

Exploring the Gender Difference in Stress Perception and Temperament Amongst Adolescents Belonging to Lower Socio-Economic Background

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ABSTRACT

The current study entails the concept of stress defined as when “environmental demands, or internal demands, outlay the adaptive capacity of a person”. During the lockdown period the most affected is the population with lower income, the struggles of sustaining life were already scorching, the pandemic followed by lockdown, made the struggles endless, the economic crunch, familial disputes, leaving of the loved ones, closure of schools and forced employment has burdened the younger ones even more in an age when an individual undergoes major emotional, physical and psychological change, trauma during such a sensitive period can have a lasting impact on the temperament and overall emotional experience of an individual. Focusing on the same, the objective of this study was to examine and compare the stress perception and emotionality in male and female teenagers. The study entails the use of Perceived stress scale and Emotionality Activity, Sociability and Impulsivity baseline inventory (EASI) for interviewing 100 adolescent girls and boys belonging from lower economic strata to measure the perceived stress and its impact on their emotionality. The results of the study show a positive correlation in Perceived stress and EASI Scores where female participants have overpowered the male counterparts. However, the study shows a path towards a more investigative stance in regard to the topic.

Keywords: *Stress, Emotionality, Sociability, Impulsivity*

Stress is the major portion of our lives nowadays that no one is left past it. It could begin in childhood to adulthood, a period when it becomes so normal to be stressed, precisely defined when “environmental demands, internal demands, either outlay the adaptive capacities of a person,”. Impact of chronic stress involves adverse psychological and physical health effects, and even heightened risk of premature mortality (Braveman, Egerter, & Mockenhaupt, 2011).

In the context of changing life, we are bestowed with technological advancement, where it is competing in a great deal of jobs and skills that were done only by humans a few years ago. Covid- 19 pandemic has stolen jobs of millions of working people , still the most affected is the population with lower income, the struggles of sustaining life were already scorching but since the pandemic followed by lockdown, the issues have been countless , the economic

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crunch, familial disputes, leaving of the loved ones, closure of schools and forced employment has burdened the younger ones even more in an age where an individual has very special and distinct needs, if not catered properly can develop into more serious mental health issues for instance it is a time of “storm and stress”. The intense and frequent negative affect during this period has been predicted to explain the increased rates of affective dysfunctions, suicide, and accidental death during this time of life. Yet some teens emerge from adolescence with minimal turmoil when they mature.

WHO defines adolescence both in terms of the biological age that spans between 10 and 19 years) and in social terms of a phase of life, marked by special changes like rapid physical growth and development; physical, social and psychological maturity, not bound but at the same time for all; sexual maturity and involving the sexual experimentation. Several problems appear to be transient but shouldn't be underestimated, for instance a report on Work Force Need in India (2001) documented that in 20th century, many reports addressed the magnitude of the emotional, behavioural and developmental problems in the nation's children, adolescents and their families. Inadequacy in children's physical health and social and emotional well-ness are linked to poverty and social disadvantage. Social Family stress and emotional abuse are two major social stressors that are likely to have an impact on teenagers' mental health according to Mobility and Child Poverty Commission, (2017). The impact of economic crunches and low parental literacy on children's mental wellbeing, social behaviour enactment and well-being have been seen in several studies (Conti & Heckman, 2012; Fletcher & Wolfe, 2016). The COVID-19 outbreak has had a greater impact on some families than others, which, along with teenagers having to spend more time at home with their parents and siblings, may pose a threat to family well-being.

Economic Disadvantage also promotes social isolation and undermines social cohesion, "leading to social fragmentation, making people prone to psychosocial stressors," according to the study by Burns, 2015. Also, limited access to resources and opportunities, as well as social comparisons between economically better-off and poorer families, poverty and disadvantage are said to generate direct stress on parents and children, leading to feelings of guilt and moral failure. However, a shift in family stress and emotional maltreatment was seen with familial stress decreasing over time but emotional mistreatment increasing in the pandemic scenario. One possibility could be that families had less stress as a result of the reopening of schools since they spent more time apart. At the same time, the pandemic was far from over, and there were still restrictions in place and other economic repercussions. As a result, in households with more problems, the pandemic's persistence may have outweighed the reopening of schools, resulting in more severe household suffering, such as emotional abuse of adolescents.

Goal Flexibility. Adolescence is also characterised by goal flexibility, the ability to shift priorities quickly, and social behaviour flexibility (Gopnik, A. et al. 2017 and Magson, N. R. et al. 2020). Young people can adjust to difficult situations because of their adaptability. Green. H (2002) conducted a study that focused mostly on relatively young teenagers and was limited to the early months of the pandemic. Other COVID-19 investigations found an increase in anxiety and depression symptoms and looked at the pandemic's long-term impact. Previous economic crises and long-term stressful events have been shown to decrease mood and psychological well-being in general, according to research. The findings showed that adolescents and young adults' positive affect decreased while their negative affect rose. Surprisingly, it was discovered that younger teenagers, in particular, exhibited

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more mood resilience, experiencing bigger fluctuations in mood over time in the direction of less pleasant and more negative mood.

