

A Study on Stress and Anger Among Adolescents During Covid-19 Pandemic

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ABSTRACT

Aim: Hans Selye defined stress as “the nonspecific (that is, common) result of any demand upon the body, be the effect mental or somatic.” Anger is an emotion characterized by antagonism toward someone or something you feel has deliberately done you wrong (Kazdin & Alan., Ed. *Encyclopedia of psychology, American Psychological Association*). The primary objective of the present study is to analyze the relationship between stress and anger among adolescents. The study also analyses the difference in the level of stress and anger among adolescents across gender. The sample consists of 168 adolescents age varying from 15-19 out of which 84 were boys and 84 were girls, through purposive sampling method. Samuel Davies Sanford Shapiro and Martin Wilks’ Shapiro-Wilk test is used to test the normality of the data. Stress Coping Style Inventory (SCSI) and Novaco Anger Inventory (NAI-25) are used to collect data and were analyzed using Spearman Rank Correlation and Mann Whitney U test with the help of SPSS software. **Result:** The result shows that there is no significant difference in the level of stress and anger among young adults across gender. There is no significant relation between stress and anger among young adults.

Keywords: Adolescents, Anger, Stress

Hans Selye, a pioneer in the study of stress, defined it as “the nonspecific (that is, common) result of any demand upon the body, be the effect mental or somatic” (Goldberger and Breznitz, 1993). Selye further demonstrated that persistent stress could cause the animals to develop various diseases similar to those seen in humans, such as heart attacks, stroke, kidney disease and rheumatoid arthritis. At the time, it was believed that most diseases were caused by specific but different pathogens. Roz, Brody & Dwyer (2002) also defined stress as “a state of physiological and physical tension produced, according to the transactional model, when there is a mismatch between the perceived demands of a situation (the stressor) and the individual’s perceived ability to cope”. Lazarus and Folkman (1984) defined stress as “a pattern of negative physiological responses occurring in situations where people perceive threats to their well-being which they may be unable to meet”. Stress is a normal reaction to everyday pressures, but can become unhealthy when it upsets your day-to-day functioning. Good stress, called eustress, can

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actually be beneficial while bad stress, or distress can be counterproductive. Good stress can help with motivation, focus, energy, and performance. On the other hand, bad stress typically causes anxiety, concern, and a decrease in performance. It also feels uncomfortable, and it can lead to more serious issues if not addressed (Lindberg, 2019).

Anger is a natural and mostly automatic response to pain of one form or another (physical or emotional). Anger can occur when people don't feel well, feel rejected, feel threatened, or experience some loss. Anger is a basic emotion (Plutchik, 1980), frequently experienced even by normal people (Tafrate, et al., 2002) and a clinical problem (Lachmund, et al., 2005) as well. Anger is a secondary emotion for teens as it often masks other underlying issues including sadness, hurt, fear, and shame. When these underlying emotions become too much, a teen will often respond by lashing out. Because adolescence can be stressful, most teens will lash out from time to time. However, for teens with anger issues, emotional outbreaks are a regular occurrence. The behavior of teens with anger and defiance issues exhibit extend far beyond the typical disrespectful behavior, eye-rolling, slammed doors, and arguments between teen and their parents. Anger is a normal part of adolescence and can be a healthy emotional response to outside stressors. There are many factors that can contribute to anger issues and defiance in teens. Every teen's emotional regulation skill set, capacity, and maturity is different. Some teens simply need more help in learning how to healthily manage their emotions and cope with stress. Other teens experience intense anger as a symptom of a mental health issue, traumatizing life experience, or simply from the stress and pressures of adolescence. Some of these common triggers of severe anger in teens include: low self-esteem, victim of bullying or persistent and unhealthy peer pressure, conflict within the family, traumatic event, death of a loved one, adoption issues, substance abuse, divorce, abuse and grief. In addition to the above list, an unresolved issue such as teen depression, anxiety, attention deficit hyperactivity disorder (ADHD), and oppositional defiant disorder (ODD) can contribute to anger issues in teens. These disorders often impact social skills, self-control, and impulse control which results in a child being more prone to having angry outbursts (Watson,2019).

