

The Relationship of Risk and Protective Factors with Mental Health among the Youth in Kashmir

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Abstract

Introduction: The main intent of this study was to estimate the relationship of risk (adverse childhood experiences and conflict exposure) and protective factors (social support and hope) with mental health among youth in Kashmir, India.

Method: A cross-sectional co-relational research design was employed in this study. The study included a sample of 693 (college and university) students who completed the survey questionnaires including "Adverse Childhood Experiences Scale, Kashmir Conflict Exposure Checklist, Mental Health Inventory (MHI-18), Multidimensional Scale of Perceived Social Support and Adult Hope Scale" by using a multi-stage sampling method. Data was analyzed by computing Spearman's Rank-Order Correlation to test the relationship among the study variables.

Results: The findings revealed that Adverse Childhood Experiences (ACEs) and conflict exposure had a positive relationship with depression, anxiety, and loss of behavior control and a negative relationship with positive affect and overall mental health. On the contrary, social support and hope were negatively related with depression, anxiety, and loss of behavior control and positively related with positive affect and overall mental health, respectively.

Conclusion: The present study provides evidence regarding the negative impact of ACEs and exposure to conflict on the mental health of the youth. The protective role of social support and hope in enhancing the mental health was validated in the present study. Therefore, the findings suggest enhancement of social support and development hope to promote mental health among the trauma exposed youth of Kashmir.

Keywords: Trauma Exposure, Mental Health, Risk Factors, Protective Factors

Introduction

Mental health is one of the vital factors of the overall health of an individual. As per the World Health Organization (WHO), mental health is defined as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" [1]. There is an interdependence of the individual's physical, mental and social functioning and neither of these can exist alone. The WHO has considered mental health as one of the essential components of health in its definition of health. However, the promotion of mental health is important because mental disorders impose heavy burden on the individual in particular and on the community in general [2]. Although people of all age groups are affected by it, but the mental health of younger individuals is an important concern because of higher prevalence rates of mental disorders among them. Globally, mental disorders represent a huge extent of burden of disease among young people. The onset of most of the mental disorders starts between the ages of 12–24 years [3]. Poor mental health has a strong link with the wellbeing and other development concerns more specifically lower educational success, substance misuse and abuse, poor reproductive and sexual health [4,5].

The mental health problems have substantially increased in Kashmir since 1989 with the advent of conflict violence. The mental health problems prior to the armed insurgency were negligible wherein about 100 individuals were attending the hospitals for mental health concerns weekly in the 1980s which rose to 200-300 individuals on daily basis in 2012 [6]. There are 45% of Kashmiri people suffering from mental distress. Among them, 41% are suffering from depression, 26% are suffering from anxiety and 19% are suffering from Post-Traumatic Stress Disorder (PTSD), respectively [7].

ACEs are those events and experiences which are stress-related and traumatic in the nature occurring during the childhood of an individual. The examples of ACEs include physical abuse, sexual abuse, growing up with a mentally ill household member or substance-abusive household member and so on. ACEs are not only responsible for the causes of immediate health hazards, but also affect the individuals' health throughout lifespan [8]. Research reveals that exposure to traumatic events during childhood or ACEs have been associated with a number of mental health disorders such as depression, suicidal ideation and behaviors, consumption of alcohol, drug misuse and abuse, smoking behaviors and risky sexual behaviors, poor marital adjustment etc. [9-12]. Exposure to ACEs leads to psychological distress and affects the mental health of individuals inversely. When the environment of a place is devastated by stressful experiences during the early years of life, the exposed individuals become vulnerable to a range of health risk behaviors including physical and mental disorders in later life [13-15].

Social support is an essential factor which encourages positive behaviors and contributes to positive outcomes of mental health and wellbeing in response to life crisis or at the times of adversity in the form of friends, family and the community at large. It plays a vital role in bringing positive psychological changes in the individual that are essential for the maintenance of their mental health [16]. Research has revealed that higher perceived levels of social support are associated with better mental health and reduced distress symptoms. A positive association of social support with mental health has also been found in the situations marked by adversity in addition to its buffering effect [17-20].