Perceived stress is also greater in this age and stage of life, commonly defined as is a degree to which situations in one's life are appraised or evaluated as stressful and intertwine the sociocultural context majorly covering on medical, physical, psychological, and psychosocial aspects of reality (Feizi A, Aliyari R, Roohafza H, 2012). Underlying cultural factors, involving social support, are essential in understanding how the people perceive stress and how they cope with it (Kim et al., 2008). The appraisals of an individual's risk often results in initiation of coping mechanisms, as heightened perception of threat has been associated with increased psychological distress (Schwartz, Lerman, Miller, Daly, & Masny, 1995) and may be correlated to other adverse health outcomes.

Stress can affect the human body responding in a way through activating the sympathetic nervous system and the hypothalamic-pituitary-adrenal axis (HPA axis), which may affect the cardiovascular, the metabolic, and the immune systems leading to several health conditions.

Emotionality: The American Psychological Association defines “a complex reaction pattern, involving experiential, behavioural and physiological elements.” Emotions are how individuals deal with matters or situations they find personally significant. Emotional experiences, according to the theory, have three components: a subjective experience, a physiological response and a behavioural or expressive response. Existing literature suggests that adolescents experience frequent and intense emotions that accompany a marked increase in their risk for mental disorders characterised by problems with emotional regulation. In the current study the attempt is to study the impact of stressors on the behavioural and emotional aspect of the children. Emotion is a configuration of presenting personality like habits of communication, mannerisms, and characteristic attitudes and values, and ultimately behaviour. To measure temperament in this study, a psychological measure given by Buss and Plomin (1975) a Questionnaire of Temperament factors of Emotionality, Activity, Sociability, and Impulsivity (EASI) was utilised. Emotion Psychologist Paul Ekman traced six fundamental emotions that could be interpreted through facial expressions. Those are happiness, sadness, fear, anger, surprise and disgust. Expanding the list in 1999 involving embarrassment, excitement, contempt, shame, pride, satisfaction and amusement, though those additions have not been widely adapted.

Theories on emotionality. Along with several researches emphasizing on cognitive and expressive realities on physiological and neurological processes caused by emotional reactions. The emotional expressive component deals with the facial reactions that embrace the presence of emotions. Considering distress to be primordial, emotionality means being in a heightened state of autonomic arousal. According to a theory by Buss and Plomin, emotionality is the rate at which a person develops irritation and starts to react negatively to stimuli in the environment. In other words, it indicates a proclivity to become easily distressed. There lies three major temperament traits: Negative emotionality, Activity, and Sociability.

Negative emotionality. Implies the individual differences in sympathetic arousal and in susceptibility to experiencing distress. By distress it is implied not only such high-arousal states as pain and frustration but also low-arousal states such as bereavement and depression,

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assuming that underlying this arousal, there is a hyperactive sympathetic division of the autonomic nervous system. The primordial distress is differentiated during the initial year of life into fear and anger. First fear is evident, because it involves less coordination to recoil and retreat than to attack. Therefore, anger may require a few weeks more of the maturation process, or we can say that anger developed from fear. A study by Riediger and colleagues collected information about daily affect in tandem with the degree of motivation to maintain or even enhance that affective state. Results showed that adolescents endorse a greater desire to enhance their negative affect and tend to reduce their positive affect in daily life, a phenomenon termed counter-hedonic motivation. This suggests that in addition to the stressful, uncertain environments adolescents face in daily life, affective responses to these environments might actually be consistent with adolescents' desire to achieve and maintain particular emotional states.

Degrees of emotionality: Distinguishing the degree of emotionality in people, overly sensitive people are more distressed when faced with emotional stimuli, the stresses of life-and they react with heightened emotional arousal and are harder to calm these intense emotions. Focusing on the developmental course of temperament, the environment in which the temperament is fostered while the genetic makeup may define the presence of certain temperamental traits but here, the environment plays a huge role in manifesting them. It has been assumed that environmental factors primarily operate across the families, making children belonging to the same families similar. The behavioural genetic unexplored environmental variance that affects the individual experiences within the family that make children in the same family as different from their siblings. Even changes that involve the entire family may affect one child more than others in the family such as the impact of divorce. All in all, it's the interplay in nature and nurture that reflects the overall development of one's temperament and personality.

Activity: Referred to the level of physical energy individuals use in body movement like being active in social situations, use of limbs at a higher rate, an urgency to work more, physical exertion like preference for exercises that eventually increases stamina. Research by Allen and Laborde (2014) showed the impact of physical exercise on the development of personality state, stability in individuality, improves extroversion and agreeableness, and a sense of discipline harboured by sportsmanship in an individual (Eime et al., 2013; Stephan et al., 2014). Daily routine of physical exercise can bolster adolescent's self-image and confidence, the ability to regulate oneself is essentially improved. (Vukasovic Hupic and Bratko, 2015; Alkadhi, 2018).