Definition of Key terms

Stress- Hans Selye defined stress as “the nonspecific (that is, common) result of any demand upon the body, be the effect mental or somatic.”

Anger- Anger is an emotion characterized by antagonism toward someone or something you feel has deliberately done you wrong (Kazdin & Alan.,Ed. *Encyclopedia of psychology American Psychological Association*).

Operational definitions

Stress- Stress can be defined as a state of emotional or mental strain or tension that are resulting from a challenge or demand that cause anxiety, restlessness, lack of motivation or focus, irritability or anger and sadness or depression.

Anger- Anger can be defined as an intense feeling of displeasure, exasperation, and malevolence in situation which people feel attacked or threatened, frustrated or powerless that can lead to increased blood pressure, increased heart rate, and tingling sensation.

Relevance of the study

This study was relevant as it focuses on the commonly observed phenomena of elevated level of anger and stress among adolescents very specially in the context of the locked down situation of the Covid pandemic.

REVIEW OF THE LITERATURE

Geldert, (2017) conducted a study on the Effects of Yoga and Mindfulness-Based Practices on Stress and Anxiety in Children and Adolescents. In-depth interview questions were created and the interviews were recorded, then transcribed. The questions utilized for this research were developed after conducting a pilot test in early 2016, from the literature review, and from the writer's MSW research committee. Questions were also developed from this writer's previous experience in the field of yoga and other mindfulness-based practices. The result shows that yoga practices alleviated the stress as well as teach children ways in which to cope with the stress and anxiety.

Prabhu et. al (2016) conducted a Study on Anger Management among Medical Undergraduate Students and Its Impact on Their Mental Health and Curricular Activities. A newly developed questionnaire was utilized which included a simplified version of the Novaco Anger Scale and Provocation Inventory and the modified Patient Health Questionnaire 9 (to measure the mental health). A correlation of data was made based on the anger tendency scores and anger management scores with the mental health scores (based on the modified PHQ-9 scores) statistically.

Graves, et.al (2021), conducted a study on Gender differences in perceived stress and coping among college students. The student sample consisted of university students (n = 448) from a large, suburban, public university in Boca Raton, Florida. The students had 30 minutes to complete the Perceived Stress Scale (PSS) and Brief COPE for measurements. The females reported higher total PSS than their male counterparts. Among the major dimensions of coping, the female students utilized more emotion-focused coping strategies than their male counterparts did. No gender differences in problem-focused or avoidant coping strategies were found.

Burt (2014), conducted a study on Identifying Gender Differences in Male and Female Anger Among an Adolescent Population. Pilot study explored differences between the levels of anger expression and anger control by adolescent males and females. Eighteen participants (9 males and 9 females) completed a strength-based anger management group promoting wellness. This pilot study used the State-Trait Anger Expression Inventory-2 Child and Adolescent (STAXI-2 C/A). Results indicated that females exhibited more anger expression, as well as less anger control. However, females had higher levels of overall improvement in comparison with male counter parts.

Rationale

After the limited review of the literature, the researcher found that there is no research related to stress and anger among adolescents, so the researcher is trying to research on this topic. The researcher is hopeful of finding this valuable information so as to enable researcher and others to know some information about adolescents in the sociodemographic area of Kerala, India.

METHODOLOGY

Problem

- Is there any significant relationship between stress and anger among adolescents across their gender during Covid-19 Pandemic?

Aim

- To study the experience of stress and anger among adolescents across gender during Covid-19 Pandemic.

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Objectives

- To study the prevalence of stress and anger during Covid-19 pandemic among adolescents in different parts of Kerala, India.
- To examine the relationship between stress and anger among adolescents during covid-19 pandemic in Kerala, India.

Variables

- **Independent Variable:** Adolescents
- **Dependent variables:** Stress and Anger

Hypotheses

The hypotheses were:

- **H01.** There will be no significant relationship between stress and anger among adolescents.
- **H02.** There will be no significant difference in the level of stress among adolescents across gender.
- **H03.** There will be no significant difference in the level of anger among adolescents across gender.

Research Design

The study was quantitative in nature and employed a correlation analysis to determine the relationship between stress and anger among adolescents during Covid-19 pandemic. The study also adopted a between-group research design to assess the difference in the level of the stress and anger among adolescents across gender.

