



**ACADEMIC STRESS IN RELATION TO PSYCHOLOGICAL WELL BEING AMONG 10+2 SCIENCE STUDENTS IN DISTRICT BILASPUR (H.P.)**

**Prakash Sankhyan**

Department: Psychology DIET Bilaspur, Himachal Pradesh

**ARTICLE INFO**

**Article History:**

Received 06<sup>th</sup> May, 2021

Received in revised form 14<sup>th</sup>

June, 2021

Accepted 23<sup>rd</sup> July, 2021

Published online 28<sup>th</sup> August, 2021

**Key words:**

Academic Stress; Psychological Wellbeing;  
10+2 Science students

**ABSTRACT**

School is a time of varied experiences and expectations wherein students are striving to give a direction to their life and make a carrier for them. Thus the present study seeks to explore the relationship between academic stress and psychological well being among 10+2 science stream students. A total of 140 students of 10+2 science stream with age range 16-18 years were participated in the study. 7 Government senior secondary schools of District Bilaspur, Himachal Pradesh were taken for this purpose. The respondents were assessed on two questionnaires i.e. academic stress and psychological well. The results showed negative and significant correlation (-.489\*\*) among academic stress and psychological well being. Academic stress accounted for a large variance in four dimensions of psychological well being and it came out to be one of major contributors to psychological wellbeing.

*Copyright©2021 Prakash Sankhyan. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.*

**INTRODUCTION**

Stress is viewed as a negative emotional, cognitive, behavioural and physiological process that occurs as a person tries to adjust to or deal with stressors (Bernstein, *et al* 2008). Stressors are defined as circumstances that disrupt, or threaten to disrupt, individuals' daily functioning and cause people to make adjustments (Auerbach & Grambling 1998). Auerbach and Grambling (1998) regard stress as an unpleasant state of emotional and physiological arousal that individuals experience in situations that they perceive as dangerous or threatening to their well-being. However, stress is perceived in different ways and may mean different thing to different individuals. It is perceived as events or situations that cause individuals to feel tension, pressure, or negative emotions including anxiety and anger. Moreover, other people define stress as the response to existing situations, which includes physiological changes (increased heart rate, and muscle tension), emotional and behavioral changes (Bernstein, *et al* 2008). Stress is always regarded as a psychological process that involves an individual's personal interpretation and response to any threatening event. It is important to note that stress can have both positive and negative effects on people. It means that stress may be a normal, adaptive reaction to threat. Its role is to signal and prepare individuals to take defensive action.

**Objectives of the study**

Following were the objectives of the study:

1. To know the academic stress of 10+2 science students in district Bilaspur (H.P.)
2. To know the psychological well being of 10+2 science students in district Bilaspur (H.P.)
3. To know the relationship between academic stress and psychological well being of 10+2 science students in district Bilaspur (H.P.)

**Rationale of the study**

In today's highly competitive world, students are facing various academic problems including exam stress, disinterest in attending classes and inability to understand the subject. Academic stress is the feeling of anxiety or apprehension over one's performance in the academic activities. It can lead to students being unable to perform to the best of their abilities in examinations.

So it is important to study the relationship of academic stress and psychological well being among students.

**Limitations of the study:** The following were the limitations of the study:

1. Only one district i.e. Bilaspur was taken for the study purpose out of 12 districts in H.P.
2. Only 7GSSSs were taken out of 95 GSSSs for the study purpose,
3. Only 20 students were taken from each GSSS for study purpose.

*\*Corresponding author: Prakash Sankhyan*

Department: Psychology DIET Bilaspur, Himachal Pradesh

## **Operational Definitions**

### **Academic Stress**

The definition of academic stress is the anxiety and stress that comes from schooling and education. There is often a lot of pressure that comes along with pursuing a degree and one's education. There is studying, homework, tests, labs, reading, and quizzes. There is the stress of doing all of the work, balancing the time and finding time for extra-curricular activities. Academic stress is especially hard on school students who are often living away from home for the first time. Teachers expect work to be completed on time. Students may underestimate the amount of time it takes to complete reading and writing assignments, to print out copies of their work.