Sociability: Is the tendency to prefer the presence of others to being alone (Buss & Plomin, 1984, p. 63). Sociability is not the same as shyness, because shy people may desire the presence of others, but they avoid it because they tend to be tense and anxious when surrounded by other people, especially unfamiliar people (Buss & Plomin, 1975). These assumptions about social rewards entangle us to explore the nature of sociability. It consists of seeking and being gratified by the rewards that flow naturally in social interaction: like presence of others, group activities, attention, responsibility, and initiation. These rewards represent increments in reinforcing power. Responsivity may be defined as the ingredient of social interaction and what is more desired by sociable people.

Assuming that sociable people are highly motivated to seek the rewards and therefore are more willing to tolerate the punishments: like crowding, excessive attention, and

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intrusiveness. As of their strong social motivation, they develop appropriate social skills and continue seeking social interaction until they find contexts in which the rewards exceed the punishments. Referring to the developmental differences, sociable children tend to be glad to see others as they anticipate the social rewards they value as they tend to smile more, and be more responsive to others. Formal people are especially drawn towards unwritten rules governing social behaviour like manners, etiquette, forms of address, recognition of status, and modesty. Their central concern is propriety: doing what is correct and socially acceptable. They are sensitive to separation between public and private scenarios, and they draw a sharper line than most of us between allowable private behaviour and public behaviour. Sociability in adolescence is explained by Social motivation models suggesting that during adolescence there are several occasions where a higher value is given to displaying risky behaviours, not correlating from “non-social value” of the result of the act (Crone and Dahl, 2012).

Verbal Models: Reward Sensitivity. The verbal reward sensitivity theory of sociability backed by research which suggests that adolescence is the time when the brain mechanism of reward processing matures at a high rate coinciding with relatively low regulation of cognitive control systems, the interaction of these two systems gives rise to an imbalance predisposing the adolescents to engage in risk taking behaviour (Casey et al., 2008). The element of circuitry imbalance is linked to reward sensitivity that impacts their social development and changes in peer influence. The increased reward sensitivity impacts the risk taking in adolescence, that pretext of a social situation, can increase their desire for social reinforcement and indulgence in risk taking, as they are attuned to cues of risk taking and also the brain regions are more active in adolescents as compared to adult risk taking behaviour (Chein et al., 2011).

Verbal Models: Distraction. The verbal model describes the relatively low maturation of brain regions associated with cognitive control which forms the core of the distraction model marking with low control and regulation in emotionally provoking situations.

Impulsivity. Depue and Collins (1999) define impulsivity as a construct that comprises a cluster of traits ranked lower in the spectrum, like sensation seeking, risk taking behaviour, novelty seeking, boldness in making decisions and boredom susceptibility, unreliability and unresponsiveness'. According to Buss and Plomin (1975) who included impulsivity, among the temperamental traits of emotionality, activity, and sociability. Their research hypothesized that impulsivity contains several dimensions including inhibitory control, or the ability to delay gratification as its major theme. The other dimension involves the ability to consider alternatives and consequences prior to making a decision, and the ability to persist on a task; these temperamental traits influence the behaviour in an integrative manner. For example, as activity and emotionality encourage people towards an action, impulsivity repels a person to not imitate a behaviour properly. Impulsivity can also be implied as doing things without a proper thought behind it. According to Cloninger, impulsivity involve “automatic, preconceptual responses to perceptual stimuli, presumably resembling inherit biases in processing information” (Cloninger et al., 1993), several of the research has established the finding that the negative emotionality have contributed to eating disorders (Lilenfeld, Wonderlich, Riso, Crosby, & Mitchell, 2006; Stice, 2002). Neuroticism has also been found to be consistent with binge- purge symptoms, whereas there is also positive evidence for impulsivity; and bulimic symptoms that tend to co-occur along with other risky behaviours associated with impulsivity (Lilenfeld et al., 2006). For

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understanding impulsivity from a physiological perspective, Newman and colleagues 1991) have attempted to explain impulsivity in terms of approach/avoidance learning. Three different components: the Behavioural Activation System (BAS), the Behavioural Inhibition System (BIS), and the Nonspecific Arousal System (NAS). The BAS corresponds to environmental hints for reward and reinforcement by activating approach and active avoidance. Whereas the BIS, responds to environmental factors for punishment and non-reward, with passive or avoidance action. Thus, the BAS and BIS are connected together to work conjugally to initiate an action and avoid certain action at same time. The third system, referred to as the NAS, which receives excitatory command from both the BAS and the BIS to increase the frequency of a certain behaviour and intensify the action and prepare for response. Furthermore, results suggest that extraversion reflects the relative strength of the BAS to BIS and that neuroticism reflects the higher strength of the NAS, marking the increased impulsive tendencies.

