people use three kinds of appraisal to assess situations. The individual initially appraises the event itself - defined as primary appraisal. There are three possible ways in which event can be appraised: 1) irrelevant, 2) benign positive or 3) stressful. Simultaneously, when the primary appraisal of stressful circumstances is made, secondary appraisal is initiated. Secondary appraisal involves the evaluation of one’s coping capabilities and resources to find if they will be sufficient enough to meet the harm, threat, and challenge of an event. Eventually, the subjective experience of stress is a balance between primary and secondary appraisal. The third type of appraisal is reappraisal. Appraisals change constantly as new information becomes available. Reappraisal does not always result in more stress; sometimes it decreases stress (Caltabiano, Sarafino, & Byrne, 2008). Appraisal of the event as stressful is influenced by two types of factors - those that relate to the person and those that relate to the situation. According to Lazarus (1999), the more confident the person is about his capacity to overcome obstacles and dangers, the more likely he may be challenged rather than threatened and vice versa. An important factor in Lazarus’s theory of stress is thus the ability or inability to cope with a stressful situation and coping is interwoven with the appraisal process. Whereas at any one point of time secondary appraisal is influenced by the person’s perceived ability to cope with the event, over time the actual coping activities and their efficacy play an important role in the appraisal process.

Transactional model of stress is criticized on the account that cognitive appraisal processes are likely to vary substantially with developmental stages, thus the definitions of stress that relies on cognitive appraisal processes becomes problematic for research on children and adolescents (Grant, Compas, Thurm, McMahon, & Gioson, 2004).

Cognitive-behavioural model of adolescent stress and coping: Adolescence is a well recognized period of development that is often stressful. Shermis and
Coleman (as cited in Printz, Shermis, & Webb, 1999) have thus offered a cognitive-behavioral model of adolescent stress and coping. This model has five major components: environmental stressors, environmental moderators, personal factors, stress outcomes, and behavioral outcomes.

**Environmental stressors** involve daily hassles like getting engaged in arguments, experiencing bad weather, getting plans change unexpectedly, and major life events including parental divorce, death of a friend or relative, serious illness or injury, with differential effects (Compas, 1987a). Environmental factors that help adolescents in coping their stress are called **environmental moderators**. These include support from family, friends and school (Compas, 1987b). And it is the perception of support that in-fact determines the extent to which the effects of stress are moderated (Printz, Shermis, & Webb, 1999). **Personal factors** like cognition have an impact on affective and behaviour outcomes. Self-talk is identified as one form of cognitive coping (Printz et al., 1999). Age, cognitive appraisal, self-esteem, and problem-solving skills as personal moderating factors (Chandler, 1985). **Stress outcomes** may include physical and psychological symptoms. Finally, **behavioral outcomes**, which are linked to stress outcomes, are regarded as secondary responses to stress. Substance abuse, delinquency, pregnancy, and dropping out of school are identified as maladaptive behavioural responses to stress (Printz et al., 1999).

**Trauma Accommodation Syndrome**: For understanding traumatic stress responses among children, Veltkamp and Miller (1994) proposed a stress model conceptualizing children’s adaptation to stressful events. They have framed out a five-stage model, which they named Trauma Accommodation Syndrome. In **Stage I**, the child experiences an event, which involves a serious threat to their life or physical well-being, or a serious injury. **Stage II** comprises a response from the child of fear, helplessness, or horror. In **Stage III**, the child re-enacts the trauma through repetitious play, frightening dreams, and/or avoidance. **Stage III** involves a recurrence of intrusive and distressing recollections of the stressful event that can include thoughts or images and may be accompanied by disorganized or agitated behaviour. In **Stage IV** of this model, cognitive processing is present, in which a triggering life experience can lead to a re-evaluation of re-experiencing or the physical and/or psychological trauma. Finally, in **Stage IV**, the child is able to resolve or accommodate to the traumatic experiences, without doubt or guilt, through the use of coping strategies in a
manner that permits the child to incorporate adaptively the meaning of the traumatisation into his or her identity.

**Bronfenbrenner’s stress model:** There are number of factors that affect adolescents stress at each level of environment. So, to create a more complete picture of factors affecting the adolescents. Bronfenbrenner (1977) developed a stress model known as Bronfenbrenner’s stress model. This model is divided into five levels.

The first level of model refers to **micro system** and involves stressors immediately affecting the adolescents. Adolescent’s experience of stress may affect their emotions. Lovallo (2005) has accepted the effect of stress from the immediate environment on the self. The second level is the **meso system** and involves the interaction of various components at the level of micro system. Multiple social risks like poverty, terrorism, larger households create greater stress leading to an impaired child outcome (Burchinal, Roberts, Zeisel, & Rowely, 2008). Experiencing social stressors seems to affect adolescent’s health outcomes in different areas including caregiver relationships, child academic achievements and child personality factors (Sorensen, Kristensen, & Loeschcke, 2003). The third level is the **exosystem** and involves stressors resulting from settings not having a direct influence on the adolescents. Socioeconomic and environmental demands place adolescents in a position more vulnerable to stress (Canino & Spurlock, 1994). The fourth level is the **macro system** and involves stressors resulting from broader factors like cultural norms and laws. Community expectation of violence or early mortality may also contribute to additional adolescent stress (O’Donnell, Schwab-Stone & Muyeed, 2002). The final level is the **chrono system** which encompasses changes or consistencies over the period of time in the characteristics of both, person as well as the environment in which he/she lives.

When faced with stress an individual finds ways to cope with the environmental demands resulting in the occurrence of different responses in the body and brain (Resick & Schnicke, 1993), which continue until the episodes of stress subsides. **Re-experiencing** is one of the common reactions to stress. And is characterized by dreams or nightmares about stressful events as well as upsetting memories, thoughts, and visuals that come into your mind, even when you are not deliberately thinking about them. Re-experiencing has been also found to cause
somatic reactions like increased heart rate, profuse sweating, tensing of muscles, etc. At times re-experiencing can occur when something reminds you of the stressful event. Re-experiencing the event through distressing dreams/nightmares is the common form of stressful reaction found among the adolescent of Kashmir region (Margoob, Khan, Mushtaq, & Shaukat, 2006). A second type of stress reaction is hyper-arousal and is characterized by the experience of being aroused. As arousal means just energy or activation in the body. Hyper-arousal means more arousal than needed. Hyper-arousal can cause staying asleep or trouble in falling sleep. Even some may feel very anxious or panicky. Avoidance is the third type of reaction following extreme stress and refers to going out of our way or avoiding thinking or confronting some situations. Avoidance of people and places related to the original stressful event was found to be the major avoidance mechanism among the Kashmiri adolescents (Margoob et al., 2006). Experienced stress situation may also lead to emotional numbing, or feeling of depression after facing the stressful situation. People suffering with emotional numbing may experience less positive feelings, like happiness and satisfaction and may have difficulty in relating to and trusting other people.

Moreover, exposure to stressors is also associated with psychological and physiological sequel, and post traumatic stress disorder (PTSD) is considered as one of the most important psycho-physiological outcome of stress experience. Post traumatic stress (PTS) follows an event that is typically concerned outside the realms of normal human experience. For example, symptoms of PTSD have been found in former prisoner of war, survivors of concentration camps and combat veterans, but were not found to be associated with major life events like the death of a family member, chronic illness or divorce (Bartop, Luckhurst, Lazarus, Kiloh, & Penny, 1977; Holmes & Rahe, 1967).

Review of the literature has also revealed that exposure to stressors appear to cause changes in mental status, such as anxiety and depression (Mears & Gatchel, 1979). There are some evidences that sleep problems may also occur during stress episodes (Fleming & Baum, 1983). Chronic stress may also lead to arousal of sympathetic nervous system; alterations in attentiveness to the world and in some cases, withdrawal and decreased social responsiveness, and all these problems are also characteristics of PTSD, although in more severe form. Compas (1995) further suggested that as different types of stressors have differential impact on the mental
health of young people and if any intervention is applied it should be tailored according to need of that particular stressor or combination of stressors. Moreover, Izuchi and Anetoh (2014) and Chatterjee (2013) have confirmed the association of stress with aggressive behaviour. Similarly, Dubow et al. (2010) have found that PTS and aggression are related to each other. In addition to psychological, physiological, and behavioural aspects stress is also found to have association with the moral aspect of individual. Perceived stress and negative life events were found to have inverse relationship with personal value (Khodarahimi, Hashim, & Mohd-Zaharim, 2012).

Studies conducted by various investigators on stress which have relevance with the present research problem have been reviewed and are summarised as under:

Dawes, Tredoux, and Feinstein (1987) investigated the impact of political violence on children due to the violent destruction of their community in South Africa. Data was collected from 71 families using the convenience sampling technique, all the participants had lost their homes in the attack, each had at least one child between 2 and 18 years old living with them at the time of the eviction. Data relevant to stress manifested in the children after the eviction were obtained from parental reports regarding their children's symptoms of emotional, conduct, and physical disorders not present before the attacks but evident 2 months thereafter. The findings of the study revealed that cumulative stress events were found to render children more emotionally vulnerable than single events. It was also found that boys showed more symptoms of stress than girls. Results also revealed that symptom patterns varied with the child's developmental level, and the resilience of mothers served as a buffer against stress in children.

Nader, Pynoos, Fairbanks, Al-Ajeel, and Al-Asfour (1993) studied posttraumatic stress disorder and grief among the children of Kuwait following the Gulf crisis. Results revealed that 1) many children who remained in Kuwait during the occupation had war-related exposures; 2) more than 70% of the children reported moderate to severe post-traumatic stress reaction; and 3) witnessing death or injury and the viewing of explicit graphic images of mutilation on television had measurable influence on severity of reaction. Moreover, the highest mean Child Post-Traumatic Stress Disorder Reaction Index (CPTSD-RI) score was found to be among those
children who reported hurting someone else. Older children were found to be exposed to greater atrocities and were also high on (CPTSD-R1) score. The findings thus suggest the need for public policy to minimize the children’s exposure to graphic depictions of war related injury, death and mutilation.

To find out the pattern of war stress experienced and the relation between these stressors and the current psychological problems Angel, Hjern, and Ingleby (2001) studied 99 school going Bosnian refugee children living in Sweden. Results of the study showed that when children had experienced much stress, significant pattern of associations were found, and talking about their experiences was found to aggravate their negative effects.

Smith, Perrin, Yule, and Rabe-Hesketh (2001) investigated the risk and the moderating factors of children’s psychological reactions to war in 339 Bosnian children aged between 9-14 years, their mothers and their teachers. The self-report data from these children revealed high levels of post-traumatic stress symptoms and grief reactions, but normal levels of depression and anxiety. The mother’s self-reports also indicated high levels of post-traumatic stress reactions, but normal levels of depression and anxiety. The child’s distress was found to be related to both their level of exposure and to their mother’s reactions.

Smith, Perrin, Yule, Hacam, and Stuvland (2002) carried out a survey as part of a United Nations Children's Fund (UNICEF) psychosocial programme during the war in Bosnia-Herzegovina. Data was collected from a community sample of 2,976 children aged between 9 and 14 years using standardized self-report measures of posttraumatic stress symptoms, depression, anxiety, and grief, as well as a report of the amount of their own exposure to war-related violence. Results of the survey showed that children reported high levels of posttraumatic stress symptoms and grief reactions. It was further found that their self-reported levels of depression and anxiety were not raised. Levels of distress were found to relate with children's amount and type of exposure. Girls were found to report more distress than boys, but only few meaningful age effects were found within the age band studied. Results were discussed in the context of service development for children in war.

Thabet, Abel, and Vostansis (2002) made an attempt to examine the emotional problems in Palestinian children living in a war zone. The study was conducted on
two groups, 91 children who were exposed to home bombardment and demolition during the Al-Aqsa Intifada were compared with 89 children that had been exposed to other types of traumatic events related to political violence as a control group. Findings revealed that more of the children who were exposed to bombardment and home demolition reported symptoms of post-traumatic stress and fear when compared to the control group. Exposure to bombardment came out to be the strongest traumatic predictor of post-traumatic stress reactions. The children who were mainly exposed to such events through media and adult’s reports were found to suffer from more anticipatory anxiety and cognitive expressions of distress than children who were directly exposed. These findings suggested that children living in war zones can express acute distress from various traumatic events through emotional problems that are not usually recognized compared with the physical disorders.

Bleich, Gelkopf, and Soloman (2003) made an attempt to study exposure to terrorism, stress-related mental health symptoms, and coping behaviours among a nationally representative sample in Israel. From the findings it was concluded that, considering the nature and length of the traumatic experience, although people showed distress and lowered sense of safety, they did not develop high levels of psychiatric distress, which may be related to a habituation process and to coping mechanisms.

Pfefferbaum et al. (2003) conducted a study to assess the indirect exposure to the 1995 Oklohma city bombing, broadcast, and print media exposure in the aftermath of the explosion, emotional reactions to media coverage, and posttraumatic stress reactions in children distant from the explosion. Data was collected from 88 sixth-grade students in the public middle school in a community 100 miles from Oklahoma City, two years after the bombing. Results of the study revealed that print media exposure was strongly associated with enduring posttraumatic stress than broadcast exposure. Indirect interpersonal exposure and the interaction of media exposure with emotional reactions to media coverage in the aftermath of the explosion both predicted ongoing posttraumatic stress. The results also suggested that children may have lingering reactions to highly publicized terrorist incidents. Therefore media exposure to terrorist incidents should be monitored and those working with children should assess exposure and stress even in children not directly impacted.
Qouta and El-Sarraj (2004) studied the prevalence of PTSD and other psychological sufferings among Palestinian children living under severe conditions during the last two years of the Al-Aqsa Intifida. The study was conducted on 944 children between the age group of 10-19 years. The Trauma Scale, the Child Posttraumatic Stress Index, the Children’s PTSD-Symptoms, the CPTS-RI and open questionnaire were used to collect data. Result showed that 32.7% of Palestinian children in the Gaza Strip started to develop acute PTSD symptoms that needed psychological intervention, while 49.2% of them suffered from moderate level of PTSD symptoms. Also, the results of this study showed that the most prevalent types of trauma exposure for children are for those who had witnessed funerals (94.6%), shooting (83.2%), saw injured or dead people who were not relatives (66.9%), and saw family members injured or killed (61%).

Schaal and Elbert (2006) examined the role of trauma confrontation in posttraumatic stress disorder among Rwandan orphans. 68 Rwandan orphans were interviewed about their war experiences and posttraumatic stress disorder (PTSD) symptoms. Two groups of samples comprised youth living either in a child-headed household (CHH) or in an orphanage. It was revealed that all those who had been interviewed were exposed to extreme levels of violence and 41% had witnessed the murder of their own mother or father. Of the sample, 44% of the participants reported suffering from PTSD. It was also observed that PTSD vulnerability was greater for youth who at the time of the study lived in CHH than those in an orphanage; it was also higher in those aged 8 to 13 during the outbreak of the genocide, than those aged 3 to 7 at the time. Furthermore, a significant relationship was found between the number of traumatic experiences and subsequent stress responses.

Cohen and Eid (2007) made an attempt to determine the effect of living under constant threat of terrorist attacks. The study was conducted on a sample of 346 Israeli Jewish and Arab adolescents. The study probed participants direct and indirect exposure to terrorist attacks, avoidance of public centres, sharing feelings with significant others, and stress reaction symptoms. Findings of the study revealed that the adolescents showed mild to low levels of stress symptoms in reaction to terrorist attacks in Israel, with no significant differences between Jews and Arabs. The Jewish adolescents reported knowing more people involved in terror attacks and being more informed by their parents about them. Demographic and exposure variables explained
39% of the variance of stress reaction symptoms. Being female, knowing someone
injured, having parents who discuss terrorist attacks or forbid going out, and more
sharing of feelings were significantly related to higher stress symptoms. For Jewish
adolescents, greater levels of sharing of feelings were related to higher distress. From
the above findings, it was concluded that Jewish and Arab adolescents were similarly
affected by the threat of terror, but were also resilient even in highly unusual
circumstances.

Elbedour, Onwuegbuzie, Ghannam, Whitcome, and Abu Hein (2007) made an
attempt to evaluate the psychological effects of exposure to war-like circumstances on
children and adolescents of Gaza. The measures of post-traumatic stress disorder
(PTSD), depression, anxiety, and coping were administered to 229 Palestinian
adolescents living in the Gaza Strip. Findings of the study revealed that out of the 229
participants, 68.9% were classified as having developed PTSD, 40.0% reported
moderate or severe levels of depression, 94.9% were classified as having severe
anxiety levels, and 69.9% demonstrated undesirable coping responses. Moreover, a
canonical discriminant analysis revealed that adolescents diagnosed with PTSD
tended to be those who reported the highest levels of depression, anxiety, and positive
reappraisal coping, and the lowest levels of seeking guidance and support coping.
Therefore, it can be concluded that a significant proportion of Palestinian adolescents
living in the Gaza Strip experienced serious psychological distress.

Pat-Horenczyk et al. (2007) examined the impact of exposure to ongoing
terrorism on 695 Israeli high school students. Exposure was measured using a
questionnaire developed for the security situation in Israel. Posttraumatic symptoms
were measured using the UCLA PTSD Index for DSM-IV-Adolescent Version
(Rodriguez, Steinberg, & Pynoos, 1999), functional impairment and somatic
complaints were assessed using items derived from the Diagnostic Interview Schedule
for Children (Lucas et al., 2001), and depression was measured with the Brief Beck
Depression Inventory (Beck & Beck, 1972). According to the criteria of the
Diagnostic and Statistical Manual of Mental Disorders (4th ed.; American Psychiatric
Association [APA], 1994), the prevalence of probable posttraumatic stress disorder
came out to be 7.6%. Girls reported greater severity of posttraumatic symptoms,
whereas boys exhibited greater functional impairment in social and family domains.
School-based screening appeared to be an effective means of identifying adolescents
who have been exposed to terror and are experiencing posttraumatic stress symptomatology and psychosocial impairment.

Shamai and Kimhi (2007) conducted a study with an aim to find the role of gender and the way social system (family and friend’s support, stress attributed to parents, friends and others in the community) contributed to the reaction to stressors of war and the threat of terror among teenagers living in Israel along the Lebanese border. The study was conducted on the sample of 353 teenagers shortly after Israel’s withdrawal from Lebanon. The study was based on the teenagers self-report. Results of the study revealed that a) gender relates significantly to level of stress but not to the general life satisfaction; b) stress attributed to the parents and to the peers has a greater contribution to the level of stress than the supportive family atmosphere and peer support; c) stress attributed to the parents and peers was found to be a mediator between gender and level of stress; d) supportive family atmosphere was found to be a mediator between gender and on the measurement of stress, while peer support was not found to have any mediating role. Special attention is given to the finding that stress attributed to parents and friends has greater significance than the support provided by them.

Audrey (2008) examined the predictive value of the level of exposure to the hurricane, level of community violence exposure, and gender, in examining PTSD symptomatology following Hurricane Katrina. Participants were 230 mother-child dyads selected from various public and private elementary and middle schools within Orleans Parish, Jefferson Parish, and East Baton Rouge Parish 4-7 months post Hurricane Katrina. Data from children was collected using the UCLA PTSD Reaction Index, the Hurricane-Related Traumatic Experiences, and the Screen for Adolescent Violence Exposure, in addition to other measures utilized in a larger grant funded research project. A Hierarchical regression analyses was used. Results of the analysis revealed that hurricane exposure and community violence exposure each were significant predictors of PTSD symptoms in children following the hurricane. Moreover, gender did not emerge out as a predictor of PTSD symptoms.

Catani, Jacob, Schauer, Kohila, and Neuner (2008) made an attempt to study the prevalence and predictors of traumatic stress related to war, family violence, and the tsunami experience in children living in a region affected by a long-lasting violent
conflict. The study also looked at whether higher levels of war violence would be related to higher levels of violence within the family and whether this would result in higher rates of psychological problems in the affected children. Data was collected from 296 Tamil school children in Sri Lanka's North-Eastern provinces. Diagnostic interviews were carried out by extensively trained local Master level counselors. PTSD symptoms were measured by means of a validated Tamil version of the UCLA PTSD Index. Participants also completed a detailed checklist of event types related to organized and family violence. Results of the investigation revealed that 82.4% of the children were found to experience at least one war-related event. 95.6% reported at least one aversive experience out of the family violence spectrum. 30.4% of participants were found to suffer from the symptoms of PTSD and 19.6% suffered from Major Depression. Linear regression analyses showed that father’s alcohol intake and previous exposure to war were significantly linked to the amount of maltreatment reported by the child. A clear dose-effect relationship between exposure to various stressful experiences and PTSD was found in the children examined. Therefore, it was concluded that war violence and violent behaviour inflicted on children in their families are related to each other. And both of these factors, together with the experience of the Tsunami, emerged out as significant predictors of PTSD in children, thus highlighting the detrimental effect that the experience of cumulative stress can have on children's mental health.

Braun-Lewensohn, Celestin-Westreich, Celestin, Verte, and Ponjaert-Kristoffersen (2009) investigated the impact of several types of exposure to terror attacks on adolescent’s psychological outcomes in the context of ongoing terror. Sample constituted of 913 adolescents (51% girls) aged between 12 to 18 years. Detailed information was collected concerning objective, subjective and "mixed" types of exposure to terror, as well as demographics, post-traumatic stress symptoms (PTSS), emotional and behavioural problems and overall psychological and psychiatric difficulties. It was observed that subjective exposure emerged out as the most important contributor to adolescent’s post-traumatic stress and other mental health problems in this context. Effect of gender was also established. On the other hand the effects of objective and mixed types of exposure, as well as age, were found to be less prominent.

Dubow et al. (2010) conducted a study to evaluate the relation of exposure to political conflict and violence, and the violence in the family, community, and school,
to posttraumatic stress (PTS) symptoms and aggressive behaviour. The sample comprised of 600 Palestinian youths (3 age cohorts: 8, 11, and 14 years old). Results revealed the additive effects of exposure to political conflict and violence in relation to PTS and aggression, suggesting that interventionists should consider the full spectrum of sources of environmental risk for PTS symptoms and aggressive behaviour.

Henriksen, Bolton, and Sareen (2010) carried out an investigation to find whether the incidence of Axis I mental disorders were associated with levels of exposure to the 9/11 terrorist attacks. Data was drawn from the Wave 2 National Epidemiologic Survey on Alcohol and Related Conditions (NESARC-2; N=34,653, ages 20+) collected between 2004 and 2005. This survey utilized a fully structured face-to-face interview to assess the presence of DSM-IV Axis I disorders since Wave 1 of the NESARC, collected between 2001 and 2002. Multiple logistic regression analyses were employed to examine the relationship between the level of exposure to 9/11 and the prevalence of Axis I disorders since Wave 1. Result of the investigation revealed that higher levels of exposure increased the odds of having new onset PTSD, any anxiety disorder, and any mental disorder. It was also revealed that compared to participants who were not exposed to 9/11, those who directly experienced 9/11 had six times the odds of having PTSD, 2.5 times the odds of having any anxiety disorder, and nearly twice the odds of having any mental disorder.

Lahad and Leykin (2010) examined the manifestation of posttraumatic stress disorder (PTSD) symptoms in two clinical samples. A study was conducted on 212 participants living in Israel. Individuals experiencing ongoing exposure to shelling were compared with subjects exposed to the intense periodic exposure. The findings of the study revealed that elevated arousal and avoidance symptoms, but not intrusion were reported in the ongoing exposure group. When compared by age, young participants in the ongoing exposure group had significantly lower PTSD scores, whereas no differences were found between participants among the intense periodic exposure age groups. No gender differences in symptoms were found among participants from intense periodic exposure, whereas in the other ongoing group the difference was in avoidance.

Ahmed et al. (2011) conducted a study to assess the levels of stress in the face of terrorism and the adopted coping strategies. Self-administered questionnaires
were filled out by 291 undergraduate students from four universities of Karachi. Results revealed that a total of 65.8% of the students suffered from mild stress levels, 91.5% of university students were exposed to terrorism through television, while only 26.5% students reported personal exposure to terrorism. Most commonly used coping strategy was increased faith in religion. Irritability emerged out to be the most common stress symptom.

Copeland-Linder, Lambert, Chen, and Lalongo (2011) conducted a longitudinal study to examine the relationship between contextual stress and health risk behaviours and the role of protective factors in a community sample of 500 urban African-American adolescents, out of which 46.6% were females. Structural equation modelling was used to create a latent measuring contextual stress (community violence, neighbourhood disorder, and experiences with racial discrimination). Finding of the study revealed that contextual stress in boys of 8th grade was associated with aggressive behaviour and substance abuse two years later. While as, for girl’s contextual stress predicted later substance use, but not aggressive behaviour. Further, it was found that high academic competence and self-worth reduced the impact of contextual stress on substance use for boys.

Tatar, Amram, and Kelman (2011) studied the perceptions of Israeli parents concerning the help-seeking behaviours of their 11 to 19 year-old children in relation to terrorist attacks. A total of 684 parents were surveyed (342 mothers and 342 fathers). Additionally, parents were asked to address the most common reactions in their children following a terrorist attack. The results show that parents perceive the following as typical reactions: stress, fear, emotional avoidance, sadness, and attempts to receive more information or details about the event, and anger or a wish for revenge. The most common reaction, as perceived by the parents, was stress.

Schraml, Perski, Grossi, and Simonsson-Sarnecki (2011) conducted a survey to study the incidence of stress symptoms among 16-year-olds, to investigate the related gender differences, and to understand the factors that may contribute to stress symptoms. The data was collected from the sample of 304 first-year high school students from two comparable schools using questionnaire method. Results demonstrated that more than 30% of the high school students reported serious stress symptoms. Almost every second girl and every fifth boy reported that they felt
stressed to a high degree. 8.2% of participants were found to have severe stress symptoms, which would be considered as a sign of chronic stress in adults. In addition to the perception of high demands, low levels of global self-esteem, sleep disturbances, and poor social support were found to play an important role in the prediction of stress symptoms.

In order to study reciprocal relation between stress and internalizing problems in Korean adolescents Lee (2011) conducted a cross-lagged, four-wave longitudinal study. Data were obtained from the Korea Youth Panel Study, which included 3188 (1594 male and 1594 female) middle and high-school students who were enrolled in the study from 2004 to 2007. The mean participant age was 14.79 years in 2004. Results obtained revealed that stress levels and internalizing problems had reciprocal influences on one another over time (all four time points). Further, it was found that at each of the time points, the effect sizes of stress on internalizing problems were significantly greater than those of internalizing problems on stress.

Ben-Zur and Almog (2013) assessed the long term effects of exposure to the Second Lebanese war, personal and social resources, and cognitive appraisal, on post-traumatic stress symptoms and future orientation measures among 204 Israeli adolescents (mean age 15.45) out of which 59.3% were girls. The main findings showed that high war exposure was positively related to post-traumatic symptoms, future fears, and risk-taking behaviour, while the appraisal of ability to cope showed the opposite pattern. High threat was positively related to post-traumatic symptoms and fears of the future while the challenge was related to risk taking. High threat and low coping ability mediated the effects of war exposure on post-traumatic symptoms.

Chatterjee (2013) made an attempt to explore the relationship between stress and aggression among the high school students of Ranchi. The data was collected from 320 students out of which 160 were males and 160 were females, using student stress scale (Akhtar, 2011) and aggression scale (Mathur&Bhatnager,2004). The age range of students was 16-19 years. Data was analysed using mean, standard deviation, t-value and correlation. The result revealed that male and female students differed significantly in the experience of stress and aggression, but female students experience more stress and aggression than male students. Result further revealed that stress was positively related with aggression.
Burri and Maercker (2014) examined the impact of war victimization and other civil trauma on the prevalence of PTSD, as mediated by cultural value orientations. Secondary data analysis was performed in 12 European countries using data, including PTSD prevalence and number of war victims, crime victims, and natural disaster victims, from different sources. Ten single value orientations, as well as value aggregates for traditional and modern factors, were examined. Results revealed that PTSD prevalence were strongly associated with war victim rates, associations, although weaker, were also found among crime victims and PTSD. Furthermore, results report that when the value of stimulation and conformity as representatives of modern and traditional values were included in the multivariate predictions of PTSD prevalence, an average of 80% of PTSD variance was explained by the model, independent of the type of trauma exposure.

Matthew, Keith, Julian, and Rebecca (2014) investigated the association between exposure to different types of traumatic events, PTSD symptoms, and aggression among Juvenile offenders. A male sub-group of juvenile offenders was identified based on their self-reported exposure to different type’s traumatic events. Results revealed that male juvenile offenders who endorsed multiple types of traumatic events or traumatic events involving violence reported higher level of PTSD symptoms but not self-reported aggression. Moreover, traumatic exposure was associated with more severe emotional and behavioural problems in the youth who were exposed to community violence.

McLean, Morris, Conklin, Jayawickreme, and Foa (2014) were interested in investigating the relationship between the characteristics of childhood sexual abuse (CAS) and the severity of the consequent posttraumatic stress disorder (PTSD), depression, suicidal ideation, and substance abuse. The sample of the study comprised of 83 female adolescents between the age range of 13-18 years seeking treatment for PTSD. Results of the investigation revealed that nearly 60.7% of the sample two-thirds of the sample (60.7%, n=51) reported the perpetrator of the CSA was a relative. 40.5% of the sample reported being victimized once, while 23.8 % of the sample reported being chronically victimized. Further, PTSD and depression scores were in the clinical range, whereas reported levels of suicidal ideations and substance use was low. The frequency of victimization was associated with suicidal ideations. Surprisingly, CAS characteristics, including trauma type, perpetrator relationship,
were unrelated to PTSD severity, including trauma type, perpetrator relationship, and duration of abuse were unrelated to PTSD severity, depressive symptoms, or substance abuse.

From the above stress related review it becomes quite evident that there is a strong positive relationship between the level of stress among individuals and their exposure to violence. People living in a violence prone environment are found to experience significantly higher level of stress than living in relatively peaceful areas. Moreover, the level of distress is found to relate with the amount and the type of exposure. It is also revealed that interpersonal exposure and interaction of media exposure with emotional reactions to media coverage in the aftermath of the exposure both predict posttraumatic symptoms. Moreover, stress is also found to be related to aggression in certain contexts. Past literature also shows that perceived stress of parents and friends have a stronger influence on the adolescent’s level of stress than the support given by them. Moreover, stress was also found to have an inimical effect on health. Lepore, Miles, and Levy (1997) have reported that ongoing stressors that are static are more detrimental to health and well-being than are episodic. Thus, the second variable of the current research is general health.

**Health: Concept and Literature review**

Health is a universal concept but has no universal definition. It has different meaning for different people. Health is subjective and its interpretation is very much depends on the culture and environment in which people live. The way in which individual interprets their own health is a personal experience. The health of an individual very much depends on their perception, as individuals with disease may live positive and healthy lives, while as people without disease may lead a despondent, unhappy and unhealthy lives. In this way the concept of health is linked to every individual, including those who are well, those who live with disability or chronic disease and those who are ill with physical or psychological conditions. Hence we can say that health is a global issue and is equally important for the satisfaction of basic human needs and for attaining an improved quality of life.

Etymologically word ‘health’ is originally derived from the word ‘heal’ which originally means ‘whole’ and also from Greek word ‘Halos’ meaning ‘whole’ (Hoad,1986). Ancient China and classical Greece have focused on the concept of
wholeness and naturalness by defining health as a state of harmony, balance, or equilibrium with nature. Hippocrates, who is traditionally considered as the father of medicine, also described health as a condition in which the functions of the body and the soul are in harmony with the outside world. On the other hand, the concept of disease refers to the defects that cause disturbances in a person’s functions and relates to the individual as a biological being (Vang & Kristenson, 2000).

As, the concept of health is a key consideration in the life of people of all cultures, religions and languages, the literature provides a number of definitions of the concept of health. The traditional western medical definition viewed health as absence of disease. It proposed that all diseases or physical disorders can be explained by disturbances in physiological processes, which result from injury, bio-chemical imbalance, bacterial or viral infection and the like (Engel, 1977). World Health Organization (WHO, 1984) stated that health is more than the absence of disease, and defined it as a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity (WHO, 1948). This definition is holistic and presents three major interrelated components of health. The physical health domain of WHO’s definition refers to the physiological or biological component of health. This aspect is most important biomedical criterion in the determination of health. For someone to be healthy, his/her biological order must be in order. The mental health aspect describes the psychological, emotional and mental status of the individual. Sound mental health is characterized by the ability of an individual to face the challenges of life with flexibility and a sense of purpose. Emotional apathy, fixation, and maladjusted personality constitute a part of manifestation of illness. Huber et al. (2011) observed that the mental health aspect signifies the possession of a sense of coherence, which includes the subjective faculties enhancing the comprehensibility, manageability, and meaningfulness of any circumstances. While as, the social health aspect refers to the behavioural component of health and signifies the harmony and integration within the individual, between each individual and other member of the society and between individuals and the world in which they live (Park, 1995). If the individual is not active in the social network it represents the form of social pathology - an abnormality, which is an infraction on the norms and values of the society. The social aspect also includes the spiritual dimension. The spiritual aspect could be personal to the individual by connecting to the world of reality and divinity. The
individual is thus a social being whose health is affected by social behaviour and interaction (Larson, 1999).

In 1986, the World Health Organisation’s (WHO) definition of health was expanded to include a community concept of health and was defined as the extent to which an individual or group is able on one hand, to realize aspirations and satisfy needs, and on the other hand, to change or cope with the environment. Thus according to WHO (1986) health is a resource of life, encompassing social and personal recourses as well as physical capacities. An individual or community thus must be able to attain and use recourses effectively and exhibit resilience when facing change. WHO’s definition marked the end of unidimensional model of health and the beginning of multidimensional paradigms.