Research Sample

The sampling distribution was even. The participants comprised of 168 college students. A sample of 84 male participants and 84 female participants, aged 15-19, was obtained. The data collection mode used in this research was Google Forms. The participants were from different parts of Kerala, India. The sample belonged to different gender, religions, family type and area of residence.

Sampling criteria

Inclusion criteria

Only the participants who met the following criteria were selected.

- Willingness of participants through online mode.
- Age limit 15-19.
- Those who hailed from Kerala State.

Exclusion criteria

Participants who fell under the following criteria were excluded.

- Those who have psychological problems.

Tools

The following tools were administered individually to collect the required data:

1. **Stress Coping Style Inventory [SCSI (Lin and Chen in 2010)]:** Stress Coping Style Inventory scale was developed to assess the different coping strategies people use in response to stress. The SCSI is divided into four factors, with a total of 28 questions. The four factors included are Factor 1- active emotional coping (1-8), Factor 2-

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passive emotional coping (9-14), Factor 3- active problem coping (15-20) and Factor 4- passive problem coping (21-28).

2. **Novaco Anger Inventory – Short form NAI -25 [Mills, Kroner, and Forth, (1998)]:** Novaco Anger Inventory scale tells you how an individual experiences anger and identifies the kind of situation that induce anger in particular individuals. Novaco Anger Scale (NAS) is a self-report questionnaire with Cognitive, Arousal, and Behavioral subscales that constitute a 48-item NAS Total score. It has a separate 12-item Anger Regulation subscale. This questionnaire is designed to index a person's disposition for anger, which is a risk factor for violence and a dynamic variable amenable to treatment. The NAS was developed in conjunction with the violence risk project of the MacArthur Foundation Research Network on Mental Health and Law. It was later revised, along with its companion scale, the 25-item.

Sociodemographic Data

The socio demographic data collected include peripheral details about the participant and other details which helped classification of participants. Consent to participate in the study was also supposed to be marked by the participant. The sample consisted of different demographic variables such as age, family type, religion, domicile, economic status, educational attainment, and civil status.

Procedure

Purpose of the study was explained to the participants online and their willingness to participate in the study was ascertained. The participants were initially asked few personal questions like name, age, gender and qualification. The Stress Coping Style Inventory (SCSI) questionnaire, Novaco Anger Inventory- Short form NAI-25 were given to the sample online with proper instruction and the assurance that the information will be kept confidential and will be used for research purposes only. Participants were encouraged to contact the scholar in case of any doubts that arise while filling out the questionnaire. In order to do so, personal information like email ID of the scholar was shared with the Google form. Responses were collected from the participants. The scoring for the two assessment was done and interpreted according to the manual.

Analysis of data

The statistical analysis of the data was carried out using a statistical package for social science version 20(SPSS20). The collected data were analyzed using following statistical test.

- Mean (μ)
- Kolmogorov- Smirnov test
- Shapiro- Wilk test
- Spearman's rank correlation (ρ)
- Mann- Whitney U test

Ethical considerations

- Data collected has been used only for the research purpose.
- Informed consent from each and every participant was acquired, through online, before collecting the data.
- Confidentiality of the obtained information has been maintained throughout the study. Information about the researcher such as name, age, gender was stated as well.

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- The contact details of the research scholar were shared with the Google form in case of any doubts that arise while filling out the questionnaire.

RESULT

The main purpose of the study was to investigate the level of stress and anger among adolescents. For this purpose, the investigator formulated 3 hypotheses. Results are shown below.

Table 1: The relationship between Stress and Anger among Adolescents

Variable	Mean	SD	W	r	Sig
Stress	89.77	9.568	.935	.032	.676
Anger	53.59	16.830	.965		

Spearman's rank correlation was used to analyze the correlation between the variables as the data was not normally distributed. The means score obtained on Stress is 89.77. The mean score obtained on Anger is 53.59. The standard deviation of Stress is 9.568 and of Anger is 16.830. Based on the correlation significant value (.676) we can infer that there is no significant relationship between Stress and Anger. So, we accept the null hypothesis. Based on correlation coefficient (.032) we can infer that Stress and Anger is not correlated.