REVIEW OF LITERATURE

The psychological distress studies have found that adults with high levels of stress also had psychological distress. Analytical reports suggest that moderate amounts of stress or increased stress are positively associated with psychological distress accompanying several health disorders and premature death, which originates with pessimistic thinking and unhealthy lifestyle.

The impact of COVID-19 has been unprecedented in stress to the young population. The report by Singh. M et al (2021) stated that the content of worries of Indian adolescents among segregation of groups of young people who were particularly vulnerable to negative emotions along with the impact of coronavirus on their lives, respondents' top worries centred upon academic attainments, social and recreational activities, and physical health. Females were as compared to males, worried about academic attainment and physical health while males were more worried about social and recreational activities (Ilis, W. E, Dumas. T, & Forbes. L. M. (2020). Physical isolation and economic instability, worry of infection, and uncertainty for the future circumstances had a profound impact on global mental health. Adolescents, the effects of this stress could be heightened due to several developmental characteristics in COVID-19 crisis, the feelings of loneliness and depression, as well as time with family, virtually with peers, schoolwork, using social networks, and engaging in physical activity. Findings entitled the physical isolation combined with economic instability, fear of uncertainty of the future has enabled this area a top priority (Brooks et al., 2020; Holmes et al., 2020).

The review by Pedrosa. L. A et al (2020) aimed to analyse how human behaviour has changed throughout the covid 19 pandemic period. The key components of the emotional reaction to the pandemic, that internal and external factors, such as personality traits, gender, the media, and the socioeconomic factors , clouded the social perception of the pandemic and the psychological outcomes of the pandemic increasing the psychological symptoms like including fear, anxiety, depression, and suicide ideation are triggered by the pandemic itself as well as by the adopted preventive measures and therefore the need of urgent support for the participants belonged to mental health professionals, elderly, college students and economic disadvantaged groups .Previous studies reviewed that fear was positively correlated with depression, anxiety, perceived infectability(Ahorsu et al., 2020). Furthermore, consequence of fear is the related stigmatisation and discrimination of infected

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or exhibiting symptoms of COVID-19. Another outcome of fear is suicide (Dsouza et al., 2020; Mamun and Ullah, 2020), and fear of infecting others (Mamun and Griffiths, 2020).

Research by Banducci. A et al. (2019) shows how distress tolerance, perceived stress, and internalising symptoms change during adolescence. According to the data, rates of felt stress rise during adolescence, which is consistent with earlier studies. Furthermore, distress intolerance predicted increases in perceived stress at baseline, which led to an increase in internalising symptoms. These findings support the use of a negative reinforcement paradigm to describe the genesis of internalising symptomology and highlight the crucial role of distress tolerance in bringing about changes in depression and anxiety symptom. Staying home prevails, home is not always a safe place for everyone. It can also be an isolation for distortion of power and abuse, supported by studies suggesting that forced proximity, economic stress and disaster-related instability, spousal aggression and domestic violence (Bavel et al., 2020; Usher et al., 2020). Quarantine means, for those living in violent places, diminished access to community-based and familial support, and lower opportunities to ask for help (Usher et al., 2020).

Another alarming condition that increases is post-traumatic stress disorder (PTSD) (Brooks et al., 2020), Also prevailed in previous epidemics, such as H1N1 Influenza and Ebola (Cénat et al, 2020). PTSD is continued even after longer periods of social disconnection and associated with increased suicide risk by 2–5 times. PTSD patients are less likely to seek help from authorities, may be due to fear of stigmatisation, believing that symptoms may disappear over time and concerns about the cost of mental healthcare (Dutheil et al., 2020).

Researcher Branje. S and Morris. S (2021) reviewed the effect of the pandemic in emotional, social, and intellectual adjustment during adolescence from four continents. Many teenagers, particularly those who were already at risk before the pandemic, had increased depressive symptoms, negative affect, and loneliness, as well as poor academic adjustment, according to the studies. At the same time, many adolescents possessed personal, family, and community resources that helped them remain resilient and function well despite the challenges they faced. Ravens.U, et al, (2021) found out that socially impoverished children and children of mentally ill parents were found to be at an increased risk of mental illness, but female gender and older age were linked to fewer mental health issues. During the pandemic, children and adolescents' mental health was aided by a positive family climate and societal support.

Piarkaska.J(2020) set out to investigate the role of personality traits, emotional capacities, trait emotional intelligence, self-efficacy, and self-esteem in adolescent perceived stress. Stress reduced self-efficacy, self-esteem, extraversion, and psychoticism, as well as extraversion and psychoticism. In comparison to men, women reported higher levels of stress. Researchers have demonstrated that social-contextual influences (norms, group membership) shape the experience, regulation, and expression of emotions (Doosje et al., 1998).