Several other scholars have proposed many different definitions of health. Health has been defined as a positive or optimal state of being, not just a neutral condition by Halbert Dunn in 1959. He also coined the term wellness to represent this positive state of health. Dubos (1959) argued that health and illness cannot be defined merely in terms of anatomical, physiological or mental attribute and that their real measure is the ability of the individual to function in a manner acceptable to him-self and to the group of which he is the part. Parsons (1972) defined health as a state of physical and mental fitness to do socialized daily tasks. Hall and Weaver (1977), view health as a purposeful and integrated method of functioning within an environment. For Hanlon and Pickett(1984) health is the attainment of the highest levels of physical, mental and social wellbeing consistent with available knowledge and resource at a given time and place. Health is considered as the foundations for achievement by Seedhouse (2001). Seedhouse viewed health as the means by which we achieve our potential, both as individuals and as groups. Seedhouse (1986) therefore described a person’s optimum state of health as being equivalent to the set of conditions that enable a person to work to fulfil their realistic, chosen and biological potentials. This definition also provides the broader perspective for understanding the concept of health that goes beyond the absence of disease or abnormality as understood using a medical model. Blaxter (1990) pointed out that health is not a unitary concept, but is multi- dimensional, and it is quite possible to have good health in one respect, but bad in another. Moreover, from humanistic view optimal autonomy, personal strength and the positive meaning of life are central
components of health (Heyrman & Van Hoeck, 1993). Nordenfelt (1993) have demonstrated that a person is in the state of complete health if and only if this person is in a physical and mental state such that he/she is able to realize all his/her vital goals given a set of accepted circumstances. For Bircher (2005) health is a dynamic state of well-being characterized by a physical and mental potential which satisfies the demands of life commensurate with age, culture and personal responsibility. The above definitions of health, thus serve to illustrate the many different ways in which health can be conceived and experienced.

Definitions of health are found to vary according to age, sex and level of education (Cox, Blaxter, & Buckle 1987), cultural group (Bowling, 1994) and socioeconomic group, with those in the low socio-economic group defining health more negatively (Blaxter & Petterson, 1982) and more likely to perceive the causes of their health being outside their control (Blaxter 1983; Pill & Sttot, 1985). Blaxter (1990) have shown that older person defines health in terms of resilience and ability to cope, whereas younger people equate health with fitness, strength and vitality. The health of adolescents has been further defined by the World Health Organization (WHO, 1993) as the state of optimal physical, emotional, cognitive, social and spiritual well-being of youth aged 10-24 years old. Healthy adolescents thus should have the capacity to realize individual potential around critical development tasks, including the ability to form a strong social ties with family and friends, to play a positive role in their communities, to engage in behaviours that contribute to a healthy lifestyle, to demonstrate physical, cognitive, emotional, social and moral competencies, to show resiliency when confronted with life stressors and to experience sense of self-confidence, hopefulness and well-being.

While going through the literature on health, it was evident that the word health is often interchangeably used for well-being. It is generally argued that well-being provides a broader understanding of health than those drawing on a more scientific, medically dominated position (Cronin de Chavez, Backett-Milbum, Parry & Platt, 2005). Not surprisingly, there is a lack of agreement in defining well-being, the conceptualisation of state of well-being is closer to the concept of mental health, happiness, full of life, vital, energy, interest, self-actualization of one’s full potential and prosperity as well as health (American Heritage Dictionary, 1980). Laverack (2004) has identified three different types of well-being – physical, social and mental.
For him physical well-being reflected the healthy functioning, fitness and performance capacity. Involvement in community and interpersonal relationships as well as employability represented the social aspect of well-being, whereas, factors like self-esteem and ability to cope and adapt were included in the mental well-being.

Psychologists have also studied health. Initially they used to define health only in terms of psychological symptoms. As, Bowling (1997) reported that 11 mostly widely used measures of psychological well-being included symptom checklist. With the passage of time, psychologists have realized that the concept of health should encompass much more than the study of life stress and mental illness. Thereby, positive affect, negative affect and long-term life satisfaction are now regarded as the signs of health status or subjective well-being (Andrews & Withey, 1978). Common features of psychological approach to health include the incorporation of psychosocial factors and subjective evaluations and experiences. Thus the more recent definition of Psychological health of adolescents includes both psychological distress and psychological well-being (Masse et al., 1998; Wilkinson & Walford, 1998). Masse et al. (1998) have pointed out that psychological distress is usually described by measures of self-depreciation, irritability, anxiety, depression, and social disengagement while as psychological well-being is mostly described by measures of control of self and event, happiness, social involvement, self-esteem, mental balance, and sociability. Depression is supposed to be present in both psychological distress and psychological well-being (Wilkinson & Walford, 1998).

Keeping in view the context of the present research work, the general health is defined in accordance with the theory of Goldberg and Hillier (1979) who identified four facets of health namely, (1) somatic symptoms, (2) anxiety and insomnia, (3) social dysfunctional, and (4) severe depression.

**Anxiety:** Anxiety refers to an unrealistic fear that leads to physiological arousal and is accompanied by the behavioural signs of escape or avoidance. Subjective experience of distress, disturbances in sleeping patterns, concentration, and social or occupational functioning are the common symptoms of anxiety. It is considered as one of the most common psychological disorders among adolescents worldwide (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003), with the estimated
prevalence of 4.0%-25.0%, and an average rate of 8.0% (Bernstein & Borchardt, 1991).

**Social dysfunction**: Social dysfunction is defined as an impaired ability to get along with others and function in society. It includes problems such as difficulty in making or keeping friends, getting along with others in social settings, trouble in coping with day to day stress and unreasonably strong fear (Newcomer, Kang, Kaye, & La Plante, 2002). De-socialization due to negative and hostile environment reactions as well as the non-effective psychological strategy operated by ill persons are considered as the reasons that lead to social dysfunction. Coping models have also pointed out that social dysfunction derives from the particular ways of coping with the disease process and with situations of social interactions (Strauss, 1989).

**Depression**: Depression is an affective state manifested by the feelings of worthlessness and guilt, sadness and apprehensions, sleeplessness, withdrawal from others, loss of appetite and sexual desire as well as loss of interest and pleasure in usual activities. It is considered as the second mental health problem that has been frequently identified in children and adolescents exposed to community violence (Duran, Cahenhead, Pendergrast, & Linder, 1994; Freeman, Mokros & Poznanski, 1993). In a study carried out in Kashmir, it was found that 66.67% adolescents, out of which 68.64% were female and 64.21% were male suffer from depression(Amin & Khan, 2009). Although symptoms of depression in adolescents are similar to those of adults (Lewinsohn & Essau, 2002), suicidal thoughts and behaviours are especially elevated in depressed youths (Lewinsohn, Rohde, & Seeley, 1996), and in some instances sadness is replaced with irritability in children and adolescents.

**Somatic Symptoms**: Somatization refers to the manifestation of personal and social distress in the form of somatic complaints seeking medical help. It is not an organic disease, but a process whose result is the illness experience of medically unexplained symptoms called as somatic symptoms (Kleinman, Kleinman, 1985). Although somatic symptoms do not have any medical explanation, but they are capable of significantly impairing the child’s life, affecting their development as well as their school, and social adjustment (Roth-Isigkeit, Thyen, Stoven, & Schmucker, 2005). Diagnostic and Statistical Manual of Mental Disorder, Fourth Edition -Text Revision (DSM-IV-TR; American Psychiatric Association (APA), 2000), have
classified somatic complaints into four domains: (1) pain symptoms (like headache, stomachache, back pain), (2) gastrointestinal symptoms (like nausea, vomiting, diarrhoea), (3) sexual symptoms (like sexual indifference, erectile dysfunction, irregular menses) and (4) pseudo neurological symptoms (like conversion symptoms such as impaired coordination, paralysis, loss of touch sensation).

Models of health

Medical model of health: Traditional medical model viewed health as a disease free-state, and conceptualized it in terms of pathology, disease, diagnosis and treatment. This model was based on the assumption that health and disease were objective and observable phenomenon (Balog, 1978). According to this model, the physical body is considered as being separate from social or psychological processes (Lyons & Chamberlain, 2006). And health is considered as related to individual body, whereas, the causes of ill-health are viewed as being biological or physiological in nature that require expert intervention.

The medical model has been, very influential in understandings the concept of health. But the major drawbacks of this model were that, it overemphasized the negative aspect (illness) of health and neglected its positive aspect (e.g., well-being). Moreover, according to this model, there is a dichotomy between health and illness, which, according to Hinkle (1961) is not necessary. To be in the state of health, it is not necessary that the person should be absolutely disease free, but they probably must have less disease than ill person. Thus, being disease free is not enough to determine a person as healthy.

Social model of health: Contrary to the medical model the social model of health states health as being influenced by a range of different factors, including those that are political, economic, social, psychological, cultural, and environmental (as well as biological) (Earle, 2007). It is assumed that factors lying outside the physical body like inequality, poverty, as well as social interaction and behaviour are the causes of ill-health.

The social model of health has been criticized for being so broad, as the wide range of factors included in this model might render it almost unusable. In addition, breadth of understanding that social model takes into account may be helpful is the
areas of health promotion and public health, but they have different priorities and therefore can only be implemented on a small scale.

**Holistic model of health:** Holistic model of health focused on the positive aspects of health and well-being, rather than the negative aspect of medical model – absence of disease and infirmity. This holistic model of health elaborates the medical model by representing health as a positive state of well-being, encompassing social, psychological, economical, spiritual, and political aspects along with physical aspects in the definition of health. This model corresponded to the view held by the ancients that health refers to a sound mind, in a sound body, in a sound family, in the sound environment.

**The biopsychosocial model of health:** This model is closely related to holistic views about health, but differs from it in the wider literature. The Biopsychosocial model of health and illness integrates social, psychological, and biological aspects of health and accounts for the interaction between these (Engel, 1977). Biological aspects include factors like genetics and our physiological condition and systems. Psychological aspects include how the individual behaves, how and what he/she thinks and how he/she feels. Social aspects take into account that individuals are social beings who interact with others within groups, communities and societies.

**Psychological model of mental health:** This model was developed by Kinderman (2005). The model states that biological and social factors, together with a person’s individual experiences, lead to mental disorder through their conjoint effects on psychological processes. Biological factors include neurotransmitters (and the associated genes) believed to be significant in depression or schizophrenia. Social factors include poverty and social deprivation, while as, circumstantial factors include life events like childhood sexual, emotional or physical abuse. All these affect people through their impact on perceptual and cognitive system and on psychological processes associated with self-esteem, beliefs in self-efficacy, motivation and expectations of reward leading to mental disorder. He argued that disruption or dysfunction in the psychological processes constitute a final common pathway in the development of mental disorders. For example, social deprivation and poverty lead to problems such as depression, but they operate through the disillusionment,
hopelessness and learned helplessness that constitute a realization that one’s actions have no effect or purpose. Being traumatized also leads to problem but through the disruption of psychological processes involving the ways in which individuals appraise themselves, the individuals in their lives and the ways in which relationships and social intercourse should be governed.

This model is very helpful for psychologists in developing more comprehensive interventions which integrate the purely psychological or one-to-one psychotherapeutic work with the work of experts in health and social care addressing the physical (biological) health care needs, the social, economic, employment and housing needs of the client and indeed protecting against abuse.

According to Crews, He, and Hodge (2007) childhood and adolescence are the periods in which important personal and psychological resources that guide cognition and decision-making, and ultimately influence health, are typically developed. Shaw and Krause (2002) further found that interaction between adolescents/children and the environment have a long term effect on health. The physical, psycho-social-emotional, and mental health well-being is profoundly affected by the isolated, acute, repetitive or chronic exposure including poly-victimization to violence and trauma (Cook et al., 2007). Moreover, constant psychological pressure because of frequent stressful or traumatic experiences over the life course can deregulate the normal physiological adaptation to stress and threats, and then sensitivity to stress (McEwen & Gianaros, 2010; Shonkoff, Boyce, & McEwen, 2009) or alter immune functioning that in turn may contribute to increased adult health problems (Altemus, Cloitre & Dhabhar, 2003). Hence youth exposed to higher levels of community violence was found to have more distress than those with lower exposure (Fitzpatrick & Boldizar, 1993; Jenkins 1993; Martinez & Richters,1993). Even, being brought up in a family having parental psychopathology, parental loss or absence or parental separation can be a predictor of future health-related problems in adulthood (Finkelhor, Ormrod, & Turner, 2007). In addition to this, individuals experiencing adversities during upbringing, are more likely to engage in high-risk behaviours (Finkelhor et al., 2007; Kendall-Tackett, 2002), which in turn are associated with both negative health as well as violence (Huas, Hassler, & Choquet, 2008). Some gender specific studies have further accounted that girls suffer from more internalized symptoms(anxiety,
depression, and general emotional distress) related with exposure than boys (Farrell & Bruce 1997; Fitzpatrick & Boldizar, 1993).

Studies on general health relevant to the current research work are presented below:

Al- Eissa (1995) investigated the psychological reactions of Kuwaiti children to war-related stress in the early period of the Gulf crisis following the summer 1990 Iraqi invasion of Kuwait. The investigation was carried on a sample of 106 children from Kuwaiti displaced families and a comparable control sample was obtained from Saudi families in Riyadh, Saudi Arabia. Data was collected by using an interview checklist of symptoms of physical and psychological distress to the index child and a female key informant in each household of cases and controls. Most Kuwaiti children were exposed to unpleasant war experiences. Findings of the investigation revealed that Kuwaiti children exhibited a substantially greater degree of dysfunctional social and emotional behaviour. Further, the types of adverse behaviours were found to be the function of the child's age, sex and experience of aggression. The findings support the notion that a negative relationship exists between armed conflict and the health and behaviour of the children. The complex needs of children exposed to violence require professionals to seek ways of combining psychodynamic interventions and relief programmes.

To examine the association of war experience and anxiety, Al-Khawaja (1997) carried out interview with 322 children aged between 5 to 16 years. Body language was used as an indicator of anxiety. The girls showed significantly more discrete body movements than boys revealing higher level of anxiety.

Reynolds, O’Koon, Papademetriou, Szczygiel, & Grant (2001) investigated rates of somatic complaints and the association between stress and somatic complaints in low-income urban youth. Sample of the study comprised of 1030 adolescents belonging to low-income urban 6th - 8th grades. Results indicated that, for both boys and girls, somatization was found to be the most commonly reported internalizing symptom in this sample, and that heightened rates of urban stress predicted heightened rates of somatic complaints. In addition to this, a significantly higher percentage of youth in this sample was found to report clinically elevated levels of somatic complaints (17%) relative to that reported by normative samples (5%).
two most common somatic complaints were stomachaches and headaches, and females reported higher rates of somatic complaints than males. These findings suggest that somatic complaints are the most common expression of internalizing symptoms among low-income urban youth, and that exposure to heightened rates of stress places low-income urban adolescents at heightened risk for somatisation.

In order to establish the prevalence of adolescent’s exposure to violence and related symptoms in the South African context and to explore relationships between exposure and symptoms, Ward, Flisher, Zissis, Muller, and Lombard (2001) administered self-report questionnaires to 104 students. Types of violence explored included: witnessing or being a victim of violence perpetrated by someone known to the child or in the home and witnessing or being a victim of violence perpetrated by a stranger. The Harvard Trauma Scale, Beck Depression Inventory, and Zung Self-Rating Anxiety Scale were used to assess potentially related symptoms. Result of the study reported that the majority of children had been exposed to at least one type of violence, and exposure to the one type of violence was related to the other type. Symptoms of post-traumatic stress disorder and depression appeared to be related to most types of exposure to violence, but anxiety symptoms only to exposure to violence perpetrated by someone known to the child or in the home.

Self-Brown, LeBlanc, and Kelley (2004) examined the relationship between adolescent violence exposure, daily stress, and psychological outcome. Data was collected from parent/adolescent dyads (N = 80) using questionnaires, which included parent ratings of adolescent externalizing and internalizing problems and adolescent self-ratings of emotional adjustment. The findings of the study revealed that severity of daily stress was found to moderate the relation between levels of violence exposure and extent of adolescent externalizing and internalizing problems. The relation was significant at higher levels of daily stress, but non-significant at lower levels of stress. Daily stress did not emerge as a moderator in the relation between violence exposure and adolescent emotional adjustment. Results also revealed that adolescents experiencing high levels of violence exposure and daily stress were at greater risk for the poor psychological outcome, which included parent ratings of adolescent externalizing and internalizing problems and adolescent self-ratings of emotional adjustment.
The study was conducted by Bailey et al. (2005) to investigate whether specific physical symptom complaints can be attributed, at least in part, to violence exposure. Participants of the study were 268 Urban African-American children between the age group of 6-7 years, residing with their biological mothers, recruited before birth, and without prenatal exposure to hard illicit drugs. Children and mothers were evaluated in hospital-based research laboratory, with teacher data collected by mail. Community violence exposure, stress symptomatology, and somatic complaints were assessed. Additional data that was collected included prenatal alcohol exposure, socioeconomic status, domestic violence, maternal age, stress, somatic complaints and psychopathology, and child depression, abuse, and gender. From the results it was observed that community witnessing violence and victimization were associated with stress symptoms. More specifically, violence victimization was related to decreased appetite, difficulty sleeping and stomachache complaints while as, witnessing violence was associated with difficulty sleeping and headaches. All associations remained significant after control for confounding. It was also found that community violence exposure accounted for 10% of the variance in child stress symptoms, and children who had experienced community violence victimization had 28% increased risk of appetite problems, 94% increased risk of sleeping problems, 57% increased risk of headaches, and 174% increased risk of stomachaches.

Jones and Kafetsios (2005) made an attempt to examine the relationship between exposure to political violence and psychological well-being by exploring the impact of a specific type of war-related events on psychological well-being as well as the role of social and political context in moderating these outcomes. The psychological well-being of 337 (N=337) Bosnian adolescents living in two towns on opposite sides of the war was assessed using the Hopkins Symptom Checklist-25 (HSCL-25) and the Harvard Trauma Questionnaire (HTQ). Based on the combined symptom scores, and in-depth interviews regarding life history, war experiences, and subjective experience of psychological well-being a gender-matched sub-sample of 40 adolescents was selected and 45-item trauma event scale was administered on them. Results from the quantitative and qualitative analyses showed that the relationship between exposure, displacement and well-being varied significantly depending on the community in which the adolescents lived. Specific meanings given to different types of war events were important in moderating their effect. Living in a neglected,
isolated and depressed community, worry about school performance, missing friends and family breakdown could have as significant effect on well-being as exposure to war-related events. The findings demonstrate the need to take social context and meaning of events into account when examining the impact of war exposure on psychological well-being.

Al-Gelban (2007) conducted a study to determine the prevalence rates and severity of depression, anxiety and stress among Saudi adolescent boys. A cross-sectional study, of secondary school boys at Abha, Aseer Region, Saudi Arabia was conducted. The systematic sampling method was used to select a class at each level in a school. The Arabic version of Depression, Anxiety and Stress Scale (DASS) was used to establish school-boy levels of depression, anxiety and stress. Results indicated that of 1723 male students recruited to this study, 59.4% had at least one of the three disorders, 40.7% had at least two and 22.6% had all the three disorders. Moreover, more than one third of the participants (38.2%) had depression, while 48.9% had anxiety and 35.5% had stress. Depression, anxiety, and stress were strongly, positively, and significantly correlated.

Kingery, Ginsburg, and Alfano (2007) examined the prevalence of 12 somatic symptoms, the association of somatic and anxiety symptoms (both concurrently and prospectively) with psychosocial functioning, and gender differences in somatic symptoms among a community sample of 114 African American adolescents out of which 57 were girls. The findings of examination revealed that out of the total sample, 83% of the participants reported at least one somatic symptom (some or most of the time within the past 2 weeks), and on average, adolescents reported 2.5 somatic symptoms. Somatic symptoms were found to correlate positively with severity of anxiety symptoms and negatively with aspects of perceived competence. In addition to it, after controlling the initial level of anxiety symptoms, somatic symptoms emerged out as a unique predictor of perceived competence (at initial assessment) and anxiety symptoms (at 6-month follow-up). Girls were found to have significantly more somatic symptoms than boys. Findings suggest that somatic symptoms may be a risk factor for anxiety disorders among African American youth.

Okello, Onen, and Musisi (2007) attempted to assess the nature and patterns of psychiatric disorders among adolescents who had been a war-abducted in the war in
Northern Uganda, compared to non-abducted adolescents living in Gulu district, Uganda. Data for the study was collected using Strength and Difficulties Questionnaire (SDQ) and the Mini International Neural-Psychiatric Interview for Children and Adolescents English version 2.0 (M.I.N.I-KID) from 82 abducted and 71 non-abducted adolescents. And it was assessed that more than 90% of adolescents reported exposure to severe trauma, either through direct or indirect experiences. It was also observed that war abducted adolescents reported significantly more PTSD, major depression and generalized anxiety disorder than non abducted adolescents. On the other hand, non-abducted adolescents reported more past suicidality than adolescents who were abducted. However, despite high rates of psychiatric disorder, these adolescents had a good psychosocial adjustment. Thus, it was concluded that war affected adolescents whether war abducted or not have varied and clinically significant emotional responses to different kinds of traumatic exposure.

Clark et al. (2008) examined the prevalence and psychological correlates of witnessing community violence among women of low socioeconomic status living in urban neighborhoods in the north-eastern United States. The sample of the investigation included 386 women receiving their health care at an urban community health centre. Women were asked to report the location and timing of their exposure to witnessing violent neighborhood events in which they were not participants. The Brief Symptoms Inventory was used to assess anxiety and depressive symptoms. It was found that even after controlling for marital status, educational attainment, age, and intimate partner violence victimization, women who witnessed violent acts in their neighborhoods were twice as likely to experience depressive and anxiety symptoms compared to women who did not witness community violence.

de Jong et al. (2008) conducted a study on exposure to violence and psychosocial impact in two districts of Kashmir. A two-stage cluster household survey was carried out between 4. 6. 2005 – 16. 8. 2005 and 4. 7. 2005 - 18. 8. 2005. The sample comprised of 510 participants. Findings of the study revealed that respondents reported frequent direct confrontations with violence since the start of the conflict, including exposure to crossfire (85.7%), round up raids (82.7%), the witnessing of torture (66.9%), rape (13.3%), and self-experience of forced labor (33.7%), arrests/kidnapping (16.9%), torture (12.9%), and sexual violence (11.6%). It was also revealed that over one-third of the participants were found to have symptoms of
psychological distress (33.3%); women scoring significantly higher. One third of respondents had contemplated suicide (33.3%). Among males, violation of modesty, forced displacement, and physical disability resulting from violence was associated with distress and in female’s dependency on others for daily living, witnessing killings and torture emerged out as the predictors of psychological distress. Self-rated poor health and being unable to work were also found to be related to mental health. Feelings of insecurity were associated with higher levels of psychological distress for both genders.

Haj-Yahia (2008) examined the effect of a retrospective report of political violence during the first Intifada (1987-1993) on psychological adjustment of 1185 Palestinian adolescents (10th to 12th graders) seven years after the first Intifada had ended. Analysis of the inter-relations was conducted between self-reported measures of political violence, socio-demographic characteristics, perceived parent’s psychological adjustment problems, and internalizing (i.e., somatization, withdrawal, anxiety, and depression) and externalizing (i.e., thought, attention and social problems, delinquent and aggressive behaviours) symptoms. Results of the investigation revealed that there was a significant net effect of retrospectively reported exposure to political violence on both internalizing symptoms and externalizing symptoms over and above the effect of socio-demographic characteristics and perceived parents' psychological adjustment problems.

Slone, Shoshani, and Baumgarten-Katz (2008) conducted a laboratory study to examine differential effects of television broadcasts of terrorism on viewer’s anxiety, according to their actual exposure history, and differential efficacy of a preparatory intervention in moderating elevated anxiety for high or low actual exposure. A study was conducted on 80 young Israeli adults, randomly allocated to terrorism or non-terrorism media broadcast, and for each type of exposure, to a preparatory or control intervention. Actual political violence and terrorism exposure history of subject was assessed, and their anxiety was measured explicitly and indirectly prior and subsequent to the intervention and media exposure manipulation. Results of the study showed that in the terrorism media exposure, participants with more high than low actual political life events (PLE) exposure showed higher post-test levels of indirectly measured anxiety. Clinical intervention before the terrorism media exposure moderated indirectly measured anxiety among participants with high PLE exposure, but increased anxiety.
for low PLE. Findings outline preparatory measures that could maximize coping for the high PLE actual exposure at-risk sector.

Amin and Khan (2009) investigated the characteristics of depression in the population of Kashmir, where a low-intensity-conflict has been going on for the last 17 years. The results of the investigation revealed that the prevalence of depression in Kashmir was 55.72%. The prevalence was found to be higher (66.67%) in the 15 to 25 years age group, followed by 65.33% in the 26 to 35 years age group. The difference in the prevalence of depression among males and females was found to be significant. The rate of depression was much higher in rural areas (84.73%) as compared to urban areas (15.26%). In rural areas the prevalence of depression among females was higher (93.10 %) as compared to males (6.8%).

Braun-Lewensohn, Celestin-Westreich, Celestin, Verte, and Ponjaert-Kristoffersen (2009) attempted to investigate the impact of several types of exposure to terror attacks on adolescent’s psychological outcomes in the context of ongoing terror. A total of 913 adolescents out of which 51% were girls, aged 12 to 18 years took part in the study. Detailed data was collected concerning objective, subjective and mixed types of exposure to terror, as well as demographics, post-traumatic stress symptoms (PTSS), emotional and behavioural problems and overall psychological and psychiatric difficulties. The results suggested that subjective exposure contributed significantly to adolescent’s post-traumatic stress and other mental health problems. Gender was also found to have an important effect. The effects of objective and mixed types of exposure, as well as age, came out to be less prominent. Further, it was found that more the adolescents consulted media, the less they experienced behavioural and emotional problems. On the basis of the findings, it was concluded that subjective experiences emerged out to be the best factor in explaining mental health outcomes when adolescents are confronted with persistent terror, the cognitive and emotional dynamics along with the coping behaviour linked to such experiences merit further investigation.

Chen (2009) in his longitudinal study examined the relationship between exposure to violence in the community and the internalizing behaviours of Asian American and African American adolescents. Data was obtained from 901 adolescents (57.9% female and 42.1% male, and 84.7% African American and 15.3%
Asian American) who had participated in both Wave I and II interviews of the National Longitudinal Survey of Adolescent Health conducted between 1994 and 1996. Results revealed that being female, having prior internalizing behaviours at baseline, and being exposed to violence was found to significantly predict internalizing behaviours and their symptoms in the African American adolescents.

Shahar, Cohen, Grogan, Barile, and Henrich, (2009) examined the prospective effect of social support from friends, parents, and school personnel on the link between bombing-related perceived stress and adolescent depression. Data for the study was collected seven months prior to the suicide bombing, adolescents completed questionnaires as part of an ongoing investigation of youth risk/resilience under stress. One month subsequent to the suicide bombing, participants were interviewed by telephone about their bombing-related perceived stress and depression. The 1-item measure and the Center for Epidemiological Studies Child Depression Scale were used to collect data. The results of the study suggest that bombing-related perceived stress was associated with an increase in continuous levels of depression from before to after the bombing. Further, it was found that pre-bombing social support from friends buffered against this effect. Adolescents reporting high bombing-related perceived stress showed an increase in depression if they reported low levels of friend’s support but not high levels of friend’s support. In addition, social support from friends was found to predict an increase in adolescent depression over time when bombing-related perceived stress was low.

Bach and Louw (2010) investigated the correlation between children's exposure to violence and the development of psychological problems such as depression. Data was collected from 186 Venda and 151 Northern Sotho adolescents by means of questionnaire survey to determine this relationship. The Children's Depression Inventory and the Child Exposure to Violence Form were used as measuring tools. From the results it was revealed that no significant differences were found in terms of overall exposure to violence between males and females. Girls were found to have a remarkably higher prevalence of depression than boys. Regarding ethnic comparison also, no significant differences were found in terms of overall exposure to violence or for witnessed events. However, the Venda adolescents had been victims significantly more often. Venda and Northern Sotho females had a similar prevalence of depression, but Northern Sotho boys were found to have higher
depression rate than Venda boys. It was also found that the correlation between victimization and total group depression was relatively low for the Northern Sotho group, and non-existent for the Venda group but a significant correlation was found between total exposure to violence and depression for the overall group.

Bhasin, Sharma, and Saini (2010) studied depression, anxiety and stress (DAS) among adolescent school students belonging to affluent families and the factors associated with high levels of DAS. Data was collected from 242 adolescent students belonging to class 9-12th selected for the study. A DASS-21 questionnaire was used for assessing DAS. The result of the study revealed that there was a remarkable correlation in the scores of three domains (DAS). Further, females were found to have significantly higher depression than males. Depression, anxiety, and stress were found to be significantly higher among the board classes, i.e., 10th and 12th as compared to the classes 9th and 11th. All the three domains (DAS) were found to have an inverse relationship with the academic performance of the students. Depression and stress were found to be significantly associated with the number of adverse events in the student's life that occurred in last one year.

Mujeeband Zubair (2012) designed a study to explore resilience, stress, anxiety and depression among internally displaced persons. The data was collected from 125 individuals (males=63, females=62) living in Garden villas, Rawalpindi and Barakoh campus, Islamabad. The age range of the sample was from 20 to 75 years. Individuals from Swat, Mardan, Swabi, Chota Lahore, Shahmansoor, and Sheikh Yaseen were included in the sample. An Urdu version of Ego Resiliency Scale (Aslam, 2007) and an Urdu version of Depression Anxiety Stress Scale (Aslam, 2007) were used as tools. Results of the study showed that women experienced more stress, anxiety and depression and less resilience as compared to men. Results also revealed that there was a significant inverse correlation between resilience and stress, anxiety and depression. Moreover, family loss during internal displacement was found to be significantly positively related with stress, anxiety and depression and negatively associated with resilience. Implications of the study are found to be assistive in developing an indigenous understanding of social and economical context of Pakistan.

Bell, Mendez, Martinez, Palma, and Bosch (2012) conducted a study to investigate the characteristics of the Colombian armed conflict and the mental health
of civilians living in active conflict zones. The data was collected from patients (N=6,353), over the age group of 16 years, from 2010-2011, who consulted in the Colombia department of Narino, Cauca, Putumayo, and Caqueta. Hierarchical cluster analysis and logistic regression were performed. Results of the investigation revealed that, direct conflict related violence, personal violence not directly conflict-related and general hardship emerged out as three clear risk factors. The regression analysis further indicated that conflict related violence was more highly associated with anxiety-related psychopathology than other risk factors, whereas, non-conflict violence was more related to aggression and substance abuse, which was more frequent in males. Depression and suicidal risks were equally associated with all three risk factors.

Kugler, Bloom, Kaercher, and Traux (2012) analyzed the relationship between childhood exposures to trauma with increased rates of somatic symptoms (SS). Study was conducted on 161 children residing at a residential treatment home who had experienced neglect and/or abuse. The Trauma Symptom Checklist for Children (TSCC), the Multidimensional Anxiety Scale for Children, and the Children’s Depression Inventory (CDI) were administered on the participants for collecting data. Primary caregivers completed the Child Behaviour Checklist. Two composite measures of SS were formed to represent both child- and caregiver-rated SS. Results of the study revealed that over 95% of children endorsed at least one SS on the child-rated measure. And the children who had experienced sexual abuse had higher rates of SS relative to children who had not. Child-rated SS were highly correlated with the CDI total score and the TSCC subscales of anxiety, depression, posttraumatic stress, dissociation, and anger. The TSCC anxiety subscale mediated the relationship between sexual abuse and child-rated SS.

To evaluate the long-term effects of violence exposure in late adolescence and early adulthood on adult health, physical as well as mental, Olofsson, Lindqvist, Shaw, and Danielsson (2012) used a long-term prospective population-based study, with a follow up of 9, 19, and 26 years. The primary source of data was the longitudinal panel from one of the longest running social science surveys in the world, the Swedish Level-of-Living surveys (LNU). Three cohorts were analyzed, individuals aged 15-19 years in 1974 and 1981, and individuals aged 18-19 years in 1991 which were followed up in 2000. Structured interviews on childhood, family
relationships, life-events, living conditions, health history and status, working conditions, behavioural, psychosocial, and demographic variables were repeatedly used in all cohorts. It was reported that multivariate models of violence exposures in adolescence in the 1974–91 cohorts were found to be the predictors of adult health in 2000 for both men and women. Women exposed to violence were found to have raised odds ratios for ill health, measured as heavy illness burden, and poor self-rated health, after controlling for possible confounders. But no such associations were found for men.

Fairbrook (2013) investigated the influence of community violence exposure (CVE) on the children and adolescents physical and mental health. Twelve research studies exploring this topic were found by conducting a search in PubMed and the Cumulative Index of Nursing and the Allied Health Literature (CINAHL). The articles used in this inquiry were limited to those published in the United States after 2003. All studies directly assessed CVE and explored its association with psychological or physical symptoms. An increased risk of PTSD and internalizing symptoms were associated with CVE. Children with CVE were at a higher risk for somatic complaints. In addition, CVE was associated with higher morbidity in children with asthma. The literature was entirely self-report with both cross-sectional and longitudinal studies. These results indicate the need for further research to better understand CVE and health associations.

Hart et al. (2013) examined the association between: (1) somatic symptoms and potential external stressors (school and peer stress, family conflict, and community violence) and (2) parent and child agreement on children’s self-report of somatic symptoms. The study was carried on 409, primarily African American (85.6 %), urban elementary school children. It was reported that the odds of self-report of somatic complaints were significantly associated with family conflict, school and peer stress, and community violence exposure.

Pan et al. (2013) were interested in studying the effect of Wenchuan earthquake. The data was collected from 373 junior high school students living in worst-hit areas three years after earthquake. Students were examined in terms of their posttraumatic stress disorder (PTSD), depression, and anxiety by using the impact of Event scale-Revised, the Zung Self-rating Depression scale, the Zung Self-rating
Anxiety scale and Earthquake exposure screening scale. Results revealed that 29.6% participants were suffering from PTSD, 44.8% from depression and 37.6% from anxiety. Further, depression and anxiety were found to be highly comorbid. Results also indicated that sight of someone being killed, family member being killed, close friends seriously injured or being killed, and felt scared emerged out to be the predictors of PTSD. Also, seen someone seriously injured, and felt scared emerged as significant predictors for depression, whereas, witnessed someone seriously injured, someone being killed and felt scared emerged as significant predictors for anxiety.