### **Psychological Well Being**

According to Huppert (2005), psychological well being is being able to feel good about oneself and to be able to function effectively. She posits that feeling good need not necessarily mean presence of positive emotions like contentment and happiness but also presence of affection, confidence, interest and engagement. Being able to function effectively includes a range of things like having a sense of control over one's life, to be able to exploit one's potential, having a sense of purpose in life and experiencing positive relations with others. Bradburn(1969) on the other hand has viewed a person's position on the dimension of psychological well being as not just the excess of positive affect over the negative, but also frequency in the experiences of positive affect relative to the negative.

### **Review of the Related Literature**

Chen and Wong (2009) examined Stress among Shanghai University Students. A quantitative approach has been undertaken to evaluate the differences among 342 students in six universities in Shanghai. Differences of college stress, psychological well-being and coping strategy with reference to gender, year of study, etc., have been explored in turn. It Findings showed that the psychological well-being has a negative relationship with college stress and positive coping strategies have significant buffering effects on psychological health problems. Male students reported higher level of stress, worse psychological well-being, and having less inclination towards using positive coping strategies. Students studying in Science subjects scored higher in personal

Park and Jung(2010) examined the relationship between high parental expectations for academic achievement and psychological well being of children. They found that the more pressure for academic achievement and psychological well being of students. They found that more pressure for academic achievement students perceived from their parents, the higher the level of stress they experience. Searle (2012) found academic stress to be related to the well-being among students and the results of their study suggested that students who appraised schools or academics as stressful and threatening displayed lower levels of well-being. Komal Ali Hussain and Rukhsana Kausar (2013) examined the relationship between academic stress and psychological well-being of high school students. For this purpose a sample of 100 school students from two Government schools of Lahore was taken. Educational Stress Scale for Adolescent (Sun, Dune, Hou, & Xu, 2011) and Stirling Children Well-Being Scale (Liddle &

Carter, 2010) were used as tools for the individual assessment of the students academic stress and psychological well-being. Data was analyzed using Pearson Product-Moment Correlation, stepwise regression analysis and independent sample *t*-test. Result of the analysis showed that there is a significant positive relationship between academic stress and psychological well-being in school students. Regression analysis showed that academic stress significantly predicts psychological well-being of school students. Result of the independent samples *t*-test show that there is a significant gender differences in academic stress of school students.

Sibnath Deb, Esben Strodl and Jiandong Sun (2012) conducted a study on academic-related stress among private secondary school students in India. The purpose of this study was to examine the prevalence of academic stress and exam anxiety among private secondary school students in India as well as the associations with socio-economic and study-related factors. Participants were 400 adolescent students (52 percent male) from five private secondary schools in Kolkata who were studying in grades 10 and 12. Participants were selected using a multi-stage sampling technique and were assessed using a study-specific questionnaire. Findings revealed that 35 and 37 percent reported high or very high levels of academic stress and exam anxiety respectively. All students reported high levels of academic stress, but those who had lower grades reported higher levels of stress than those with higher grades. Students who engaged in extra-curricula activities were more likely to report exam anxiety than those who did not engage in extra-curricular activities.

Komal Ali Hussain(2013) conducted a study on Academic Stress and Psychological Well-Being of School Students. For this purpose a sample of 100 school students from two Government schools of Lahore was taken. Educational Stress Scale for Adolescent (Sun, Dune, Hou, & Xu, 2011) and Stirling Children Well-Being Scale (Liddle & Carter, 2010) were used as tools for the individual assessment of the students academic stress and psychological well-being. Data was analyzed using Pearson Product-Moment Correlation, stepwise regression analysis and independent sample *t*-test. Result of the analysis showed that there is a significant positive relationship between academic stress and psychological well-being in school students. Regression analysis showed that academic stress significantly predicts psychological well-being of school students. Result of the independent samples *t*-test show that there is a significant gender differences in academic stress of school students. Girls experience more academic stress than boys. Findings of the research can help in understanding awareness of educational stress and mental health among school students.