Resilience is an important and often overlooked resource for coping with stress. Individuals who have faced moderate difficulties in the past show higher resilience to recent adversity (Seery, Holman & Silver, 2010), and exposure to past stress copes with current stress. Social demographics and family results show that among the four stressful life events, family conflict and social problems are more strongly associated with the perceived amount of

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stress. Higher levels of education are negatively associated with perceived stress. Davis. J (2012) utilised a nonexperimental, correlational design examining archival data. The participants consisted of approximately, early adolescent fifth grade students aged 10- 13 years. The participants were administered the BarOn Emotional Quotient Inventory (BarOn EQI: YV) and a demographic questionnaire. The results concluded that girls generally reported better stress management skills than boys. The higher SES group reported increased adjustment to the environment.

Using data from the National Institute of Child Health & Human Development Study of Early Child Care and Youth Development (SECCYD), the Study by Shapiro. B and Laurence. S (2013) found that emotional reactions in childhood, household confusion, and household income were found in childhood and adolescence. Affects young people participants in SECCYD were tracked from birth to adolescence. The results indicated that emotional responsiveness and low household income in childhood directly predict higher levels of emotional and behavioural problems in adolescence. In contrast, the effects of family problems on adolescent mental health depend on the emotional response of the child. The study by Jawonski. M and Linke. S (2019) was to look at the emotionality, activity, and sociability (EAS) temperament domains in connection to morningness–eveningness in teenagers. The EAS Temperament Survey, the Composite Scale of Morningness, and the Munich Chronotype Questionnaire were completed by 539 students aged 13–19 years. Greater emotionality-anger was linked to eveningness, while greater emotionality-distress was linked to lower social jet lag across the five EAS dimensions (emotionality-distress, emotionality-fearfulness, emotionality-anger, activity, and sociability). The findings show that evening chronotypes have a disposition that makes them prone to rage. Chander. S and Rathore. P (2015) studied fifty boys and girls gymnasts (n=50) from Madhya Pradesh, with ages ranging from under 14 to under 17. A questionnaire with four distinct measures was handed to the gymnasts (Emotionality, Activity, Sociability, and Impulsivity). EASI was compared separately to see if there was a difference in the gymnast's temperament level, and the results show that there is no significant difference in the reported temperament level between the groups of gymnasts aged 14 and 17 years old. The investigator also tested all temperamental traits differences between under 14 – 17 Boys and girls, Amato assessed how current marriage promotion policies affect children's well-being. The research showed that there are many causes for children's social or emotional problems, and that there is only one family structure, so interventions to increase the proportion of children raised with parents are for children in the United States. It states that it only slightly improves overall well-being. In addition, data from a longitudinal research on mediational and moderational relationships are presented by Eisenberg. N and Guthrie. R (2000) At the first, assessment, the effects of attention management on social functioning were mediated by resiliency, and this relationship was attenuated by negative emotionality. The relationship between behaviour management and socially appropriate/prosocial behaviour was modified by negative emotionality. These findings emphasise the necessity of evaluating various types of regulation as well as the interactions between dispositional traits in predicting social outcomes. Stevenson. J (1998) determined the significance of genetic and common environmental influences on temperament and behaviour relations, as well as the longitudinal covariance between emotionality, activity, and sociability (EAS) temperamental traits and anxious/depressed behaviour, attention problems, delinquent behaviour, and aggressive behaviour. It was found that anxious/depressed behaviour, attention issues, delinquent behaviour, and aggressive behaviour were all predicted by high emotionality. Also, boys had a higher influence on delinquent and violent behaviour. High activity levels,

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especially in younger children, were also linked to aggressive conduct. The correlation between emotionality and attention issues, as well as emotionality and aggressive conduct, was revealed to have a significant genetic influence. Based on Baron and Kenny (1986) research, it was predicted that: (1) higher perceived stress would be associated with lesser life satisfaction, (2) high perceived stress would be predictor of low levels of self-efficacy and life satisfaction. Not only for children the scale was reliability used for adult women as well, the psychometric properties of the EAS temperament survey (Buss and Plomin, 1984), the results of the longitudinal study were assessed over period of 3 years and indicated that model as stable to use. The stability estimates of the EAS instrument were assessed over a period of 3 years. The results indicated an acceptable fit for the basic theoretical EAS model. Examining the effects of age and gender on perceived interpersonal stress, coping with interpersonal stressors, and psychological adaptation in early and middle adolescents. Results Compared to boys, girls had higher levels of perceived interpersonal stress and took advantage of more social support. In addition, girls showed higher, distracted and lower scores for maladaptive coping and emotional distress than boys. Problem-focused coping and emotion-focused coping are negatively associated with emotional and behavioural problems, and perceived stress and maladaptation coping are positively associated with coordination problems.

