PalArch's Journal of Archaeology of Egypt / Egyptology

IMPACT OF CHILDHOOD TRAUMA AND PERCEIVED STRESS ON PATIENTS WITH CONVERSION DISORDER

Dr. Fatima Khurram¹, Dr. Samar Fahd², Dr. Sabiha Iqbal³, Dr. Muzamila Akram⁴, Sania Farrukh⁵, Dr. Shahzadi Iqra naz Malik⁶, Sidra Sarwar⁷, Shanza Majid⁸, Zeeshan Maqbool⁹

 ¹Assistant Professor, Department of Applied Psychology, The Islamia University of Bahawalpur. Email id: <u>Fatima.khurram@iub.edu.pk</u>, <u>Samar.Fahd@iub.edu.pk</u>
 ³ Lecturer, Department of Education, The Islamia University of Bahawalpur. Email id: Sabiha_26@live.com
 ⁴ Assistant Professor, Department of Educational Training, The Islamia University of Bahawalpur. Email id: <u>Muzamila.Akram@iub.edu.pk</u>
 ⁵Sania Farrukh, M.Phil, Department of Applied Psychology, The Islamia University of Bahawalpur. Email id: <u>Samar.Fahd@iub.edu.pk</u>
 ⁶Principal, Fgps1, Bahawalpur Cantonment. Email id: iqramalikfg112@gmail.com
 ^{7,8} M.S. Department of Applied Psychology University of Lahore. Email id: <u>Sidrasarwar240@gmail.com</u>, <u>Shanzamajid18@gmail.com</u>
 ⁹B.S. Scholar, Department of Applied Psychology, The Islamia University of Bahawalpur. Email id: <u>zmaqbool03@gamil.com</u>

Dr. Fatima Khurram, Dr. Samar Fahd, Dr. Sabiha Iqbal, Dr. Muzamila Akram, Sania Farrukh, Dr. Shahzadi Iqra naz Malik, Sidra Sarwar, Shanza Majid, Zeeshan Maqbool. IMPACT OF CHILDHOOD TRAUMA AND PERCEIVED STRESS ON PATIENTS WITH CONVERSION DISORDER Palarch's Journal of Archaeology of Egypt/Egyptology 17(8), 842-854. ISSN 1567-214x

Keywords: Conversion Disorder, Childhood Trauma, Perceived Stress, Bahawalpur, Multan.

ABSTRACT:

The current study aims to examine the impact of childhood trauma and perceived stress on patients with conversion disorder. The sample for the present research (N=200) was collected from Bahawal Victoria Hospital (BVH), Shakoor Mind Care Institute, Bahawalpur (SMI), Civil Hospital Bahawalpur (CHB) and Nishtar Hospital Multan (NHM) through simple random sampling technique. Childhood trauma was measured through Childhood Trauma Questionnaire (CTQ) and Perceived Stress was measured using Perceived Stress Scale (PSS).

Diagnosed conversion patients were selected for the present study. The results indicated that childhood trauma experience was significantly positively correlated with conversion disorder. Similarly, perceived stress was also significantly positively correlated with conversion disorder.

INTRODUCTION

Conversion disorder (CD) by and large needs to do with physical malfunctioning, for example, paralysis, blindness, or trouble talking (Aphonia), with no physical or organic pathology to signify the interruption. Most conversion symptoms mention that some sort of neurological disease is influencing sensory-motor frame works, in spite of the fact thatconversion side effect can copy the full scope of physical malfunctioning. Hence, and in light of the fact that the aspect "conversion" suggest etiology for which there is regulated verification the proposition for DSM-5 is to change the name to "Functional Neurological Disorder" (with "functional" alluding to an indication without organic reason) (Stone, LaFrance, Levenson, & Sharpe, 2010).

In Greek mythology, hysteria, the first name for functional neurological symptom disorder, was supposed to be caused by a deficiency of orgasms, uterine melancholy and not multiplying. Plato, Aristotle and Hippocrates trusted that a lake of sex disturb the uterus. The Greeks trusted that it could be prohibited and treated with wine and orgies. Hippocrates contented that a lake of regular sexual intercourse stimulated the uterus delivering toxic fumes and caused it to move in in the body, and this implied all ladies out to be married and enjoy a satisfactory sexual life (Tasca, Cecilia, Rapetti, Mariangela, Giovanni, Fadda&Biance, 2012).