Kaur(2014) conducted a study on Impact of Academic Stress on Mental Health: A Study of School going Adolescents. This study has been conducted on a sample of 200 school going adolescent students of Bathinda district. Data were collected with the help of academic stress scale by AbhaBisht (1987) and Mental Health Inventory developed by Srivastaand JagdishRai (1986). The scores obtained were analyzed statistically and the findings of the study reveal that significant differences exist in mental health of adolescent with regard to level of academic stress they experience. Further significant difference is also found in the mental health of students with respect to their gender in terms of high and low level of academic stress.

Munir, Shafiq, Ahmad and Khan (2015) examined the relationship among loneliness, academic stress and psychological well being as measures among a sample of 165 students (67 males and 98 females) of first year selected by simple cluster sampling strategy. The participants were selected from two major colleges of Jalal PurJattan, Gujrat. The age range of respondents was 15-19 (M=16.4 and SD =0.9). The results showed significant correlation among loneliness, academic stress, and psychological well being. Loneliness, academic stress and family income were identified as the predictor of psychological well being. There were found no significant differences among male and female students. It was concluded that loneliness and academic stress were significantly negatively correlated with psychological well being and loneliness and academic stress were significantly positively correlated. Loneliness, academic stress, and family income of students play the role of indicators for psychological well being of students.

Anand and Nagle (2016) examined Perceived Stress as Predictor of Psychological Well-being among Indian Youth. A total of 281 college students (Males=174, Females= 107) in the age range of 18-24 years, participated in the study. They were administered Perceived Stress Scale and Ryff's Scale of Psychological Wellbeing. Results revealed that perceived stress had significant negative relation with all the six dimensions of psychological wellbeing. Perceived Stress accounted for a large variance in all the dimensions of psychological wellbeing. Perceived Stress came out to be one of the major contributors to psychological health and wellbeing.

**METHODOLOGY**

**Research Design:** Descriptive survey technique used to collect data for the study.

**Sample:** Out of 95 Govt. sr. sec. schools there were 30 Government Sr. Sec. Schools where the science stream was available and only 7 schools were randomly selected for data purpose. In each school only 20 students were taken for study purpose.

**Tools:** The following tools were used in data collection from the selected schools as:

**Academic stress:** Scale for Academic Stress By Sinha, Sharma and Nepal (2002) was used. It has following dimensions of academic stress as cognitive, affective, physical, social/ interpersonal and motivational. Its reliability test retest is .88 and split half is .75.

**Psychological Well being:** Psychological Well-Being Scale by D. S. Sisodia and Pooja Choudhary was used. The scale consists 50 items in Five Area-I. Satisfaction, II. Efficiency, III. Sociability, IV. Metal Health, Interpersonal Relation. The test-retest reliability was .87 and the consistency value for the scale is .90. The scale was validated against the external criteria and coefficient obtained was .94.

**Procedure:** The measures were administered in a class room setting where 20 science students were instructed and their responses were collected. Participants were provided with scales. i.e. Scale for Academic Stress By Sinha, Sharma and Nepal(2002) and Psychological Well-Being Scale by D. S. Sisodia and Pooja Choudhary and an average of 45 minutes were taken by them to fill up the questionnaire.

**Statistical data analysis**

The data was analyzed using the Statistical Package for Social Sciences (SPSS) version 20. Descriptive analysis was performed so as to summarize and describe the main features of the sample. The Spearman's correlation test was performed so as to find out how academic stress was related to psychological well-being of 10+2 science students. This method of analysis was used because some assumptions for parametric tests like the general assumption of normality and the assumption of homogeneity of variance were not met.

In addition, multiple regression analysis (MRA) was used in the analysis because the study had one continuous dependent variable which was psychological well-being and one independent variable (predictor variable) which included. Furthermore, as a result of the presence of the control variables, the MRA was used so as to determine if the presence of control variables had an influence on the relationship between academic stress and psychological well-being of students.