Van Doorn et al. studied how emotional expressions impact attributions of agency and responsibility under circumstances of uncertainty. Across three studies, it was found that expressions of regret lead to inferences that the expresser was responsible for a situation, although expressions of anger reflected that someone else was responsible. These results imply that emotional expressions can make sense of ambiguous social situations by virtue of informing attributions that correspond with the appraisal that are associated with discrete emotion. Focusing on the domain of conscious observation of others' painful facial expressions has confirmed to increase pain perception in observers and to impact behavioural response tendencies. The study by Khalidi et al, indicates that even subliminal exposure to painful emotional expressions can surge pain perception and enhance behavioural response tendencies. The extent to which effortful control impacted the risk of internalising or externalising problems of high negative emotionality in a sample of Dutch population of pre- and early adolescents. The impact of fearfulness and frustration showed to be attenuated by increased levels of effortful control. The associations ranged between two domains of mental health investigated: effortful control attenuated the effect of fearfulness on internalising problems and the impact of frustration on externalising problems. The results were stronger for externalising problems and similar for preadolescent (age 11) and adolescents older. A heightened emotional reactivity to emotionally distressing stimuli can be associated with heightened internalising and externalising behaviours, and lead to impaired social functioning the findings support the contribution of emotional reactivity to behaviour problems and social adjustment among children living in disadvantaged urban areas, and furthermore implying that elevated reactivity may suggest risk for social difficulties in manners that overlap only partially with internalising and externalising behaviour problems. Smith and Prior (1995) found in 80 children from a stressful family that gender were not predictors of the child's stress regulation. The results were supported by a later study by Ruckman, Burts, and Pierce (1999), children with inappropriate educational situations for their level of competence were not clearly associated with gender and stress, although these researchers made hypotheses based on previous literature that male children will show more stress signals than women.

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METHODOLOGY

Objectives of the study

1. To compare the Perceived stress amongst boys and girls belonging to low economic status.
2. To compare the temperament differences in girls and boys age range of 13 - 18).
3. To compare the role of perceived stress on emotionality and temperament in adolescents (13-18).

Sample

For the present study, the purposive sampling (Non probability sampling) technique was used to shortlist 100 boys and girls of 13 to 18 years of age studying in secondary education and proficient in English language, the participants had belonged to families having low financial status. The Participants of the study were chosen purposefully, the group of 50 adolescent boys and 50 adolescent girls who belonged to economically weaker strata were chosen. All the participants were students of Government authorised school in Ghaziabad.

Instruments

1.Emotionality Activity Sociability Inventory (EASI): A Questionnaire of Temperamental traits factors of Emotionality, Activity, Sociability, and Impulsivity (EASI). By Buss and Plomin (1975). The EASI Temperament Survey was one of the first instruments designed to assess adolescents' temperament. It's a 20-item survey with five questions for each of the four temperament traits: emotionality, activity, sociability, and impulsivity, however a baseline inventory question was used for this study especially developed for the adolescent age group. All of the items are graded on a five-point scale and measure broad dispositions (Buss and Plomin 1975).

2.Perceived stress Scale: The scale have been designed by Sheldon Cohen to help measure individual stress levels. The Perceived Stress Scale (PSS) is a standard stress assessment instrument. The tool, which was originally formed in 1983, still remains a popular choice for gaining an understanding of how different situations impact our emotions and perceived stress. The questions in this test focus on the thoughts and emotions encountered during stress, the best part of this questionnaire is that it allows the participant to respond immediately to the questions, without pondering much about it, therefore giving an accurate measure.

Procedure

The methodology of the current study comprises shortlisting of participants, testing procedure and the techniques of data analysis. A total of 50 Boys and 50 Girls in the age group of 13 to 18 were selected based on their economic background (n=100) of Uttar Pradesh state. As soon as the participants were finalised, the Questionnaire was distributed under the supervision of the researcher so that the data was recorded appropriately. Buss and Plomin's Temperament Inventory covers four different measures (Emotionality, Activity, Sociability, and Impulsivity) EASI, was separately interpreted in the present study in order to judge the temperament level of participants were analysed using correlation, t- test and Pearson's correlation to see the difference among the groups participants for that the level of significance was set at 0.05 and the investigator also tested over all Temperamental traits and stress perception difference between under 13 – 18 year old Boys and under 13 – 18 year old Girls.

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RESULTS

In the analysis of results several statistical methods were utilised to scrutinise the data. The variables in the study were to compare the scores of male and female samples on two different questionnaires PSS and EASI.

Initially the mean scores of PSS scales were computed for both the male sample and female sample separately, the table below highlights the mean, Standard deviation and t test of the sample in comparison. The procedure was followed in computation and analysis of EASI questionnaire scores, to evaluate the mean, standard deviation and t test of the same.