Hope is an important construct which aids people to withstand in adverse conditions like war, diseases, injury or the armed conflicts tradition and help them to move towards the positive adjustment and growth [21]. Feeling of hope helps an individual to develop a positive attitude towards one's life, which in turn has a positive impact on his/her mental health [22, 23]. A sense of hope has been identified as one of the empirically supported component and important principle to protect and promote the mental health of the individuals who experience potentially stressful and traumatic events [24].

The mental health of the Kashmiri youth is a concern because they have been living in the conflict torn environment since their childhood. There have been more than 100,000 conflict related deaths in Kashmir since the outbreak of the armed insurgency and its people

experiencing a range of stressful experiences, for instance, killings, maltreatment, firing, explosions, teargas and pellet shelling, search operations, curfew, forced labor, torture, humiliation, sexual violence and so on [25]. A recent study has found that 99.7% of the Kashmiri youth experienced violence, 95.4% reported feelings of distress, 60.3% experienced physical sickness, 99.3% reported adverse impact of conflict on their education and 91.2% reported an adverse impact on others mental health due to conflict violence [26].

However, the factors such as social support and feelings of hope will be imperative in promoting mental health by mitigating the negative impact of risk factors like adversities during childhood and exposure to conflict. Therefore, in the same line, the current study was undertaken to examine the relationship of risk and protective factors with mental health among young adults studying in different colleges and universities of Kashmir.

Method

The sample consisted of 693 undergraduate and postgraduate students whose age was between 18 to 25 years. The sample was drawn from all the ten districts of Kashmir Valley. A multistage sampling technique was employed to recruit the study participants from colleges and universities of Kashmir. The recruitment was followed in two stages:

Stage I: This stage involved preparing a list of institutions by the researcher district-wise and selecting two institutions from each district randomly.

Stage II: This stage involved recruiting participants from the institutions including both undergraduate ($n = 440$) and postgraduate ($n = 253$) students for the present study making a total of 693. Available students on the voluntary basis participated in this study during the field visit.

The following inclusion and exclusion criteria were employed in the present study:

For the present study only colleges and universities were included and others were excluded, the students from Kashmir Valley were included and those coming from outside were excluded, male and female students were included and students from other gender were excluded, the students whose age range was not between 18-25 years were not included in the current study, and the students who had any prior mental illness were not included in this study.

Permission to carry out the study was obtained from institution heads such as College Principals and University Directors and Deans in Kashmir. Afterwards, we approached the students and provided a consent form to each of them with a request to sign on the same. The objectives of the study were briefed to the participants prior to the data collection process. It took about 20 to 30 for the participants to complete the questionnaires.

The tools used in this study were as follows:

Demographic Questionnaire: The socio-demographic characteristics of the participants were recorded by using a demographic questionnaire developed by the researcher. For example, gender, family type, native place, age, educational level and monthly family income of the

respondents were recorded for this study.

Kashmir Conflict Exposure Checklist (KCEC): The KCEC was prepared by the researcher on the basis of previous studies reporting exposure to armed conflict in Kashmir. The final version of conflict exposure checklist comprised of 17 items after pilot study. The participants required to report whether the particular event had occurred or not by indicating "yes" or "no". For instance, "Have you been hit with a bullet, pellet, or any other explosive?" A score of "1" was given to the "yes" response and "0" to the "no" response. The item score was added or summed up to arrive at the objective score of the conflict/trauma exposure.

Adverse Childhood Experiences (ACEs): This self-report measure was developed by Felitti et al. [27] in 1998. It has 17 item statements with dichotomous response options in the form of "yes" or "no". The respondents get a score of '1' if they receive a "yes" answer and a score of '0' is given if the answer is "no". The score on ACEs scale ranges from 0 to 17. The Cronbach's alpha coefficient was used to measure the reliability of the ACEs which was ascertained to be 0.82.

Mental Health Inventory (MHI-18): The MHI-18 developed by Veit and Ware [28] in 1983 was used to examine the mental health of the research participants. There are four subscales of MHI-18 that include anxiety, loss of behavioral control, depression, and positive affect as well as a total score. The response range of MHI-18 varies between 1 (all of the time) through 6 (none of the time). The eight items (1, 3, 5, 7, 8, 10, 13, & 15) of MHI-18 are reverse scored because of their opposite meaning. The range of the total score as well as subscales is 0-100. The reliability of the whole MHI-18 was obtained with the help of Cronbach's alpha coefficient that was found to be 0.72.