In the nineteenth century, hysteria moved from being reflected a neurological disorder to being considered a psychological disorder, when Pierre Janet contended that "dissociation shows up independently for neurotic reasons and so as to antagonistically aggravated the person's regular day to day existence" (Tasca, Cecilia, Rapetti, Mariangela, Giovanni, Fadda&Biance, 2012). Freud's model (Josef Breuer and Sigmund Freud, 1895) suggested that the emotional charge getting from agonizing involvements would be consciously repressed as a method for managing the irritation, however that the emotional charge would be by one means or another "converted" into neurological symptoms. Freud later opposed that the repressed experience was of a sexual nature.

Lazarus (1999) establishes that stress can be perceived as any form of event that strains a person's ability to manage. Nobody's life is free of stress giving little mind to how sensible you are. McEwen (1998) explained that a manageable measure of perceived stress is in truth healthy and would challenge the person to improve. In any case, too abnormal state of perceived stress may impact the functioning of immune system (Cohen, 1996). Theorell and partners (2006) gave a working meaning of stress as "the non-specific reaction (energy mobilization)

that occurs in requesting or testing circumstances". For physiologist, stress is seen as a natural request or danger that stimulated physiological arousal. This response may be versatile (i.e., by motivating a fight or flight response), yet may likewise be hurtful to one's health when initiated more than once, for delayed timeframes, or between helpless people (Endler, 1988; Selye, 1976).

Lazarus and Folkman (1984) extremely driven stress inquire about by emphasizing the part of perceived stress. They indicate that for stress to happen and impact one's health, an individual must assess a situation as unbearable or requesting and greater his or her flexible assets (Lazarus & Folkman, 1984). The view of stress is dictated by characteristics of the stimulus (i.e., extent, force, controllability), and furthermore singular attributes (i.e., mood, past experience, personality, and coping skills). Point of view on stress now by and large diagnosed that a stress evaluation is responsible for activating stress responses (e.g., physiological, behavioral) that may harmfully influence physical health. Consequently, while definite events are largely considered as stressful (e.g., loss of loved one), the impact of even this events rely upon people's interpretations of their situation (Lazarus & Folkman, 1894).

The National Institute of mental Health (USA) defines childhood trauma as; "The experience of an event by a child that is emotionally painful or distress, which frequently achieves permanent mental and physical impacts". Nevertheless, with the right help it is possible to recover even from extreme early trauma. Childhood Trauma is an instance that causes emotional, physical and also other psychological distress earlier adulthood (Barnett, Manly & Cicchetti, 1991; Egeland, Sroufe & Erickson, 1983).

Kind of childhood trauma comprising emotional abuse, physical abuse, sexual abuse, and neglect have become much research thought (Cicchetti & Rizely, 1981; Mendelson, Robins & Jhonson, 2002). Experience to trauma has been associated to short-term and long-term negative psychological and psychosocial results (Davis & Petretic-Jackson, 2000; Hovens, 2010).

Childhood trauma has been related to conditions that may increase to poor functioning. Its occurs all the more as regularly as possible in families that have cut down parent informational accomplishment, are crushed, and have more prominent pressure (Klest, 2012; Pears & Fisher, 2008; Rosenthal &Futch, 2009). Childhood trauma looks add to poor psychological functioning. Adults and what are more children who have faced childhood trauma have communicated disturbance in psychological development and functioning (Zlotnick, Mattia& Zimmerman, 2001).

Childhood trauma seems, by all accounts, to be recognized with poor interpersonal relationships among adolescent and young adulthood, poor school performance, deviant behavior with criminal movement among adolescence, and more persistent somatic complaints (Alink & Egeland, 2013; Carpenter &Chunge, 2011; Saltzman, Pynoos, Layne, Steinberg &Aisenberg, 2001; Schäfer, 2010; Smith, Park, Ireland, Elwyn& Thornberry, 2012). The idea of trauma causally related to the conversion disorder. Traumatic experience every now and again happening amid the childhood; shows a trigger for the dissociation process. The circle of the conscious detached from disturbing traumatic experiences (Brown, Schrag & Trimble, 2005).

The direct cause of conversion disorder is said to be the experience of stressful or traumatic life event which prompts psychological expression of that event (Brown, Cardena, Nijenhuis, Sar& Van der Hart, 2007). Literature mentions that experience to traumatic events, both in childhood and adulthood, have been interconnected to the development of psychopathology later in life (American Psychiatric Association, 1996). The psychoanalytic theorist considered that the important events of early childhood construct up an individual personality later in life (Sar, Akyuz, Dogan&Ozturk, 2009).