Rollocks, Dass, Hutchinson, and Mohammed (2013) carried out the study to investigate associations between experiencing multiple traumatic events and certain mental health symptoms. Sample comprised of 420 adolescents of Indo-and Afro-Trinidad. Data was collected using Traumatic Symptom Checklist for Children (TSCC). Pearson’s correlation, Multivariate analysis of variance (MANOVA) and Regression analysis were performed. Findings of the results revealed that multiple traumatic experiences, age and gender were significantly related to anxiety, anger, depression and post-traumatic stress. Multiple traumatic experiences were found to be associated with a range of mental health problems in adolescents. It was also found that younger adolescents had higher psychological symptoms than older adolescents. Females were found to demonstrate more psychological distress than males.

Slone and Shoshani (2014) conducted a cross-sectional investigation to find out relationship between conflict exposure and psychiatric symptoms among Jewish Israeli adolescents from 1998-2011. This period of 14 years included acts of terrorism, missile attack, wars, relocations, military operations, and relative quiet, reflecting a dynamically changing, primarily violent climate. The sample comprising of 8,727 adolescents aged between 12-17 years was assessed for personal political life events (PLE) exposure and for psychiatric symptoms using the Brief Symptom Inventory (BSI; Derogatis & Spencer, 1982). Data were divided into 8 exposure periods: (a) pre-Intifada 1998–2000, (b) Intifada peak 2001–2003, (c) Intifada recession 2004, (d) evacuation 2005, (e) missiles and the 2006 Lebanon war, (f) peak missiles 2006–2007, (g) Operation Cast Lead 2008–2009, and (h) global terrorism 2010–2011. Results confirmed a relation between type of exposure period, PLE exposure, and psychiatric symptoms. In addition, PLE exposure was positively correlated with psychiatric symptoms. A moderating effect of gender on the relationship between
PLE exposure and the psychiatric index was found, with elevated symptoms among females.

From the above literature it becomes clear that exposure to any kind of violence has an adverse effect on the general health of the victim. Studies conducted in past also revealed that even exposure to media apart from witnessing and experiencing actual violence has negative impact on the general health of individuals. Girls are found to be at higher risk than boys. Studies also revealed that social support from family and friends can act as buffer against the adverse effect of exposure to violence.

Moreover mental health is also found to be associated with the individual’s value orientations (Maercker et al., 2009). Hence our next variable is personal values.

**Personal Value: Explanation and related studies**

Values imply what is important to us and reflect a basic, indisputable aspect of what it means to be a human being. They are the codes or general principles that guide our actions as well as serve as criteria for making decisions, setting priorities and lie behind the explanations and justifications that we give for our actions. Living your life in accordance to your values makes you feel excited, energised, in control, and productive. Behaving in alignment with one’s personal values have been also found to reduce defensive responses to threatening information (Sherman, Nelson, & Steele, 2000), and perceptions of threat (Sherman & Cohen, 2002; Steele 1988; Keough, 1998), reflecting their importance in conflict areas.

The concept of value can be traced back to the ancient Greek philosophers like Socrates, Plato, and Aristotle (Kluckhohn, 1951). These philosophers viewed values according to universal ideas of behaviour known as virtues. A successor to this school of thought was a German philosopher Eduard Spranger. Spranger (1928) pointed out that six basic types of individuality were present in everyone in different propositions, with one dominating. These six basic types of individuality are: the theoretical, economical, aesthetic, social, power and religious. Inspired by Sprang; Allport, Vernon, and Lindzey (1951) carried out an empirical research in to values and developed a values measure using classifications based on Spranger’s *Types of Men* (1928). They proposed that value constitute six basic interests and motives namely social, theoretical, religious, economic, political, and aesthetic. Based on this
proposition, Allport (1961) defined values as a belief upon which a man acts by preference. Allport is considered as a pioneer in the field of value orientation (Rohan, 2000). Another value theory was put forward by Kluckhohn (1958). He maintained that each way of life is a pattern and not just the mere haphazard collection of customs. This pattern of life depends on underlying system of values. And values according to him are the concept of desirables, which influences the selection from available modes, means, and ends of action. Kluckhohn’s (1958) definition of values was different from that ancient Greeks approach to values. However, Rokeach (1973) proposed that values are more specific and defined them as an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence. Rokeach (1973) definition refers to values as beliefs and these beliefs are linked to preferences. He further suggested that values have cognitive, affective and a behavioural component. Cognitive aspect of values represents what is desirable for individual. This means that individuals know the correct end-state to strive for. Affective aspect reflect that individuals are emotional about their values while as, behavioural aspect of values reflects that it is an intervening variable that leads to action when activated (Rokeach, 1973). Another important name in modern value theories is Shalom Schwartz. Schwartz (1992) provided a detailed definition of values by referring them to as desirable states, objective, goals and behaviours, transcending specific situations and applied as normative standards to judge and to choose among alternative modes of behaviour. Other prominent value theorists include, Williams (1979), Hofstede (1980), Hechter (1993), Henderson (2003), and Bain, Kashima, and Haslam (2006). Williams (1979) asserted that values are the criteria of desirability. Hofstede (1980) was of the view that values involve a broad tendency to prefer certain states of affairs over other. In the words of Hechter (1993) values are relatively general and durable internal criteria for evaluation. Values were defined as the priorities and preferences of individuals and groups, which reflect what is important to them by Henderson (2003). Bain et al. (2006) argued that values are the cognitive representations that act as conduits between social influence and personal preferences. From the above definitions it can be concluded that early approaches to values conceived them as guides and motives, where as recent definitions contemplate values as cognitive preferences and desirable conceptions. It is important to mention here that in the
present study values are conceptualized as what is important to individuals as guiding principles in their lives across situations (Schwartz, 1992).

There may be innumerable values for an individual but a few of them significantly influence the behaviour. Values to which an individual is committed and which influences his /her behaviour are called personal values (Theodorson & Achilles, 1969). Personal values are not discrete choices between two opposite values. Rather there exists a continuum of progressively changing valuation in between the two opposing extreme values, and each person who chooses to adopt their value, will have an individually selected valuation that lies somewhere along this continuum. Thus people can vary in the strength of their commitment to a particular value, and is reflected in were they would place their level of emphasis for this value along the continuum between the value and it’s opposite. Hence each person has a very individualistic set of personal values that contains quite a range and diversity of personal values. Two people may share the same value but the strength of their commitment to the value is likely to be quite different. Accordingly, Anbalagon (1989) defines personal values as relatively permanent perceptual framework which shapes and influences the nature of an individual’s behaviour.

Regarding the origin of values three prominent views- biological, cognitive and social, have been put forward. The biological perspective on values focuses upon their role in evolutionary adaptation. Michod (1993) suggested that the values are the result of survival tactics and they develop due to their fitness enhancing properties and the positive effect on survival. A cognitive explanation for the origin of values given by Schwartz (1996) states that values are cognitive representations of three universal requirements: biological needs, social interactional requirements for interpersonal coordination’s, and social institutional demands for group welfare and survival. Through cognitive development people learn to present their needs as values. Hill (1960) suggested that learning theory can also be used to explain development of values. According to this theory values are assumed to develop exclusively from objective rewards or reinforcements. This process is comparable to operant conditioning whereby rewards or punishments respectively lead to the strengthening or weakening of behaviours (Skinner, 1974). In the context of values, the environment itself serves as the key source of reinforcement (Hetcher, 1993). This theory of genesis of values can be applied across a multitude of situations and also
accounts for how values may differ across groups. Whereas, social theorists suggest that values are the product of social conditions (Joas, 2000). According to Kluckhohn (1958) people are pulled by the conceptions of right, good and desirable, and these conceptions are strongly influenced by social and cultural experiences, leaving biological pressures as indirectly significant to values. Triandis (1980) is also of the view that values are formed mainly through socialization; both directly and indirectly. Families are considered as important sources of socialization (Roberts & Bengston, 1999). Parent’s values are also found to strongly influence those of their children (Taris & Semin, 1997). It is thus evident that all the above mentioned three perspective have a unique contribution in explaining the genesis of values. And values are likely to develop from the combination of biological and social influences as well as from individual differences and cognitive experiences (Hetcher, 1993).

To specify the function of values Gaus (1990) proposed that while animals act on instinct and are pre-programmed about how to respond to stimuli by nature, people act on free will and choose for themselves how to respond to any given stimuli in accordance with their values. And the intensity and the relevance attached to the values by the individual are described as their value priority (Hofstede, 1980). Value priorities are both intimate and shared. Thus we can say that personal choices that humans make in life are dependent upon their personal values (Hultman & Gellermann, 2002).

Two leading psychological approaches to values have been put forwarded by Rokeach (1973) and Schwartz (1992, 1994, & 1996).

**Rokeach’s value theory:** Rokeach’s (1973) psychological study on values is a mile stone in social science. He put forwarded a model of belief system in which beliefs, attitudes, and values are clearly differentiated. This model defines values as a special class of enduring belief concerning modes of conducts and end states of existence that transcend specifics objects and situations and that are personally and socially preferable to an opposite mode of conduct or end- states of special class of enduring beliefs concerning modes of conducts and end states of existence. Rokeach (1973) claimed that human beings are capable of holding 36 distinct values. He categorised these values in terms of instrumental and terminal values. Terminal values are referred to the goals that are to be attained during a lifetime, whereas instrumental
values are considered as means of achieving terminal values. Instrumental values are further divided into two categories: Moral values (forgiveness, helpfulness) and Competence values (logical imaginative). Similarly, Rokeach classified terminal values as, Personal values (self-respect, inner harmony) and Social values (equality, a world at peace). Collectively individual’s terminal and instrumental values from a value system. According to this value system every individual holds the same values but to different degrees. Thus, the significance of a value is determined by its relative importance within an individual’s value system. In order to measure instrumental and terminal values Rokeach developed 18-item Rokeach value survey.

Rokeach’s model of instrument and terminal values is considered as one of the most influential and well-known conceptual model values (Allen, 1994). As a result of this, Rokeach is one of the most widely referenced value theorists in literature (Hitlin & Piliavin, 2004; Rohan, 2000).

**Shalom Schwartz’s theory of the structure of human values**: Schwartz theory is an extension of Rokeach’s work. And is concerned about the basic values that people in all cultures recognize (Schwartz, 1992). This theory indentified 10 motivationally different, broad and basic values and specifies the dynamics of conflict and similarity among these values. The main content aspect of a value is the type of goal or motivational concern that it expresses (Schwartz & Blisky, 1987, 1990). And these motivational goals distinguish one value from another. As a result, this value theory defines 10 broad motivationally distinct value categories that are recognized across cultures. Moreover, these values, in the form of conscious goals represent three universal requirements of human existence to which all individuals and societies must be responsive: need of individuals as biological organisms, requisites of coordinated social interactions and survival and welfare needs of groups (Schwartz, 1992). Each of the 10 value types are defined in terms of broad goal it expresses (Schwartz, 1992).

**Achievement**: Value type of achievement has a defining goal of personal success through demonstrating competence according to social standards. Competent performance that generates resources is necessary for individuals to survive, and for groups and institutions to reach their objectives. Achievement values emphasize demonstrating competence in terms of prevailing cultural standards, thereby obtaining social approval.
**Hedonism:** Hedonism refers to the value type with a defining goal of pleasure and sensuous gratification for oneself. Hedonism values derive from organismic needs and the pleasure associated with satisfying them.

**Stimulation:** Excitement, novelty, and challenges in life are the defining goals behind stimulation value type. And are derived from organismic need for variety and arousal in order to maintain an optimal, positive, rather than threatening, level of activation.

**Self-Direction:** The motivating goal of self-direction is independent thought, choice of actions, creativity, and exploration. These values derive from organismic needs for control and mastery (Deci, 1975) and interactional requirements of autonomy and independence (Kluckhohn, 1951; Kohn & Schooler, 1983; Morris, 1956).

**Universalism:** The motivating goal behind the value type of universalism is understanding, broadmindedness, social justice, equality, world of beauty, unity with nature, appreciating, tolerance, wisdom and protection for welfare of all people and nature. Universalism values derive from survival needs of individuals and groups. People do not recognize these needs until they encounter others beyond the extended primary group and until they become aware of the scarcity of natural resources. Universalism combines two subtypes of concern-for the welfare of those in the larger society and world and for nature.

**Benevolence:** It is a narrowly defined version of universalism. And is concerned only with the welfare of close ones. The defining goal of benevolence is preservation and enhancement of the welfare of people with whom one is in frequent personal contact. Benevolence values derive from the basic requirement for smooth group functioning and from the organismic need for affiliation (Maslow, 1965).

**Conformity:** The defining goal of this value is restraint of actions, inclinations, and impulses likely to upset or harm others, or violate social expectations or norms. Conformity values are derived from the requirement that individuals inhibit inclinations that might disrupt smooth interaction and group functioning, and put emphasis on self-control in everyday interaction, usually with close others.
Tradition: Tradition most often takes the form of religious rites, beliefs, and norms of behaviour. The motivating goal of tradition is respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide to the self. Groups everywhere develop practices, symbols, ideas, and beliefs that represent their shared experience and fate, which eventually become sanctioned as valued group customs and traditions (Sumner, 1906) and are passed on. They symbolize the group's solidarity, express its unique worth, and contribute to its survival (Durkheim, 1912/1954; Parsons, 1951).

Security: The defining goal of security value type is safety, harmony, and stability of society, of relationships, and of oneself. Security values derive from basic individual and group requirements (Kluckhohn, 1951; Maslow, 1965; Williams, 1968). The value type of security serves both at individual level (e.g., cleanliness) and wider group level (e.g., national security).

Power: The motivating goal of value type of power is social status and prestige, and control or dominance over people and resources. Power values are derived from a certain degree of status differentiation (Parsons, 1951), that is required for the functioning of social institutions and emphasise the attainment or preservation of a dominant position within the more general social system. Power values may also be transformations of individual needs for dominance and control (Korman, 1974).

The most important aspect of Schwatrz’s theory is the structural relation among the 10 values. These values are organised according to the idea that the pursuit of a value can have practical, psychological, and social consequences that are congruent with some values but conflict with others.

The total pattern of relations of conflict and congruity among the 10 values is presented in circular structure. To be more specific, it determines the order of the value type in the two-dimensional structure. The closer value types are located around the circle, the more compatible they are and correspondingly, the more distant the more conflicting they are. Relationships among the 10 value types can be summarized in terms of four higher-order value types on two bi-polar dimensions: Openness to change (combining stimulations and self-direction values) versus conservation (combining security, conformity and tradition) and self-enhancement (combining power and achievement) versus self-transcendence (combining universalism and
benevolence). Hedonism shares some element of both openness to change and self-enhancement.

Figure 1. Theoretical model of relations among ten motivational types of value

Schwartz’s values theory has been tested in more than 60 countries and in most of the samples both the distinctiveness of 10 value types and their circular structure could be confirmed (Schwartz, 2007) even there are some contrary findings in large representative samples (Hinz, Brahler, Schmidt, & Albani, 2005; Mohler & Wohn, 2005).

Schwartz’s mainly examine the relationship between values and various social behaviours, attitudinal variables, and personality characteristics, but there is urgent need for exploring the concept of values in the realms of clinical psychology. As, the research on trauma has revealed that an understanding of core personality and values may better predict variations in trauma symptoms than the actual severity of a trauma (Durodie, 2003). There are also reports and observations which indicate positive relationships between a person knowing, giving importance to, and living by their values, and their mental health functioning. Donahue (1985) asserted that positive mental health indexes are generally aligned with a person knowing and living by their values, with the converse leading to less healthy and sometimes pathological or negative correlates. Van der Wateren (1999) also noted that people with a clearly
clarified values system in general utilise more constructive coping strategies and report a higher level of psychological wellbeing. Bergin, Payne, and Richards (1996) found that beneficial mental health consequences are an outcome of congruence or of behaving in synchrony with one’s religious values, whereas acting contrary to personal values results in dissonance, with consequences of guilt, anxiety, despair, or alienation. Wilson and Murrell (2004) reported that individuals with a high discrepancy between rated importance and rated consistency of values as expressing a lot of distress. In one of the study using a secondary data analysis of two independent data sets by the World Health Organisation (WHO) and value researchers in eleven countries it was found that up to 50% of the variance of different prevalence of ICD-10 diagnoses (depression, generalized anxiety disorder, alcohol dependency) could be explained by cultural values (Maercker, 2001, 2004), suggesting that particular value patterns are specific to psychiatric disorders. Moreover, Kleinman and Kleinman (1985) have found that traditionally oriented people have better mental health. But the in the context of trauma and stress-related disorders it has been shown that modern values are protective against posttraumatic stress via mediating social sharing processes, while traditional values increase this stress via the same mediation pathway (Maercker et al., 2009).

Mostly the focus of value research is predominantly on how values may influence behaviours rather than value change. General values have been found to be related to range of orientations including political views (Rokeach, 1973), religiosity (Mio, Olsen, Bernard, and Luke, 2003), and social attitude towards issues like privacy (Tetlock, 1986). Values have also been associated with occupational choices (Huntly & Davis, 1983) as well as drug addiction (Toler, 1975).

Review of literature further revealed that people who give higher importance to the values of self-transcendence correlate negatively with violent behaviour and bullying (Knafo, 2003; Knafo, Daniel, & Khoury-Kassabri, 2008), attitudes favouring war (Cohrs, Moschner, Maes, & Kielmann, 2005a), and social dominance orientation (Cohrs, Moschner, Maes, & Kielmann, 2005b). On the other hand, values congruent with the self-enhancement dimension were found to be related negatively to the expression of empathy for others, altruism, and cooperation (Bardi & Schwartz, 2003; Myyry & Helkama, 2001) and positively to violent behaviour and bullying (Knafo, 2003; Knafo et al., 2008). Thus we can say that values provide useful insights in a
therapeutic context and create a motivational context in which aggression and violence are either facilitated or inhibited within and among groups.

The studies conducted by various investigators which have relevance with the present research problem have been reviewed and are presented below:

Boehnke and Schwartz (1997) made an attempt to examine the extent to which fear of conventional and nuclear war were related to value priorities in samples of 224 male and 348 female German (mean age 23.9 yrs) and Israeli (mean age 23.6 yrs) university students. Value priorities were postulated to influence the appraisal of threat. Results showed that fear of war was greater among those who attributed greater importance to values that express concern for others i.e., universalism and benevolence, and to values that emphasize preservation of the social order i.e., security and conformity. In Israel, fear of nuclear war was also found greater among those who attribute greater importance to values that legitimate self-enhancement i.e., power and achievement. Fear of war was found to be greater among females than males, a finding attributable both to stereotypic response bias and to role socialization. Fear of war was not related to a variety of indicators of mental health.

Sagiv and Schwartz (2000) investigated relations of value priorities to measures of subjective well-being in two parts. Samples of students and adults (N=1261), from Israel and former East and West Germany, participated in Part I of the study. Hypothesized direct relations of nine types of values to well-being, based on healthy values from the psychotherapy literature, relations of values to needs, self-determination theory, and the emotional resources needed to pursue various values were tested in each sample. Results showed that achievement, self-direction, stimulation, tradition, conformity, and security values correlated with affective well-being, as predicted, but not with cognitive well-being. Part II tested the hypothesis that well-being depends upon congruence between personal values and the prevailing value environment. Results largely supported the hypotheses regarding the values conducive to positive and negative well-being among students of business administration (n = 40) and psychology (n=42). Hypotheses were derived from the social sanctions, environmental accordance’s for value attainment and internal value conflicts likely to be experienced in each department.
Schwartz, Sagiv, & Boehnlke (2000) investigated relations of individual’s value priorities to their worries in seven samples from four cultural groups (N = 1,441). A social-cognitive analysis suggests that value priorities influence worries by increasing attention to and perception of threats to valued goals. On this basis, researcher generated hypotheses relating two types of worries, micro (about self and its extensions) and macro (about society and world), to 10 types of values. As predicted, giving priority to self-transcendence values (universalism and benevolence) was found to be associated with low micro and high macro worry, whereas giving priority to self-enhancement values (power, hedonism, and - to a lesser degree - achievement) was reported to be associated with high micro and low macro worry. Meaningful associations were also found for other values. Values were found to account for substantially more variance in macro than in micro worries.

Romero, Sobral, Luengo, and Marzoa (2001) surveyed three groups of adolescents (435 school-attending boys, 529 school-attending girls, and 95 delinquent boys) in juvenile rehabilitation centres or prisons, to investigate relationships between values and self-reported antisocial behaviour. The result indicated that antisocial behaviour was associated with hedonistic values and a lack of interest in conventional values and social values. These relationships could not be explained by the institutionalization effects.

Bernburg and Thorlindsson (2005) examined the individual-level and contextual effects of values that encourage violence and perceived conduct norms on youth aggression in Iceland. The results indicate that group adherence to violent values and norms influences aggression through social control as well as internalization (socialization), lending cross-cultural support to the subculture of violence perspective.

Bouckenooghe, Buelens, Fontaine, and Vanderheyden (2005) investigated the relationships among stress, values, and value conflict. Data was collected from 400 people working in a variety of companies in Flanders. Results indicated that the values of openness to change, conservation, self-transcendence, and self-enhancement were important predictor of stress. Participants open to change reported less stress, whereas participants who had high scores on conservation, self-enhancement, and self-transcendence perceived more stress. People who were found to report high values conflict also experienced more stress. Separate analyses for men and women
showed that there were gender differences in the relationships observed between the 4 value types and stress.

Murphy et al. (2006) investigated the impact of terrorist attack on the work values of working adults of U.S. within the age range of 18 to 50 years. Values were assessed using Rokeach value survey. The findings of the investigation indicated that the value structure of adults significantly changed after attack, as previously important self-esteem and self-actualization values moved down in importance while survival, safety and security values increased in importance.

To examine values among Finnish adolescent and student before and after September 11, 2001, Verkasalo, Goodwin, and Bezmenova (2006) conducted a survey on high school and university student samples in Finland. The data was collected using Schwartz’s (1992) value circumplex model, before and after the World Trade Centre (WTC) and associated attacks. Observations revealed that in study 1 (N=419), security values of adolescents were found to be higher on the day following WTC attacks than before, but fell back toward pre-attack levels in the subsequent two samples. In contrast, levels of stimulation were found to be lower following the terrorist incidents. In Study 2 (N=222), it was revealed that security levels of students were also higher following the WTC attacks, but again were closer to pre-attack levels in a subsequent cohort.

To find whether there is any influence of personal value’s on the ethical dimension of decision making, Fritzsch and Oz (2007) examined personal values as they relate to five types of ethical dilemmas, using Partial Least Squares (PLS). The results showed that there is a significant positive contribution of altruistic values in ethical decision making and a significant negative contribution of self-enhancement values in ethical decision making.

Choy, Lee, and Ramburth (2007) explored the functionalist perspective of stratification and institutional processes of values inculcation in schools and organizations. A quantitative study was conducted to investigate the variations in value priorities between managers, professionals and executives in multi-national companies in Singapore. The questionnaire survey involved 252 participants. The findings highlight that the notion that differences in the relative value preferences
between the three hierarchical groups may be a result of their previous respective educational socialization and achievements in schools.

Liu et al. (2007) conducted a study with an objective to describe adolescents personal values, their problem behaviours, and the relationships there of according to gender. The relationship between parental values, adolescent values, and adolescent’s problem behaviours among sixth-grade students and one of their parents were also examined. The data used in these analyses were from the baseline assessment of a school-based HIV risk reduction intervention being conducted and evaluated among sixth grade students and one of their parents across 9 elementary schools in The Bahamas. Personal values were measured by the Portrait Values Questionnaire (PVQ). Seven reported problem behaviours were queried from the students, which included physical fight with a friend, drank alcohol, beer, or wine, smoked a cigarette, pushed or carried any drugs, carried a gun, knife, screwdriver or cutlass to use as a weapon, had sex and used marijuana or other illicit drugs over the past 6 months. Multilevel modeling for binary data was performed to estimate the associations between adolescent and parental values and adolescent problem behaviours. Results of the analysis revealed that among 785 students, 47% of the students reported at-least one problem behaviour. More boys reported having one or more problem behaviours than girls. Boys compared to girls expressed a higher level of self-enhancement, while girls expressed a higher level of self-transcendence. The results of multilevel modeling indicated that boys with a higher level of self-enhancement and girls with a higher level of openness to change and a lower level of conservation were more likely to report engagement in problem behaviours. Only two parental values (self-transcendence and conservation) were low or modestly correlated with youth’s values (openness to change and self-enhancement). Parental-reported values documented limited association on adolescents' reported values and behaviours.

Padilla-Walker (2007) examined a theoretical model that considered accurate perception and acceptance of maternal values in relation to adolescent’s positive values and behaviours. 151 mother adolescent dyads completed measures targeting adolescent and maternal perceptions of pro-social values and adolescent behaviours (mean age of adolescent was 16.34 years). Path analysis using structure equation modeling revealed that accurate perception and acceptance of maternal values were positively related, both additively and multiplicatively, to personal values. Accurate
perception and acceptance were negatively related to adolescent’s antisocial behaviours, and personal values were positively related to adolescent’s prosocial behaviours. The current study provides insight into how maternal discipline might influence adolescent behaviours indirectly through mother-adolescent interactions.

Knafo, Daniel, and Khoury-Kassabri (2008) tested the hypothesis that values become relatively important predictors of adolescent’s self-reported violent behaviour in school environments in which violence is relatively common. 907 Arab and Jewish adolescents with the mean age of 16.8 years, attending 33 Israeli schools participated in the study. Findings of the study revealed that power values correlated positively, and universalism and conformity correlated negatively with self-reported violent behaviour, accounting for 12% of the variance in violent behaviour, while school membership for 6% of the variance. Further it was found that schools in which violence was more common, power values relationship with adolescent’s self-reported violence was found to be positive and the relationship of universalism with self-reported violence was found to be negative.

Lonnqvist et al. (2009) conducted a study with a purpose to find a relationship between personal values and self-esteem. The study was conducted on 3612 participants in 14 samples of pre-professionals, high school students, and adults, from Finland, Russia, Switzerland, Italy, and Estonia. Findings of the study revealed that self-enhancement values (power, achievement) and openness to change values (self-direction, stimulation) were positively, and self-transcendence values (universalism, benevolence) and conservation values (tradition) were negatively related to self-esteem. Further in samples of pre-professionals, self-esteem was found to correlate with congruence between personal values and the prevailing values environment. On the group-level, endorsement of achievement and universalism values was more strongly and positively related to self-esteem in samples where these values were considered more important. In contrast, endorsement of self-direction and hedonism values was more strongly and positively related to self-esteem in samples where these values were considered less important. These group-level results are interpreted as suggesting that attainment of culturally significant goals may raise self-esteem, but that high self-esteem may be required for the pursuit of less socially desirable goals.

Maercker et al. (2009) studied the influence of cultural factors on mental health. Researchers investigated cultural influences not only by nationality but also by
value orientation (modern vs. traditional values). Chinese and German adult crime victims were compared by means of structural equation multi-sample analysis. Traditional (conformity, benevolence, customs orientation) and modern values (achievement, hedonism, stimulation), traumatic exposure, posttraumatic stress (PTS), and two self-perceived interpersonal mediator processes (disclosure intentions, social acknowledgement as a victim) were assessed by self-report measures in 130 Chinese and 151 German crime victims. Findings revealed that two patterns of prediction for PTS differed between the countries: In the German sample both value types but in the Chinese sample only traditional values were directly or indirectly predictive of PTS. Traditional values inhibited social acknowledgement of a victim in China and Germany. In Germany, traditional values were related to increased PTS severity. Modern values predicted social acknowledgement as well as lower symptoms in Germany, but not in China.

Zukauskien and Malinauskiene (2009) investigated the relationship between youth prosocial orientation, and personality traits and personal values in a sample of Lithuanian adolescents, in order to assess differences in personality and personal values between those adolescents who are engaged in community and school life and those who are not. Data was collected from 490 high school students (mean age =18.20) from one administrative region. Participants completed a questionnaire assessing adolescent prosocial orientation, along with measures of personality traits (NEO-FFI) and personal values (PVQ). Cluster analysis based on adolescent participation in community and school life reported in the questionnaire identified 5 distinct groupings of adolescents: very involved (who had high levels of involvement); involved (who scored more than 0.5 SD above the average levels of organized activities); average involvement (who scored on the average levels of all three forms of structured activities); adolescents with some involvement (who scored on the average levels on structured activities, but were very low on commitment to goals); and uninvolved adolescents. Comparisons revealed several significant differences among the groups in terms of personality traits and values. Very involved and involved adolescents were found to be characterized by more pronounced traits in extraversion, openness to experience and agreeableness, while conscientiousness was found to be significantly higher only in the very involved cluster. Adolescents, who were more engaged in community and school life, were found having higher levels of
basic personal values, with the exception of hedonism. Results were discussed with regard to the role that personality traits and personal values may play in fostering the prosocial orientation of adolescents.

Cohen and Shamai (2010) studied the relationship between individual values, psychological well-being, and organizational commitment undertaking a group of 271 Israeli police officers enrolled in undergraduate programme in Israeli university. The findings of the study revealed that there was a positive relationship between psychological well-being and the values of benevolence, self-direction, and achievement, and a negative relationship between psychological well-being and the values of power and tradition.

Li, Wang, Wang, and Shi (2010) examined the relations between cultural values (i.e., individualism and collectivism) and aggression among 460 Chinese adolescents out of which 234 were girls. Conflict level and social status insecurity were examined as potential explaining mechanisms for these relations. The results showed that adolescent’s endorsement of collectivism was negatively related to their use of overt and relational aggression as reported by teachers and peers, whereas positive associations were found between the endorsement of individualism and adolescent aggression. Adolescent’s conflict level and social status insecurity accounted for a significant part of these associations.

Bobowik, Basabe, Pa’ez, Jimenez, and Bilbo (2011) carried out a study to analyze the association between personal values and well-being. Two correlational studies were conducted with the following random samples: (1) four native samples: two samples from the 2006 European Social Survey (Europe N1 = 28,375, Spain N2 = 1,321) and two Basque samples (N3 = 1,770; N4 = 820); and (2) a sample of immigrants in the Basque Country (quasi-random) (N5 = 1,171). The age range of the participants was 18–60 years. The data was collected using, Schwartz’s Portrait Values Questionnaire (PVQ)- 40 or PVQ-21, Bradburn’s Positive and Negative Affect Scale (PNA); Goldberg’s General Health Questionnaire (GHQ), and life satisfaction and perceived control items from the World Value Survey. Partial correlation analysis was applied. Results supported a positive relationship of hedonic and psychological well-being with openness to experience and individualist values, and a negative association with power and conservation or collectivist values. Satisfaction with life
partially mediated the relationship between personal values and affect. The results support a universal association of healthy values with well-being.

To study the generational difference in personal values of business students from a private mid-western university Giacomino, Brown, and Akers (2011) carried out an investigation using Rokeach value Survey and Orke Typology of personal values. The results obtained in this study were compared with the results of similar studies conducted in latter 1990’s. After comparisons it was revealed that students in 2010 study placed more importance on the value of national security than did the students in 1998. Also the change in value system was observed where students were found more concerned about achieving social goals through competition than with rather than moral reasons.

Loonqvist, Jasinskaja-Lahti, and Verkasalo (2011) conducted the longitudinal study to investigate the process of value change in a migration context. The study was conducted on 145 Ingrian–Finnish migrants who migrated from Russia to Finland. Participants were asked to complete the same measures of personal values both before and after migration. Results of the study showed that, at the group level, the importance of both universalism and security values increased after migration, whereas the importance of power and achievement values decreased. While at the level of the individual, the structure of value change was similar to the typical between-subjects structure of values. Although, any two migrant’s value change profiles were found to share only 2% of their variance, suggesting divergent patterns of value change across migrants.

Daniel et al. (2012) investigated the role of age and cultural complexity in value differentiation among adolescence. The study was conducted on the sample of 3,497, early and mid-adolescents from 4 cultural groups (majority and former Soviet Union immigrants in Israel and Germany) who rated their values in 3 contexts (family, school, and country). Results showed that value differentiation varied across individuals. Early adolescents showed lower value differentiation than mid-adolescents. Further immigrant (especially first generation) adolescents were found to have higher value differentiation than majority adolescents, which reflect the complex social reality they face while negotiating cultures.
Khodarahimi, Hashim, and Zaharim (2012) conducted a study to examine the perceived stress, emotional regulation, positive and negative emotions. Data was collected from 308 students from a public. Result showed that perceived stress and negative life events hassles had significant negative relationship with personal values and its subscales.

Schwartz, Vecchinoe, Caprara, Schoen, and Castro (2012) using data from Italy, Spain, and Germany (N= 1,569), carried out a study to investigated the role of basic values (universalism and security) and basic traits (openness and agreeableness) in predicting perceptions of the consequences of immigration. Structural equation modeling revealed that universalism values underlie perceptions that immigration has positive consequences and group security values underlie perceptions that it has negative consequences. Personal security makes no unique, additional contribution. Multi-group analyses revealed that these associations are invariant across the three countries except for a stronger link between universalism and perceptions of the consequences of immigration in Spain. To examine whether values mediate relations of traits to perceptions of immigration, researcher used the five-factor model. Findings supported a full mediation model. Individuals’ traits of openness and agreeableness explained significant variance in security and universalism values. Basic values, in turn, explained perceptions of the consequences of immigration.