Table 1 PSS Scores obtained by Girls and Boys

n=100	n	MEAN	SD	T test
Girls	50	24.47	4.03	0.0005
Boys	50	21.33	4.39	

Table 2 EASI scores obtained by Girls and Boys

EASI SCORES, n= 100	n	MEAN	SD	T test
Girls	50	46.34	7.64	0.05
Boys	50	43	8.54	

Table 3 Correlation of Pss and EASI scores

Correlation in PSS and EASI Scores (r value)	Interpretation	t value in PSS and EASI Scores	Interpretation
0.27607921	Positive but significant correlation	0	Null hypothesis accepted

Table 4 Correlational value for PSS and EASI baseline inventory Comparing male and female scores

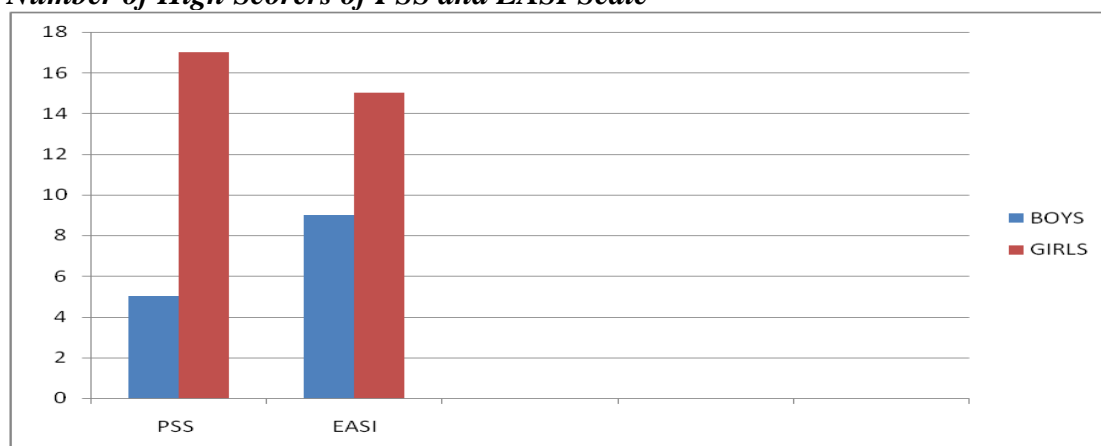
	CORRELATION (PSS and EASI r value)	Interpretation
Girls	0.39	Significant
Boys	0.08	Negligible

Table 5 Correlation Value for scores obtained on EASI and PSS

Correlation EASI (Girls and Boys)	Interpretation	Correlation PSS (r=Girls and Boys)	Interpretation
-0.20	Negative but significant	0.16	Positive but significant

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Number of High Scorers of PSS and EASI Scale



DISCUSSION

The first table highlights the mean, standard deviation and t test of the scores obtained on questionnaire PSS given by Sheldon Cohen which is a 10 item scale ,aimed to measure the perceived stress .The means, standard deviation and t scores were calculated and the obtained results were computed , in order to compare the difference in the scores based on gender of the participants .The calculation record that girl participants had mean score of 24.47 and a standard deviation of 4.03, whereas male participants had the mean score of 21.33 and the standard deviation of 4.3, the disparity of 3 points , succeeded by girls, However the deviations within the sample were seen more in male participants .It was also seen that girls had higher average on perceived stress. The t test was also computed to highlight the comparison of female and male participants on the same scale of PSS. The t value at 0.05 and 0.01 level of significance, was checked to be of 0.005, which marks the insignificance of the difference between two groups.

In the comparison of Table number 2, which highlights the mean, standard deviation and t test of the scores obtained on questionnaire EASI baseline inventory given by Buss and Plomin, the means, standard deviation and t scores were calculated and the obtained results were computed, in order to compare the difference in the scores based on gender of the participants. The calculation record that girl participants had mean score of 46.34 and a standard deviation of 7.64, whereas male participants had the mean score of 43 and the standard deviation of 8.54, the disparity of 3 points, succeeded by girls, however the deviations within the sample were seen more in male participants. It implies that female participants were also high on the Emotionality spectrum marked by higher scores on sociability, activity and impulsivity.

The t-test was also computed to highlight the comparison of female and male participants on the same scale of PSS. The t value at 0.05 and 0.01 level of significance, was checked to be of 0.05 was found which marks the insignificance of the difference between two group, because greater the value of t , the greater the difference between two groups and the t value was found to be very low in comparison to the table value , so its assume to be of small difference between the groups. It marks the significance that girls have found to be more on perceived stress than boys and having higher scores of perceived stress influence their scores on emotionality spectrum as well marked by higher scores on EASI baseline as well, whereas in case of boys, the group have a significantly low correlates among the scores of Perceived stress and EASI baseline inventory.