In last limited years fewer researches has been made in our understanding of mental illness and also about the causes of different mental disorder. There is still so much more that we simply don't know about the causes and its complexity of conversion disorder. There are many aspects that involve in the development of conversion disorder and there is behind many causes and factors include that increase the symptoms severity of conversion disorder. Very insufficient researches done on conversion disorder for known reasons and risk factors in Pakistan. Thus people don't know about with things (causes, reasons, and risk factors) that involve in the development of conversion disorder. Childhood trauma and perceived stress become the causes of conversion disorder. Childhood trauma and perceived stress also involved but in my research I do the work on childhood trauma and perceived stress, these causes become the reason of conversion disorder.

METHODS Participants

The sample for the present researched was taken from Bahawalpur and Multan, cities of Southern Punjab. In Bahawalpur, data was taken from Bahawal Victoria Hospital (BVH), Shakoor Mind Care Institute Bahawalpur (SMI), Civil Hospital Bahawalpur (CHB), and in Multan data was taken from Nishtar Hospital. Total numbers of respondents who participate in this study were N=200. Simple random sampling techniques were used to collect data from diagnosed patients of conversion disorder. Age range of the sample was 17 to 45 years. The demographic variable was age, education, profession, marital status, and socio-economic status.

Instruments

Perceived Stress Scale

Perceived stress scale was established to assess the degree to which situations in one's life are considered as stressful. The PSS (Cohen, Kamarck & Mermelstein, 1983) has become one of the most commonly used scale too measure perceived stress. It has been used in studies evaluating the stressfulness of situations.

Childhood Trauma Questionnaire

Childhood trauma was measured through Childhood Trauma Questionnaire (CTQ; Pennebaker, & Susman, 2013). This self-report measure assesses numerous types of traumatic incidences experienced before the onset of age 17. It was developed by

Design and procedure

Quantitative research and cross sectional research design is selected. The sample in the present study was 200. There were 200 diagnosed patients of conversion disorder. The sample for the present researched taken from Bahawalpur City. In Bahawalpur City taken from Bahawal Victoria Hospital (BVH), Shakoor Mind Care Institute Bahawalpur (SMI), Civil Hospital Bahawalpur (CHB), and from Multan City Nishtar Hospital Multan. The current study was conducted out using survey as research method. Questionnaires were distributed among the sample as instrument of survey method. Demographic variables were controlled. Formal permission was taken from authorities and head of psychiatric departments through formal letters for carrying out the research on the diagnosed conversion patients in their hospitals and clinics. The patients were cooperative in this regard. The questionnaire measuring the level of perceived stress and childhood trauma and trauma severity impact on diagnosed patients with conversion disorder. Age range of the respondents was between 17 to 45 years.

Participants were made sure of confidentiality of the response. They were also asked to respond fairly. Each respondent was rated according to the basic scoring given. The authorities, head of psychiatric department, psychologists and psychiatrist were thanked after the completion of data collection. It was a time consuming process. Then, the data was transformed into SPSS. All the subjects were recognized by a code. The data was kept secret and only researchers could approach it.

Data Analysis

Statistical Package for Social Science (SPSS) version 25 was used to analyze the collected data.

RESULTS AND DISCUSSION

Gender, 32 (16.0%) were male respondents and 168 (84.0%) were female respondents participated in this research, whereas in marital status, 89 (44.5%) were single respondents, 83 (41.5%) were married respondents were having primary education, 35 (17.5) respondents were having middle education, 43 (21.5%) respondents were having matric education, 14 (12.0%) respondents were having intermediate education and 18 (9.0%) respondents were having graduation education. Furthermore, in socioeconomic status, 21 (10.5%) respondents were from upper class of socioeconomic status, 101 (50.5%) respondents were from middle class of socioeconomic status and 78 (39.0%) respondents were from lower class of socioeconomic status. Finally, in severity of conversion disorder, 29 (14.5%) respondents were from middle level of severity in conversion disorder and 94 (47.0%) respondents were from several level of severity in conversion disorder.