Dainel, Fortuna, Thrun, Cioban, and Knafo (2013) conducted a short term longitudinal study to test whether a major life event of war changes the priority that early adolescents assign to values. 39 Israeli adolescents completed the Schwartz Value Survey on four occasions – at the beginning, middle, and end of the 2006 Israeli-Lebanes war during which their home town was bombared. Results reported that anxiety-based values of tradition, power, and security increased in importance, while as, conformity values decreased in importance. Further, anxiety-free values of benevolence, universalism, self-direction, stimulation, and hedonism were found to decrease in importance. Achievement values decreased in importance and then increased in importance. The findings revealed that value development at least during early adolescence, can take place rather quickly under circumstances of major traumatic events such as war.

Kaptan, Shiloh, and Onkal (2013) analysed the relationship between values and risk perceptions regarding terror attacks. The study was conducted on university
students from Turkey (N= 536) and Israel (N = 298). Schwartz value theory (1992, 1994) was applied to conceptualize and measure values. Cognitive (perceived likelihood and perceived severity) and emotional (fear, helplessness, anger, distress, insecurity, hopelessness, sadness, and anxiety) responses about the potential of (i) being personally exposed to a terror attack, and (ii) a terror attack that may occur in one’s country were assessed to measure risk perceptions. Comparison of the two groups suggests that the Turkish participants were significantly more emotional about terror risks than the Israeli respondents. Both groups perceived the risk of a terror attack that may occur in their country more likely than the risk of being personally exposed to a terror attack. No significant differences are found in emotional representations and perceived severity ratings regarding these risks. Results provided support for the existence of a link between values and risk perceptions of terror attacks. In both countries, self-direction values were negatively related to emotional representations, whereas security values were positively correlated with emotions; hedonism and stimulation values are negatively related to perceived likelihood.

Cahskan, Sapmaz, and Uzunkol (2014) made an attempt to investigate the correlation between value preference and life goals, and to examine to what extent value preferences predict life goals. The study consisted of 273 university students. A Schwartz Value Survey was conducted to determine the value preferences of the participants, and a Life Goals Scale was used to measure their purposes in life. Multi Regression Analysis was performed to obtain results. Results revealed that intrinsic life goals were positively predicted by values of safety, benevolence and conformity, whereas, only values of power and hedonism positively predicted extrinsic life goals.

Although previous studies have established the mediated predictive relationship between value orientations and mental health disorders, Maercker et al. (2014) were interested in extending the finding on mental health and value orientations to broader mental health indicators and two types of mediators i.e., social support and resilience in accordance to a theory of values and modernization/post-modernization. The sample for the study was collected from three countries, Germany, Russia, and China. A path-model with traditional values predicting mental health mediated by social support, and modern values predicting mental health mediated by resilience was tested in all three countries. Results showed that value orientations were strongest in China, followed by Russia and Germany. Structural
Equation modeling supported the assumption of mediated prediction of mental health by value orientations by and large. The traditional value benevolence predicts social support whereas the modern value self-direction predicts resilience. The findings indicated that personal value orientations are meaningful predictors of mental health. The analysis of personal values showed promise in linking public health, cross-cultural and modernization issues.

Vecchione et al. (2014) investigated how basic values may account for political activism. The study was conducted in two phases. In study 1, participants (N=35,116), from 20 countries responded to the 21-item version of Portrait Version Questionnaire (PVQ-21) in European Social Survey. In study 2, sample (N=7,773) was collected from six of the same countries, (Finland, Germany, Greece, Isreal, Poland, and United Kingdom) and eight other countries (Australia, Brazil, Chile, Italy, Slovakia, Turkey, Ukrain and United States) using 40-item PVQ. Results showed that across both studies political activism was related positively to self-transcendence and openness to change, especially to universalism and autonomy of thought, a sub type of self-direction. Political activism was found to relate negatively to conservation values, especially to conformity and personal security. Moreover, national difference in the strength of the association between individual’s values and political activism were linked to level of democratization.

Zimmermann et al. (2014) made an attempt to explore the personal values in soldiers after military deployment. The association of personal values with mental health and resilience were also examined. Sample comprised of 117 soldiers of German armed forces who had been deployed in Afghanistan (n=40 undergoing initial psychiatric treatment, n=77 untreated). Data was collected using Schwartz’s Portrait Value Questionnaire (PVQ), The Posttraumatic Stress Diagnostic Scale, and the 11-item version of the Resilience Scale (RS-11). Logistic regression was performed. Result revealed that value types of hedonism, power were negatively, while as, value types of tradition and universalism were positively correlated with probability and severity of posttraumatic stress disorder, whether participant was on treatment or not. Further, the effects were partially mediated by the RS-11 scale values. Findings reveal that value types were associated with psychiatric symptoms in soldiers after deployment. These results could contribute to the further development of therapeutic approach.
The above literature regarding personal values reveals that in some studies personal values were found to have negative relationship with perceived stress and negative life events. Studies also showed that values of benevolence, self-direction, and achievement were positively related to psychological well-being while as values of power and tradition were found to correlate negatively with psychological well-being. Aggression was found to be related positively with individualistic values and negatively related with collectivistic value. So, the last but not the least variable of this research work is aggression.

Aggression: Concept and Literature review

Aggression is a common term used in contemporary society, to characterize the behaviour of others as well as ourselves. Aggression is a behaviour intended at harming another individual who does not wish to be harmed (Baron & Richardson, 1994). It may be carried out in any behaviour actuated by intent to harm another person against that person’s wishes. These behaviours can range from subtle interpersonal acts like spreading gossips about someone with the intention of ruining that person’s reputation, to the large-scale group behaviour like hitting, damaging or destroying another’s persons property, gang violence and warfare. Whereas, acts like accidents, dental treatment, sidewalk collisions cannot be included in the definitions of aggression because they are not actually actuated by the intent to cause harm to the other person, they rather happen by chance or by the will of other person. It is therefore clear that aggression constitutes of three elements. These are intention, action tendency and actual harm committed to another person (Berkowitz, 1981).

Etymologically the word aggression is originated from original Latin word ‘aggredere’ which means: to attack, to approach, to advance, to assail and to attempt. Allen (1948) referred to the original meaning of aggression as the will to ensure and to test one’s capacity to deal with external forces, which may or may not involve hostility. For Murphy (1962) aggression ranges from hostility to the vigour with which either constructive or destructive acts are carried out. Oxford Dictionary Online (1989) defines aggression as a forceful action or procedure especially when intended to dominate or master and as hostile, injurious or destructive behaviour or outlook.

The historical review of the definitions of aggression can be traced back to Freud (1930). Freud was of the view that man by nature seeks to exploit, humiliate, to
inflict pain, to torture, and to kill his neighbours. Thus for him aggression was not merely a response to frustration neither a simple act of defence to attack. Criticizing Freud’s view, Dollard, Doob, Miller, Mowrer, and Sears (1939) suggested that aggression was an act whose goal-response is injury to an organism, the term ‘goal response’ indicates motivation and striving, so that aggression becomes the end result in a deliberate series of actions, making it clear that aggression cannot be the accidental consequence of behaviour lacking intent to harm. On the contrary, Buss (1961) dismissed the idea that intent is required in aggression on the basis that intent is a mental concept that lacks objectivity and requires rigorous analysis, and defined aggression as a response that delivers noxious stimuli to another organism. Whereas, Gilua and Deniels (1969) described aggression as the entire spectrum of assertive, intrusive and attacking behaviour, and point out that this definition includes overt and covert attack, such as defamatory acts of sarcasm, self-directed attack and dominance behaviour as well as assertive behaviour like forceful and determined attempt to master a task and accomplish an act. Bandura (1973) pointed out that an adequate definition of aggression must include both injuries, behaviour of the predator and the social judgment of the victim. Aggression is defined as an act that injures or irritates another person by Felson and Tedeschi (1993). Feldman (2001) viewed aggression as an intentional injury or harm to another person, an intension to hurt or to cause damage (Passer & Smith, 2007), and is behaviour that is meant to hurt another person in a physical or verbal manner or to destroy another person’s property (Atkinson, Atkinson, Smith, & Bem, 1993). Sadock and Sadock (2007) defined aggression as the intent to harm or otherwise injure another person, an implication inferred from events preceding or following the act of aggression. Myburgh and Poggenpoel (2009) mentioned that it is not necessarily actions or observable behaviour that should be labelled as aggression, but the intention or motivation behind aggressive conduct that especially determines whether behaviour is aggressive or not. Thus we can say that general definitions of aggression incorporate either of the four attributes of the behaviour, assumption about the instigator, emotional aspects, intent to injure and a chance of harm being done to the victims.

To understand the nature of aggression, Buss and Perry (1992), and Buss (1961) developed a theoretical model. This model of aggression underlies the links between three components-thoughts, emotion and behaviours-and examine them
collectively as an internal tendency to develop aggressive rather than as actual behaviours. According to this model the behaviour component of aggression includes **physical aggression** (inflicting injury on someone else with an intention of causing pain) and **verbal aggression** (manifested as direct or indirect rejection or intimidation that serves as a substitute for, or prelude to assault). The cognitive component includes **hostile thoughts** involving a negative, fixed view of interpersonal situations and a perception that the world is a menacing unfair place where nobody can be trusted because everybody acts out of selfish motives. And the emotional component constitutes the **angry feeling** comprising affective responses to frustration provocation, or occasionally, anxiety, typically coupled with physiological arousal. Anger heightens sensitivity to frustrating situations or obstacles, triggers combative thoughts and may intensify or provoke actions against the perceived source of threat (Cicchetti, Ackerman, & Izard, 1995). Although hostility is a cognitive response where as anger is an emotional one, the both are similar in that both foster negative thoughts of an accusatory nature or thoughts about inflicting harm. Furthermore anger and aggressive behaviour are comparatively short in duration whereas hostility is persistent and may continue long after the feelings of anger have subsided (Buss, 1961). Studies conducted on Buss and Perry’s (1992) model also revealed that hostile thoughts lead to the development of angry feelings, which in turn fuel physical and verbal aggressive behaviour (Check & Dyck, 1986; Dodge & Pettit, 2003). Thus, aggression for the present research work is operationalized in terms of physical aggression, verbal aggression, hostility and anger.

Feshbach (1970) on the other hand, was of the opinion that aggression has two broad forms - reactive and proactive. Reactive aggression refers to the violent responses to physical or verbal aggression initiated by others, which is relatively uncontrolled and emotionally charged. Whereas, the proactive aggression is characterized as controlled, purposeful aggression lacking in emotion, that is used to achieve a desired goal, including the domination and control of others (Dodge, 1991).

Moreover, Qouta, Punamaki, Mill, and El-Sarray (2007) asserted that the concept of aggression in children and adolescents is much broader then the physical or psychological expression of violence with the intent to harm other person. They were of the opinion that for children and adolescents, reactive aggression involves overt and often physical action of harming, with angry outburst in response to actual
or perceived privations while as, provocative aggression does not require provocation or anger, but it is used to reach other goals through violent means. They also suggested that reactive aggression is linked to loss of family member or being injured in war as an example of war exposure at a personal level but not with war related threats and being a witness to violence in war. Apart from this, for children direct aggression means that a child would hit or curse at friend or destroy things belonging to them, while as, indirect aggression includes being socially manipulative and scheming with intent to cause pain to make others feel ridiculous or excluded (Qouta et al., 2007).

Several theoretical frameworks were developed to explain the origin of aggression.

**Instinct theory:** Instinct theorists like Freud, Lorenz, Mclean, Thorndike, James, and McDougall (Petersen & Davises, 2005) argued that aggression spring from an innate fighting instinct. Once accumulated, this energy must be expressed independently of the individual’s choice (Petersen & Davises, 2005). Lorenz (1996) also approached aggression from ethnological viewpoint, stressing that aggression was an adaptive propensity that had evolved in humans and other animals to facilitate survival. Instinct theory as put forth by Freud and Lorenz, posited that aggression was a natural adaptive human instinct.

**Evolutionary theory:** Evolutionary theorists believe that aggression is passed on from humanid to humanoid to homo-sapiens (Biancoli, 2000). Concerning aggression in subhuman animal species, it is believed that animals are genetically predisposed for protection against any invasion. Animals are naturally inclined to aggressive behaviour even though they had never been given any prior or explicit training to fight. These theorists believe that humans were also inspired, like animals, to discharge their aggressive instincts through the rapidity of technological development, such that they are able to express their aggression by participating in sports and other harmless competitive activities. For evolutionary psychologists aggression was seen as a strategy for gaining resources, eliminating rivals, and improving ones chances of genetic survival (Buss & Shackleford, 1997).

**Drive theory:** Criticizing the instinct view presented by Freud and Lorenz, pioneers of the Drive theory proposed that aggression mainly stem from an externally
elicited drive to harm others. And the most popular drive theory ‘frustration – aggression theory’ was proposed by Dollard, Doob, Miller, Mowrer, and Sears (1939). According to this theory frustration always leads to some type of aggression. Later on, Berkowitz (1989) argued that the original theory overstates the connection of aggression-frustration, and theorized that frustration leads to the arousal of a drive whose primary goal is that of harming some person or objects—primarily the perceived cause of frustration. He also concluded that aggression related cues which are also relevant to current or previous anger instigators can enhance or stimulate a person’s aggression.

**Neoassociation theory:** Berkowitz (1989, 1990, 1993) in his neoassociation theory of aggression states that negative situations like frustration, provocation, unwanted noise, extreme temperature, and unpleasant ordure produces negative affect. And these negative feelings and experiences are the main cause of anger and anger aggression. Negative affect produced by aversive experiences automatically stimulate various thought, memories, expressive motor reaction and psychological responses associated with both fight and flight tendencies. The fight tendencies lead to feelings of anger, while as, the flight tendencies lead to the feelings of fear. This theory also assumes that cues present during a negative event become associated with the event and with the cognitive and emotional responses triggered by the event.

**Social Learning theory:** Social learning theory is built on the behavioural notion of conditioning. It states that people acquire aggressive responses in the same as they acquire other complex forms of social behaviours i.e., either through direct experiences or by observing others (Bandura, 2001; Mischel, 1973, 1999; Mischel & Shoda, 1995). This theory provides the useful set of concepts for understanding and describing the beliefs and expectations that guide social behaviour. Social learning theory is particularly useful in understanding the acquisition of aggressive behaviours and in explaining instrumental aggression (Anderson & Bushman, 2002).

**Script theory:** Script theory proposed by Huesmann (1986, 1998), is seen as the detailed version of social learning process. It states that when individuals observe violence in mass media they learn aggressive scripts. Scripts define situations and guide behaviour: once the script is learned, it may be recalled at some later time and used as a guide for behaviour.
Social Information Processing theory: Social information processing theory of aggression is developed by Crick and Dodge (1994). This theory explains social behaviours by the sequence of cognitive processes that occur between encountering a social event and enacting a response. In the first two steps, the individual encodes and interprets the available social information (what happened, and why it happened). In the next step, there is a clarification of goals (what I want to do now), followed by the generation and retrieval of possible response. Finally, the individual chooses and then enacts their responses.

Using this framework, researchers have identified specific cognitive tendencies and biases that underpin aggression (Dodge, 1980). For example, aggressive children tend to interpret ambiguous social situation in a way that attributes hostile intent to others, even when information about another’s intention is unavailable (Berkowitz, 1989; Dodge & Frame, 1982; Dodge & Somberg, 1987; Gouze, 1987; Yoon, Hughes, Cavell, & Thompson, 2000). Once they have developed their own impression of social situation, aggressive children may be more motivated to achieve instrumental goals than to seek a fair outcome (Pert & Jahoda, 2008). Then on considering how to respond to the situation, they may expect more positive outcomes from aggression in terms of how it would make them feel, whether it would resolve the situation and how it would be appraised by others (Fontaine & Dodge, 2006). It is also thought that beliefs about moral acceptability of response options might affect decision-making (Fontaine & Dodge, 2006). Similarly, an individual’s belief about how easily they could enact certain response options is also likely to affect how they choose to respond to social situations (Fontaine & Dodge, 2006). The SIP model thus provides a framework on which to build a coherent picture of the various cognitive tendencies that underlie aggression. It also takes into account that all individuals enter into social situations with predisposition and knowledge from previous experiences. These schema and tendencies guide each of the steps involved in processing of social situations. More recent formulations of SIP also account for the mediating roles of temperament and emotional arousal in processing (Lemerise & Arsenil, 2000). In this way, SIP model offers an explanation for aggressive behaviour.

Excitation Transfer theory: Excitation transfer theory developed by Zillmann (1983), stresses that individuals carry physiological arousal resulting from one stimulus forward into other situations. The transfer is dependent on three
conditions: 1) the emotional arousal from the initial stimulus has not dissipated 2) the emotional arousal is misattributed to the second stimulus and 3) the level of arousal has not reached an excitatory threshold before encountering the second stimulus.

**General Aggression Model (GAM):** Anderson and Bushman (2002) developed this model to explain why individuals who are exposed to high levels of aggression, either directly or indirectly through media, tend to become increasingly aggressive themselves. This model attempts to integrate biological, developmental, social and cognitive dimensions of aggression in one unified model. GAM is based on the idea that that environmental and personality factors also called as inputs, combine to produce cognitive, emotional, physiological, and behavioural outcomes (Anderson & Carnagey, 2004). These environmental and personality factors lead to overt aggression through their impact on three basic processes: 1) arousal - they may increase physiological arousal or excitement; 2) affective states – they can arouse hostile feelings and outward signs of these; and 3) cognitions – they may induce individuals to think hostile thoughts or may bring beliefs and attitudes about aggression to mind. And on the basis of the individual’s interpretations of the current situations and restraining factors, they then engage either in thought actions, which might involve in restraining their anger, or impulsive actions, which can lead to overt aggressive actions.

Adolescence is seen as a period of major change in the nature and severity of human aggression. To understand and clarify the factors underlying adolescent’s aggression, Belsky, (1980); Bronfenbrenner, (1979); Dutton, (1985) postulated “The Nested Ecological Theory”. This model allows for the integration of multiple levels and contexts and examination of the multiple effects and interrelatedness of factors to establish the wider picture on adolescent aggression; research that focuses on any one level underestimates the effects of other contexts. The Nested Ecological Theory thus implies that, in order to understand adolescent aggression, one must examine factors at four levels: the culture (macrosystemic), the environment (exosystemic), the family (microsystemic) and the individual (ontogenic). Also it is found that there is a bi-directional influence within and between the levels.

The **macrosystemic level** is related to broad, cultural values and beliefs that influence ontogenic, micro and exosystem development. Factors at this level might include the general, societal attitude towards adolescents and their aggressive
behaviour, the legal response to aggressive acts by this demographic and its portrayal by the media.

The **exosystem level** refers to formal and informal social structures that impinge upon the immediate setting in which that person is found and which influences them. Factors associated with adolescent aggression at this level include: living in an area where there is a high crime rate (Tarolla, Wagner, Rabinowitz, & Tubman, 2002), high levels of poverty (Farrington & Painter, 2004; Felner, 2005; Hubbard & Pratt, 2002; Obeidallah, Brennan, Brooks-Gunn, & Earls, 2004; Smith & McVie, 2003), a lack of social support (Siegel & Senna, 2000) and a lack of available activities for adolescents (Scales, Benson, & Leffert, 2000). In one of their study Guerra, Huesmann, and Spindler (2003) exposure of children to violence, which is an environmental risk factor (Richters & Martinez, 1993), leads to changes in children’s beliefs about aggression, such as whether aggression is legitimate or not (Dodge & Coie, 1987; Slaby & Guerra, 1988), which is then associated with subsequent increased aggression and also increased aggressive fantasy (i.e., another internal attribute that seems to exacerbate aggressive behaviour). Ho (2008) also observed that exposure to community violence was associated with adolescent’s aggressive and rule-breaking behaviour.

At the **microsystemic level**, which refers to the family unit or the immediate context in which aggression occurs, factors include: poor emotional attachment between parents or primary caregiver and child (Acoca, 1999; Farrington & Painter, 2004), witnessing domestic violence and conflicts in families (Batchelor, 2005; Farrington & Painter, 2004), parental criminality, incarceration and substance abuse (Acoca, 1999), poor parenting practices (Farrington & Painter, 2004; Smith & McVie, 2003), family structure and functioning (Smith & McVie, 2003), physical and sexual abuse (Acoca, 1999; Austin, 2003; Batchelor, 2005; DiNapoli, 2003; Smith & McVie, 2003) and a history of accommodation in care (Batchelor, 2005; Smith & McVie, 2003). Furthermore, associations with deviant peers (DiNapoli, 2003; Farrington, 1995) and gang participation (Esbensen, Deschenes, & Winfree, 1999) have also been identified as factors associated with aggressive behaviours in adolescents at this level.

Finally, factors associated with adolescent aggression at the **ontogenic level**, which refers to individual development and an individual’s unique, developmental history, include: the age of onset of aggression (Cottle, Lee, & Heilbrun, 2001),
substance abuse (Batchelor, 2005; DiNapoli, 2003; Smith & McVie, 2003), mental health problems (Acoca, 1999; Batchelor, 2005), low self-esteem (Chesney-Lind & Shelden, 1998; Smith & McVie, 2003), low academic achievement (Batchelor, 2005; Siegel & Senna, 2000), expulsion from school and high levels of truanting (Acoca, 1999; Batchelor, 2005) and limited involvement in extracurricular activities (Eccles & Barber, 1999).

Moreover, the expression of aggression is related to distinct changes in the development of child (Qouta, Punamaki, Miller, & El-Sarry, 2007). As toddlers restore to physical aggression and fights but with increasing age the frequency of reactive and physical aggression decreases. Qouta et al. (2007) further argued that in war exposed children, decrease in aggression does not happen because children in general need personal resources and family, school, and societal support for decrease of aggression to occur, however, in war situations, military violence takes place simultaneously with the psychological and biological changes of the children. This dual situation influences and interferes with the cognitive, emotional, and psycho-physiological processes of children which in turn then can have an impact on whether there will be a reduction in the level of aggression as related to the developmental stages of the child (Qouta et al., 2007).

While going through the literature sufficient evidence was found documenting the increase of aggression among the adolescents during war (Belsky, 2008; Klingman 1992; Ronen, Rahav, & Apple, 2003). As, exposure to constant violence may teach new aggressive behaviour to children as well as reduce their inhibition to act in a violent manner (Bandura, 1986). Farrell and Bruce (1997) have also pointed out that adolescents who have seeing someone being chased, threatened, attacked, wounded, or killed are likely to get engaged in aggressive behaviour and violence, even after controlling for previous levels of aggression (Gorman-Smith & Tolan, 1998). Hence adolescents exposed to violence are likely to get engaged in violence themselves thereby, reinforcing the cycle of violence in their communities (Widom, 1989).

Moreover, aggression in control appears to be a crucial adaptive behaviour in human beings. Even it is viewed as positive behaviour when one is threatened. Poussaint and Alexander (2000) asserted that aggression may also be viewed as an attempt to overcome feelings of weakness and powerlessness. While as, Knox, King, Hanna, Logan, and Ghaziuddin (2000) and Pliszka, Sherman, Barroew, and Irick
argued that aggression among adolescents can arise in an attempt to cope with the depressive tendencies. Evidences have shown that anger, hostility, irritability and aggressiveness are frequently present in depressive patients (Pasquini, Picardi, Biondi, Gaetano, & Morosini, 2004).

Studies conducted by various investigators which have relevance with the present research problem have been reviewed and are presented below:

Raboteg-saric, Zuzul, and Kerestes (1994) conducted a study with an aim to investigate whether and how, extreme environmental influence, such as a war situation, can affect the development of children's aggressive and prosocial behaviour. A combined longitudinal cross-sectional study was conducted on preschool children whose behaviour was rated on the Children's Aggressive and Prosocial Behaviour Rating Scale by their teachers. At the beginning of 1991 (before the war in Croatia started) the behaviour of two groups of children (one five years old and one six years old) was assessed. One year later, the younger group was assessed again. Another group of five-year-old children was also included and rated at the same time. The data was analyzed according to age, sex and the time of measurements. Results of the study demonstrated that the war had a strong impact on the development of prosocial behaviour. As in this period, children's prosocial behaviour had increased, while aggressive behaviour had not changed.

Willams, Stiffman, and O'Neal (1998) investigated environmental and behavioural risk factors as predictors of involvement in violent behaviour among African American youths. Data was taken from 684 African American youth’s between the ages 14 to 17 years. Findings revealed that 40% of the variance in African American youth’s involvement in violent behaviour was predicted by the environmental risk factors of exposure to violence, deteriorated school environment, negative peer environment, and traumatic experiences and by the behavioural risk factors of alcohol use and substance use.

Moses (1999) carried out an investigation to study the prevalence of violence, relationship between exposure to violence and symptoms of depression and hostility, and demographic differences in exposure to and effects of traumatic violence. The data was collected from a non-randomly selected population of 337 inner city school students. An anonymous survey was conducted asking the participants to mention how
many times they had experienced each of six types of traumatic violence. Findings of the survey revealed that 62% of the students were exposed to an average of 3.05 of the six types of violence listed. Further, exposure to most types of violence was found to be highly inter-correlated. Males were found to be more exposed to violence than females. Moreover, exposure to violence emerged out to be the predictors of hostility for both genders, and predictive of depression for females.

Barkin, Kreiter, and DuRant (2001) studied young adolescent’s intentions to use moralistic violence and their violence exposure, examining male–female differences. The study was conducted on 702 students of Sixth-grade, from Georgia middle schools serving impoverished communities. Data regarding the student’s exposure to violence, family structure and education level, church attendance, gang interest, drug use, and depression status was collected. Results revealed that exposure to violence were associated with increase in the intentions of using violence.

Simons, Paternite, and Shore (2001) examined the model of the association between adolescent’s perception of the quality of parent/adolescent attachment and adolescent aggression, with social cognition and self-esteem as mediators. The sample comprised of 68 sixth graders, their parents, and their language arts teachers. Results revealed that after controlling mother/adolescent and father/adolescents attachment and adolescent self-esteem, higher cognition was associated with lower self-report of aggression among adolescents. Moreover, after controlling mother/adolescent and father/adolescent attachment and adolescent social cognition, adolescent higher self-esteem was associated with father-reported lower adolescent aggression and father-reported higher adolescent’s prosocial behaviour.

Guerra, Huesmann, and Spindler (2003) investigated the effects of witnessing community violence on aggressive cognitions and behaviour. The investigation was carried out on an ethnically diverse sample of 4,458 children living in urban neighbourhoods. Results showed that adolescent’s prior exposure to violence had significant effect in increasing aggression, normative belief about aggression, and aggressive fantasy. Results also reported that exposure to violence predicted aggressive behaviour in grades 1 through 3 (ages 5-8) and grades 4 through 6 (ages 9-12), but the effects on social cognition were only evident in the later grades. Further it was revealed that effect of exposure to violence on aggression in the later grades was partially mediated by its effect on social cognition. These findings suggest that
exposure to community violence has an impact on children’s behaviour through imitation of violence and the development of associated cognitions as children get older.

Rahaman and Haq (2005) examined aggression in adolescent boys and girls in relation to socio-economic status (SES) and residential background in Bangladesh. A total of 240 respondents constituted the sample of study. The measure of aggressive behaviour were used for the collection of data. It was found that regardless of SES and residential background, girls expressed more aggressive behaviour than the boys. Similarly regardless of gender and residential background, respondents with high SES expressed more aggression than the low SES. The results reveal that a differential treatment in SES and residential background provides a new dimension in understanding aggression in adolescent boys and girls.

Werner and Nixon (2005) investigated the relation between normative beliefs about different forms of aggression and corresponding aggressive behaviours in two studies of adolescents. In Study one, an instrument designed to assess normative beliefs about aggression was revised to include beliefs about the acceptability of relational aggression, and the psychometric properties of the instrument were examined. In Studies one and two, the unique associations of normative beliefs about relational and physical aggression with self reported relational and physical aggression were examined. Findings across both studies revealed that beliefs-behaviour associations were specific to aggression forms. In other words, beliefs about relational aggression were uniquely associated with engagement in relationally aggressive acts, whereas beliefs about physical aggression, but not relational aggression, contributed unique information about adolescent’s level of physical aggression. No gender effects were found.

Thomas, Bierman, and The Conduct Problems Prevention Research Group (2006) studied the impact of classroom aggression on the development of aggressive behaviour in children. This study was conducted on 4,907 children who were examined for demographic factors associated with exposure to high-aggression classrooms, including school context factors (school size, student poverty levels, and rural vs. urban location) and child ethnicity (African, American, European American). The developmental influence of different temporal patterns of exposure (e.g., primacy, recency, chronicity) to high-aggression classrooms were evaluated on
child aggression. Obtained results reported that African American children attending large, urban schools serving socioeconomically backward students were more likely than other students to be exposed to high-aggressive classroom context. Hierarchical regressions demonstrated cumulative effects for temporal exposure, whereby children with multiple years of exposure showed higher levels of aggressive behaviour after 3 years than children with primacy, less recent, and less chronic exposure, controlling for initial levels of aggression.

Aceves and Cookston (2007) studied the prospective associations between violent victimization, the quality of the parent-adolescent relationship, and the subsequent onset of violent aggression. Using the National Longitudinal Study of Adolescent Health, participants were divided into violent and nonviolent cohorts based on whether they had committed an act of violence prior to Wave 1. Results showed that violent victimization at Wave 1 predicted the onset of violent aggression at Wave 2 for adolescents who were non-violent at baseline. Earlier violent victimization, however, was found to have no effect on aggression trajectories for baseline violent adolescents. Parent-adolescent relations served as a protective buffer, such that violently victimized adolescents who reported high quality relationships with parents were less likely to be involved in violent aggression at Wave 2. Subsequent gender interaction analyses revealed that while the buffering effect was evident for males, parent-adolescent relations did not protect females from the onset of aggressive behaviours.

Ahmed and Haque (2007) conducted empirical investigation behaviour on aggression in adolescent boys and girls of tribal (i.e. Chakma) and non-tribal (i.e. Bengali) students in Chittagong Hill Tracts. A sample comprised of 360 respondents from tribal (N = 160) and non-tribal (N = 160) groups. Each group was equally divided into boys and girls. Each gender was then equally divided into early and late adolescents. The study used a $2 \times 2 \times 2$ factorial design representing two races (Chakma/Bengali), two genders (boys/girls) and two stages of development (early adolescence/late adolescence). The Measure of Aggressive Behaviour (MAB) was administered on the sample for data collection. It was observed that regardless of gender and stage of development, tribal respondents were found to express significantly higher rates of aggression than non-tribal respondents. Again, regardless of race and stage of development, boys expressed significantly higher rates of
aggression than girls. Similarly, regardless of race and gender, respondents at early adolescent stage expressed significantly higher rates of aggression than the respondents at late adolescent stage.

Losel, Bliesener, and Bender (2007) studied the social information processing and experiences of aggression in social contexts as predictors of different of aggressive behaviour. The investigation was conducted on the sample of 102 students (aggressive, average, competent, and victimized) with a prospective design in Grade 7/8 and again in Grade 9/10. Results showed that aggressive - impulsive responses emerged out as strong predictors of self-reported and teacher- reported physical aggression, verbal aggression, violent offenses, general aggression, while as, effect, and attributions of hostility and aggressive/egocentric goal settings had no impact. Results further revealed that perceived aggression in the family, in the peer group, in the media consumption, and (less consistently) at school also emerged out as predictors of verbal aggression and violent offenses. Multivariate analysis revealed both mediating and independent effects of social information processing and experiences of aggression in social context.

Karriker-Jaffe, Foshee, Ennett, and Suchindran (2008) compared the timing and patterns of physical and social aggression and examined sex differences in development using five waves of in-school surveys administered over 2.5 years. The study was conducted on 5151 participants out of which 50.0% were female, 52.1% white and 38.2% African-American. Multilevel growth curve models showed that physical and social aggression followed curvilinear trajectories from ages 11 to 18, with increases in each type of aggression followed by subsequent declines. Physical aggression was found at its peak around age 15; social aggression peaked around age 14. It was also revealed that boys consistently perpetrated more physical aggression than girls, but the trajectories were parallel. Girls and boys perpetrated the same amount of social aggression at all ages.

Fives, Kong, Fuller, and Di Giuseppe (2009) examined whether a combination of anger, hostility and irrational beliefs i.e., intolerance of rules frustration, intolerance of work frustration, demands for fairness, and self-downing would predict physical, verbal, and indirect aggression and peer ratings of aggression. The study was carried out on 135 high school-aged adolescents using questionnaire method. Follow-up analysis tested gender as a moderator of the relations between irrational beliefs and
aggression, and anger and aggression. Results demonstrated that gender, anger, and an irrational belief of intolerance of rules frustration predicted physical aggression, while anger and irrational belief of intolerance of rules frustration uniquely predicted indirect aggression. Anger alone was found to predict verbal aggression. Males were more likely to report higher rate of physical aggression and were voted to be more aggressive by their peers. However, gender did not moderate the relations between cognition and aggression, and anger and aggression.

Ribeaud and Eisner (2010) investigated risk factors for aggression in pre-adolescence in a multi-ethnic urban sample. This study reviews a range of risk factors for aggression at age 11 derived from a prospective longitudinal study on the social development of children in a large multi-ethnic sample in Switzerland. Besides analyzing the effects of individual risk factors, the study also investigates the effect size of cumulative risk within and across risk domains. It further analyses gender differences in risk vulnerability. Results suggest that proximal behavioural and psychological risk factors most strongly predict later aggression, whereas more distal external factors related to the family, to school and to peer relationships are less predictive. The most distal factors (prenatal risks and socio-demographic factors) are only marginally associated with later aggression. Analysis of cumulative risk suggests a strong relationship between the number of risk factors and later aggression. Finally, results support the notion of a higher risk vulnerability of boys compared with girls.

Spanovic, Lickel, Denson, and Petrovic (2010) investigated the relationship between emotions of fear and anger and people’s motivation for intergroup aggression in within the context of Serbian-Albanian relations in Serbia (Study 1) and Serbian-Bosniak intergroup relations in Bosnia (Study 2). It was found that fear of the outgroup was related to increased motivation for aggression in the context of the ongoing conflict in Serbia, whereas fear was negatively related to aggression in Bosnia, where the conflict had been resolved. The relationships between fear and aggression were significant even after controlling for anger. Furthermore, in group affiliation were found to mediate the relationship between fear and aggression in Serbia and between anger and aggression in Bosnia.