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Further analysing the results, the data from table 4 highlights that correlation of scores obtained by girls on EASI and PSS were shown to be positively correlated ($r = 0.39$), which corresponds that as the score increases in one scale, the score also increase on another, in case of girls, the high score on perceived stress may lead to higher score on EASI beeline inventory too. For the male participants, the correlation in PSS and EASI baseline inventory found to be positive, but lower magnitude($r = 0.08$). It marks that the correlation is low, which means that as the score of PSS increases, the EASI score also increase, however the magnitude of the correlation is less. Table 5 reflects the correlation of scores obtained on EASI baseline inventory marks a negative correlation ($r = -0.20$), which means that as the scores of one gender increases the score of another gender reduce or shares an inverse relationship. From the same table, the correlation of boys and girls scores on PSS were correlated, marking a positive but small correlation in scores ($r = 0.16$). The correlation among the scores of EASI and PSS scales were found to be positive among, correlating at the r value of 0.27, which marks the positive correlation among the scores but at a lower magnitude.

From the statistical analysis it was found that there was a low correlation among the PSS and EASI scores, shows that there is a very bleak relationship between perceived stress and the emotionality of the adolescents of underprivileged homes, the emotionality spectrum seems to be very less effected by the stress adolescents perceive. Moreover, adolescents have lower perceived stress in all, but the results indicate that the female participant were slightly higher on both emotionality and perceived stress as compared to the male counterparts, as more number of girls show higher scores on the Perceived stress scale and Emotionality and EASI inventory, marking their emotional reactivity, impulsivity and sociability. There are many reasons that transform into perceived stress, it entails the environmental factors, individual temperamental factors and cognitive factors that may contribute to the overall behaviour of a person. The adolescent population is especially reactive towards the stressors, they face. The population surveyed under this study belonged to underprivileged strata based on financial criteria.

The total participants of 100 were surveyed, females especially were high on perceived stress, whereas boys had lowered scores on perceived stress ($r = 0.16$). It was found from the analysis that on correlating the scores of male and female candidates on EASI temperament inventory, there was a negative correlation, as girls were also higher in the particular spectrum of emotionality. Supporting literature by Nolen-Hoeksema S (1990) shows when women and men have similar psychological problem influencing them, females are more vulnerable than men to perceive stress, due to the differences in their biological and social responses to stressors, self-concepts, or coping styles. Another study by Loganathan & Murthy, (2011) suggests that younger women are even greater risk of mental distress, which immensely correlated with hegemonic masculinity that undervalues women in front of male. Across the world, researches evidence that common Mental illnesses such as depression and anxiety are more prevalent in the female gender besides poverty. Hormonal factors associated with the reproductive cycle may contribute to women's proneness to depression. In India, the lack of staunch policies for the welfare of unhealthy women along with any clear policies along with social stigma further elaborating the situation (Malhotra & Shah, 2015). Furthermore, the quality of life, basic need sufficiency, and permanence of housing were positively correlated with mental well-being, but the same does not correspond to the gender difference in the group, not that significant difference was found within the male and female population.

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In a brief and informal interview conducted by the researcher from the participant highlights that many female participants had emotional problems contributed due to familial conflicts, the parental pressure for marriage and early marriage and lack of freedom was mainly the concerning factor for them, when analysing the data it was also observed that the female participants had more coping strategies to counter emotionality as compared to males as they had usually reported their emotionally conflict to their loved ones, whereas male participants had difficulty in expressing their feelings to anybody and they keep their feeling to themselves.

Also in a brief interview, some facts highlighted were related to violence in the young population that often contributed to their distress. Violence is not only related to the external slum environment, but also to the homes. The persistent dread of eviction from homes and abuse may make the children sensitive to the behavioral and emotional issues as differentiated with children living in rural areas or non-slum locales (Bhatia, 2007 & Patel, Flisher, Nikapota, & Malhotra, 2008). Seeing violence and being the target of violence is even a greater stressor in the life as a child and spousal abuse may highly correlate and predispose to negative physical and reduced mental growth and cognition in young as they undergo persistent episodes of domestic abuse and are forced to live with this anxiety of evicting the home, and this may create a sense of instability in the emotional states of the children of these homes (SAGE Journals, 2011). Another hypothesis regarding the scores obtained may indicate towards lower self-esteem and bleak form of self-concept in the participants who scored higher on EASI inventory, happening to make them more sensitive towards the environmental stress and ultimately challenging their self-perception in long run. Excessive emotionality may even lay an underlying factor in the development of mental illness and physical symptoms related to it in adult years. However, if appropriate coping strategies are utilised to deal with the heightened emotionality, it may provide further cognitive and emotional growth.

CONCLUSION

In the end it was finally seen that Perceived stress may slightly contribute to the Emotionality spectrum among adolescents from underprivileged homes, primarily on the sub-spectrums of emotionality, activity, sociability and impulsivity. It was confirmed that males were lower in the perceived stress and Emotionality spectrums suggesting different contributing factors like emotional, social and temperamental heritances. The correlation was however present in the perceived stress and EASI scores of both the category of sample. The study implicated future research on the temperamental correlates and drew conclusion that there should be more emphasis on health care and psycho-educating adolescents, marking needs for staunch government policies to support them.

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Conflict of Interest

The author(s) declared no conflict of interest.

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