Frequency Distribution of Demographic variable ($N=200$)					
Respondent's Characteristics		f (%)			
Gender	Male Female	32 (16.0) 168 (84.0)			
Marital Status	Single Married Divorced	89 (44.5) 83 (41.5) 28 (14.0)			
Education	Primary Middle Matric Intermediate Graduation	80 (40.0) 35 (17.5) 43 (21.5) 14 (12.0) 18 (9.0)			
Socioeconomic Status	Upper Middle Lower	21 (10.5) 101 (50.5) 78 (39.0)			
Conversion Disorder	Mild Moderate Severe	29 (14.5) 77 (38.5) 94 (47.0)			

Table 1

The mean age of overall respondents was (M age =27.98 + 5.05). While, the mean of childhood trauma (M=54.13 and SD=12.11) showed moderate level of trauma experience in childhood of overall respondents. Whereas, the mean of recent trauma experience (M=56.42 and SD= 13.35) showed also moderate

level of recent trauma experience among overall respondents. However, the mean of perceived stress (M=28.42 and SD=6.85) showed also moderate level of perceived stress among overall respondents. Finally, in conversion disorder, the mean (M=2.33 and SD=.72) of overall respondents was in moderate level of conversion disorder. Meanwhile, the values of skewness were also in acceptable ranges.

Table 2

Descriptive Statistics of Age, Child Trauma Experience, Recent Traumatic Experience Perceived Stress and Tendency of Conversion Disorder (N=200)

Variables			Range		
	M	SD	Potential	Actual	Skew
Age	27.98	5.05	-	18-45	.20
Child Trauma	54.13	12.11	-	29-78	02
Recent Trauma	56.42	13.35	-	29-95	.32
Perceived Stress	28.42	6.85	10-50	14-48	.33
Conversion Disorder	2.33	.72	1-3	1-3	57

Childhood trauma experience was significantly positively correlated with recent trauma experience (r=.35, p<.01), perceived stress (r=.38, p<.01) and conversion disorder (r=.26, p<.01). While, recent trauma experience was significantly positively correlated with perceived stress (r=.28, p<.01) and conversion disorder (r=.22, p<.01). Moreover, perceived stress was significantly positively correlated with conversion disorder (r=.56, p=.01).

Table 3

Inter-Correlation among Child Trauma Experience, Recent Trauma Experience Perceived Stress and Tendency of Conversion Disorder (N=200)

	cy of conversio	m Distriu	er (11 200)	/
Variables	1	2	3	4
1.Child Trauma	-	.35**	.38**	.26**
2.Recent Trauma		-	$.28^{**}$.22**
3.Perceived Stress				$.56^{**}$
4.Conversion Disorder				-

Table 4 shows the significance of the model, that means it is successfully predicted that child hood trauma leads to conversion disorder among individuals. Findings indicate that individual with childhood trauma positively significantly predicts relationship of conversion disorder (R 2=.02, B=.14, t=2.09, F=4.309, P<.05) by contributing 2% variability in the model. Moreover, the above table helps in understanding the association between the study variables shown in Table 3.

Table 4

÷	Predictors	R	R ²	ß	SE	LL	95% UIL	
	Treateroits	1	R	_P	SL			
	CTQ	.14	.02	.14	.08	.01	.34	
	Note. CTQ=	Childhood	trauma Qu	estionnaire,	R= relation	nship dimer	nsion, SE= St	a

Regression analysis of childhood trauma and conversion disorder

Note. CTQ= Childhood trauma Questionnaire, R= relationship dimension, SE= Standard Error. LL= Lower Limit, UL= Upper Limit, β = standard Coefficient. P<.05

Discussion

The main purpose of the present study is to look at is the impact of childhood trauma and perceived stress on patients with conversion disorder. Many findings of the research confirmed the usefulness of scales. In this examine, it will likely be mentioned that how childhood trauma co-related with conversion disorder, how perceived stress co-related with conversion disorder. The result of this study indicates that childhood trauma and perceived stress correlated with conversion disorder among conversion patients. In childhood trauma included physical abuse, sexual abuse, and death of any close family member or friend, divorced, severe injury. Evidence strong association of all these factors and high level of perceived stress among the patients with conversion disorder.