Multidimensional Scale of Perceived Social Support (MSPSS): The MSPSS developed by Zimet et al. [29] in 1988, was used to assess the perceived social support among respondents. There are 12 items in MSPSS which are rated on a 7-point Likert scale. The response of the scale items ranges from 1 meaning "strongly disagree" to 7 meaning "strongly agree". The score on MSPSS ranges from 12 to 84. The reliability of MSPSS was obtained with the help of Cronbach's alpha coefficient that was ascertained to be 0.85.

Adult Hope Scale (AHS): The AHS developed by Snyder et al. [30] in 1991 was administered to measure the hope among participants. The AHS is a measure of 12 items including four filler items. The AHS items are rated on a Likert scale of 8-point that ranges from 1 which indicates "definitely false" to 8 which indicates "definitely true". The Cronbach's alpha coefficient was used to measure the reliability of the AHS that was found to be 0.75.

Frequency, percentage, range, means and *SD* were used for the descriptive analysis. Shapiro-Wilk test was used for the normality and the data of this study was not found normally distributed. Since data was not normally distributed, Spearman's Rank-Order Correlation was computed to interpret the results meaningfully. The

statistical package for the analysis used was IBM SPSS 20.0.

The participants were treated according to the APA/ICMR ethical guidelines. The Institute Ethics Committee (Human Studies) of the Pondicherry University reviewed and approved the study. The respondents were acquainted regarding the purpose of the research. They were asked to participate on voluntarily basis and were ensured the confidentiality with respect to the data recorded from them. In addition, the participants of this study were given freedom to withdraw if they wish to do so at any time.

Results

A total of 693 young undergraduate and postgraduate students of Kashmir valley were recruited for the present study. Table 1 depicts that two-third of the participants, 67.4% ($n = 467$) were male and one-third, 32.6% ($n = 226$) were female. With respect to age, 44.4% ($n = 308$) of the respondents were 18-20 years old and the rest, 54.6% ($n = 385$) were 21-25 years old. Regarding family type, 41.1% ($n = 286$) came from a joint family and 58.9% ($n = 407$) came from a nuclear family. Nearly two-third of the participants, 63.5% ($n = 440$) were studying undergraduate course and one-third 36.5% ($n = 253$) were studying postgraduate course. One-tenth of the participants, 10.3% ($n = 71$) came from the city, a quarter, 27.7% ($n = 192$) from the town and nearly two-third, 62.0% ($n = 430$) from the village. The monthly family income of one-third, 36.6% ($n = 254$) of the participants was less than 10000 INR, 29.6% ($n = 205$) had 10001 to 20000 INR and the remaining one-third, 33.8% ($n = 234$) had 20001 INR and above.

Table 2 depicts that the mean mental health score of the sample was found to be (mean = 57.98; $SD = 11.32$). Regarding negative mental health, the mean anxiety reported was found to be (mean = 55.06; $SD = 16.78$), depression (mean = 57.18; $SD = 14.00$) and loss of behavioral control (mean = 64.58; $SD = 18.11$), respectively. With respect to positive mental health, the mean score of positive affect was found to be (mean = 56.05; $SD = 18.11$) in the range of 20-100 for all the subscales thereof.

Table 3 shows that mean score of ACEs reported by the research participants was found to be (mean = 4.64; $SD = 3.70$) and that of the conflict exposure was (mean = 10.35; $SD = 3.61$). The mean score of perceived social support was found to be (mean = 66.69; $SD = 12.40$) whereas, the mean score of hope was found to be (mean = 49.38; $SD = 8.32$).

The findings of the present study revealed that ACEs and conflict exposure were positively correlated with anxiety depression and loss of behavior control, whereas they were negatively correlated with positive affect and overall mental health. On the contrary, perceived social support and hope were negatively correlated with anxiety, depression and loss of behavior control, whereas they were positively correlated with positive affect and overall mental health among young adults of Kashmir (Table 4).