Bailey and Coore-Desa (2012) investigated the effect of exposure to community violence on levels of aggression among children in Kingston, Jamaica. Data for the investigation was obtained from a sample of preparatory and primary
school children. It was found that there was no significant difference in aggression among the children. Similar levels of aggression were found in both the groups, which determine that no one is immune to the effects of exposure. Exposure occurs in a number of ways and the direct witnessing of community violence is only one of a variety of risk factors for increased aggression.

Hert, McLaughlin, and Hatzenbuehler (2012) examined the emotion dysregulation as a potential mechanism linking a broader range of stressful experiences to aggressive behaviour in a diverse sample of early adolescents (N=1065). The longitudinal associations of peer victimization and stressful life events with emotion dysregulation and aggressive behaviour were examined. Structural equation modeling was used to create latent constructs of emotion dysregulation and aggression. It was found that both stressful life events and peer victimization predicted subsequent increases in emotion dysregulation over a four month period. This increase in emotion dysregulation, in turn, was associated with increases in aggression over the subsequent three months. Longitudinal mediation models showed that emotion dysregulation mediated the relationship of both peer victimization and stressful life events with aggressive behaviour. Increasing the use of adaptive emotion regulation strategies is an important target for interventions aimed at preventing the onset of adolescent aggressive behaviour.

Fikkers, Piotrowski, Weeda, Vossen, and Valkenburg (2013) investigated how exposure to media violence and family conflict affects adolescent’s subsequent aggressive behaviour. A total sample of 499 adolescents (aged 10 to 14, 48% girls) participated in a two-wave longitudinal survey (4-month interval). Survey questions were used to assess their exposure to violence on television and in electronic games, family conflict, and aggressive behaviour. Results of the study revealed that there was a significant interaction between media violence and family conflict. In families with higher conflict, higher media violence exposure was related to increase subsequent aggression. These findings underscore the important role of the family in shaping the effects of adolescent’s media use on their social development.

Ebesutani, Kim, and Young (2014) made an attempt to examine the role of violence exposure and negative affect (anxiety and depression) in understanding child and adolescent aggression. The sample of the current study comprised of 199 adolescents between the age range of 7-17 years. Using structural equation modelling
both negative affect and exposure to violence war found to predict aggressive behaviour significantly among adolescents. Moreover, negative affect was found to partially mediate relationship between exposure to violence and aggression.

Izuchi and Anetoh (2014) conducted a study with an aim to explore the psychological determinants of aggressive behaviour among adolescents in secondary school in Awka South L.G.A. of Anambra state. The sample of the study comprised of 450 students selected from all the public secondary schools using simple random sampling technique. The data obtained were analyzed by using mean scores and t-test. The results obtained showed that stress significantly influenced aggressive behaviour among secondary school adolescents while as self-concept and locus of control were not found to significantly influence aggressive behaviour among them.

Nwosu, Okoye, & Raphael (2014) examined the association between psychopathological symptoms of paranoid ideation, anxiety, depression and aggression among adolescents. Sample comprised of 584 adolescents (males = 300, females = 284) belonging to two private schools and two public schools of Anambara state where study was conducted. The age range of participants was 13 - 17 years. The data was collected using psychopathological symptom scales (6-item paranoid ideation scale, 10-item anxiety scale and 13-item depressive system scale) and 6-item aggressiveness scale. Pearson’s correlation coefficient was performed to explore the relationship between the above mentioned variables. Results of the study revealed a significant positive association of aggression with paranoid ideation, anxiety, and depression. Further, proper mental health hygiene and regular psychological check-up in schools were recommended.

From the readily available literature it can be concluded that environmental risk factors like exposure to direct violence, exposure to media violence, family conflict, deteriorated school environment, negative peer environment, traumatic experiences and substance abuse were likely to predict aggression among adolescents. Psychological risk factors and fear were also found to be related to aggressive behaviours. Studies also revealed that boys are more physically aggressive than girls. Moreover, early adolescents were found to be more aggressive than adolescents in later stage. Some studies also showed a positive relationship between social support and aggressive behaviour. Whereas, stress was also found to influence aggressive behaviour.
Significance of the study

21\textsuperscript{th} century has witnessed a radical increase in the incidences of armed conflicts of varied intensities throughout the globe. Taking into consideration the World scenario of armed conflict, the World Health Organisation (WHO) has reported that 10\% of the people who experience traumatic events will have serious mental health problems and another 10\% will develop behaviours that will hinder their ability to function effectively (WHO, 2001), signifying that armed conflicts lead to the consequences that go beyond killings and causalities. During conflict, community structures may not be able to fill their customary role as a source of support and adaptation, which in turn increases the risk of adverse reaction like psychopathologies. Adolescents being in the most vulnerable stage of development are worstly affected. Hodas (2006) and Miller (2007) have also reported that isolated, acute, repetitive, or chronic exposure, including poly-victimization to violence and trauma may have a profound impact on children and adolescent’s physical, psychosocial-emotional, and mental health and well-being in varying degrees and intensities. Adolescents growing up in the conflict are not able to comprehend what is happening around them, as a result, they feel vulnerable and uncertain about what to do for survival. The unavoidable fear which they face seems to cause mistrust in them, which de-stabilizes the community. Adolescent’s exposure to community violence has also been associated with concerns about their own safety (Du Rant et al., 2000). Similarly, Lynch and Cicchetti (2002) reported that adolescent’s exposed to higher levels of community violence were more likely to feel insecure than adolescents with less exposure. Unlike physical trauma, individuals suffering from psychological trauma do not passively register the impact of external forces, but engage with them in active and social way. It has been found that when children are constantly exposed to violence they get used to it (Guerra, Huessmann, & Splinder, 2003). Moreover, values that are recognized as organizing principles for human behaviours, cognitions, and affect expression are found to better predict variations in trauma symptoms than the actual severity of trauma (Durodie, 2003). Perhaps the primary impact of conflict on victims is through their witnessing the destruction of a social world, embodying their history, identity, and living values.

Thus taking into consideration the above mentioned facts, the present study was conducted as an endeavour to study the impact of the ongoing armed conflict on
the level of stress, general health, personal values and aggressive tendencies of adolescents belonging to Kashmir region by comparing them with the adolescents of Jammu region which is relatively peaceful region.

**Research objective**

1. To determine the relationship between stress, general health, personal values and aggressive tendency among the adolescents of Jammu and Kashmir regions.

2. To investigate the difference in the adolescents belonging to Jammu region and Kashmir region in terms of their level of stress, general health, personal values and aggressive tendencies.

3. To investigate gender difference in the adolescents of Jammu region and Kashmir region in terms of level of stress, general health, personal values and aggressive tendencies.

4. To examine the role of demographic variables, stress, personal values and dimensions of aggression in the prediction of general health of adolescents of Jammu and Kashmir regions.

**Research Questions**

1. Is there any relationship among the variables of stress, general health, personal values and aggressive tendencies in the adolescents of Jammu and Kashmir regions (total sample)?

2. Is there any relationship among the variables of stress, general health, personal values and aggressive tendencies in the adolescents of Kashmir region?

3. Is there any relationship among the variables of stress, general health, personal values and aggressive tendencies in the adolescents of Jammu region?

4. Is there any significant difference in the level of stress between the adolescents of Jammu region and Kashmir region?

5. Is there any significant difference in the level of general health and its dimensions between the adolescents of Jammu region and Kashmir region?
6. Is there any significant difference in the personal values between the adolescents of Jammu region and Kashmir region?

7. Is there any significant difference in the level of aggressive tendencies and its dimensions between the adolescents of Jammu region and Kashmir region?

8. Is there any significant difference in the level of stress between the adolescent boys and girls of Jammu region and Kashmir region?

9. Is there any significant difference in the level of general health and its dimensions between the adolescent boys and girls of Jammu region and Kashmir region?

10. Is there any significant difference in the personal values and its dimensions between the adolescent boys and girls of Jammu region and Kashmir region?

11. Is there any significant difference in the level of aggressive tendencies and its dimensions between the adolescent boys and girls of Jammu region and Kashmir region?

12. Does demographic variables (gender, residential background, and religion), stress, personal values (power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security), and dimensions of aggression (physical aggression, hostility, verbal aggression, and anger) significantly predict general health of adolescents of Jammu and Kashmir region (total sample)?

13. Does demographic variables (gender, residential background, and religion), stress, personal values (power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security), and dimensions of aggression (physical aggression, hostility, verbal aggression, and anger) significantly predict general health of adolescents of Kashmir region?

14. Does demographic variables (gender, residential background, and religion), stress, personal values (power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security), and dimensions of aggression (physical aggression, hostility, verbal aggression, and anger) significantly predict general health of adolescents of Jammu region?
Operational Definition used in the present research work

**Stress:** Stress is defined as a pattern of negative physiological states and psychological responses occurring in situations where individuals perceive threats to their well-being, which they may be unable to meet (Lazarus, 1974).

**Health:** Health is defined in terms of somatic symptoms, anxiety/insomnia, social dysfunction and severe depression (Goldberg & Hiller, 1976).

**Aggression:** Aggression is operationalized in terms of physical aggression, anger, verbal aggression and hostility.

**Personal values:** Values are conceptualized as what is important to individuals as guiding principles in their lives across situations (Schwartz, 1992).

**Adolescents:** Individuals between the age group of 15-19 years.

**Armed conflict:** An armed conflict is defined as contested incompatibility which concerns government and/or territory where the use of armed force between two parties, one out of which is government of state and results in at least 25 battle-related deaths (Wallensteen & Margareta, 2001).
Methods
CHAPTER - 2

METHOD

The main focus of this chapter is to explain in detail the methodology followed in the pursuit of obtaining the results to meet the research objectives of the present research endeavour. As, the present research was carried out to study ‘the level of stress, general health, personal values and aggressive tendencies among the adolescents of Jammu and Kashmir regions, following steps were taken for meeting the research objectives through empirical investigation.

Research design

Research design is the detailed blueprint used to guide a research study towards its objectives. A research design provides a framework to be used as a guide in collecting and analyzing data. Selecting appropriate research design is based on many factors, including the nature of research problem, the field of research, depth of required details and its objectives. For the present research work the cross-sectional, descriptive, comparative research design was used to compare the level of stress, general health, personal values and tendency of aggressive behaviour among the adolescents of Jammu and Kashmir regions at particular point of time.

Participants

Participants for the present research work were selected through random sampling technique from the population comprising of 11th & 12th grade students of government and private run schools of Jammu and Kashmir regions. 627 students attending 7 higher secondary schools of Kashmir region and 5 higher secondary schools of Jammu region took part in the study. From Kashmir region (i.e. conflict area) the sample was drawn from higher secondary schools of district Anantnag, Baramulla, Pulwama, and Srinagar. And from Jammu region (relatively peaceful area) sample was collected from the higher secondary schools of district Ramban, Udhampur and main Jammu city. Most of the schools were gender-mixed, with one all-girl school (Kashmir) and one all-boy school (Kashmir). From Kashmir region 324 participants were selected and the remaining 303 participants were taken from Jammu region. The age range of students was between 15 to 19 years ($M=16.17, SD=1.62$).
The research tools were administered on 650 students, however 23 forms were found to be incomplete and were rejected. Thus the final sample comprised of 627 students (N=627).

**Table 1(a)**

*Showing gender-wise breakup of the sample (N=627)*

<table>
<thead>
<tr>
<th></th>
<th>Kashmir</th>
<th>Jammu</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>188</td>
<td>175</td>
<td>363</td>
</tr>
<tr>
<td>Girls</td>
<td>136</td>
<td>128</td>
<td>264</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>324</strong></td>
<td><strong>303</strong></td>
<td><strong>627</strong></td>
</tr>
</tbody>
</table>

Table-1(a) shows the gender wise breakup of the sample. Sample comprised of 188 boys and 136 girls from conflict ridden Kashmir region and 175 boys and 128 girls from relatively peaceful Jammu region.

**Table 1(b)**

*Showing the religion-wise breakup of the sample (N=627)*

<table>
<thead>
<tr>
<th></th>
<th>Kashmir</th>
<th>Jammu</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muslim</td>
<td>314</td>
<td>161</td>
<td>475</td>
</tr>
<tr>
<td>Hindu</td>
<td>10</td>
<td>142</td>
<td>152</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>324</strong></td>
<td><strong>303</strong></td>
<td><strong>627</strong></td>
</tr>
</tbody>
</table>

Table-1(b) shows that 314 adolescents from Kashmir region belonged to Muslim community and 10 to Hindu. As, Kashmir is a Muslim majority region that is why only 10
Hindu adolescents were found in different schools of this region. Whereas, sample from Jammu region comprised of 161 Muslim adolescents and 142 Hindu adolescents.

**Table 1(c)**

*Showing residential background of the sample (N=627)*

<table>
<thead>
<tr>
<th></th>
<th>Kashmir</th>
<th>Jammu</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>144</td>
<td>135</td>
<td>279</td>
</tr>
<tr>
<td>Urban</td>
<td>180</td>
<td>168</td>
<td>348</td>
</tr>
<tr>
<td>Totals</td>
<td>324</td>
<td>303</td>
<td>627</td>
</tr>
</tbody>
</table>

Table-1(c) represents the residential background of the sample. Out of the total sample (N = 627), 144 belonged to the rural areas and 180 to urban areas of Kashmir region. Whereas, 135 participants from Jammu region belonged to rural areas and 168 to urban areas.

**Table 1(d)**

*Showing the family type of the sample (N=627)*

<table>
<thead>
<tr>
<th></th>
<th>Kashmir</th>
<th>Jammu</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear Family</td>
<td>200</td>
<td>160</td>
<td>360</td>
</tr>
<tr>
<td>Joint Family</td>
<td>124</td>
<td>143</td>
<td>267</td>
</tr>
<tr>
<td>Total</td>
<td>324</td>
<td>303</td>
<td>627</td>
</tr>
</tbody>
</table>

Table-1(d) depicts the family type of participants. Out of 627 adolescents, 200 came from nuclear families and 124 from joint families of conflict ridden Kashmir region. Remaining 160 belonged to nuclear families and 143 to joint families of relatively peaceful Jammu region.
Table 1(e)

*Showing the socio-economic status of respondents (N=627)*

<table>
<thead>
<tr>
<th></th>
<th>Kashmir</th>
<th>Jammu</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>78</td>
<td>78</td>
<td>156</td>
</tr>
<tr>
<td>Moderate</td>
<td>143</td>
<td>132</td>
<td>275</td>
</tr>
<tr>
<td>High</td>
<td>103</td>
<td>93</td>
<td>196</td>
</tr>
<tr>
<td>Total</td>
<td>324</td>
<td>303</td>
<td>627</td>
</tr>
</tbody>
</table>

The socio-economical status of the total sample was assessed on 3 point scale ranging from low, moderate and high. Table 1(e) reveals that out of the 324 adolescents from Kashmir region, 78 belonged to low, 143 to moderate and 103 to high socio-economic status. Table 1(e) further shows that 78 adolescents from Jammu region belonged to low, 132 to moderate and 93 to higher socio-economical status.

**Inclusion criteria**

- Students who were enrolled in 11th and 12th standard of different higher secondary school were included in the study.
- Only the students who were co-operative were included in the study.

**Exclusion criteria**

- Student’s who had repeated the class were not included in the sample.
- School drop-outs were not included in the study population.
- Students who were non-cooperative were not included in the study.

**Measures**

The following measures were used:
Demographic information

The Demographic sheet included a total number of 6 items. The participants were asked to provide general information about their age, gender, religion, residential background, family type, and socio-economic status. The socio-economic status of the family was rated on a 3 point scale low, moderate and high.

Stress Measuring Scale

Stress Measuring Scale developed by Chashoo and Khan (2009) was used to measure the stress level among adolescents. This scale was especially designed to measure the stress level of the adolescents of conflict area like Jammu and Kashmir. Stress measuring scale has 20 items and the responses are obtained on 5-point Likert-type scale. The maximum obtained score is 100 and minimum is 20. Higher score on this scale implies higher levels of stress and vice versa. It takes on an average 8 minutes to complete the questionnaire. Split-half reliability coefficient of the scale was reported to be .94.

General Health Questionnaire-28 (GHQ-28)

To assess the general health of adolescents, General Health Questionnaire-28 (GHQ-28) developed by Goldberg and Hiller (1979) was administered on them. GHQ-28 is a multiple choice paper-pen questionnaire. It was designed to detect current non-psychotic psychiatric disorders in the general population. The questionnaire has four subscales: Somatic complaints, anxiety/insomnia, social dysfunction and major depression. The general health questionnaire can be administered to adolescents or adults of any age. It is diagnostic but can also be used to detect acute conditions (Goldberg & Hiller, 1979). There are four versions of General Health Questionnaire (GHQ) at the moment (with 60, 30, 28 and 12 items) available to psychiatrists, qualified doctors, clinical psychologists, and experienced counsellors (Jancz, 2000). Conbach's (1951) alpha coefficient for internal validity of GHQ-28 version ranges from .84 to .93 in different studies. The conbach alpha of GHQ - 28 for the present study was found to be .95. Goldberg and Hiller (1979) cited that the test-retest probability coefficient on 87 psychiatric cases with a six-month follow up was .90 (Jancz, 2000) and it appeared to be the reliable and valid
assessment technique for psychological health. The results for general health questionnaire (GHQ-28) were obtained by adding responses on all the items and summing them up. Responses are given on 4-point Likert-type scale, with a total score ranging from 0 to 84. A higher score on GHQ 28 implies poor health status and vice versa.

**Schwartz Short Value Scale (SSVS)**

In order to measure the personal values among the adolescents, the Schwartz Short Value Scale (SSVS) developed by Lindeman and Yerkasalo (2005) was used. The SSVS was derived from the longer Schwartz Value Scale. The SSVS consisted of ten value types each with a description to clarify its meaning (e.g., Power - social power, authority, wealth; Benevolence-helpfulness, honesty, forgiveness, loyalty, responsibility). These ten values could be categorised into two dimensions (a) openness to change versus conservation (stimulus, self-direction, hedonism, tradition, conformity and security) and self-enhancement versus self-Transcendence (hedonism, power, achievement, universalism, and benevolence). Reliability and validity of the SSVS was investigated in four separate studies, the average reliability of the ten SSVS values was reported as ranging from .34 to .77 (Lindeman & Yerkasalo, 2005). Participants rated the importance of the ten items as life guiding principles in their lives on a 9-point, non-symmetrical scale ranging from 0 (opposed to my principle) to 1 (not important), to 4 (important), to 8 (of supreme importance). The SSVS takes on average two minutes to complete, and gives insight into ten broad value types. Reliability and validity of the SSVS was investigated in four separate studies, the average reliability of the ten SSVS values was reported as ranging from .34 to .77 (Lindeman & Yerkasalo, 2005). SSVS’s conbach alpha for the present study was .67.

**Aggression scale**

The aggression scale was constructed by the present researcher to measure the aggressive behaviour of the adolescents living in Jammu and Kashmir regions. The need for the construction of this scale was felt as no appropriate scale for measuring aggression in the context of conflict situation was available.
Before taking up the task of construction of scale for measuring aggressive tendencies, extensive review of literature was done to construct items for this scale. In the present research work, aggression was operationally defined in terms of four dimensions, which were finalized on the basis of judge’s agreements keeping in view the requirements of this research work. These four dimensions were physical aggression, hostility, verbal aggression and anger. The dimensions described are being defined below:

**Physical aggression**: It is defined as a use of physical force against another person with (e.g. stick, rod, bullet) or without an object (e.g. slap, push, punch, kick, bite).

**Verbal aggression**: It defined as an intentional abuse of power, such as teasing, taunting, or threatening, that is initiated by one or more individuals of relatively greater status or power (by virtue of their numbers or size) against a victim of somewhat lesser status or power. Cursing, yelling, and screaming at others are also the forms of verbal aggression.

**Hostility**: It is defined as a set of negative attitudes, beliefs, and appraisals concerning others (Smith, 1992). Hostile individuals have the desire to cause harm to others or have intense anger towards others (Chaplin, 1982).

**Anger**: Anger is defined as an emotion that encompasses a wide spectrum from mild irritation to intense rage that is often the result of perceived provocation or mistreatment (Smith, 1992).

For the construction of the scale in the first phase 60 items were framed very cautiously on the basis of available literature. These items were related to dimensions of physical aggression, verbal aggression, hostility, and anger. The preliminary form of scale was given to 15 judges (including psychologists, educationalists, and language experts) with the request to rate the each item on five point scale (most appropriate to least appropriate), according to the concept of aggression, language of items and its cleanness of meaning. Having obtained the ratings from experts, the averages of judge’s rating were calculated and only those items were retained which had high agreement. After the whole procedure 35 items were retained. Then pilot study of the scale was conducted on 300 students of Jammu and Kashmir both male
and female. After pilot study, some items were then reformulated in simpler language and item analysis was performed. After item analysis, 27 items were retained. Item analysis was done to ascertain the relevance of items; all items were found significant at 0.01 level of confidence. To conform the reliability of scale cornbach’s alpha (α) was calculated and it was found to be .66 to .72 which confirms the reliability of the scale. For this scale two measures of validity were chosen, namely content validity and face validity. Content validity is associated with validating the content of the test. The available literature and the contribution of the experts confirmed the content validity of the scale. Face validity solely depends on the subjective judgement of the researcher. The supervisor of the researcher was fully satisfied that the items of scale measured the construct that it was supposed to measure. Hence, the scale had face validity. Thus, the constructed scale was valid for the measurement of aggression of 15 to 20 years of age group. In this way the scale was considered to be standardized scale.

The final version of aggression scale constituted of 27 items representing four dimensions - physical aggression, anger, hostility, and verbal aggression. The scale has 5 point Likert type response categories ranging from “Extremely uncharacteristic” (a score of 1) to “Extremely characteristic” (a score of 5), hence the total score of scale ranges from 27 to 135, higher score on the scale indicated higher aggressive tendency and vice versa. Respondent takes on an average of about 10 minutes to fill this aggression scale.

Procedure

Researcher first of all identified four districts of Kashmir region and three districts of Jammu region for the purpose of collecting data. After identifying the districts the researcher approached the principals of various higher secondary schools from those districts. The aims and objectives for conducting the study on proposed topic were explained in detail to the principals of these schools. Out of 10 higher secondary schools that were approached in different districts of Kashmir region only the principals of seven higher secondary schools granted permission, while as in Jammu region permission for the purpose of data collection was granted from the principals of all the five schools that were approached by the researcher. The researcher was allowed to collect data from students during free periods. Before
distributing the questionnaires to students, researcher to her best abilities tried to build up a rapport with them. An introductory discussion was held with students highlighting the purpose of the study and its academic utility. Once the students were convinced to participate, detailed information about how to complete the questionnaire was provided to them. The participants were also encouraged to ask for assistance in case they experience any difficulty in filling up the questionnaires. Participation was entirely voluntary. The data was collected in small groups of students (10-15) at a time, under the supervision of classroom teachers and researcher. On average, participants took 30-45 minutes to complete all the questionnaires. In this manner the responses of all 627 were finally collected. Further, subjects were assured of the confidentiality of their responses and were thanked for their cooperation.

**Ethical consideration**

Due to the sensitivity of the context in which present research work was carried out, informed consent was taken from the respondents prior to the distribution of questionnaire distribution. Data was collected only from those students who were willing to participate. No one was forced to participate. Participants of the study were informed about the purpose and procedure of the investigation. In case, the content of questionnaires might cause any emotional pain through recalled memories, the researcher debriefed all the participants and offered group and individual counselling sessions. To ensure the anonymity and confidentiality the participants were asked not to write their names on the questionnaires. The subjects were also convinced that the result will have no personal consequences against them.

**Statistical analysis**

Once the data is collected from the respondents using the appropriate tools and the tabulation of score is done, then it requires applying certain types of statistical treatment to reduce the long-wide ranging scores into interpretable form, in order to understand the results easily and conveniently. So, keeping in view the nature of present research investigation and to meets the research objectives and hypothesis, independent t- test was found best suited for comparing the two groups of adolescents on the variables of stress, general health, personal values and aggressive tendencies. For seeing the relations among the variables investigated correlation method was
used. Correlation analysis is used to describe the strength and direction of the linear relationship between two variables. In addition to the t-test and correlation analysis, multiple regression analysis was used to see the influence of demographic variables, stress, personal values, and dimensions of aggression on general health. Multiple Regressions are based on correlation but a more sophisticated exploration of interrelationships among the sets of variables. Multiple regression is not one technique but a family of technique (enter, forward, backward, stepwise etc.). In the present endeavour hierarchical multiple regression analysis was performed. In hierarchical multiple regression analysis, predictor variables are entered in steps or blocks in a predetermined order. Researcher on the basis of literature review determines which variable should be entered at which stage. The later endeavour was though beyond our purpose but seems to elicit very important information. Analysis was done using 17.0 versions of SPSS (Statistical Package for Social Science).
Results and Discussion
CHAPTER 3

RESULTS AND DISCUSSION

This chapter deals with the statistical analysis and interpretation of the obtained results in the light of the purpose of the study. In the present research work effort was made to empirically examine the difference between the adolescent participants of Jammu region and Kashmir region in terms of their levels of stress, general health, personal values and tendency of aggressive behaviour. In addition to this, it was also intended to examine the relationship between stress, general health, personal values and tendency of aggressive behaviour among the adolescents of both regions as well as to explore the predictive role of demographic variables (gender, religion, and residential background), stress, facets of personal values and dimensions of aggression on the general health of both the groups. Thus, to realize the main objectives, the entire data after tabulation was analyzed using Pearson’s correlation co-efficient, t-test and hierarchical multiple regression with the help of SPSS 17, in the following manner:

- Firstly inter-correlation between the studied psychological variables was carried out for total sample.
- Then inter-correlation between the studied psychological variables was carried out for the sample of Kashmir region.
- Then inter-correlation between the studied psychological variables was carried out for the sample of Jammu region.
- Then t-test was applied to find the mean difference between the two groups on the variables of stress, general health, personal values and aggressive tendencies.
- Then the t-test was applied to find the gender difference on the variables of stress, general health, personal values and aggressive tendencies in both Kashmir and Jammu regions.
- Then hierarchical multiple regression was carried out to find the predictors of General health in total sample.
- Then hierarchical multiple regression was carried out to find the predictors of General health in Kashmir region.
Then hierarchical multiple regression was carried out to find the predictors of General health in Jammu region.

Table 2
**Showing Descriptive Statistics: Mean and Standard Deviation (N=627) of All Variables Along With Dimensions**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Variables</th>
<th>Total Sample (N=627) Mean(SD)</th>
<th>Kashmir (N=324) Mean(SD)</th>
<th>Jammu (N=303) Mean(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Stress</td>
<td>63.66(11.08)</td>
<td>65.4(10.68)</td>
<td>61.82(11.23)</td>
</tr>
<tr>
<td>2.</td>
<td>General health</td>
<td>49.76(11.72)</td>
<td>59.38(3.37)</td>
<td>39.47(8.21)</td>
</tr>
<tr>
<td>i.</td>
<td>Somatic complaints</td>
<td>12.28(3.09)</td>
<td>14.73(1.02)</td>
<td>9.66(2.33)</td>
</tr>
<tr>
<td>ii.</td>
<td>Anxiety</td>
<td>12.92(3.20)</td>
<td>15.14(1.35)</td>
<td>10.55(2.93)</td>
</tr>
<tr>
<td>iii.</td>
<td>Social dysfunction</td>
<td>11.93(3.20)</td>
<td>14.52(8.6)</td>
<td>9.17(2.50)</td>
</tr>
<tr>
<td>iv.</td>
<td>Severe depression</td>
<td>12.61(3.20)</td>
<td>14.98(1.27)</td>
<td>10.08(2.74)</td>
</tr>
<tr>
<td>3.</td>
<td>Values</td>
<td>59.33(8.89)</td>
<td>60.19(8.78)</td>
<td>58.40(8.93)</td>
</tr>
<tr>
<td>i.</td>
<td>Power</td>
<td>4.97(1.74)</td>
<td>5.22(1.68)</td>
<td>4.71(1.77)</td>
</tr>
<tr>
<td>ii.</td>
<td>Achievement</td>
<td>6.71(1.84)</td>
<td>6.81(1.71)</td>
<td>6.59(1.93)</td>
</tr>
<tr>
<td>iii.</td>
<td>Hedonism</td>
<td>5.09(1.53)</td>
<td>5.23(1.59)</td>
<td>4.93(1.44)</td>
</tr>
<tr>
<td>iv.</td>
<td>Stimulation</td>
<td>5.48(1.78)</td>
<td>5.38(1.62)</td>
<td>5.58(1.93)</td>
</tr>
<tr>
<td>v.</td>
<td>Self-direction</td>
<td>6.14(1.84)</td>
<td>6.31(1.79)</td>
<td>5.96(1.87)</td>
</tr>
<tr>
<td>vi.</td>
<td>Universalism</td>
<td>5.99(1.66)</td>
<td>5.73(1.50)</td>
<td>6.26(1.79)</td>
</tr>
<tr>
<td>vii.</td>
<td>Benevolence</td>
<td>6.46(1.84)</td>
<td>6.63(1.79)</td>
<td>6.27(1.88)</td>
</tr>
<tr>
<td>viii</td>
<td>Tradition</td>
<td>5.74(1.87)</td>
<td>5.90(1.93)</td>
<td>5.57(1.79)</td>
</tr>
<tr>
<td>ix.</td>
<td>Conformity</td>
<td>6.67(1.77)</td>
<td>6.77(1.66)</td>
<td>6.59(1.88)</td>
</tr>
<tr>
<td>x.</td>
<td>Security</td>
<td>6.09(1.82)</td>
<td>6.21(1.66)</td>
<td>5.96(1.99)</td>
</tr>
<tr>
<td>4.</td>
<td>Aggression</td>
<td>77.86(11.99)</td>
<td>82.11(10.41)</td>
<td>73.33(11.93)</td>
</tr>
<tr>
<td>i.</td>
<td>Physical aggression</td>
<td>38.21(6.74)</td>
<td>40.19(6.18)</td>
<td>36.08(6.69)</td>
</tr>
<tr>
<td>ii.</td>
<td>Hostility</td>
<td>9.92(2.44)</td>
<td>10.63(2.09)</td>
<td>9.16(2.56)</td>
</tr>
<tr>
<td>iii.</td>
<td>Verbal aggression</td>
<td>7.69(2.00)</td>
<td>8.18(1.66)</td>
<td>7.17(2.20)</td>
</tr>
<tr>
<td>iv.</td>
<td>Anger</td>
<td>22.04(4.03)</td>
<td>23.09(3.96)</td>
<td>20.91(3.79)</td>
</tr>
</tbody>
</table>

*Note: High scores on General health questionnaire (GHQ)-28 and its dimensions indicate poor health and vice versa*
Table 2 depicts the mean (M) and standard deviations (SD) of the total sample, as well as, comparing groups (i.e., Jammu region and Kashmir region) on all four variables - Stress, General Health, Personal values and Aggression along with their dimensions.

Table 3(a)

**Showing Correlation between Stress, General health, Personal values, and Aggression among adolescents of Jammu and Kashmir regions (N=627)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stress</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. General Health</td>
<td>.265**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Personal Values</td>
<td>.321**</td>
<td>.093*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4. Aggression</td>
<td>.179**</td>
<td>.433**</td>
<td>-.065</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note: *P<.05, **P<.01, High scores on General health questionnaire (GHQ)-28 and its dimensions indicate poor health and vice versa.

Table-3(a) depicts correlation matrix between the psychological variables of stress, general health, personal values, and aggression for the overall sample of Jammu and Kashmir region. A significant positive correlation was found between the stress and General health (r = .265, p <.01), indicating that high score on stress experience is related to high general health score. Stress was also found to correlate positively with personal values (r = .321, p <.01), depicting that adolescents reporting higher level of stress gave more importance to their personal values. Table-3(a), also showed a strong positive correlation between adolescents stress level and aggression (r = .179, p <.01), revealing that adolescents having higher level of stress had greater aggressive tendencies. A significant positive correlation was found between general health and personal values(r = .093, p <.05), which implies that adolescents reporting more general health problems scored high on their personal values. General health was also found correlate positively with aggression(r = .433, p <.01), depicting that the adolescents reporting poor health were found to show more aggressive behaviours. No significant correlation was found between personal values and aggression (r = .065).
Findings obtained in table-3(a), revealed that the level of stress that individual experiences is positively related to his/her general health status. This finding is supported by the findings of the study conducted by Bovier, Chamot, and Perneger (2004), reporting the strongest correlation between stress and mental health. There are also evidences which show the reciprocal relations between stressors and psychological symptoms (Grant, Huesmann, & Spindler, 2003; Kim, Conger, Elder, & Lorenz, 2003). Although, exposure to some stressors is considered as a normal part of development and may also act as a stimuli for growth and development, but the cumulative and simultaneous stressors are found to threaten the well-being and healthy development of children and adolescents (McLaughlin & Hatzenbuehler, 2009). Compas, Davis, and Forsythe (1985) were of the opinion that stressors arising from day-to-day hassles are stronger predictors of health symptoms than are major life events during adolescents.

A significant positive association was also reported between stress and total personal values, which implies that adolescents suffering from stress symptoms gave more priority to their values. This finding is in contrast with the previous finding obtained by Khodarahimi, Hashim, and Mohd-Zaharim (2012), suggesting a significantly inversely relationship between perceived stress and negative life event hassles with personal values and its subscales. But there are few studies which have demonstrated that traditional value orientations are associated with greater post-traumatic stress disorder (PTSD) symptom severity, whereas modern value orientations are associated with lower PTSD symptom severity (Maercker et al., 2009; Muller, Forstmeier, Wagner, & Maercker, 2011).