Current study investigated that childhood trauma correlated with conversion disorder among conversion patients. Childhood trauma experience was significantly positively correlated with recent trauma experience (r=.35, p<.01), perceived stress (r=.38, p<.01) and conversion disorder (r=.26, p<.01). While, recent trauma experience was significantly positively correlated with perceived stress (r=.28, p<.01) and conversion disorder (r=.22, p<.01). Moreover, perceived stress was significantly positively correlated with conversion disorder (r=.56, p<.01). Hence the hypothesis that childhood trauma co-related with conversion disorder is accepted. Many researches supported the result of this hypothesis.

According to Anum and Yousaf, (2012) there is a close relationship between childhood trauma (physical, sexual, emotional abuse and neglect) in patients and conversion disorder. The previous research focused on thirty-six cases that had a history of childhood trauma, physical abuse that leads to conversion disorder.

Numerous studies highlighted that childhood abuse and emotional pent up as an etiological factor of conversion disorder. For instance, a study stated that earlier sexual abuse incidences and childhood trauma predicted conversion disorder and this relationship is buffered by comorbidity of diagnosed depression.

Moreover, it was also found that childhood physical abuse predicted the difficulty in verbalizing emotions among the abused patients (Nicholson & Stone, 2011). Furthermor, Kanaan, (2016) explored that specific traumatic life events have depicted a link with symptoms of conversion disorder. Previous study has also demonstrated possible link between the clinical manifestations of conversion disorder, childhood trauma and stressful life events. (Akyuz, Gokalp, Erdiman & Oflaz, 2017).

Another research suggested that the direct influence of childhood abuse on conversion symptoms may be partially mediated by the impact of later occurring negative life events. The impact of life events experienced in the year preceding the symptom onset is positively related to the symptoms severity in patients with conversion disorder (Roelofs. Spinhoven, Sandijck. Moene & Hoogduin, 2005). Aforementioned researches verified the findings of the present study that traumatic experiences significantly influence the manifestation of conversion disorder symptoms (Sobot, Ivanovic-Kovacevic, Markovic, Misic-Pavkov & Novovic, 2012).

The second hypothesis was formulated to explore the relationship between perceived stress and conversion disorder. Hence the hypothesis that perceived stress co-related with conversion disorder is not accepted. Many researches supported the result of this hypothesis.

Conclusion

Thus, it is concluded from the preceding discussion that negative experiences and traumatic incidences in childhood along with perception of stressors might play a significant role in psychological problems like conversion disorder. Hence, understanding of these variables could be beneficial in treatment of psychological disorders.

Thus, concluding the discussion, previous studies have identified multiple different stressors like any kind of perceived stress, work and relationship problem. For which there is some evidence of correlation with symptoms severity of conversion disorder but no single key stressor type has emerged (Nicholson & Stone, 2011). Findings suggested that psychosocial factors have been implicated in genesis of conversion disorder. Severe and sudden emotional stress to precipitate conversion reaction (Sharma, Giri, Dutta&Mazumder, 2005). As a whole Impact of Childhood Trauma and Perceived Stress on Patients with Conversion Disorder is significant.

Reference

- American Psychiatric Association. (1996). Diagnostic and Statistical Manual of Mental Disorders, (DSM-IV), Washington DC American Psychiatric Association, 1994. *Tradução portuguesa. Fernandes JC edt, Climepsi Editores, Lisboa*.
- Alink, L. R., & Egeland, B. (2013). The roles of antisocial history and emerging adulthood developmental adaption in predicting adult antisocial behavior. Aggress Behav, 39(2), 131-140. Doi: 10.1002/ab.21464
- Barnett, D., Manly, J.T., & Cicchetti, D. (1991). Continuing towards an operational definition of psychological maltreatment. *Development and psychopathology*, 3(01), 19.doi: 10.1017/s0954579400005046.
- Brown RJ (2004). "Psychological mechanisms of medically unexplained symptoms: an integrative conceptual model". Psychol Bull. **130** (5): 793–812. Doi: 10.1037/0033-2909.130.5.793. PMID 15367081.
- Carpenter, L., & Chung, M. C. (2011). Childhood trauma in obsessive compulsive disorder: the roles of alexithymia and attachment.
 Psychology and Psychotherapy: Theory, Research and Practice, 84(4), 367-388.
- Cicchetti, D., & Rizely, R. (1981). Developmental perspectives on the etiology, intergenerational transmission, and sequelae of child maltreatment. *New Directions for Child and Adolescent Development*, 1981(11), 31-55.doi:10.1002/cd.23219811104.
- Cohen, S. (1996, "Psychological stress immunity, and upper respiratory infections", Current Directions in psychological sciences, Vol. 5, pp. 86-90.
- Cohen, S; Kamarck T; Mermelstein R (December 1983). "A global measure of perceived stress". Journal of Health and Social Behavior. 24 (4): 385–396. doi: 10.2307/2136404. PMID 6668417.
- Cruess, DG; Antoni MH; Kumar M; Ironson G; McCabe P; Fernandez JB; Fletcher M; Schneiderman N (July 1999). "Cognitive-behavioral stress management buffers decreases in dehydroepiandrosterone sulfate (DHEA-S) and increases in the cortisol/DHEA-S ratio and reduces mood disturbance and perceived stress among HIV-seropositive men". Psychoneuroendocrinology. 24 (5): 537–549. doi:10.1016/S03064530(99)00010-4. PMID 10378240.
- Culhane, JF; Rauh V; McCollum KF; Hogan VK; Agnew K; Wadhwa PD (June 2001). "Maternal stress is associated with bacterial vaginosis in human pregnancy". Maternal and Child Health Journal. 5 (2): 127–134. doi:10.1023/A:1011305300690. PMID 11573838.