Table 2: Stress among adolescents across gender

Variable	Gender	N	Mean Rank	U	Sig
Stress	Male	84	85.14	3474.000	.864
	Female	84	83.86		

Data presented in the table.2 indicates that there is no statistical difference in the level of Stress among adolescents of both gender ($U= 3474.000, P>0.05$). The mean rank for male is 85.14 and mean rank for female is 83.86.

Table 3: Anger among adolescents across gender

Variable	Gender	N	Mean Rank	U	Sig
Anger	Male	84	80.86	3222.500	.332
	Female	84	88.14		

Data presented in the Table 3 indicates that there is no statistical difference existed in anger ($U=3222.500, p>0.05$). The mean rank for male is 80.86 and mean rank for female is 88.14. The significant value of anger among adolescents is .332. Based on the result the null hypothesis was accepted. So, there is not significant difference in the level of anger among adolescents across gender.

Major Findings

1. There is no correlation between Stress and Anger among Adolescents.
2. There is no significant difference in the level of Stress among adolescents across gender.
3. There is no significant difference in the level of Anger among adolescents across gender.

Limitations of the Study

The sample size used for the study was very small and limited to one geographical area. The responses were collected via online mode, so there could be lack of seriousness to participants while answering. Purposive sampling method was used which is prone to

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researcher bias. As this is cross-sectional study, the cause and effect cannot be determined and other confounding factors cannot be looked into.

Implications of the Study

As a result of the study, it states that there is no correlation between Stress and Anger among Adolescents. Both emotions can affect us in very negative ways, mainly if left unmanaged. Prolonged exposure to anger and stress can take a toll on our physical health. It can raise our blood pressure which instigates other issues that affect us physically and emotionally.

Women are more likely to report physical and emotional symptoms of stress than men, such as having had a headache (41 percent vs. 30 percent), having felt as though they could cry (44 percent vs. 15 percent), or having had an upset stomach or indigestion (32 percent vs. 21 percent) in the past month (APA,2022). Contradictory, considering the statistical difference on comparing stress among male and female adolescents there is no difference existing in the level of stress but comparing the mean score, it indicates that males (85.14) have comparatively high stress than female (83.86). Stress management techniques like deep breathing, physical exercise and good nutrition, meditation, muscle relaxation, drug therapy, emotional disclosure can be practiced more among males.

One study, by scientists at Southwest Missouri State University, who surveyed around 200 men and women, suggested that women were as angry and acted on their anger as frequently as men. The main difference they identified was that men felt less effective when forced to contain their anger, while women seemed better able to control immediate impulsive responses to anger. On the contrary, considering the statistical difference on comparing anger among male and female adolescents there is no difference existing in the level of anger but comparing the mean score, it indicates that males (80.86) have comparatively less anger than female (88.14). Anger management techniques include mindfulness-based stress reduction, cognitive restructuring, controlled breathing, journaling, count down ,etc can be more trained among females. Anger can be a positive and useful emotion, if it is expressed appropriately. Long-term strategies for anger management include regular exercise, learning relaxation techniques and counselling (*Department of Health, State Government of Victoria, Australia, 2019*).

Scope for further study

1. For better credibility, offline method of collecting data could be adopted.
2. Further studies can be done using a larger sample size.
3. The similar correlational study can be done in population with different age groups.
4. A mixed methodology using the same variables can be employed for future studies.

CONCLUSION

Stress is a somatic or mental unpleasant experience resulting from any demand placed on an individual. Anger is an emotion of antagonism towards the perpetrator of some deliberate harm. The objective of the assessment is to study the relationship between stress and anger among adolescents across gender during covid-19 pandemic. The report is analyzed by Stress Coping Style Inventory and Novaco Anger Inventory. The data was analyzed using the following statistical methods like Mean, Kolmogorov-Smirnov test, Shapiro-Wilk test, Spearman Rank Correlation method and Man-Whitney U test. The research study was quantitative in nature. The result of the study shows that there is no significant difference in the level of anger and stress among adolescents across gender and there is no significant relationship between stress and anger among adolescents.

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Conflict of Interest

The author(s) declared no conflict of interest.

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