Table 1. Demographic Characteristics of the Sample (*N* = 693)

Variable	n (%)	Variable	n (%)
Gender		Age	
Male	467 (67.4)	18-20 years	308 (44.4)
Female	226 (32.6)	21-25 years	385 (54.6)
Family Type		Educational level	
Joint	286 (41.1)	Undergraduate	440 (63.5)
Nuclear	407 (58.9)	Postgraduate	253 (36.5)
Native place		Monthly family income	
City	71 (10.3)	Less than 10000 INR	254 (36.6)
Town	192 (27.7)	10001 to 20000 INR	205 (29.6)
Village	430 (62.0)	20001 INR and above	234 (33.8)

Table 2. Description of Mental Health (*N* = 693)

Variable	Actual score range	Possible score range	Mean	SD
Mental health	24.44 – 100	0 – 100	57.98	11.32
Subscales				
Negative mental health				
-Anxiety	20 – 100	0 – 100	55.06	16.78
-Depression	20 – 100	0 – 100	57.18	14.00
-Loss of behavioral control	20 – 100	0 – 100	64.58	16.12
Positive mental health				
-Positive affect	20 – 100	0 – 100	56.05	18.11

Note: *SD* = Standard deviation

Table 3. Description of ACEs, Conflict Exposure, Perceived Social Support and Hope (*N* = 693)

Variable	Actual score range	Possible score range	Mean	SD
ACEs	0 – 13	0 – 21	4.64	3.70
Conflict exposure	2 – 17	0 – 17	10.35	3.61
Perceived social support	26 – 84	12 – 84	66.69	12.40
Hope	28 – 64	8 – 64	49.38	8.32

Note: *SD* = Standard deviation

Table 4. Correlation Coefficients of Risk and Protective Factors with Mental Health (*N* = 693)

Variable	Anxiety (<i>r</i>)	Depression (<i>r</i>)	Loss of behavior control (<i>r</i>)	Positive Affect (<i>r</i>)	Overall Mental health (<i>r</i>)
1. ACEs	.07**	.19***	.13***	-.10***	-.23***
2. Conflict exposure	.16***	.14***	.13***	-.15***	-.22***
3. Perceived social support	-.08**	-.13***	-.12***	.17***	.21***
4. Hope	-.08**	-.09**	-.18***	.13***	.19***

Note: ***p*<0.05 and ****p*<0.01

Discussion

The present study was undertaken to examine the relationship of risk and protective factors with mental health in a sample of young adults from Kashmir. The mean score of overall mental health was found to be 57.98 (*SD* = 11.32) in the range of 24.44-100 indicating a moderate level of mental health among young students of Kashmir. The research participants demonstrated moderate levels of negative mental health which includes anxiety (mean = 55.06; *SD* = 16.78), depression (mean = 57.18; *SD* = 14.00) and loss of behavioral control (mean = 64.58; *SD* = 16.12), respectively. Moreover, young adults demonstrated moderate levels of positive affect with the mean score of 56.05 (*SD* = 18.11). It is evident from the findings that young adults experienced in the context of Kashmir, certain levels of positive affectivity a positive aspect of mental health as well as depression anxiety, and loss of behavioral control which are the negative aspects of mental health. Thus, good mental health of an individual does not mean that he/she is free from psychological distress symptoms [1, 4, 31].

The findings revealed that ACEs were associated with

higher anxiety, depression and loss of behavior control, while lower levels of positive affect and overall mental health indicating that youth who experience adversities during their childhood exhibit poor mental health. This finding is supported by other studies that exposure to ACEs leads to psychological distress and affects mental health inversely [32, 33]. When the environment of a place during the early years of life is devastated by stressful events both inside homes as well as externally, makes the exposed individual vulnerable to a number of disorders both physical and mental as well as other health risk behaviors in later life [13-15].

Similarly, the findings indicated that exposure to armed conflicts was related with increased rates of negative mental health aspects and decreased rates of positive affect and overall mental health which indicates that individuals who get exposed to the traumatic events of armed conflict develop symptoms of mental distress and lower their positive affectivity leading to poor mental health. Studies which have examined the impact of traumatic exposure of armed conflicts on mental health revealed higher rates of mental disorders among the

exposed populations [34]. Kashmir is regarded as one of the violence prone places on the face of the earth where conflicts between fighting parties take place at any moment of time anywhere in which civilian people, mostly youth, get exposed to the traumatic exposure of stressful events leading to the development of mental disorders [35, 36].