**Table 1** Showing the Mean and Standard Deviation

|                                    | Descriptive Statistics |                |     |
|------------------------------------|------------------------|----------------|-----|
|                                    | Mean                   | Std. Deviation | N   |
| VAR00001(Psychological well Being) | 178.9500               | 19.85354       | 140 |
| VAR00002(Academic Stress)          | 13.0500                | 4.00777        | 140 |

The average score of psychological well being was 178.95 which shows that the sample which was taken for study purpose represent normal individual with moderate psychological well being while the average score of academic stress is 13.05and SD is 4.00.

**Table 2** Showing the Correlation of Psychological well Being and Academic Stress

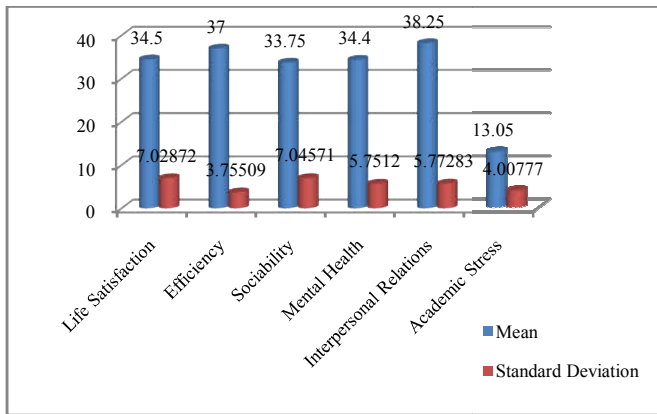
|  |                     | VAR00006<br>(Psychological well Being) | VAR00007<br>(Academic Stress) |
|--|---------------------|--|-------------------------------|
| VAR00006<br>(Psychological well Being) | Pearson Correlation | 1                                      | -.489**                       |
|  | Sig. (2-tailed)     |  | .000                          |
| VAR00007 (Academic Stress)             | Pearson Correlation | -.489**                                | 1                             |
|  | Sig. (2-tailed)     | .000                                   |                               |
|  |                     | N                                      | 140                           |
|  |                     | N                                      | 140                           |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The above table shows the correlation between Academic stress and psychological well being which is significant at the .05 level (2-tailed). It shows that as academic stress increased the psychological well being decreased or vice-versa.

**Table 3** Showing overview of the scores and standard deviation of academic stress and five dimensions of psychological well being

| Variables               | Minimum | Maximum | Mean    | Standard Deviation |
|-------------------------|---------|---------|---------|--------------------|
| Life Satisfaction       | 14      | 46      | 34.5000 | 7.02872            |
| Efficiency              | 31      | 45      | 37.0000 | 3.75509            |
| Sociability             | 22      | 48      | 33.7500 | 7.04571            |
| Mental Health           | 25      | 43      | 34.4000 | 5.75120            |
| Interpersonal Relation: | 27      | 49      | 38.2500 | 5.77283            |
| Academic Stress         | 7       | 20      | 13.0500 | 4.00777            |



Graph 1 Showing the scores and standard deviation of perceived role stress and six dimensions of psychological wellbeing

Psychological well being has five dimension, each and scores ranging from 14-49; Life satisfaction with other (M= 34.8, SD= 5.5), Efficiency (M= 36.9, SD= 4.7), Sociability(M= 38.8, SD= 6.1), Mental health(M= 33.9, SD= 5.8), interpersonal relations(M=38.2, SD= 5.5,) and overall psychological wellbeing (M=178.9065 SD=19.85) indicating overall above average psychological wellbeing of the participants. The sample had a mean of 12.4029 (SD=4.99234) on perceived stress which is below average considering the range of 10-40. The sample had a mean of 11.110 (SD= 5.1338) on academic stress which was below average considering the range of 10-40.