The table-3(a) also indicated a significant positive association of stress with aggression among adolescents. This finding seems to be quite logical, as when the individual is under stress condition he/she usually shows fight or flight reactions. And the fight reaction is an obvious recognition of the potential violent response that stress can engender. Grohol (2004) is also of the opinion that, stress and aggression feed off each other, thereby contributing to a circle of violence.

Correlation matrix in table - 3(a) also revealed a positive correlation between general health and personal values, signifying that adolescents holding strong values suffer from more general health problems. This finding is in contrary to the finding of
the study conducted by Vachon and Agresti (1992) which stated that people having clearly defined value system are able to use more constructive coping strategies leading higher level of psychological wellbeing. The positive association between general health and personal values in the context of the present study appears to be logical as people experience well-being only when they act in accordance to their value system, and there are high chances, that because of insecure and fearful situations of Jammu and Kashmir region, adolescents may not feel free to act in accordance to their value system. And the individuals with high inconsistency between rated importance and rated consistency of values are found to suffer from lot of distress (Wilson & Murrell, 2004).

Furthermore, a strong positive association was found between general health and aggression. This finding is in line with the study conducted by Freedman, Sears, and Carlsmith (1998) reporting a positive association between anxiety and aggression among adolescents. Lawrence (2002) in his study on nurses, have also asserted that frequent exposure to aggression is detrimental to mental health. Dodge, Lochman, Harnish, Bates, and Petti (1997) have also suggested a direct link between reactive aggression and depression and anxiety. Furthermore, in the total sample, personal values and aggression were found to be unrelated.

Table 3(b)

Showing Correlation between Stress, General health, Personal values, and Aggression among adolescents from Kashmir region (N=324)

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Health</td>
<td>.309**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Values</td>
<td>.279**</td>
<td>-.038</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Aggression</td>
<td>.295**</td>
<td>.322**</td>
<td>-.025</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: *P<.05, **P<.01

Table-3(b) depicts the correlation matrix among the psychological variables of stress, general health, personal values, and aggression in adolescents from Kashmir region. Results indicate a positive correlation between stress and general health ($r =$
.309, \( p < .01 \), depicting that adolescents reporting more stress symptoms suffer from more general health problems. Stress also showed a strong positive correlation with personal values (\( r = .279, \ p < .01 \)). A positive relationship was also found between stress and aggression (\( r = .295, \ p < .01 \)). Interestingly no significant correlation was found between general health and personal values (\( r = -.038 \)) of adolescents from Kashmir region. Results further revealed a significant positive correlation between general health and aggression (\( r = .322, \ p < .01 \)). Moreover, no significant correlation was found between personal values with aggressive tendencies (\( r = -.025 \)) of Kashmiri youth.

Findings of table-3(b) clearly indicate that stress level of the Kashmiri adolescents was associated with their general health status. More stressful the adolescent more health problems he/she may suffer from. No doubt, that individuals can use their body’s natural defence mechanism to overcome minor episodes of stress but, extreme and prolonged chronic stress, like the armed conflict in Kashmir valley can be psychologically and physically devastating. This is evident from the fact that serious health conditions like anxiety, depression, insomnia, muscle pain, high blood pressure are commonly found among the individuals with of untreated chronic stress (Baum & Polsusnzy, 1999). Previous researches have also suggested unhealthy consequences of individual’s behavioural, cognitive and emotional responses to stressors (Cohen, Evan, Stokols, & Krantz, 1986).

Results in table-3(b), further revealed a significant positive relationship between stress and personal values, this finding is in contrast to the past literature reporting that personal values can buffer people to the effects of stress (Creswell et al., 2005). But the above findings appear to be relevant in the present context as it has been found living in alignment to important personal values may be most effective in reducing stress in people with a positive dispositional self-concept, but may aggravate stress in people with a negative dispositional self-concept (Swann, Griffin, Predmore, & Gaines, 1987). Adolescents of Kashmir have been witnessing low intensity war since their childhood, as a result of which they may have developed negative self-concept. As, self-concept is found to be inversely related to war exposure among adolescents (McIntyre & Venture, 2003).Thus, negative self-concept may be the reason of positive relationship between stress and personal values among Kashmir adolescents.
The findings of the present study also depicted a strong correlation between stress and aggression, indicating that adolescents facing more stressful situations are more likely to engage in aggressive behaviour. Hert, Mc Laughlin, and Hatzenbuehler (2012) have also revealed the same results. They were of the opinion that stressful life events predict increase in emotional dysregulation which in-turn increases aggression. Copeland-Linder, Lambert, Chen, and Lalongo (2011) have also confirmed that contextual stress is associated with aggressive behaviour and substance abuse, thus supporting the above finding.

Moreover, a positive association between general health and aggression in this group signifies that adolescents showing greater aggressive behaviour have more general health problems. The study conducted by Marsee, Weems, and Taylor (2008) and Fung, Gerstein, Chan, & Engebretson (2013) also supports the above finding by revealing a direct connection between reactive aggression and depression and anxiety. Capaldi (1991) was also of the view that there is a correlation between aggression and depressive symptoms among the children and adolescents.

Table 3(c)

Showing Correlation between Stress, General health, Personal values, and Aggression among adolescents from Jammu region (N=303)

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Stress</td>
<td>1</td>
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<td></td>
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</tr>
<tr>
<td>2. General Health</td>
<td></td>
<td>.249**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3. Personal Values</td>
<td></td>
<td>.343**</td>
<td>.041</td>
<td>1</td>
</tr>
<tr>
<td>4. Aggression</td>
<td>-.014</td>
<td>.241**</td>
<td>-.189**</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: *P<.05, **P<.01

Table-3(c) displays the correlation matrix between stress, general health, personal values and aggression of adolescents from the relatively peaceful Jammu region. Scores reveal that stress was positively correlated with general health ($r = .249$, $p <.01$). Stress was also found to correlated positively with personal values ($r = .343$, $p <.01$), depicting that adolescents experiencing more stress symptoms holding higher personal values. Unexpectedly no significant association was found between stress and aggression ($r = -.014$). General health was also not found to correlate
significantly with personal values ($r = .041$). While as, a strong relationship was found between general health and aggression ($r = .241$, $p < .01$), reflecting that adolescents diagnosed with more health problems showed more aggressive tendencies. The results in the table 3(c), also revealed that personal values correlate significantly with aggression but in negative direction ($r = -.189$, $p < .01$), which means that adolescents having higher level of personal values were found to engage in less aggressive behaviours.

Stressed adolescents of the relatively peaceful Jammu region were also found to suffer from more general health problems. Stress was also found to show a positive association with personal values among them. Moreover, general health of adolescents from Jammu was also found to correlate positively with their aggressive behaviour, indicating that adolescents suffering from general health symptoms were more inclined towards aggressive behaviour. Rose, Rose, and Feldman (1989) in their study on the group of normal children have also revealed a correlation of .72 between internalizing and externalizing symptoms, thus favouring the above finding. The findings of the current study also reveal a significant negative correlation between personal values and aggression among the adolescents of Jammu region. Implying that more firmly the adolescents practise their values, lesser their chances of showing aggressive behaviour. There are also evidences showing that overt and relational aggression correlate positively with collective values but negatively with individual values (Li, Wang, & Wang, 2010).
### Table 3(d)

**Correlation between dimensions of General health, Personal values, and Aggression**

<table>
<thead>
<tr>
<th>Variables</th>
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<th>15</th>
<th>16</th>
<th>17</th>
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<tr>
<td>1. Somatic complaints</td>
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<tr>
<td>2. Anxiety/Insomnia</td>
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<td>.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>3. Social dysfunction</td>
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<td>.755**</td>
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<td>4. Severe depression</td>
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<td>.770**</td>
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<td>5. Power</td>
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<td>.142**</td>
<td>.136**</td>
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<tr>
<td>6. Achievement</td>
<td>.101*</td>
<td>.041</td>
<td>.082*</td>
<td>.109**</td>
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<tr>
<td>7. Hedonism</td>
<td>.108**</td>
<td>.083*</td>
<td>.134**</td>
<td>.146**</td>
<td>.140**</td>
<td>.118**</td>
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<td>8. Stimulation</td>
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<td>-.060</td>
<td>-.029</td>
<td>.024</td>
<td>.261**</td>
<td>.100*</td>
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<td>.060</td>
<td>.111**</td>
<td>.083*</td>
<td>.023</td>
<td>.190**</td>
<td>.177**</td>
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<td>10. Universalism</td>
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<td>-.126**</td>
<td>.020</td>
<td>.180**</td>
<td>.010</td>
<td>.175**</td>
<td>.079*</td>
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<tr>
<td>11. Benevolence</td>
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<td>.069</td>
<td>.062</td>
<td>.068</td>
<td>.014</td>
<td>.195**</td>
<td>.052</td>
<td>.237**</td>
<td>.148**</td>
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<td>12. Tradition</td>
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<td>.036</td>
<td>.056</td>
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<td>.190**</td>
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<td>.031</td>
<td>.092*</td>
<td>.270**</td>
<td>.090*</td>
<td>.240**</td>
<td>.158**</td>
<td>.240**</td>
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<td>.075</td>
<td>.014</td>
<td>.014</td>
<td>.057</td>
<td>.256**</td>
<td>.057</td>
<td>.180**</td>
<td>.120**</td>
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<td>.279**</td>
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<td>.260**</td>
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<tr>
<td>15. Physical aggression</td>
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<td>.340**</td>
<td>.288**</td>
<td>.343**</td>
<td>.097*</td>
<td>-.047</td>
<td>.021</td>
<td>-.016</td>
<td>.004</td>
<td>-.164**</td>
<td>-.075</td>
<td>-.041</td>
<td>-.109**</td>
<td>-.111**</td>
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<td>16. Hostility</td>
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<td>.357**</td>
<td>.340**</td>
<td>.362**</td>
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<td>17. Verbal aggression</td>
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<td>-.077</td>
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<td>18. Anger</td>
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<td>.315**</td>
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<td>.011</td>
<td>.093*</td>
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<td>.059</td>
<td>.065</td>
<td>.118**</td>
<td>.486**</td>
<td>.363**</td>
<td>.327**</td>
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</tr>
</tbody>
</table>

**Note:** *P<.05, **P<.01
Table 3-(d) shows a strong positive correlation of somatic complaints with anxiety/insomnia ($r=0.807$, $p<0.01$), social dysfunction ($r=0.811$, $p<0.01$), and severe depression ($r=0.802$, $p<0.01$), which indicates that adolescents reporting more somatic symptoms were found to suffer from symptoms of anxiety/insomnia, social dysfunction, and severe depression. Somatic symptoms were also found to correlate positively with the values of power ($r=0.151$, $p<0.01$), achievement ($r=0.101$, $p<0.05$), hedonism ($r=0.108$, $p<0.01$), self-direction ($r=0.087$, $p<0.05$), indicating that adolescents suffering from somatic complaints give more priority to the values of power, achievement, hedonism, and self-direction. Significant negative correlation was found between somatic complaints and value of universalism ($r=-0.107$, $p<0.01$), which indicates that giving more priority to that value of universalism reduces the incidence of somatic complaints in adolescents. No correlation of somatic symptoms was found with the values of stimulation ($r=-0.042$), benevolence ($r=0.044$), tradition ($r=0.043$), conformity ($r=0.040$), and security ($r=0.055$). Somatic complaints were also found to correlate positively with physical aggression ($r=0.304$, $p<0.01$), hostility ($r=0.297$, $p<0.01$), verbal aggression ($r=0.248$, $p<0.01$), and anger ($r=0.312$, $p<0.01$). Which implies that adolescents reporting high level of somatic symptoms were also found to have high level of physical aggression, hostility, verbal aggression, and anger.

Anxiety/insomnia was found to correlate positively with social dysfunction ($r=0.755$, $p<0.01$), and severe depression ($r=0.775$, $p<0.01$). Adolescents suffering from anxiety/insomnia were also found to suffer from social dysfunction and severe depression. A significant positive association was also found between anxiety/insomnia and values of power ($r=0.154$, $p<0.01$), achievement ($r=0.081$, $p<0.05$), and hedonism ($r=0.083$, $p<0.05$), with adolescents reporting more anxiety/insomnia being correlated with having higher values of power, achievement and hedonism. No significant association was found between anxiety/insomnia and stimulation ($r=-0.045$), self-direction ($r=0.060$), universalism($r=-0.072$), benevolence ($r=0.069$), tradition ($r=0.042$), conformity ($r=0.007$), and security ($r=0.075$). Whereas, a strong positive relationship of anxiety/insomnia was found with physical aggression ($r=0.340$, $p<0.01$), hostility ($r=0.357$, $p<0.01$), verbal aggression ($r=0.262$, $p<0.01$) and anger ($r=0.383$, $p<0.01$). Which implies that adolescents suffering from anxiety/insomnia were also found to
have higher tendencies for physical aggression, hostility, verbal aggression, and anger.

Social dysfunction was found to correlate positively with severe depression ($r=.770, p<.01$), with adolescents suffering from social dysfunction being correlated with severe depression. Social dysfunction was also found to correlate positively with power ($r=.142, p<.01$), hedonism ($r=.134, p<.01$), self-direction ($r=.111, p<.01$) and negatively with universalism ($r=-.125, p<.01$). Which indicated that adolescents reporting social dysfunction were found to give higher priority to the values of power, hedonism, self-direction and lower priority to the value of universalism. No significant relationship of social dysfunction was found with the values of achievement ($r=.041$), stimulation ($r=-.060$), benevolence ($r=.062$), tradition ($r=.036$), conformity ($r=-.031$) and security ($r=.014$). Social dysfunction was found to correlate positively with physical aggression ($r=.288, p<.01$), hostility ($r=.340, p<.01$), verbal aggression ($r=.256, p<.01$), and anger ($r=.245, p<.01$). Which implies that adolescents suffering from social dysfunction were also found to have higher aggressive tendencies.

Severe depression was found to correlate positively with the value of power ($r=.136, p<.01$), achievement ($r=.082, p<.05$), hedonism ($r=.146, p<.01$) self-direction ($r=.083, p<.05$) and negatively with universalism ($r=-.126, p<.01$). Which suggested that adolescents suffering from severe depression had higher affirmation with the values of power, achievement, hedonism, self-direction and low affirmation with the value of universalism. No significant association of severe depression was found with the values of stimulation ($r=-.029$), benevolence ($r=.068$), tradition ($r=.056$), conformity ($r=.031$), and security ($r=.014$). A significant correlation of severe depression was also found with physical aggression ($r=.343, p<.01$), hostility ($r=.362, p<.01$), verbal aggression ($r=.272, p<.01$) and anger ($r=.315, p<.01$). Which implies that adolescents suffering from severe depression were found to have higher tendency for physical aggression, hostility, verbal aggression and anger.

Value of power was found to correlate positively with the values of achievement ($r=.109, p<.01$), hedonism ($r=.140, p<.01$), tradition ($r=.13, p<.01$) and conformity ($r=.092, p<.01$), with adolescents reporting higher value for power being correlated with holding higher values of achievement, hedonism, tradition and
conformity. Value of power was not found to have any significant correlation with the values of stimulation, self-direction, universalism, benevolence, and security. Power was also found to correlate positively with physical aggression ($r=.097$, $p<.05$) and anger ($r=.165$, $p<.01$), with adolescents reporting higher priority for the value of power being correlated with physical aggression and anger. No significant correlation of value of power was found with hostility ($r=.030$) and verbal aggression ($r=-.002$).

Value of achievement was found to have positive correlation with values of hedonism ($r=.118$, $p<.01$), stimulation ($r=.261$, $p<.01$), self-direction ($r=.190$, $p<.01$), universalism ($r=.180$, $p<.01$), benevolence ($r=.195$, $p<.01$), tradition ($r=.187$, $p<.01$), conformity ($r=.270$, $p<.01$), and security ($r=.256$, $p<.01$). Which implies that adolescents giving higher priority to the value of achievement gave higher to the values of hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security. A significant negative correlation of value of achievement was found with hostility ($r=-.08$, $p<.05$) and verbal aggression ($r=-.083$, $p<.05$) and positive relation was found with anger ($r=.082$, $p<.05$). Which implies that adolescents reporting higher priority for the value of achievement were found to have lower tendency towards hostility and verbal aggression while as had higher tendency for getting angry.

Value of hedonism was found to have positive correlation with the values of stimulation ($r=.100$, $p<.05$), self-direction ($r=.177$, $p<.01$), tradition ($r=.118$, $p<.01$), and conformity ($r=.090$, $p<.05$). This implies that adolescents reporting higher priority to the value of hedonism were found to give higher priority to the values of stimulation, self-direction, tradition, and conformity. No significant correlation of hedonism was found with the values of universalism ($r=.010$), benevolence ($r=.052$), and security ($r=.057$). Hedonism was found to have no correlation with physical aggression ($r=.021$), hostility ($r=.020$), verbal aggression ($r=.077$), and anger ($r=.064$).

Value of stimulation was found to correlate positively with the values of self-direction ($r=.188$, $p<.01$), universalism ($r=.175$, $p<.01$), benevolence ($r=.237$, $p<.01$), tradition ($r=.190$, $p<.01$), conformity ($r=.240$, $p<.01$), and security ($r=.180$, $p<.01$). Which indicates that adolescents reporting higher importance to the value of stimulation also gave higher importance to the values of self-direction, universalism, benevolence, tradition, conformity, and security. Stimulation was found to correlate
negatively with hostility \((r=-.079, p<.05)\), and verbal aggression \((r=-.094, p<.05)\). No significant correlation of stimulation was found with physical aggression \((r=-.016)\) and anger \((r=.011)\).

Value of self-direction was found to correlate positively with the values of universalism \((r=.079, p<.05)\), benevolence \((r=.148, p<.01)\), conformity \((r=.158, p<.01)\), and security \((r=.120, p<.01)\). Which indicates that adolescents reporting higher importance to the value of self-direction gave higher importance to the values of universalism, benevolence, conformity and security. Self-direction was not found to have any significant correlation with physical aggression \((r=.004)\), hostility \((r=-.053)\), verbal aggression \((r=.047)\), and anger \((r=.093)\).

Value of universalism was found to have positive correlation with the values of benevolence \((r=.287, p<.01)\), tradition \((r=.186, p<.01)\), conformity \((r=.240, p<.01)\), and security \((r=.227, p<.01)\). Which implies that adolescents who gave high priority to the value of universalism had higher affirmation for the values of benevolence, tradition, conformity, and security. Universalism was found to correlate negatively with physical aggression \((r=-.164, p<.01)\), hostility \((r=-.196, p<.01)\), verbal aggression \((r=-.188, p<.01)\), and anger \((r=-.078, p<.05)\). Which implies that adolescents reporting higher importance to the value of universalism had lesser tendencies for physical aggression, hostility, verbal aggression, and anger.

Value of benevolence was found to have positive correlation with tradition \((r=.361, p<.01)\), conformity \((r=.376, p<.01)\), and security \((r=.279, p<.01)\), which implies that adolescents reporting higher priority to the value of benevolence gave higher importance to the values of tradition, conformity, and security. Benevolence was found to correlate negatively with hostility \((r=-.140, p<.01)\) and verbal aggression \((r=.08, p<.05)\), implying that adolescents who gave higher importance to the value of benevolence had lesser tendencies of hostility and verbal aggression. No significant relationship of benevolence was found with physical aggression \((r=-.075)\) and anger \((r=.067)\).

Value of tradition was found to have positive correlation with value of conformity \((r=.289, p<.01)\) and security \((r=.316, p<.01)\), which implies that adolescents who had high traditional values gave higher importance to the values of
conformity and security. Tradition was found to have negative correlation with hostility ($r=-.109$, $p<.01$), which implies that adolescents reporting higher importance to the value of tradition had lower hostile tendencies. No significant correlation of tradition was found with physical aggression ($r=-.041$), verbal aggression ($r=-.077$), and anger ($r=.059$).

Value of conformity was found to have positive correlation with the value of security ($r=.260$, $p<.01$), which suggests that adolescents reporting higher values of conformity had given higher importance to the values of security. Conformity was found to correlate negatively with physical aggression ($r=-.109$, $p<.01$), hostility ($r=-.151$, $p<.01$), and verbal aggression ($r=-.160$, $p<.01$), implying that adolescents reporting higher importance to the value of conformity had lower tendencies for physical aggression, hostility, and verbal aggression. No significant correlation was found between conformity and anger.

Value of security was found to correlate negatively with physical aggression ($r=-.111$, $p<.01$), hostility ($r=-.104$, $p<.01$) and verbal aggression ($r=-.126$, $p<.01$) and positively with anger ($r=.118$, $p<.01$). Which implies that adolescents endorsing value of security had lower tendencies for showing physical aggression, hostility, and verbal aggression while as, higher tendency for showing anger.

Physical aggression was found to correlate positively with hostility ($r=.523$, $p<.01$), verbal aggression ($r=.439$, $p<.01$), anger ($r=.486$, $p<.01$), with adolescents reporting high on physical aggression being correlated with higher hostility, verbal aggression, and anger. Hostility was found to have positive correlation with verbal aggression ($r=.432$, $p<.01$) and anger ($r=.363$, $p<.01$), with adolescents reporting high on hostility being correlated with higher verbal aggression and anger. Verbal aggression was found to have positive correlation with anger ($r=.327$, $p<.01$), with adolescents reporting high on verbal aggression being correlated with higher anger.
### Table 4(a)

**Showing Comparison between the Adolescents of Jammu region and Kashmir region in terms of their Stress level**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Kashmir (N=324, df=625)</th>
<th>Jammu (N=303, df=625)</th>
<th>t-value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress</td>
<td>65.38 (10.68)</td>
<td>61.83 (11.23)</td>
<td>4.05</td>
<td>.000</td>
</tr>
</tbody>
</table>

In table-4(a) adolescents living in the highly conflict area i.e., Kashmir region were compared to those living in the relatively peaceful Jammu region on the psychological variable of stress. Results reveal that adolescents from two regions i.e. Jammu and Kashmir differ significantly in terms of their level of stress ($t = 4.05, p < .000$). Adolescents living in Kashmir region reported significantly more stress ($M = 65.38, SD = 1.68$) in comparison to the adolescents living in Jammu region ($M = 61.83, SD = 11.23$). The obtained findings thus depict that the adolescents living in the Kashmir region experience greater stress than their counterparts living in Jammu region.

From the results in table - 4(a), it is clearly evident that adolescents from the conflict ridden Kashmir region were found to be more stressed than the adolescents living in the relatively peaceful Jammu region. The above findings are consistent with the report published by mental health experts of Srinagar revealing that there has been an uncontrollable increase in the number of stress and trauma related patients in the Kashmir Valley (“The News”, 2005). This may be due to the fact that adolescents of Kashmir region have grown up in unpredictable and insecure conditions, facing constant threat to life, such circumstances are likely to exhaust the natural coping mechanisms of the individual thereby causing high levels of stress among them. Cohen and Eid (2007) have also established that teenagers residing in the vicinity of terrorist attack have high levels of stress as compared to those living in vicinities with a low risk of attacks. Schuster et al. (2001) have also noted that terrorist incidences lead to decreased feeling of safety, and heightened perception of threat among the community members which in turn results in the increased level of stress among them. The above finding is also supported by findings of the prior studies conducted by Summerfield...
(1997); and Kimhi and Shamani (2006) reporting that population living under the threat of terrorism are most likely to develop symptoms of distress.

### Table 4(b)

**Showing Comparison between Adolescents of Jammu region and Kashmir region in terms of their General Health as well as on its dimensions**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Kashmir (N=324, df=625)</th>
<th>Jammu (N=303, df=625)</th>
<th>t-value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somatic Complaints</td>
<td>14.73 (1.02)</td>
<td>9.66 (2.33)</td>
<td>35.70</td>
<td>.00</td>
</tr>
<tr>
<td>Anxiety</td>
<td>15.14 (1.35)</td>
<td>10.55 (2.93)</td>
<td>25.42</td>
<td>.00</td>
</tr>
<tr>
<td>Social Dysfunction</td>
<td>14.52 (.86)</td>
<td>9.17 (2.50)</td>
<td>36.30</td>
<td>.00</td>
</tr>
<tr>
<td>Severe Depression</td>
<td>14.98 (1.27)</td>
<td>10.08 (2.74)</td>
<td>28.99</td>
<td>.00</td>
</tr>
<tr>
<td>Total General Health</td>
<td>59.38 (3.38)</td>
<td>39.47 (8.21)</td>
<td>40.17</td>
<td>.00</td>
</tr>
</tbody>
</table>

*Note: High scores on General health questionnaire (GHQ)-28 and its dimensions indicate poor health and vice versa*

Table-4(b) provides the pattern of comparisons between the adolescents from Kashmir region and Jammu region on the variable of general health as well as on its dimensions. Results indicate that both groups differ significantly on the overall general health score ($t = 40.17$, $p < 0.000$). Adolescents from Kashmir ($M = 59.38$, $SD = 3.34$) scored higher mean than those belonging to Jammu region ($M = 39.47$, $SD = 8.21$) on the total general health. As the higher scores on GHQ-28 implies poor health status indicating that adolescents from Kashmir valley have poor general health in comparison to the adolescents from Jammu region.

Table-4(b) further shows the comparisons of these two groups on the four dimensions of general health. On the dimension of somatic complaints the two groups differed significantly ($t = 35.70$, $p < 0.000$), with Kashmiri adolescents ($M = 14.73$, $SD = 1.02$) showing higher symptoms of somatic complaints than the adolescents from Jammu region ($M = 9.66$, $SD = 2.33$). The two groups also differed significantly on
the dimension of anxiety/insomnia \((t = 25.42, p < 0.000)\). Higher level of anxiety was observed in adolescents from Kashmir valley \((M = 15.14, SD = 1.35)\) in comparison to those living in Jammu \((M = 10.55, SD = 2.93)\). A significant difference was observed on the dimension of social dysfunction between the two groups \((t = 36.30, p < 0.000)\). On this dimension adolescents from Kashmir \((M = 14.52, SD = 0.86)\) scored higher mean than those residing in Jammu region \((M = 9.17, SD = 2.50)\). A statistically significant difference between the two groups was found on the dimension of severe depression \((t = 28.99, p < 0.000)\). Kashmiri adolescents \((M = 14.98, SD = 1.27)\) reported significantly more symptoms of severe depression than those living in Jammu \((M = 10.08, SD = 2.74)\). Suggesting that adolescents living in Kashmir region have poor general health than those from Jammu region.

From the comparisons obtained in table - 4(b), it is revealed that adolescents of Kashmir region suffer from more general health than those residing in Jammu region. The poor general health conditions of adolescents from the conflict ridden Kashmir region in comparison to those living in Jammu region could be due to the fact that the prevalence of chronic exposure to violence is much higher in the Kashmir region than those living in Jammu. As conflict and political violence have been found to disrupts the normal social structure of the society, thereby, increasing the stress and instability, and decreasing the sense of security among the members of society (Al-Krenawi, Graham, & Kanat-Maymon, 2009) which in turn is detrimental to the social and emotional development of adolescents (Al-Krenawi, Lev-Wiesel, & Sehwail, 2007; Giacaman, Hussein, Gordon, & Awartani, 2007) thus, having implication for the collective health status and well-being of their social contexts, including family, peer, and communities (Al-Krenawi et al., 2007) reflecting the multifaceted impact that exposure to violence can have on all the aspects of an adolescents life. The above results are also in collaboration with the studies conducted in other parts of the world revealing the association of exposure to violence with mental illness (Agudelo, 2005; Bleich, Gelkopf, & Solomon, 2003; Murthy & Lakshminarayana, 2006).

Somasundaram (2002) has also pointed out the prevalence of depression, anxiety, somatisation disorder, and drug abuse in the population exposed to violence. Somatic complaints among Kashmiri adolescents can be attributed to the unpredictable environment in which they live. As it has been confirmed that
individuals who perceives low feeling of control over situations are found to take negative situations as highly stressful and often experience negative affect with high intensities that in turn lead to somatic complaints (Antonovsky, 1979, 1987). Kugler, Bloom, Kaercher, Truax, and Storch (2012) in their study also observed that children who had experienced trauma abuse have higher rates of somatic complaints relative to children who had not. Social dysfunction among the adolescents of Kashmir may be because of the reason that conflict has disrupted the social fabric of the Kashmiri society because of which adolescents might tend to perceive the world as dangerous, unpredictable, and unsafe, and people as malevolent and untrustworthy. Such feelings of distrust negatively influences the individual’s interpersonal and social relationships which are characterised by social avoidance, social withdrawal, isolation, interpersonal conflict, changes in thinking such as decreased concentration, low self-esteem, and negative expectations about the future (Terr, 1991). Al-Eissa (1995) also found that reactions to war-related stress are exhibited in a substantially greater degree of social dysfunction and emotional behaviour. Moreover, it has also been postulated that life threat and physical harm, persistent worries lead to anxiety while as loss may produce the reaction of grief and depression (Pynoos & Nader, 1988). Hence, the anxiety among the adolescents of Kashmir region can be attributed to the constant threat to life and worries which they face in their daily routine while as their depression may be attributed to witnessing the death of their loved ones. Symptoms of anxiety and depression were also reported in the people of Afghanistan after the war (Cardozo et al., 2004; Scholt et al., 2004). Thabet, Abed, and Vostanis (2002) have also reported that children who face war and terror are more anxious and depressed. Also, the sleep of such children was found to be disturbed (Ronen, Rahav, & Rosenbaum, 2003). Thus, it can be said that health of adolescents is compromised by any type of armed conflict as well as political upheavals.
Table 4(c)  

Showing Comparison between Adolescents of Jammu region and Kashmir Region in terms of their Personal Values  

<table>
<thead>
<tr>
<th>Variables</th>
<th>Kashmir (N=324, df=625) Mean(SD)</th>
<th>Jammu (N=303, df=625) Mean(SD)</th>
<th>t-value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>5.22(1.68)</td>
<td>4.71(1.77)</td>
<td>3.67</td>
<td>.000</td>
</tr>
<tr>
<td>Achievement</td>
<td>6.81(1.71)</td>
<td>6.59(1.93)</td>
<td>1.53</td>
<td>.124</td>
</tr>
<tr>
<td>Hedonism</td>
<td>5.23(1.59)</td>
<td>4.93(1.44)</td>
<td>2.46</td>
<td>.014</td>
</tr>
<tr>
<td>Stimulation</td>
<td>5.38(1.62)</td>
<td>5.58(1.93)</td>
<td>1.41</td>
<td>.158</td>
</tr>
<tr>
<td>Self-direction</td>
<td>6.31(1.79)</td>
<td>5.96(1.87)</td>
<td>2.34</td>
<td>.019</td>
</tr>
<tr>
<td>Universalism</td>
<td>5.73(1.50)</td>
<td>6.26(1.79)</td>
<td>4.02</td>
<td>.000</td>
</tr>
<tr>
<td>Benevolence</td>
<td>6.63(1.79)</td>
<td>6.27(1.88)</td>
<td>2.44</td>
<td>.017</td>
</tr>
<tr>
<td>Tradition</td>
<td>5.90(1.93)</td>
<td>5.57(1.79)</td>
<td>2.19</td>
<td>.029</td>
</tr>
<tr>
<td>Conformity</td>
<td>6.77(1.66)</td>
<td>6.59(1.88)</td>
<td>1.44</td>
<td>.149</td>
</tr>
<tr>
<td>Security</td>
<td>6.21(1.66)</td>
<td>5.96(1.99)</td>
<td>1.69</td>
<td>.091</td>
</tr>
</tbody>
</table>

Table 4(c) shows the mean comparisons between the adolescents of Kashmir region and Jammu region with regards to their Personal values. The independent t-test reveals a statistically significant difference between the adolescents of two groups on the value of power ($t=3.67$, $p<0.00$). Adolescents from Kashmir ($M=5.22$, $SD=1.68$) gave more priority than those belonging to Jammu ($M=5.22$, $SD=1.77$) to the value of power. On the value of achievement no significant difference ($t=1.53$, $p<.137$) was found between the adolescents belonging to Jammu region ($M=6.59$, $SD=1.93$) and Kashmir region ($M=6.81$, $SD=1.71$). The two groups also differed significantly on the value of hedonism ($t=2.46$, $p<0.014$) with adolescents of Kashmir ($M=5.23$, $SD=1.59$) giving more importance to hedonism as compared to their counterpart residing in Jammu region ($M=4.93$, $SD=1.44$). No significant difference ($t=1.41$, $p<.15$) was seen between adolescents of Jammu ($M=5.58$, $SD=1.93$) and Kashmir ($M=5.38$, $SD=1.62$) on the value of stimulation. Results also displayed a significant difference on the value of self-direction ($t=2.35$, $p<0.02$).
with adolescents of Kashmir ($M = 6.31$, $SD = 1.80$) giving higher preference for the value of self-direction in comparison to those belonging to Jammu ($M = 5.96$, $SD = 1.87$). Statistically significant difference on the value of universalism was also found between the two groups ($t = 4.02$, $p < .00$). Adolescents from Jammu ($M = 5.73$, $SD = 1.79$) were found to score higher on this value than those living in Kashmir ($M = 6.26$, $SD = 1.50$). On the value of benevolence also the significant difference was reported ($t = 2.44$, $p < 0.015$). On this value adolescents from Kashmir region ($M = 6.63$, $SD = 1.81$) scored higher mean than those from Jammu ($M = 6.26$, $SD = 1.79$). Two groups also showed a significant difference on the value of tradition ($t = 2.19$, $p < .03$). Adolescents from Kashmir ($M = 5.90$, $SD = 1.93$) reported higher inclination towards the above mentioned value in comparison to their counterparts ($M = 5.57$, $SD = 1.79$). On the value of conformity no significant difference ($t = 1.39$, $p = .149$) was observed between adolescents of Jammu region ($M = 6.56$, $SD = 1.88$) and Kashmir region ($M = 6.77$, $SD = 1.66$). Adolescents from Jammu region ($M = 5.96$, $SD = 1.99$) and Kashmir region ($M = 6.21$, $SD = 1.66$) were not found to differ significantly on the value of security ($t = 1.73$, $p < .091$).