- Davis, J.L, & Petretic- Jackson, P.A. (2000). The impact of child sexual abuse on adult interpersonal functioning. *Aggression and violent Behavior*, 5(3), 291-328.doi: 10.1016/s 1359-1789(99)00010-5.
- Egeland, B., Sroufe, L.A., & Erickson, M. (1983). *The Developmental Consequence of Different Patterns of Maltreatment. Child Abuse & Neglect*, 7(4), 459-469.
- Endler, N. S. (1988). Hassles, health, and happiness. In M. P. Janisse (Ed.), Individual differences, stress and health psychology (pp. 24-56). New York: Springer
- Farooq, A., & Yousaf, A. (2016). Childhood trauma and alexithymia in patients with conversion disorder. *Journal of the College of Physicians and Surgeons Pakistan*, 26(7), 606-610.
- Freud, S., & Breuer, J. (1895). Studies on hysteria. se, 2. London: Hogarth, 255-305.
- Garg, A; Chren MM; Sands LP; Matsui MS; Marenus KD; Feingold KR; Elias PM (January 2001). "Psychological stress perturbs epidermal permeability barrier homeostasis: implications for the pathogenesis of stress-associated skin disorders". Archives of Dermatology. 137 (1): 53–59. doi:10.1001/archderm.137.1.53 . PMID 11176661.
- Holzel, BK; Carmody J; Evans KC; Hoge EA; Dusek JA; Morgan L; Pitman RK; Lazar SW (March 2010). "Stress reduction correlates with structural changes in the amygdala". Social Cognitive & Affective Neuroscience. 5 (1): 11–17. doi:10.1093/scan/nsp034 . PMC 2840837 . PMID 19776221.
- Hovens, J. G. F. M., Wiersma, J. E., Giltay, E. J., van Oppen, P., Spinhoven, P., Penninx, B. W. J. H., & Zitman, F. G. (2010). Childhood life events and childhood trauma in adult patients with depressive, anxiety and comorbid disorders vs. Controls. Acta Psychiatrica Scandinavica, 122(1), 66-74. Doi: 10.1111/j.1600-0447.2009.01491.x
- Klest, B. (2012). Childhood trauma, poverty, and adult victimization. *Psychological Trauma: Theory, Research, Practice, and policy,* 4 (3), 245-251.doi: 10.1037/a 0024468.
- Kramer, JR; Ledolter J; Manos GN; Bayless ML (Winter 2000). "Stress and metabolic control in diabetes mellitus: methodological issues and an illustrative analysis". Annals of Behavioral Medicine. 22 (1): 17–28. doi:10.1007/BF02895164. PMID 10892525.
- Lane, JD; Seskevich JE; Pieper CF (Jan–Feb 2007). "Brief meditation training can improve perceived stress and negative mood". Alternative Therapies in Health and Medicine. 13 (1): 38–44. PMID 17283740.
- Lazarus, R. & Folkman, S. (1984). Stress, Appraisal, and Coping. New York: Springer.