Further, our findings disclosed that social support had a significant negative association with negative mental health aspects and positive association with positive affect and overall mental health which provides the evidence that those individuals who receive more social support experience higher levels of mental health in terms of decreased psychological distress symptoms and increased positive affect. These findings are consistent with earlier studies that revealed that higher perceived levels of social support associated with better mental health and reduced distress symptoms [17-20]. The positive association of social support with mental health among the young adult population of Kashmir might be due to the cultural aspects of Kashmir so that people extend support to all those who are in conditions of adversity.

Furthermore, hope was negatively associated with reduced distress symptoms and positively associated with positive affect and overall mental health. It meant that the participants have hopefulness which can help them to withstand in the stressful situations and to move forward towards personal growth. The positive feelings of Kashmiri youth while living in the adverse conditions could be because of the personal resources as well as the community environment where such feelings are encouraged among the masses to have a positive outlook of life. The previous literature underscore that feelings of hope are positively associated with mental health and decreased mental distress symptoms in the face of adversity [37-40].

The strongest risk factor for anxiety was found to be conflict exposure, whereas, social support emerged as its strongest protective factor among the youth in Kashmir. Regarding depression, ACEs were found be its strongest risk factor and social support as the strongest protective factor. ACEs also emerged as the strongest risk factor for the loss of behavior control and hope was considered as its strongest protective factor. Concerning positive affect, the strongest risk factor was found to be the conflict exposure and social support was considered as its strongest protective factor. With respect to the overall mental health, the strongest risk factor was found to be ACEs followed by conflict exposure. On the contrary, social support emerged as the strongest protective factor of the overall mental health followed by hope among the young adults of Kashmir.

The present study has its implications which provide better understanding of the mental health and its relationship with risk and protective factors among the young adults of Kashmir. The findings speak about the enhancement of social support and development of feelings of hope among the youth across Kashmir Valley in order to enhance the mental health of youth exposed

to childhood and conflict trauma. The formulations of community and institution based programs will be imperative to enhance the protective factors of Kashmiri youth in order to promote their mental health by reducing the impact of risk factors in order to withstand and move towards growth in the stressful environment.

The present study like other studies has its limitations. First, the self-report measurement tools were used to assess the risk (ACEs and conflict exposure) and protective (social support and hope) factors as well as mental health. Second, only the college and university going students were covered in this study. Third, only 18 to 25 year old students were included in the study. Fourth, the students who participated in the study were Muslim students. So, further studies should be taken into consideration in other religious communities.

Conclusion

To conclude, the relationship of mental health with risk and protective factors was validated in the present study among the young adults of Kashmir. ACEs and conflict exposure emerged as the risk factors of mental health, whereas, social support and hope emerged as the protective factors of mental health in the context of Kashmir. The findings of the present study confer the importance of protective factors in promoting mental health and preventing disorders. Therefore, understanding these factors will be helpful for mental health professionals to provide necessary resources, knowledge and skills to the youth of Kashmir that will promote their mental health.

Conflict of Interest

The author declares that there is no conflict of interest involved.

Ethical Approval

The study was approved by the Institute Ethics Committee (Human Studies) of the Pondicherry University. Permission to carry out the study was also obtained from college principals as well as university directors and deans in Kashmir. Moreover, the students voluntarily participated in the study by giving their written informed consent.

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References

1. World Health Organization. Promoting mental health: concepts, emerging evidence, practice. 2005. Retrieved on Feb 28 2021 from https://www.who.int/mental_health/evidence/MH_Promotion_Book.pdf
2. Global burden of mental disorders and the need for a comprehensive, coordinated response from health and social sectors at the country level. 2011. Retrieved on Feb 28 2021 from https://apps.who.int/gb/ebwha/pdf_files/EB130/B130_9-en.pdf