As, values express what is important to adolescents in their lives (Bardi & Schwartz, 2003), findings of table-4(c) revealed that all the ten value types were considered important by both the groups of adolescents in guiding their life (as mean score of all the ten values is above 4 for both the groups), but the groups differed in degree of importance attributed to different values. Since values represent basic human needs (Rokeach, 1973), adolescents from conflict ridden Kashmir valley demonstrated higher priorities for the values of power, hedonism, self-direction, benevolence, and tradition in comparison to those living in Jammu region. These findings are quite logical as status, looks, and wealth which are the organismic need of power value have offered important short term means of countering threats to security and survival in our evolutionary past (Buss, 2000), and this may be the reason that adolescents of Kashmir are more oriented towards the values like power. Giving more importance to the values of hedonism and self-direction means that they give more emphasis to the pursuit of self-interest, independent action, thought and feeling and are ready to face new challenges. Benevolence and tradition collectively represent devotion to ones in-group. Past literature has also indicated a strong, benevolent ties among the members of society following terror attacks (Vertzberger, 1997), also
benevolence is found to be related to threat perception (Goodwin, Willson, & Gaines, 2005). While as value of tradition helps individual to deal with fear and anxiety and in avoiding conflicts (Schwartz, 2003 a). Whereas, adolescents from Jammu region were found to give more importance to the value of universalism i.e., they are more concerned about the welfare of people and environment in the broader settings than the Kashmiri adolescents.

**Table 4(d)**

*Showing Comparison between Adolescents of Jammu region and Kashmir region in terms of their level of Aggression and its dimension*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Kashmir(N=324,df=625)</th>
<th>Jammu(N=303,df=625)</th>
<th>t-value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Aggression</td>
<td>40.19(6.18)</td>
<td>36.08(6.69)</td>
<td>8.00</td>
<td>.000</td>
</tr>
<tr>
<td>Hostility</td>
<td>10.63(2.09)</td>
<td>9.16(2.56)</td>
<td>7.91</td>
<td>.000</td>
</tr>
<tr>
<td>Verbal aggression</td>
<td>8.18(1.66)</td>
<td>7.17(2.20)</td>
<td>6.49</td>
<td>.000</td>
</tr>
<tr>
<td>Anger</td>
<td>23.09(3.96)</td>
<td>20.91(3.79)</td>
<td>7.05</td>
<td>.000</td>
</tr>
<tr>
<td>Total Aggression</td>
<td>82.11(10.41)</td>
<td>73.33(11.93)</td>
<td>9.83</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table-4(d) shows the mean comparison between the adolescents belonging to conflict ridden Kashmir valley and relatively peaceful Jammu region on the variable of aggression and its dimension. Results reveal that the two groups differed significantly \((t = 9.83, p < 0.00)\) in terms of their overall aggression levels. The adolescents from Kashmir region \((M = 82.11, SD = 10.41)\) scored higher mean than those belonging to Jammu \((M = 73.33, SD = 11.93)\), depicting that adolescents of Kashmir have more aggressive tendencies as compared to those from Jammu.

Table-4(d) further maps out that on the dimension of physical aggression the two groups differed significantly \((t = 8.00, p<0.00)\) with adolescents belonging to Kashmir \((M = 40.19, SD=6.18)\) showing higher physical aggression as compared to
those living in Jammu region ($M = 36.08, SD = 6.68$). The two groups also differed significantly on the dimension of hostility ($t = 7.91, p < 0.00$). On this dimension also adolescents from Kashmir ($M = 10.63, SD = 2.09$) scored higher mean value in comparison to those living in Jammu ($M = 9.16, SD = 2.56$). A significant difference was found on the dimension of verbal aggression ($t = 6.49, p < 0.00$). Adolescents from Kashmir ($M = 8.18, SD = 1.66$) reported higher verbal aggression than in those living in Jammu ($M = 7.20, SD = 2.20$). On the dimension of anger also a significant difference was found between the two groups ($t = 7.05, p < 0.000$). Adolescents from Kashmir ($M = 23.10, SD = 3.96$) were reported being more angry than their counterparts from Jammu ($M = 20.91, SD = 3.79$). These results suggest that adolescents living in the violent environment have more aggressive tendencies than adolescents living in non-violent environment.

On comparing the adolescents of Kashmir with those living in Jammu on the psychological variable of aggression, significantly higher aggressive tendencies (including physical aggression, verbal aggression, hostility, and anger) were found among those living in conflict ridden Kashmir region than their counterparts. These findings are in line with the study conducted by Guerra, Huesmann, and Spindler, (2000). They reported that witnessing community violence was found to be positively associated with children's aggressive behaviour. Youth of Kashmir may have also learned to be aggressive from the violent environment in which they live. As, aggression is a learned behaviour, and repeated exposure to violence can teach new aggressive behaviour to children as well as reduces the inhibition to act in a violent manner (Bandura, 1973). Moreover, it is found that children who are repeatedly exposed to violence during childhood get habituated to it and experience it as less aversive this makes it easier for them to think and plan aggression (Huesmann, 1998). Besides this, they may be using aggression as a strategy to protect themselves and to conform their survival in the threatening environment. As, there are evidences which reveal that environmental demands like need to obtain social resources and need to protect oneself from harm fosters the development of belief and behaviour like aggression, which are adaptive in certain contexts (Hawley, 2003; Ng-Mak, Salzinger, Feldman, & Stueve, 2004). While as, Archer (2004) argued that the use of aggression may also be interpreted as a difficulty in dealing with conflict or even a maladaptive strategy for conflict. Another reason behind the higher aggression level of Kashmiri
adolescents may be the presence of abundance of weapons (e.g. guns etc.) in their surroundings. As, the mere presence of a weapon has also been found to elicit an increase in aggressive behaviour in individuals (Berkowitz & Le Page, 1967).

The greater tendency of physical aggression among group of Kashmiri adolescents is likely because of the frustration, helplessness, and hopelessness that they experience because of the constant atrocities that they face due to the conflict. There is also previous evidence which reports that high level of physical aggression is associated with psychosocial maladjustments among both perpetrators and victims (Crick & Nelson, 2002). From the table- 4(a) it is clear that adolescents of Kashmir experience more stress and this stress may be the reason of their verbal aggression. As, Fry and Karney, (2006) are also of the opinion that stress is related to higher levels of verbal aggression. The adolescents of Kashmir have witnessed violence both directly, i.e., confronting violent act personally as well as indirectly, i.e., through media, each of these are found to change the perception and interpretation of individual towards the world, thereby, making them hostile. When the world is perceived as a dangerous place, it is likely that the information received will be interpreted as threatening, and individuals will react accordingly. Favouring the above finding (Zillmann & Weaver, 1999) have reported that long-lasting exposure to the violent films is associated with hostile behaviour in unprovoked participants and greater hostile behaviour in provoked participants. Al-Krenawi, Lev-Wiesel, and Sehwail (2007) have found higher level of hostility among those who were exposed to political violence events. However, hostility represents the cognitive aspect of aggression and is supposed to play important role in the initiation of anger representing the affective aspect of aggression (Beck, 1994), thus we can say that hostility and anger are closely related to each other and may reciprocally activate each other and motivate the individual to engage in aggressive behaviour against others.
Table 5(a)

*Showing comparison of adolescents from Jammu region and Kashmir region in terms of Gender on the level of Stress*

<table>
<thead>
<tr>
<th>Groups</th>
<th>Variables</th>
<th>Gender</th>
<th>Boys</th>
<th></th>
<th>Girls</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mean(SD) N(df)</td>
<td></td>
<td>Mean(SD) N(df)</td>
<td>t-value</td>
</tr>
<tr>
<td>Kashmir</td>
<td>Stress</td>
<td></td>
<td>64.15(9.98) 188(322)</td>
<td>67.08(11.40) 136(322)</td>
<td>2.45</td>
<td>.015</td>
</tr>
<tr>
<td>Jammu</td>
<td>Stress</td>
<td></td>
<td>58.80(11.76) 175(301)</td>
<td>65.96(8.96) 128(301)</td>
<td>5.76</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table-5(a) shows that there is a significant gender difference on stress in the adolescents belonging to both Jammu as well as Kashmir regions. Scores from the table-5(a), reveal that in Kashmir region boys and girls were found to differ significantly ($t = 2.45$, $p<0.015$) in terms of their stress level, with girls showing a higher mean score on stress ($M = 67.08$, $SD=9.98$) than boys ($M = 64.15$, $SD = 11.40$). Similarly, in case of Jammu region also, a significant difference ($t = 5.76$, $p<0.000$), was found between the two groups. Girls scored significantly higher ($M = 65.96$, $SD = 8.96$) than that of boys ($M = 58.80$, $SD = 11.76$) on stress. It implies that in general girls were more vulnerable to stress than boys.

Finding of the table-5(a) clearly indicate that girls are in-general at higher risk for developing stress symptoms. This may be because of the reason that females are emotionally and physically weak and get easily affected by any stressful situation. Moreover, girls tend to be relatively more dependent on the family than boys, and the disintegration of family as the result of any kind of conflict, fear of loss or death of parents and other loved ones, have major repercussions on their psychological and emotional health leading to psychological stress in them. Past studies have also shown that female adolescent’s distress was significantly related to all types of exposure to community violence, but male adolescent’s distress was significantly related only to their own victimization or that of their familiar person (Jenkins & Bell, 1994). Studies
conducted by Allen, Moore, Kuperminc, & Bell (1998); Pat-Horenczyk (2005); Slone, Adiri, and Arian (1998) also supported the above finding. It has also been pointed out that the coping strategies that women use are less effective in buffering the psychological effects of life stress than are those that men use (Pearlin & Schooler, 1978).

Table 5(b)

*Showing comparison of adolescents from Jammu region and Kashmir region in terms of Gender on General health and its dimensions*

<table>
<thead>
<tr>
<th>Groups</th>
<th>Variables</th>
<th>Gender</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>t-value</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mean(SD)</td>
<td>Mean(SD)</td>
<td>N(df)</td>
<td>N(df)</td>
</tr>
<tr>
<td>Kashmir Region</td>
<td>Somatic Complaints</td>
<td></td>
<td>14.75(.99)</td>
<td>14.71(1.06)</td>
<td>188(322)</td>
<td>136(322)</td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td></td>
<td>15.00(1.24)</td>
<td>15.33(1.47)</td>
<td>188(322)</td>
<td>136(322)</td>
</tr>
<tr>
<td></td>
<td>Social Dysfunction</td>
<td></td>
<td>14.54(.91)</td>
<td>14.49(.79)</td>
<td>188(322)</td>
<td>136(322)</td>
</tr>
<tr>
<td></td>
<td>Severe Depression</td>
<td></td>
<td>14.89(1.11)</td>
<td>15.11(1.46)</td>
<td>188(322)</td>
<td>136(322)</td>
</tr>
<tr>
<td></td>
<td>Total General Health</td>
<td></td>
<td>59.19(3.07)</td>
<td>59.65(3.75)</td>
<td>188(322)</td>
<td>136(322)</td>
</tr>
<tr>
<td>Jammu Region</td>
<td>Somatic Complaints</td>
<td></td>
<td>9.40(2.34)</td>
<td>10.01(2.26)</td>
<td>175(301)</td>
<td>128(301)</td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td></td>
<td>10.20(2.76)</td>
<td>11.03(3.08)</td>
<td>175(301)</td>
<td>128(301)</td>
</tr>
<tr>
<td></td>
<td>Social Dysfunction</td>
<td></td>
<td>9.27(2.72)</td>
<td>9.02(2.16)</td>
<td>175(301)</td>
<td>128(301)</td>
</tr>
<tr>
<td></td>
<td>Severe Depression</td>
<td></td>
<td>9.95(2.53)</td>
<td>10.27(2.99)</td>
<td>175(301)</td>
<td>128(301)</td>
</tr>
<tr>
<td></td>
<td>Total General Health</td>
<td></td>
<td>38.83(8.32)</td>
<td>40.34(7.99)</td>
<td>175(301)</td>
<td>128(301)</td>
</tr>
</tbody>
</table>

*Note: High scores on General health questionnaire (GHQ)-28 and its dimensions indicate poor health and vice versa*
Table-5(b) indicates gender based mean comparisons of adolescents belonging to Jammu region and Kashmir regions on the psychological variable of general health and also on its dimensions. Results reveal that boys (\(M = 59.19, SD = 3.07\)) and girls (\(M = 59.65, SD = 3.75\)) from Kashmir region did not differ significantly (\(t = 1.2, p < .23\)) in terms of their mean score on overall general health. Looking at the dimensions of general health, no significant difference (\(t = .32, p < .75\)) was found between boys (\(M = 14.75, SD = .99\)) and girls (\(M = 14.71, SD = 1.06\)) of Kashmir region on the dimensions of somatic complaints. On the dimension of social dysfunction also boys (\(M = 14.54, SD = .91\)) and girls (\(M = 14.49, SD = .79\)) were not found to differ significantly (\(t = .57, p < .57\)). No significant difference (\(t = .57, p < .57\)) was found between boys (\(M = 14.89, SD = 1.11\)) and girls (\(M = 15.11, SD = 1.46\)) of Kashmir region on the dimension of severe depression. Moreover, on the dimension of anxiety/insomnia a significant difference (\(t = 2.19, p < .03\)) was found between the boys and girls of Kashmir region. Girls (\(M = 15.33, SD = 1.47\)) of Kashmir region were found to score higher mean in comparison to boys (\(M = 15.00, SD = 1.24\)) on the dimension of anxiety. Suggesting that although there was no gender difference among the adolescents of Kashmir on the total general health and its dimensions except for anxiety, girls from Kashmir region were found to be more anxious than boys.

In case of Jammu region also no significant difference (\(t = 1.58, p < .114\)) was seen between boys (\(M = 38.83, SD = 8.32\)) and girls (\(M = 40.34, SD = 7.99\)) on over all general health scores. Going through the dimensions it was revealed that girls (\(M = 10.01, SD = 2.26\)) from Jammu region were found to score significantly higher mean than boys (\(M = 9.40, SD = 2.34\)), (\(t = 2.27, p < .024\)), on the dimensions of somatic complaints. On the dimension of anxiety also girls (\(M = 11.03, SD = 3.08\)) were found to score significantly higher than boys (\(M = 10.20, SD = 2.76\)), (\(t = 2.44, p < .015\)). On the dimension of social dysfunction boys (\(M = 9.27, SD = 2.72\)) and girls (\(M = 9.02, SD = 2.16\)) did not found to show any significant difference (\(t = .86, p < .390\)). On the dimension of severe depression also no significant difference (\(t = 1.01, p < .309\)) was found between the boys (\(M = 9.95, SD = 2.53\)) and girls (\(M = 10.27, SD = 2.99\)) of Jammu region. Indicating that although boys and girls of Jammu region did not differ significantly in terms of total general health score but girls of Jammu showed significantly more symptoms of somatic complaints and anxiety then boys.
From the findings of table-5(b) it is evident that there was no significant effect of gender on overall general health of adolescents belonging to Kashmir valley. Suggesting that psychological health of both boys and girls of Kashmir was equally affected by the rages of ongoing conflict. This is in line with the studies conducted by Grant et al. (2005); Kliewer, (2006); Kliewer, Lepore, Oskin, & Johnson (1998) reporting that gender did not influence the development of internalizing symptoms, even if the girls witness more community violence. Moreover, no significant difference between the two groups was found on the dimensions of general health except for the dimension of anxiety. On the dimension of anxiety girls scored higher mean than boys, indicating that girls are more anxious than boys. This finding is in line with the study conducted by Foster, Kupermine, and Price (2004) reporting that girls exposed to community violence showed higher level of anxiety and posttraumatic stress whereas, boys did not report higher levels of either.

In the relatively peaceful region of Jammu also, no significant difference was found between the boys and girls on overall general health. But the boys and girls of Jammu region did show a significant difference on the general health dimensions of anxiety and somatic complaints. The girls showed a higher mean score than boys on both these dimensions, indicating that girls of Jammu have more anxiety accompanied with somatic complaints than their counterparts. Previous literature also reveals that girls are twice as prone to anxiety as boys (Clark, 2011). This may be because in general girls are more inclined towards negative emotion, self-criticism, and endless rumination about problems. Lewinsohn, Gotlib, Lewinsohn, Seeley, and Allen (1998) also found that female participants reported significantly higher degree of anxiety symptomatology than male participants. Hewitt and Norton (1993) have further asserted that women with anxiety disorders appear to report a significantly higher severity level of the cognitive and somatic symptoms of anxiety, compared to men. Similarly, Egger, Costello, Eranli, and Angold (1999) have also confirmed that girls suffering from anxiety were found to be reporting somatic symptoms five times and headache three times more when compared to girls not diagnosed with an anxiety disorder.
Table 5(c)  

Showing Comparison of Adolescents of Jammu region and Kashmir region in terms of Gender on Personal values

<table>
<thead>
<tr>
<th>Group</th>
<th>Variables</th>
<th>Gender</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Boys</td>
<td></td>
<td>Girls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean(SD)</td>
<td>N(df)</td>
<td>Mean(SD)</td>
<td>N(df)</td>
<td>t-value</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Kashmir Region</td>
<td>Power</td>
<td>5.10(1.58)</td>
<td>188(322)</td>
<td>5.39(1.80)</td>
<td>136(322)</td>
<td>1.55</td>
<td>.121</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Achievement</td>
<td>6.53(1.81)</td>
<td>188(322)</td>
<td>7.21(1.47)</td>
<td>136(322)</td>
<td>3.62</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hedonism</td>
<td>5.16(1.63)</td>
<td>188(322)</td>
<td>5.34(1.54)</td>
<td>136(322)</td>
<td>.994</td>
<td>.321</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stimulation</td>
<td>5.01(1.61)</td>
<td>188(322)</td>
<td>5.89(1.49)</td>
<td>136(322)</td>
<td>4.98</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-direction</td>
<td>6.17(1.83)</td>
<td>188(322)</td>
<td>6.50(1.73)</td>
<td>136(322)</td>
<td>1.63</td>
<td>.103</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Universalism</td>
<td>5.34(1.56)</td>
<td>188(322)</td>
<td>6.28(1.20)</td>
<td>136(322)</td>
<td>5.87</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Benevolence</td>
<td>6.20(1.89)</td>
<td>188(322)</td>
<td>7.22(1.45)</td>
<td>136(322)</td>
<td>5.24</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tradition</td>
<td>5.43(1.95)</td>
<td>188(322)</td>
<td>6.55(1.7)</td>
<td>136(322)</td>
<td>5.36</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conformity</td>
<td>6.34(1.82)</td>
<td>188(322)</td>
<td>7.35(1.19)</td>
<td>136(322)</td>
<td>5.64</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Security</td>
<td>5.90(1.74)</td>
<td>188(322)</td>
<td>6.63(1.44)</td>
<td>136(322)</td>
<td>3.94</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Jammu Region</td>
<td>Power</td>
<td>4.59(1.87)</td>
<td>175(301)</td>
<td>4.88(1.60)</td>
<td>128(301)</td>
<td>1.36</td>
<td>.173</td>
<td></td>
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<tr>
<td></td>
<td>Achievement</td>
<td>6.34(2.00)</td>
<td>175(301)</td>
<td>6.94(1.77)</td>
<td>128(301)</td>
<td>2.70</td>
<td>.007</td>
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</tr>
<tr>
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<td>Hedonism</td>
<td>4.71(1.41)</td>
<td>175(301)</td>
<td>5.24(1.43)</td>
<td>128(301)</td>
<td>3.22</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stimulation</td>
<td>5.70(1.95)</td>
<td>175(301)</td>
<td>5.42(1.89)</td>
<td>128(301)</td>
<td>1.22</td>
<td>.222</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-direction</td>
<td>5.81(1.92)</td>
<td>175(301)</td>
<td>6.18(1.79)</td>
<td>128(301)</td>
<td>1.72</td>
<td>.086</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Universalism</td>
<td>5.95(1.80)</td>
<td>175(301)</td>
<td>6.69(1.69)</td>
<td>128(301)</td>
<td>3.61</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Benevolence</td>
<td>6.10(1.96)</td>
<td>175(301)</td>
<td>6.51(1.73)</td>
<td>128(301)</td>
<td>1.88</td>
<td>.060</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tradition</td>
<td>5.30(1.80)</td>
<td>175(301)</td>
<td>5.95(1.71)</td>
<td>128(301)</td>
<td>3.19</td>
<td>.002</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conformity</td>
<td>6.17(2.08)</td>
<td>175(301)</td>
<td>7.10(1.38)</td>
<td>128(301)</td>
<td>4.41</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Security</td>
<td>5.50(2.12)</td>
<td>175(301)</td>
<td>6.59(1.56)</td>
<td>128(301)</td>
<td>4.88</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

Table-5(c) shows the gender-wise comparisons of adolescents from Jammu and Kashmir regions on ten personal values. Results clearly reveal that in Kashmir region no significant difference ($t=1.55$, $p<.12$) was found between boys ($M=5.10$, $SD=1.58$) and girls ($M=5.39$, $SD=1.80$) on the value of power. While as, a significant
gender difference was found on the values of achievement \((t=3.62, p<.001)\). Girls \((M = 7.21, SD = 1.47)\) scored higher mean on this value then boys \((M = 6.53, SD = 1.81)\).

No significant difference \((t = .994, p<.321)\) was seen between boys \((M = 5.16, SD = 1.63)\) and girls \((M = 5.34, SD = 1.54)\) of Kashmir region on the value of hedonism. On the value of stimulation the two groups differed significantly \((t = 4.98, p<.000)\) with girls \((M = 5.89, SD = 1.49)\) giving more priority than boys \((M = 5.01, SD = 1.61)\) to the value of stimulation. No significant difference \((t = 1.63, p<.10)\) was found between boys \((M = 6.17, SD = 1.83)\) and girls \((M = 6.50, SD = 1.73)\) on the value of self-direction. A significant difference between both groups was also found on the value of universalism \((t = 5.87, p<.00)\). On this value girls \((M = 6.28, SD = 1.20)\) scored higher mean than boys \((M = 5.34, SD = 1.56)\). The significant difference between boys and girls was also reported on the value of benevolence \((t = 5.24, p<.00)\) with girls \((M = 7.22, SD = 1.45)\) giving more importance to benevolence than boys \((M = 6.20, SD = 1.89)\). On the value of tradition also there was a significant difference between two groups \((t = 5.36, p<.00)\). Girls \((M = 6.55, SD = 1.71)\) reported significantly higher preference for this value than boys \((M = 5.43, SD = 1.95)\). The two groups differed significantly on the value of conformity \((t = 5.64, p<.00)\) with girls \((M = 7.35, SD = 1.19)\) showing higher preference for conformity than boys \((M = 6.34, SD = 1.82)\). On the value of security also the two groups differed significantly \((t = 3.94, p<.00)\). Girls \((M = 6.63, SD = 1.44)\) gave more preference to this value than boys \((M = 5.90, SD = 1.74)\). Results thus revealed that girls of Kashmir were found to give more importance to the values of achievement, stimulation, universalism, tradition, benevolence, conformity, and security than boys.

In case of Jammu region also no significant difference \((t=1.36, p<.17)\) was found between boys \((M = 4.59, SD=1.58)\) and girls \((M=4.88, SD=1.80)\) on the value of power. A significant difference between boys and girls was found on the value of achievement \((t=2.70, p<.001)\). Girls \((M=6.94, SD=1.77)\) gave higher preference to achievement value than boys \((M=6.34, SD=2.00)\). On hedonism the two groups differed significantly \((t=3.22, p<.001)\) with girls \((M=5.24, SD=1.43)\) showing higher inclination for this value than boys \((M=4.71, SD=1.41)\). On the value of stimulation boys \((M=5.70, SD=1.95)\) and girls \((M=5.42, SD=1.89)\) did not differ significantly. On the value of self-direction no significant difference was found between boys \((M=5.81, SD=1.72)\) and girls \((M=6.18, SD=1.79)\) of Jammu region. The boys and girls of
Jammu region showed significant difference on the value universalism ($t=3.61$, $p<.00$). Girls ($M=6.69$, $SD=1.20$) showed higher mean score on this value than boys ($M=5.95$, $SD=1.56$). No significant difference ($t=1.88$, $p<.06$) was found on the value of benevolence between boys ($M=6.10$, $SD=1.96$) and girls ($M=6.51$, $SD=1.73$). On the value of tradition significant difference was found between two groups ($t=3.19$, $p<.002$). Girls ($M=5.95$, $SD=1.71$) were found to be more traditional than boys ($M=5.30$, $SD=1.95$). Statistically significant difference between the two groups was found on the value of conformity ($t=4.41$, $p<.00$). Girls ($M=7.10$, $SD=1.38$) were found to be more conforming than boys ($M=6.17$, $SD=2.08$) on this value. The two groups also showed the significant difference on the value of security ($t=4.88$, $p<.00$). Girls ($M=6.59$, $SD=1.56$) of Jammu region were found to give more importance to this value in comparison to boys ($M=5.50$, $SD=2.12$). Implying that girls of this group were more oriented, towards the values of achievement, hedonism, universalism, conformity, tradition and security than boys.

Values are thought to have similar meanings for men and women (Prince-Gibson & Schwartz, 1998) but there are also some studies that have suggested gender difference in value priorities. From the results in table - 5(c), it is clear that all the 10 personal values were considered important by both boys and girls of the Kashmir region, but girls were found to give more importance than boys to the values of achievement, stimulation, universalism, benevolence, tradition, conformity and security. As people adapt their values according to their life circumstances (Schwartz & Bardi, 1997), and can modify them to fit the changes that society experience, the higher inclination of girls towards the values of achievement, stimulation, universalism, and benevolence might be because of their desire to live successful, fearless, prosperous and peaceful life, of which they are deprived. While as values of conformity, tradition, security serve as a means of dealing with fear and anxiety (Schwartz, 2003 a) thereby, helping people in avoiding conflicts, preserving the current orders and in taking active control against threats. This may be the reason behind giving higher importance to these values by girls of the Kashmir region.

While as in Jammu region also all the 10 values were considered important by both genders, but the girls have shown more inclination for the values of achievement, hedonism, universalism, tradition, conformity and security than boys. Although,
Jammu is a relatively peaceful area, but the trend of gender preference for personal values in Jammu region is almost same as that of the Kashmir region.

Table 5(d)

*Showing Comparison of Adolescents from Jammu region and Kashmir region in terms of Gender on level of Aggression and its dimensions*

<table>
<thead>
<tr>
<th>Groups</th>
<th>Variables</th>
<th>Gender</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Boys</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean(SD)</td>
<td>N(df)</td>
<td>Mean(SD)</td>
<td>N(df)</td>
<td>t-value</td>
<td>P</td>
</tr>
<tr>
<td>Kashmir Region</td>
<td>Physical aggression</td>
<td>40.78(6.23)</td>
<td>188(322)</td>
<td>39.39(6.01)</td>
<td>136(322)</td>
<td>2.01</td>
<td>.045</td>
</tr>
<tr>
<td></td>
<td>Hostility</td>
<td>10.65(2.12)</td>
<td>188(322)</td>
<td>10.61(2.04)</td>
<td>136(322)</td>
<td>1.64</td>
<td>.870</td>
</tr>
<tr>
<td></td>
<td>Verbal aggression</td>
<td>8.30(1.75)</td>
<td>188(322)</td>
<td>8.01(1.51)</td>
<td>136(322)</td>
<td>1.54</td>
<td>.123</td>
</tr>
<tr>
<td></td>
<td>Anger</td>
<td>22.38(3.68)</td>
<td>188(322)</td>
<td>24.08(4.12)</td>
<td>136(322)</td>
<td>3.90</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Total aggression</td>
<td>82.11(10.38)</td>
<td>188(322)</td>
<td>82.10(10.49)</td>
<td>136(322)</td>
<td>.012</td>
<td>.990</td>
</tr>
<tr>
<td>Jammu Region</td>
<td>Physical aggression</td>
<td>37.79(6.48)</td>
<td>175(301)</td>
<td>33.75(6.28)</td>
<td>128(301)</td>
<td>5.41</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Hostility</td>
<td>9.61(2.58)</td>
<td>175(301)</td>
<td>8.53(2.41)</td>
<td>128(301)</td>
<td>3.71</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Verbal aggression</td>
<td>7.56(2.22)</td>
<td>175(301)</td>
<td>6.64(2.06)</td>
<td>128(301)</td>
<td>3.69</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Anger</td>
<td>20.52(3.91)</td>
<td>175(301)</td>
<td>21.44(3.58)</td>
<td>128(301)</td>
<td>2.10</td>
<td>.036</td>
</tr>
<tr>
<td></td>
<td>Total aggression</td>
<td>75.49(11.90)</td>
<td>175(301)</td>
<td>70.37(11.37)</td>
<td>128(301)</td>
<td>3.76</td>
<td>.000</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01

The overall pattern of results in table 5-(d) indicate that there is no significant gender difference on overall aggression level between the adolescent boys and girls of Kashmir region but a significant difference is found among the adolescents living in Jammu region on the same variable. Results clearly show that boys (M=82.11, SD=10.38) and girls (M=10.49,SD=10.49) of Kashmir region do not differ significantly on the overall aggression level (t = 0.012, p< 0.990). However, on the dimension of physical aggression a significant gender difference (t=2.01, p< 0.045) was found among the adolescents of Kashmir region, with boys (M=40.78, SD=6.23)
scoring higher mean than girls ($M=39.39, SD=6.01$). On the dimension of hostility boys ($M=10.65, SD=2.12$) and girls ($M=10.61, SD=2.04$) were not found to differ significantly ($t = 0.164, p < .87$). On the dimension of verbal aggression also no significant difference ($t=1.54, p<0.125$) was found between boys ($M=8.30, SD=1.75$) and girls ($M=8.01, SD=1.51$) of Kashmir region. Moreover, a significant difference ($t = 0.164, p < .87$) was found between two groups on the dimension of anger, with girls ($M=24.08, SD=4.12$) scoring higher mean than boys ($M=20.52, SD=3.68$). The pattern of mean scores depict that in Kashmir valley, no significant gender difference was found on the total aggression score. But boys were found to be significantly more physically aggressive than girls while as on the dimension of anger, girls scored significantly higher mean than boys.

Table 5-(d) also reveals that in Jammu region a statistically significant gender difference was found among the adolescents on the variable of overall aggression level ($t= 3.76, p< 0.00$), with boys ($M=22.38, SD=11.90$) showing higher level of aggressive tendencies as compared to girls ($M= 70.37, SD=11.37$). Moreover in Jammu region, a significant gender difference was also found on all the four facets of aggression i.e. physical aggression ($t=5.41, p< .000$), hostility ($t =3.71, p< .000$), verbal aggression($t = 3.69, p<0.000$) and anger ($t = 2.10, p<0.036$). On the facet of physical aggression boys ($M= 37.79, SD=6.48$) were found to have significantly high score than girls ($M=33.75, SD=6.28$). Hostility was also found to be significantly high in boys ($M=9.61, SD=2.12$) than in girls ($M=8.53, SD=2.41$). On the dimension of verbal aggression also boys ($M=7.56, SD=2.22$) were found to score more than girls ($M=6.64, SD=2.06$). Results indicate that in Jammu region there was a significant gender difference on the variable of aggression as well as on its dimensions, with boys scoring more than girls. While as, on the dimension of anger, female adolescents ($M=21.44, SD=3.58$) scored significantly higher mean than the male adolescents ($M=20.52, SD=3.91$).

From the above findings, it is revealed that in the conflict ridden Kashmir valley no significant effect of gender was seen on the overall aggression. Suggesting that boys and girls living in the valley were equally aggressive. The absence of gender difference on overall aggression in Kashmir region can be attributed to the fact that in this conflict ridden region both boys and girls are equally exposed to the violence in one form or the other. Supporting the above finding, Farrell and Bruce (1997) have
also reported that witnessing violence is linked to violent externalizing behaviour (aggression) for both males and females. Bjorkquist (1994) also favours above finding by stating that it is not correct to claim that males are more aggressive than females.

While comparing the dimensions of aggression it was found that boys and girls of Kashmir region differed significantly on the two dimensions of aggression i.e., physical aggression and anger. On the dimension of physical aggression, boys were found to score higher mean value than girls while on the dimension of anger girls showed a higher mean score than boys. Results thus indicate that boys of Kashmir region have higher tendency for physical aggression than girls while as girls of this region exhibit more anger than boys. This may be because of the fact that in our society males are allowed to express their frustration through overt behaviour like physical aggression, whereas females are considered as submissive and their overt voice is always curbed down, and it is not considered to be good if they show physical aggression thus they may resort to covert form of aggression like anger. It is imperative to mention here that anger can be adaptive as it energizes an individual and increases the cognitive awareness to take action against a threat or perceived threat (Goleman, 1995).And this might also be the reason for higher levels of anger among girls of the Kashmir region. Moreover, if we look at the physical aggression rate, it is certainly true that males are more physically aggressive than females, but anthropological studies have shown that, it is not a universal truth (Fry, 1992; Cook, 1992).

Further, table-5(d) also showed that in Jammu region boys and girls differed significantly on overall aggression with boys exhibiting a greater tendency towards aggression in comparison to their female counterparts. As people living in Jammu region do not have as much exposure to violence as those living in Kashmir, the above findings are consistent with the previous researches that boys are more aggressive than girls (Bongers, Koot, van der Ende, & Verhulst, 2004; Quinsey Skilling, Lalumiere, & Craig, 2004). But inconsistent with the findings of study conducted by Rahaman and Haq (2005) which state that girls show more aggressive behaviour than boys regardless of SES and residential background. Nevertheless, Maccoby and Jacklins (1980) in their mata-analytic study found 24 outcomes favouring boy’s aggression, 8 with no difference and none in which girls displayed higher aggression.
Moreover, in Jammu region boys were found to have significantly higher levels of physical aggression, verbal aggression and hostility and girls were found to show more anger than boys. Bettencourt and Miller (1996) from their experimental analysis and Arscber (2004) from their analysis in real life settings have also confirmed that boys are physically and verbally more aggressive than girls. Whereas, Ramirez (1991, 1993) has reported that that boys engage more in physical aggression and hostility than girls.