- Lazarus, R.S. (1999), "Stress and emotion: A new synthesis", New A new synthesis", New York: Springer.
- Leon, KA; Hyre AD; Ompad D; DeSalvo KB; Muntner P (December 2007). "Perceived stress among a workforce 6 months following hurricane Katrina". Social Psychiatry and Psychiatric Epidemiology. 42 (12): 1005–1011. doi:10.1007/s00127-007-0260-6. PMID 17932611.
- Marcus, MT; Fine PM; Moeller FG; Khan MM; Pitts K; Swank PR; Liehr P (September 2003). "Change in Stress Levels Following Mindfulnessbased Stress Reduction in a Therapeutic Community". Addictive Disorders & Their Treatment. 2 (3): 63–68. doi:10.1097/00132576-20030203000001.
- McAlonan, GM; Lee AM; Cheung V; Cheung C; Tsang KWT; Sham PC; Chua SE; Josephine GWS (April 2007). "Immediate and sustained psychological impact of an emerging infectious disease outbreak on health care workers". The Canadian Journal of Psychiatry. 52 (4): 241– 247. PMID 17500305.
- Mendelson, T., Robins, C.J., & Johnson, C.S. (2002). Relations of sociotropy and autonomy to developmental experiences among psychiatric patients. *Cognitive Therapy and Research*, 26(2), 189-198.
- Nicholson, T. R., Stone, J., & Kanaan, R. A. (2011). Conversion disorder: a problematic diagnosis. *J Neurol Neurosurg Psychiatry*, 82(11), 1267-1273.
- Pears, K.C., Kim, H.K., & Fisher, P.A. (2008). Psychosocial and cognitive functioning of children with specific profiles of maltreatment. *Child Abuse Negl*, 32(10), 958-971.doi: 10.1016/j chiabu. 2007.12.009.
- Pennebaker, J. W., & Susman, J. R. (2013). Childhood Trauma Questionnaire. Measurement Instrument Database for the Social Science.
- Rosenthal, B.S., Wilson, W.C., & Futch, V.A. (2009). Trauma, Protection, And Distress in Late Adolescence: A Multi-Determinant Approach. *Adolescence*, 44(176), 693-703.
- Saltzman, W. R., Pynoos, R. S., Layne, C. M., Steinberg, A. M., & Aisenberg, E. (2001). Trauma-and grief-focused intervention for adolescents exposed to community violence: Results of a school-based screening and group treatment protocol. Group Dynamics: Theory, Research, and Practice, 5(4), 291.
- Şar V. Dissociative Identity Disorder: Psychopathology associated with childhood traumas. Klinik Gelişim 2009; 22:26-33.

- Schäfer, I., & Fisher, H. L. (2011). Childhood trauma and posttraumatic stress disorder in patients with psychosis: clinical challenges and emerging treatments. Current opinion in psychiatry, 24(6), 514-518.
- Smith, C. A., Park, A., Ireland, T. O., Elwyn, L., & Thornberry, T. P. (2013). Long-term outcomes of young adults exposed to maltreatment: the role of educational experiences in promoting resilience to crime and violence in early adulthood. *Journal of interpersonal violence*, 28(1), 121-156.
- Sobot, V., Ivanovic-Kovacevic, S., Markovic, J., Misic-Pavkov, G., & Novovic, Z. (2012). Role of sexual abuse in development of conversion disorder: case report. *Eur Rev Med Pharmacol Sci*, *16*(2), 276-279
- Stone, J., LaFrance, W. C., Levenson, J. L., & Sharpe, M (2010). Issues for DSM-5: Conversion disorder. American Journal of Psychiatry, 167, 626–627.
- Selye, H. (1976). The stress concept. *Canadian Medical Association Journal*, 115(8), 718.
- Tasca, Cecilia; Rapetti, Mariangela; Carta, Mauro Giovanni; Fadda, Bianca (2012-10-19). "Women and Hysteria in the History of Mental Health". Clinical Practice and Epidemiology in Mental Health: CP & EMH. 8: 110–119. Doi: 10.2174/1745017901208010110. ISSN 1745-0179. PMC 3480686. PMID 23115576.
- Theorell, T.(Chair), Kristensen, T. S., Kornitzer, M., Marmot, M., Orth-Gomer, K., & Steptoe, A. (2006). Stress and Cardiovascular Disease. Report prepared for the European Heart Network.
- Zlotnick, C., Mattia, J., & Zimmerman, M. (2001). Clinical features of survivors of sexual abuse with major depression. *Child Abuse & Neglect*, 25(3), 357-367.doi: 10. 1016/s 0145-2134(00) 00251-9.