3. Assari S. Financial distress, anxiety, depression, and suicide among American college students. *International Journal of Behavioral Sciences*. 2018 Jul 30;12(2):84-90.
4. Wangchuk P, Hengudomsub P, Chaimongkol N. Relationships between Protective Factors and Mental Health of Adolescents in Mongar, Bhutan. *Thai Pharmaceutical and Health Science Journal* 2016; 11(2): 49-61.
5. Whiteford HA, Ferrari AJ, Degenhardt L, Feigin V, Vos T. The global burden of mental, neurological and substance use disorders: an analysis from the Global Burden of Disease Study 2010. *Plos One*. 2015 Feb 6;10(2): e0116820.
6. Hassan A, Shafi A. Attitude towards mental illness in Kashmir. *International NGO Journal*. 2012 Nov 30; 7(4):73-7.
7. Housen T, Lenglet A, Ariti C, Shah S, Shah H, Ara S, Viney K, Janes S, Pintaldi G. Prevalence of anxiety, depression and post-traumatic stress disorder in the Kashmir Valley. *BMJ Global Health*. 2017 Oct 1; 2(4).
8. Wiehn J, Hornberg C, Fischer F. How adverse childhood experiences relate to single and multiple health risk behaviours in German public university students: a cross-sectional analysis. *BMC Public Health*. 2018 Dec; 18(1): 1-3.
9. Dube SR, Felitti VJ, Dong M, Giles WH, Anda RF. The impact of adverse childhood experiences on health problems: evidence from four birth cohorts dating back to 1900. *Preventive Medicine*. 2003 Sep 1; 37(3): 268-77.
10. Jones TM, Nurius P, Song C, Fleming CM. Modeling life course pathways from adverse childhood experiences to adult mental health. *Child Abuse and Neglect*. 2018 Jun 1; 80: 32-40.
11. Schilling EA, Aseltine RH, Gore S. Adverse childhood experiences and mental health in young adults: a longitudinal survey. *BMC Public Health*. 2007 Dec; 7(1): 1-0.
12. Hoseini HS, GHOBARI BB, FARROKHI N, Sodagar S. The Mediating Role of Insecure Attachment Styles between Early Experienced Violence and Marital Adjustment in Women. *International Journal of Behavioral Sciences* 2019; 13(2): 79-85.
13. Hays-Grudo J, Morris AS, Ratliff EL, Croff JM. Adverse childhood experiences and addiction. In *Family Resilience and Recovery from Opioids and Other Addictions 2021* (pp. 91-108). Springer, Cham.
14. Andersen SH. Association of Youth Age at Exposure to Household Dysfunction With Outcomes in Early Adulthood. *JAMA Network Open*. 2021; 4(1): e2032769-.
15. Paul MA, Khan W. Prevalence of childhood mental disorders among school children of Kashmir Valley. *Community Mental Health Journal*. 2019 Aug; 55(6):1031-7.
16. Brailovskaia J, Schönfeld P, Kochetkov Y, Margraf J. What does migration mean to us? USA and Russia: Relationship between migration, resilience, social support, happiness, life satisfaction, depression, anxiety and stress. *Current Psychology*. 2019 Apr; 38(2): 421-31.
17. Sierau S, Schneider E, Nesterko Y, Glaesmer H. Alone, but protected? Effects of social support on mental health of unaccompanied refugee minors. *European Child and Adolescent Psychiatry*. 2019 Jun; 28(6): 769-80.
18. Riahi ME, Aliverdinia A, Pourhossein Z. Relationship between social support and mental health. *Social Welfare Quarterly*. 2011 Jan 10; 10(39): 85-121.
19. Rey L, Extremera N, Sánchez-Álvarez N. Clarifying the links between perceived emotional intelligence and well-being in older people: Pathways through perceived social support from family and friends. *Applied Research in Quality of Life*. 2019 Mar; 14(1): 221-35.
20. Sahranç Ü, Çelik E, Turan ME. Mediating and moderating effects of social support in the relationship between social anxiety and hope levels in children. *Journal of Happiness Studies*. 2018 Apr; 19(4):1003-19.
21. Dorsett P. The importance of hope in coping with severe acquired disability. *Australian Social Work*. 2010 Mar 1; 63(1): 83-102.
22. Stice E, Shaw H, Bohon C, Marti CN, Rohde P. A meta-analytic review of depression prevention programs for children and adolescents: factors that predict magnitude of intervention effects. *Journal of Consulting and Clinical Psychology*. 2009 Jun; 77(3): 486.