### Table 6(a)

**Showing General Health of adolescent participants of Jammu and Kashmir region as predicted by Demographic variables, Stress, Personal values, and dimensions of Aggression**

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.064</td>
<td>.006</td>
<td>.025</td>
<td>.039</td>
</tr>
<tr>
<td>Religion</td>
<td>-.457*</td>
<td>-.445**</td>
<td>-.469**</td>
<td>-.395**</td>
</tr>
<tr>
<td>Residential background</td>
<td>-.224*</td>
<td>-.231**</td>
<td>-.190**</td>
<td>-.146**</td>
</tr>
<tr>
<td>Stress</td>
<td>.254**</td>
<td>.243**</td>
<td>.182**</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>.102**</td>
<td>.086**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achievement</td>
<td>.114**</td>
<td>.110**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hedonism</td>
<td>.136**</td>
<td>.115**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stimulation</td>
<td>-.081*</td>
<td>-.078*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-direction</td>
<td>.033</td>
<td>.034</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Universalism</td>
<td>-.145**</td>
<td>-.096**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benevolence</td>
<td>.018</td>
<td>.036</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tradition</td>
<td>-.018</td>
<td>-.006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conformity</td>
<td>-.029</td>
<td>-.006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>-.015</td>
<td>-.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical aggression</td>
<td></td>
<td></td>
<td></td>
<td>.055</td>
</tr>
<tr>
<td>Hostility</td>
<td></td>
<td></td>
<td></td>
<td>.177**</td>
</tr>
<tr>
<td>Verbal aggression</td>
<td></td>
<td></td>
<td></td>
<td>.065</td>
</tr>
<tr>
<td>Anger</td>
<td></td>
<td></td>
<td></td>
<td>.072</td>
</tr>
<tr>
<td>R²</td>
<td>.212</td>
<td>.273</td>
<td>.342</td>
<td>.410</td>
</tr>
<tr>
<td>R² Change</td>
<td>.212</td>
<td>.061</td>
<td>.069</td>
<td>.068</td>
</tr>
<tr>
<td>F</td>
<td>55.76(3,623)</td>
<td>58.29(4,622)</td>
<td>22.68(14,612)</td>
<td>23.47(18,608)</td>
</tr>
<tr>
<td>P</td>
<td>&lt;.000</td>
<td>&lt;.000</td>
<td>&lt;.000</td>
<td>&lt;.000</td>
</tr>
</tbody>
</table>

*Note: *p*.05, **p*.01, Labels assigned Gender: Boys=1,Girls=2, Religion: Muslim=1,Hindu=2, Residential background: 1=Urban,2=Rural.*
Table-6(a) provides the summary of the predictors of general health in the total sample (Jammu and Kashmir regions). In the first step demographic variables (gender, religion, and residential background) were taken as predictors of general health. In the second step variable of stress was added. In the third step facets of personal value (power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security) were entered. And in the fourth step dimensions of aggression (physical aggression, hostility, verbal aggression and anger) were added to the regression model. Hierarchical regression analysis revealed that at step one, demographic variable contributed significantly to the regression model, $F(3,623) = 55.76, p<.000$, and accounted for 21.2% of the variation in general health of adolescents. Out of three demographic predictors only two i.e., religion ($\beta=-.457$) and residential background ($\beta=-.224$) emerged out as significant predictors of general health. Introducing the stress variable explained an additional 6.1% of variation in general health and this change in $R^2$ was significant, $F(4,622) = 58.29, p<.000$. In step two stress came out as a significant predictor ($\beta=.254$). Inclusion of the facets of personal values explained an addition of 6.9% variation in general health and this change in $R^2$ was significant, $F(14,612) = 22.68, p<.000$. Out of the ten personal values, power ($\beta=.102$), achievement ($\beta=.114$), hedonism ($\beta=.136$), stimulation ($\beta=-.081$), and universalism ($\beta=-.145$) were found as significant predictors of general health. Finally, the addition of dimensions of aggression to the regression model accounted for 6.8% variation in general health and this change in $R^2$ was also significant, $F(18,608)=23.47, p<.000$. Of the four dimensions of aggression only hostility ($\beta=177$) emerged out to be the significant predictor. All the four models together accounted for 41.0% variance in general health, with religion ($\beta=-395$) emerging out to be the most significant predictor of general health.

Hierarchical regression analysis revealed that in the state of Jammu and Kashmir as a whole, demographic variables viz. religion and the residential background to which adolescents belong played an important role in predicting the general health of adolescents. Religion has the benefit of empowering the individual through connecting him/her to a community and to a superior force that might in turn give psychological stability (Oman & Thorensen, 2003). Literature has provided different reasons for the religion–health relationship, revealing that religion increases certain factors, protective of health including social support (George, Ellison, &
Larson, 2002), reduced depression (Ellison & Levin, 1998) and improved health habits (George et al., 2002). Researchers conducted in the past have also documented a difference between rural and urban health care which was expressed in terms of health care access and utilization, cost and geographical distribution of providers and services (Hartly, 2004). There are disparities in urban context with the means of socio-economic status, higher crime and violence, high risk behaviour etc., (Freudenberg, 2000), while as in rural context diet, insufficient health care (Morgan, 2002; Hartley, 2004), poor education, unemployment, and poverty (Milton, 2009), were reported possible causes of poor health.

Stress came out as another significant predictor of general health in the total sample implying that adolescents experiencing stress are likely to be diagnosed with general health problems. This finding is directly supported by a study conducted by the U.S. Department of Health and Human Services [DHHS] (1999), stating that stress acts as a risk factor for mental health disorders, which have been estimated to affect approximately one in five children ages 9 to 17 years. Studies conducted in occupational context have also revealed the association between work stress and individual’s health and wellbeing (Lorette et al., 2005).

Regression model also revealed that among ten facets of personal values as measured, only five values (power, achievement, hedonism, stimulation, and universalism) emerged out as the predictors for the criterion variable (general health). Out of these five values power, achievement, and hedonism were found to be significantly positively related to general health while as values of stimulation, and universalism were found to be negatively related to general health. Indicating that adolescents holding self-enhancement values were likely to predict more health problems and those holding values of stimulation and universalism were likely to enjoy good general health status. However, past research has tentatively identified that the value types of self-direction, benevolence, universalism, achievement, and stimulation contribute positively to mental health, whereas, the value type of conformity, tradition, security, and power are detrimental and considered unhealthy (Sagiv & Schwartz, 2000). The finding of the present research confirms the association between stimulation and universalism with good general health and association of power with poor general health. But, in contrary to above study an association of the values of achievement and hedonism was found with poor general
health. This may be because of the fact that both achievement and hedonism are self-limited values and may not be considered as socially desirable in the present context. According to Sheldon and Elliot (1999) only those values which are socially desirable, whether intrinsic or extrinsic lead to higher level of well-being.

Moreover, out of the four dimensions of aggression, only hostility emerged out to be the most significant predictor of general health. This may be because of the fact that hostile individuals usually get engaged in negative health behaviours and health risk factors like smoking, alcohol consumption etc. (Leiker & Hailey, 1988), and because of their antagonistic attitude and behaviour they are not able to extract the needed social support system (Gallo & Smith, 1999), which in turn leads to hyperactivity and more prolonged physiological responses when coping with stressors, especially interpersonal stressors (Guyll & Contrada, 1998) and various cardiovascular, neuro-endocrine and immune system alterations (Krantz & McCeney, 2002).
Table 6(b)

Showing General Health of adolescents of Kashmir region as predicted by Demographic variables, Stress, Personal values, and dimensions of Aggression

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.055</td>
<td>.004</td>
<td>.078</td>
<td>.029</td>
</tr>
<tr>
<td>Religion</td>
<td>.060</td>
<td>.066</td>
<td>.063</td>
<td>.094</td>
</tr>
<tr>
<td>Residential background</td>
<td>-.094</td>
<td>-.148**</td>
<td>-.189**</td>
<td>-.128*</td>
</tr>
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<td>Stress</td>
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<td>.389**</td>
<td>.282**</td>
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<td>Power</td>
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<td>-.021</td>
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</tr>
<tr>
<td>Achievement</td>
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<td>Universalism</td>
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<td>.062</td>
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<tr>
<td>Benevolence</td>
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<td>.011</td>
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<tr>
<td>Tradition</td>
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<td>-.138*</td>
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<tr>
<td>Conformity</td>
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<td>-.174**</td>
<td>-.156**</td>
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<td>Security</td>
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<tr>
<td>Physical aggression</td>
<td></td>
<td>-.059</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hostility</td>
<td></td>
<td>.164**</td>
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<td></td>
</tr>
<tr>
<td>Verbal aggression</td>
<td></td>
<td>.198**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger</td>
<td></td>
<td>.146*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R²   | .018 | .123 | .182 | .273 |
R² Change | .018 | .105 | .059 | .090 |
F     | 1.92(3,320) | 11.20(4,319) | 4.917(14,309) | 6.345(18,305) |
P     | <.125 | <.000 | <.000 | <.000 |

*p<.05, **p<.01

The hierarchical regression analysis performed on the adolescents of conflict ridden Kashmir region as depicted in the table-6(b), shows that demographic variables at step one did not predict their general health significantly, F (3,320) = 1.92, p<.125, accounting for only 1.8% variation in general health. At step two when the variable of stress was added, additional variation of 10.5% was found in general health and this
change in $R^2$ was significant, $F(4,319)=11.2, p<.000$. Along with stress ($\beta=.332$), residential background ($\beta=-148$) also emerged out to be the significant predictor of health at step two. Adding personal values at step third accounted for additional 5.9% variation in general health and this change in $R^2$ was significant, $F(14,309)=4.917, p<.000$. Of the ten personal values only tradition ($\beta=-.018$) and conformity ($\beta=-.029$) were found to contribute significantly to regression model. Finally, adding dimensions of aggression at step four explained additional 9.0% of variation in general health and the change in $R^2$ was also significant, $F(18,305)=6.34, p<.000$. Out of the four dimensions of aggression hostility ($\beta=.164$), verbal aggression ($\beta=.198$) and anger ($\beta=.146$) emerged out to be significantly contributing to general health. Moreover, in the fourth step, value of tradition did not appear to be a significant predictor of general health. All the four models together were found to account for 27.3% variance in general health, with stress emerging out as a strong predictor of general health with beta coefficient ($\beta=.28$).

Findings obtained in table-6(b) revealed that among the adolescents of Kashmir region, i.e., high conflict area, out of the three demographic variables only one, i.e., residential background emerged out as the significant predictor of general health. This finding appears to be logical as people living in urban settings have higher accessibility and affordability in receiving professional help (Chatterjee, Patel, Chatterjee, & Weiss, 2003), while as, the rural population live in poverty and poverty may be a significant deterrent of mental health. Amin and Khan (2009) have also confirmed that in Kashmir region depression is much higher in rural areas (84.73%) as compared to urban areas (15.26%).

Stress from which adolescents suffered was also found to be the significant predictor of general health among the group of Kashmiri adolescents. This result is consistent with the study conducted by Compas and Reeslund (2009), which states that exposure to stressors represent a significant source of risk to the healthy development of adolescents. They further stated that when faced with the same stressor(s), the stress process and the impact from stress vary individually and lead to different health outcomes depending on individual and environmental vulnerabilities and resources, as well as the ability to cope effectively with the stressors. Kramer, Kwong, Lee, and Chung (2002) further asserted that stress and conflict in teenagers lead to isolation and withdrawal or acting out behaviours that in turn can lead to
depression. Martin, Kazarian, and Breiter (1995) has also found that children and adolescents who report high levels of perceived stress are at high risk for negative outcomes, such as depression.

Further, it was found that only two facets of personal value (tradition, and conformity) emerged out as the predictor of general health. Tradition and conformity were found to correlate negatively with the general health. This implies that adolescents having high value of tradition and conformity were found to have good general health. This result is in contrary to the study conducted by Sagiv and Schwartz (2000) according to which tradition and conformity have a detrimental effect on mental health. While in the context of conflict ridden Kashmir region, where forcible arrests, disappearances, and fake encounters are common, emerging of tradition and conformity as predictors of general health appears to be quite logical. As, conformity values, which are derived from the motivational goal that individuals inhibit inclinations that might disrupt and undermine smooth interaction and group functioning and tradition values, which encompasses practices, symbols, ideas, and beliefs that represent their shared experience and fate of a society appear to be socially desirable in the context of Kashmir. And socially desirable values are directly related to higher levels of well-being (Sheldon & Elliot, 1999). There are also some findings which indicate that tradition and conformity are related with the affective component of subjective well-being, but not with the cognitive component (Sagiv & Schwartz, 2000).

Furthermore, out of the four dimensions of aggression three (hostility, verbal aggression and anger) were found to be the significant predictors of general health among the adolescents of the Kashmir region. All these three dimensions of aggression positively predicted general health. Suggesting that adolescents having a high score on hostility, verbal aggression, and anger may have more health problems. These findings are in line with the prior findings, which state that childhood aggression are associated with the maintenance of externalizing disorders and development of internalizing disorders (Russo & Beidel, 1994). Moss et al. (2000) have further pointed out that symptoms of anxiety, psychosis, depression and hypomania were all found to be higher in participants demonstrating the problematic behaviour. Freedman, Sears, and Carlsmith (1998) also showed that adolescents with high anxiety scores also had high aggressiveness scores. Moreover prolonged anger is
thought to place unnecessary demand on the physiological system, which in turn then becomes more susceptible to detrimental health effects (Martin et al., 1999). Researchers have also reported that verbal aggression can inflict long-term mental and emotional harm, particularly during a person’s formative adolescent years (Assink, 2008). Moreover prolonged anger is thought to place unnecessary demand on the physiological system, which in turn then becomes more susceptible to detrimental health effects (Martin et al., 1999).

Table 6(c)

*Showing General Health of adolescents of Jammu region as predicted by Demographic variables, Stress, Personal values, and dimensions of Aggression*

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.079</td>
<td>.005</td>
<td>.030</td>
<td>.060</td>
</tr>
<tr>
<td>Religion</td>
<td>.066</td>
<td>.060</td>
<td>.016</td>
<td>.016</td>
</tr>
<tr>
<td>Residential background</td>
<td>.000</td>
<td>.009</td>
<td>.023</td>
<td>.008</td>
</tr>
<tr>
<td>Stress</td>
<td>.242**</td>
<td>.272**</td>
<td>.249**</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>.050</td>
<td>.032</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achievement</td>
<td>.079</td>
<td>.068</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hedonism</td>
<td>.103</td>
<td>.101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stimulation</td>
<td>-.008</td>
<td>-.020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-direction</td>
<td>.009</td>
<td>.022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Universalism</td>
<td>.013</td>
<td>.037</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benevolence</td>
<td>-.019</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tradition</td>
<td>-.066</td>
<td>-.052</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conformity</td>
<td>-.101</td>
<td>-.076</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>-.097</td>
<td>-.089</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical aggression</td>
<td></td>
<td></td>
<td>.099</td>
<td></td>
</tr>
<tr>
<td>Hostility</td>
<td>.160*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal aggression</td>
<td>-.060</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger</td>
<td></td>
<td></td>
<td>.091</td>
<td></td>
</tr>
<tr>
<td>R^2</td>
<td>.012</td>
<td>.065</td>
<td>.109</td>
<td>.170</td>
</tr>
<tr>
<td>R^2 Change</td>
<td>.012</td>
<td>.053</td>
<td>.044</td>
<td>.061</td>
</tr>
<tr>
<td>F</td>
<td>1.26(3,299)</td>
<td>5.18 (4,298)</td>
<td>2.52 (14,288)</td>
<td>3.22 (18,284)</td>
</tr>
<tr>
<td></td>
<td>P&lt;.288</td>
<td>P&lt;.000</td>
<td>P&lt;.002</td>
<td>P&lt;.000</td>
</tr>
</tbody>
</table>

*Note: *p<.05, **p<.01*
The hierarchical regression analysis performed on the adolescents representing Jammu region as revealed in the table-6(c), shows that at step one, demographic variables did not predict general health significantly, $F (3,299) =1.26, p<.200$, accounting for only 1.2% of variance in general health. When stress was entered at step two, additional 5.3% of variation was seen in general health and this change in $R^2$ was significant, $F (4,298) =5.180, p<.000$. Stress ($\beta=.242$) appeared to be the significant predictor of general health indicating that stressed adolescents are likely to have more health problems. Adding personal values to regression equation at step third, accounted for of 4.4% variation in general health and this change in $R^2$ was found to be significant, $F(14,288) =2.521, p<.002$. No individual personal value was found to contribute to the regression model significantly. Finally, addition of dimensions of aggression at step four, explained additional 6.1% of variation to general health and this change in $R^2$ was significant $F(18,284) =3.22, p<.000$. Of the four dimensions of aggression only hostility ($\beta=.160$) emerged as a significant predictor of general health. All the four models taken together accounted for 17.0% variation in general health, with stress emerging out to be a strongest predictor of general health with beta coefficient ($\beta=.24$) in Jammu region.

The hierarchical regression analysis performed on the adolescents of the relatively peaceful Jammu region, revealed that the level of stress experienced by the adolescents significantly predicted their general health. Stress was found to correlate positively with general health, implying that more stressful adolescents suffered more general health problems (high score means poor health). Apart from stress, hostility which is one the dimensions of aggression also emerged out as the significant predictor of general health among the adolescents of Jammu region.
Conclusion, Implications, Suggestions and Limitations
CHAPTER 4
CONCLUSION, IMPLICATIONS, SUGGESTIONS AND LIMITATIONS

Conclusion

The present research was planned to study the “level of stress, general health personal values and aggressive tendencies among the adolescents of Jammu and Kashmir regions”. Findings obtained on the basis of the results are concluded as under:

- In the total sample of Jammu and Kashmir region, a significant positive relationship was found between stress, general health, personal values and aggressive tendencies except for personal values and aggression.
- In the sample of Kashmir region, a significant positive relationship of stress was found with general health, personal values and aggressive tendencies. A positive relationship was also found between general health and aggression.
- In the sample of Jammu region, a significant positive relationship of stress was found with general health and personal values. General health was found to be significantly related with aggression. A positive relationship was also found between personal values and aggression.
- Adolescents from conflict region i.e., Kashmir were found to have higher levels of stress than those belonging to relatively peaceful Jammu region.
- Adolescents from Kashmir region reported significantly more general health problems than those of Jammu region.
- Adolescents from Kashmir were found to be significantly high on the values of power, hedonism, self-direction, universalism, benevolence and tradition than those belonging to Jammu region.
- Adolescents from Kashmir region were found to be significantly more aggressive than those belonging to Jammu region.
- In Kashmir region, significant gender difference was found on the variable of stress. Girls were found to be significantly more stressful than boys. Similarly, in Jammu region more stress was found among girl adolescents than boys.
- In Kashmir region, no significant gender difference was found in terms of general health, except for the dimension of anxiety. Girls were found to be
more anxious than boys. In case of Jammu region also no significant gender difference was found on general health as a whole, but the groups differed significantly on the dimensions of anxiety and somatic complaints. Girls were found to score significantly high on these dimensions than boys.

- In Kashmir region, significant gender difference was found on the values of achievement, stimulation, universalism, benevolence, tradition, conformity and security. It was found that girls gave more importance to the values of achievement, stimulation, universalism, benevolence, tradition, conformity and security than boys. While as, in Jammu region significant gender difference was found on the values of achievement, hedonism, universalism, tradition, conformity and security. Girls were found to give more priority to the values of achievement, hedonism, universalism, tradition, conformity, and security by than boys.

- In Kashmir region, no significant gender difference was found on aggression as a whole, but groups were found to differ significantly on the dimensions physical aggression and anger. Boys from Kashmir region showed higher tendency towards physical aggression than girls while as, girls scored higher on the dimension of anger than boys. On the contrary, significant gender difference was found in Jammu region on the variable of aggression as a whole, as well as on its four dimensions. Boys were found to score more on total aggression as well as on its dimensions than their counterparts.

- In the total sample of Jammu and Kashmir regions, religion, residential background (demographic variables); stress; value of power, achievement, hedonism, stimulation, universalism (facets of personal values); and hostility (facet of aggression) emerged out as the significant predictors of general health.

- In Kashmir region, residential background (demographic variable); stress; conformity value; hostility, verbal aggression and anger (facets of aggression) emerged out as the significant predictors of general health.

- In Jammu region, stress and hostility emerged out as the significant predictors of general health in Jammu region.

It is thus evident that conflict in the Kashmir valley, irrespective of gender, has adversely affected its adolescent population. Looking from the psychological
perspective conflict has led to the emotional distortion, mental imbalance, feeling of uncertainty and insecurity among the Kashmiri people. Moreover, exposure to unpredicted severe traumatic events on a daily basis has lead to the increase in psychological health problems and behaviour disorders like aggression as well as alterations in the value priorities of adolescents.

**Implications**

The results of the present thesis provided us valuable insight about the extent to which the adolescents of Kashmir region are affected by the long lasting and ravaging armed conflict. Furthermore, difference in value prioritization was also revealed. Although, it is not possible to separate out the impact of armed conflict from the physiological, psychological, social, economic, and political aspects of the people of Kashmir Valley, but the obtained results can be utilized by various agencies like school counsellors, clinical psychologists and policy makers in planning their intervention strategies. There is an alarming need for mental health education, training programs by mental health professionals including psychiatrists and psychologists. Apart from them, sociologists, social workers, teachers as well as religious leaders can also play an important role in teaching the younger generation how to cope with adverse situations like conflict. Furthermore, adolescents should be provided with a cooperative atmosphere at home, society and in school that will encourage them to take decisions and provide opinions. Attempts should be made to inculcate positive values among adolescents. It should be made compulsory for schools to have at least one trained counsellor. Last but not the least, government should provide proper avenues for the betterment of adolescents of Kashmir region.

**Suggestions and Limitations**

Research is a continuous process and it is equally true that at single point of time one can investigate only few aspects related to research variables. Thus there always remains a perspective for future investigation related to any research work. As far as the present research work is concerned it focused on the adverse consequences of living in the conflict ridden area on adolescents of Jammu and Kashmir region. And the results of this study also justify the fact that conflict has have devastating impact on the psychological, emotional, and moral aspects of adolescents. On the hand there are evidences in the literature showing traumatic events are not always bad. Quarantelli (1985) reported that survivors of the 1974 tornado in Xenia, Ohio,
who experienced psychological distress, where found to report positive outcomes as they had learned that they could handle crises effectively, and felt that they were better off for having met this type of challenge. Disaster may also bring a community closer together or reorient an individual to new priorities, goals or values. This concept has been referred to as posttraumatic growth by some authors (e.g., Calhoun, 2000). Thus a further research should investigate the on the aspect of 'posttraumatic growth' among the adolescents of Jammu and Kashmir.

The present study was empirical in nature, as human behaviour cannot be explained fully by using objective methods. Therefore, it is suggested that in future research should include both qualitative and quantitative investigation to provide insight for researcher with regard to impact of armed conflict on stress, general health, personal values and aggressive tendencies among adolescents. Also the same study can be conducted in the other parts of the country that witness disturbances, so that a wider picture of society could be framed which will help in implementing proper interventions at each level.

Moreover, the tools used to collect responses in this study were in English language, because of which many adolescents studying in public school faced difficulties in comprehending the questionnaires. So it is suggested that in future research tools to be used for data collection should be translated in to language well known to the respondents. The language of the tools should not be confusing like it should not include negative statements because it may lead to misinterpretation of the statements. Since, psychological tools are important and unavoidable means of psychological researches, so this suggestion must be properly taken care of with utmost importance and priority.
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Fairbrook, S.W. (2013). The physical and mental health effects of community violence exposure in pre-adolescent and adolescent youth. *Journal of Student Nursing Research, 6*(1), 24-30,


APPENDICES

DEMOGRAPHIC INFORMATION

AGE : .....................................................
Gender : ..................................................
FAMILY INCOME : ......................................
RURAL/ URBAN : ....................................... 
RELIGION : .............................................
JOINT/NUCLEAR FAMILY : ..............................
## STRESS MEASURING SCALE

**Instructions:**
You are requested to make self-assessment about the list of problems, statements and complaints that people usually experience as a response to stressful events/situations. Please read each statement carefully and encircle the number given against each statement to indicate how much you have been bothered about the problem.

Not at all  = 1  
A little bit  = 2  
Moderately  = 3  
Quite a bit  = 4  
Extremely  = 5

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>When something reminds me about the stressful events my heart pounds, breathing becomes tense and my body sweats.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Obsessive thoughts of unexpected happenings often disturb me and develop the feeling of nervousness.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Frequent and unexpected firing that lead to search operation in the valley is stress experience for me and others.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I become upset when I remember the death of my family member/ close relative / friend due to unprovoked violence.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>I perceive that people living in the valley are the soft targets of militants / forces.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>I am often stressed when I think that I can be the victim of violence.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>I feel irritable when something reminds me about the stressful events.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Arrest of innocent inhabitants is the cause of mental agony, sleeplessness and tension.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Due to prevailing conditions, I often feel that my home environment is becoming tense.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>I feel that something is intervening in maintaining relationship with others.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Perceiving threat of encounters / blasts impels me to think that life is always in danger.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>I usually avoid going to crowded places thinking that I may be the target of trouble creators.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>13.</td>
<td>Remembering traumatic events often disturbs me and creates the feeling of insecurity.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>I often have nightmares of stressful events.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>I feel restless when I think about killings of innocents inhabitants in the valley.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>I avoid thinking /talking about already occurred/unexpected events.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>I have lost interest in the activities I used to enjoy.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>I usually feel distant or cut off from other people.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>I often feel that my future will somehow be cut short.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>I become tense when I feel that my academic achievement and social relations are being affected.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
GENERAL HEALTH QUESTIONNAIRE-28 (GHQ-28)

Please read this carefully

We should like to know how your health has been in general, over the past few weeks. Please answer ALL the questions on the following pages simply by underlining the answer which you think most nearly applies to you. We want to know about present and recent health related complaints only, not those that you had in the past. The information used by you will be used for research purpose only.

It is important that you try to answer ALL the questions.

Have you recently

<table>
<thead>
<tr>
<th>Question</th>
<th>Better than usual</th>
<th>Same as usual</th>
<th>Worse than usual</th>
<th>Much worse than usual</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Been feeling perfectly well and in good health?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Been feeling in need of a good tonic?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
<tr>
<td>3. Been feeling run down and out of sorts?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
<tr>
<td>4. Felt that you are ill?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
<tr>
<td>5. Been getting any pains in your head?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
<tr>
<td>6. Been getting a feeling of tightness or pressure in your head?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
<tr>
<td>7. Been having hot or cold spells?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
<tr>
<td>8. Lost much sleep over worry?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
<tr>
<td>9. Had difficulty in staying asleep once you are off?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
<tr>
<td>10. Felt constantly under strain?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
<tr>
<td>11. Been getting edgy and bad tempered?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
<tr>
<td>12. Been getting scared or panicky for no good reason?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
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<td></td>
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</tr>
<tr>
<td>13.</td>
<td><strong>Found everything getting on top of you?</strong></td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
</tr>
<tr>
<td>14.</td>
<td><strong>Been felling nervous and strung-up all the time?</strong></td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
</tr>
<tr>
<td>15.</td>
<td><strong>Been managing to keep yourself busy and occupied?</strong></td>
<td>More so than usual</td>
<td>Same as usual</td>
<td>Rather less than usual</td>
</tr>
<tr>
<td>16.</td>
<td><strong>Been taking longer over the things you do?</strong></td>
<td>Quicker than usual</td>
<td>Same as usual</td>
<td>Longer than usual</td>
</tr>
<tr>
<td>17.</td>
<td><strong>Felt on the whole you were doing things well?</strong></td>
<td>Better than usual</td>
<td>About the same</td>
<td>Less well than usual</td>
</tr>
<tr>
<td>18.</td>
<td><strong>Been satisfied with the way you’ve carried out your task?</strong></td>
<td>More satisfied</td>
<td>About same as usual</td>
<td>Less satisfied than usual</td>
</tr>
<tr>
<td>19.</td>
<td><strong>Felt that you are playing a useful part in things?</strong></td>
<td>More so than usual</td>
<td>Same as usual</td>
<td>Less useful than usual</td>
</tr>
<tr>
<td>20.</td>
<td><strong>Felt capable of making decisions about things?</strong></td>
<td>More so than usual</td>
<td>Same as usual</td>
<td>Less so than usual</td>
</tr>
<tr>
<td>21.</td>
<td><strong>Been able to enjoy your normal day-to-day activities?</strong></td>
<td>More so than usual</td>
<td>Same as usual</td>
<td>Less so than usual</td>
</tr>
<tr>
<td>22.</td>
<td><strong>Been thinking of yourself as a worthless person?</strong></td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
</tr>
<tr>
<td>23.</td>
<td><strong>Felt that life is entirely hopeless?</strong></td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
</tr>
<tr>
<td>24.</td>
<td><strong>Felt that life isn’t worth living?</strong></td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
</tr>
<tr>
<td>25.</td>
<td><strong>Thought of the possibility that you might make away with yourself?</strong></td>
<td>Definitely not</td>
<td>I don’t think so</td>
<td>Has crossed my mind</td>
</tr>
<tr>
<td>26.</td>
<td><strong>Found at times you couldn’t do anything because your nerves were too bad?</strong></td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
</tr>
<tr>
<td>27.</td>
<td><strong>Found yourself wishing you were dead and away from it all?</strong></td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
</tr>
<tr>
<td>28.</td>
<td><strong>Found that the idea of taking your own life kept coming into your mind?</strong></td>
<td>Definitely not</td>
<td>I don’t think so</td>
<td>Has crossed my mind</td>
</tr>
</tbody>
</table>
SCHWARTZ SHORT VALUE SCALE

Dear respondent you are requested to rate the following values after making complete assessment in terms of their importance as a guiding principle for you. Use the following scale for rating each value by simply encircling the number given against each value i.e. from 0-8.

0= opposed to my principles
1= not important
4= important
8= of supreme importance

<table>
<thead>
<tr>
<th></th>
<th>POWER - social power, authority, wealth.</th>
<th>0 1 2 3 4 5 6 7 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>ACHIEVEMENT - success, capability, ambition, influence on people and events</td>
<td>0 1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>3.</td>
<td>HEDONISM - gratification of desires, enjoyment in life, self-indulgence</td>
<td>0 1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>4.</td>
<td>STIMULATION - daring, a varied and challenging life, an exciting life.</td>
<td>0 1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>5.</td>
<td>SELF-DIRECTION - creativity, freedom, curiosity, independence, choosing one's own goals.</td>
<td>0 1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>6.</td>
<td>UNIVERSALISM - broad-mindedness, beauty of nature and arts, social justice, a world at peace, equality, wisdom, unity with nature, environmental protection.</td>
<td>0 1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>7.</td>
<td>BENEVOLENCE - helpfulness, honesty, forgiveness, loyalty, responsibility.</td>
<td>0 1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>8.</td>
<td>TRADITION - respect for tradition, humbleness, accepting one's portion in life, devotion, modesty.</td>
<td>0 1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>9.</td>
<td>CONFORMITY - obedience, honoring parents and elders, self-discipline, politeness.</td>
<td>0 1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>10.</td>
<td>SECURITY - national security, family security, social order, cleanliness, reciprocation of favours.</td>
<td>0 1 2 3 4 5 6 7 8</td>
</tr>
</tbody>
</table>
AGGRESSION SCALE

Instructions:

Dear respondents you are requested to go through each statement carefully and make assessment on your own as to how each statement describes you. You are required to rate each statement using 5 point rating scale. If statement describes extremely uncharacteristic in you give a score of [1], somewhat uncharacteristic score [2], neither characteristic nor uncharacteristic score [3] somewhat characteristic score[4], extremely characteristic score [5]. Place your rating in the parenthesis given on the right side of each statement. Information given by you will be used for academic purpose only.

Extremely characteristic in you. 5
Somewhat characteristic in you. 4
Neither characteristic nor uncharacteristic in you. 3
Somewhat uncharacteristic in you. 2
Extremely uncharacteristic in you. 1

1) I have a temptation of fighting with others. ( ) PA
2) I try to dominate others by threatening them, in order to safeguard my identity. ( ) H
3) I usually behave in an unfriendly manner even with my close friends. ( ) A
4) I can go to the extent of hurting others physically for protecting the rights of the people. ( ) PA
5) If anyone creates hindrance in the path of my work, I get annoyed. ( ) A
6. I feel bitter even for small things. ( ) H
7. My friends think that I often end up my talks with verbal fights. ( ) VA
8. If someone pushes me I will push him/her back. ( ) PA
9. I often find myself disagreeing with others. ( ) VA
10. I retaliate against those who try to suppress me. ( ) PA
11. I lose my temper easily. ( ) A
12. I prefer violent means of getting justice. ( ) PA
13. When frustrated, I let my irritation show. ( ) A
14. I become angry when people do not accept my genuine feelings. ( ) A
15. If I feel insulted I become revengeful. ( ) PA
16 On seeing people protesting on streets, I can join them without giving a single thought. ( ) PA
17. I experience anger while arguing with people. ( ) A
18. I often make threats I don’t really mean to carry out. ( ) H
19. My friends think that I am a short -tempered person. ( ) A
20. I can press others to get my demands fulfilled. ( ) PA
21. I often use abusive words while having conversation with others. ( ) VA
22. If someone abuses me I feel like hitting him/her. ( ) PA
23. To protect the rights of people I can opt the path of violence. ( ) PA
24. I can intentionally damage public/private property to show my resentment. ( ) PA
25. I can take part in gang fights. ( ) PA
26. Those who continuously irritate me are asking for a punch in the nose. ( ) PA
27. I can annoy other peoples on street. ( ) H

Note;
PA=Physical aggression
VA=Verbal aggression
A=Anger
H=Hostility