23. Klein JB, Jacobs RH, Reinecke MA. Cognitive-behavioral therapy for adolescent depression: a meta-analytic investigation of changes in effect-size estimates. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2007 Nov 1; 46(11): 1403-13.
24. Hobfoll SE, Watson P, Bell CC, Bryant RA, Brymer MJ, Friedman MJ, Friedman M, Gersons BP, De Jong JT, Layne CM, Maguen S. Five essential elements of immediate and mid-term mass trauma intervention: Empirical evidence. *Psychiatry: Interpersonal and Biological Processes*. 2007 Dec; 70(4): 283-315.
25. Dar AA, Deb S. The volatile situation in Kashmir and its impact on the mental health of common people. 2020 Aug 31. In S. Deb, G. Subhalakshmi & K. Chakraborti (eds.), *Upholding Justice: Social, Psychological and Legal Perspectives* (pp. 152-168). London/New York: Routledge.
26. Dar AA, Deb S. Mental Health in the Face of Armed Conflict: Experience from Young Adults of Kashmir. *Journal of Loss and Trauma*. 2020 Mar 17: 1-1.
27. Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V, Marks JS. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*. 1998 May 1; 14(4): 245-58.
28. Veit CT, Ware JE. The structure of psychological distress and well-being in general populations. *Journal of Consulting and Clinical Psychology*. 1983 Oct; 51(5): 730-742.
29. Zimet GD, Dahlem NW, Zimet SG, Farley GK. The multidimensional scale of perceived social support. *Journal of Personality Assessment*. 1988 Mar 1; 52(1): 30-41.
30. Snyder CR, Harris C, Anderson JR, Holleran SA, Irving LM, Sigmon ST, Yoshinobu L, Gibb J, Langelle C, Harney P. The will and the ways: development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*. 1991 Apr; 60(4): 570.
31. Keyes CL, Dhingra SS, Simoes EJ. Change in level of positive mental health as a predictor of future risk of mental illness. *American Journal of Public Health*. 2010 Dec; 100(12): 2366-71.
32. Park EJ, Kim SY, Kim Y, Sung D, Kim B, Hyun Y, Jung KI, Lee SY, Kim H, Park S, Kim BN. The relationship between adverse childhood experiences and sleep problems among adolescent students: mediation by depression or anxiety. *International Journal of Environmental Research and Public Health*. 2021 Jan; 18(1): 236.
33. Koball AM, Domoff SE, Klevan J, Olson-Dorff D, Borgert A, Rasmussen C. The impact of adverse childhood experiences on healthcare utilization in children. *Child Abuse and Neglect*. 2021 Jan 1; 111: 104797.
34. Dar AA, Deb S. Psychological distress among young adults exposed to armed conflict in Kashmir. *Children and Youth Services Review*. 2020 Nov 1; 118: 105460.
35. Scobell A. Flashpoint Asia: The most dangerous place? *Parameters*. 2001 Jul 1; 31(2):129-133.
36. Shah H, Mishra AK. Trauma and children: Exploring posttraumatic growth among school children impacted by armed conflict in Kashmir. *American Journal of Orthopsychiatry*. 2021; 91(1): 132.
37. Halama P, Dedova M. Meaning in life and hope as predictors of positive mental health: Do they explain residual variance not predicted by personality traits? *Studia Psychologica*. 2007 Jan 1; 49(3):191.
38. Heidari M, Ghodusi M. The relationship between body esteem and hope and mental health in breast cancer patients after mastectomy. *Indian Journal of Palliative Care*. 2015 May; 21(2):198.
39. Koenig HG, Youssef NA, Smothers Z, Oliver JP, Boucher NA, Ames D, Volk F, Teng EJ, Haynes K. Hope, religiosity, and mental health in US veterans and active duty military with PTSD symptoms. *Military Medicine*. 2020 Jan; 185(1-2): 97-104.
40. Van Gestel- Timmermans H, Van Den Bogaard J, Brouwers E, Herth K, VanNieuwenhuizen C. Hope as a determinant of mental health recovery: a psychometric evaluation of the Herth Hope Index- Dutch version. *Scandinavian Journal of Caring Sciences*. 2010 Dec; 24: 67-74.