Table 4 Showing correlations among the study variables

|                         | Life Satisfaction | Efficiency | Sociability | Mental Health | Interpersonal Relations | Academic Stress |
|-------------------------|-------------------|------------|-------------|---------------|-------------------------|-----------------|
| Life Satisfaction       | 1                 | .322**     | .425**      | -.010         | .533**                  | -.450**         |
| Efficiency              | .322**            | 1          | .316**      | .161          | .346**                  | -.555**         |
| Sociability             | .425**            | .316**     | 1           | -.047         | .452**                  | -.244**         |
| Mental Health           | -.010             | .161       | -.047       | 1             | .479**                  | -.066           |
| Interpersonal Relations | .533**            | .346**     | .452**      | .479**        | 1                       | -.314**         |
| Academic Stress         | -.450**           | -.555**    | -.244**     | -.066         | -.314**                 | 1               |

\*. Correlation is significant at the 0.05 level (2-tailed).  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).

Academic stress is significantly related to four dimensions of psychological well being except one dimension i.e. mental health. Academic stress has come out to be negatively and significantly related to life satisfaction with others( $r=-.450^{**}$ ,  $p<.01$ ), Efficiency ( $r=-.555^{**}$ ,  $p<.01$ ), Sociability ( $r=-.244^{**}$ ,  $p<.01$ ) and interpersonal relations( $r=-.314^{**}$ ,  $p<.01$ ). Academic stress and psychological well being have different directions in which they operate, when academic stress is more it brings down the psychological wellbeing of the individual.

Table 5 Multiple Regression summaries of Psychological Wellbeing

| Model | Predictor       | Adj R <sup>2</sup> | β     | F-value | Significance |
|-------|-----------------|--------------------|-------|---------|--------------|
| 1     | Academic Stress | .234               | -.489 | 43.418  | .000         |

Academic Stress accounts for 23.4% variance (sig, .000) in overall psychological wellbeing. Since this variance is significant it was thought pertinent to study the variance explained by all the five dimensions individually.

Table 6 Multiple Regression summaries of Psychological Wellbeing

| Predictor       | Dependent Variables     | Adj R <sup>2</sup> | β     | F-value | Significance |
|-----------------|-------------------------|--------------------|-------|---------|--------------|
| Academic Stress | Life Satisfaction       | .196               | -.450 | 34.966  | .000         |
|                 | Efficiency              | .304               | -.555 | 61.583  | .000         |
|                 | Sociability             | .053               | -.244 | 8.727   | .004         |
|                 | Mental Health           | -.003              | -.066 | .611    | .436         |
|                 | Interpersonal Relations | .092               | -.314 | 15.093  | .000         |

Academic stress accounts for 19.6% variance (sig, .000) in life satisfaction with others dimension of psychological wellbeing. Academic stress is counterproductive to having and maintaining negative relations with others. Academic stress accounts for 30.4% variance (sig, .000) in efficiency of psychological wellbeing. Academic stress is negatively related to the experience of efficiency that shows that higher the score on academic stress the lower will be the efficiency thus working in opposite direction. Academic stress is counterproductive to psychological well being. Academic stress accounts for 5% variance (sig, .000) in sociability dimension of psychological wellbeing. Academic stress shows variance in this dimension emphasizing the importance of academic stress in the capability to manage one self with the environment and complete the complex array of external activities. Academic stress accounts for .03% variance (sig, .000) in mental health dimension of psychological wellbeing. Academic stress is negatively related to the mental health. Academic stress accounts for 9% variance (sig, .000) in personal relations dimension of psychological wellbeing. Academic stress is negatively related to this dimension that shows that higher the score on Academic stress the lower will be the score on personal relations

### FINDINGS, DISCUSSION AND CONCLUSION

Academic stress was measured using Scale for Assessing Academic Stress (SAAS). It consisted of 30-items. This scale has already used and validated in Nepal.8 Reliability consistency of this scale measured through alpha reliability was 0.70 in this study showing the satisfactory. The subject has to select one out of two alternative responses (yes and no) for each item of the scale. All yes responses are given one point each and summed-up to get total stress score. In this study academic stress was categorized as low stress (15 and below) and high stress (16 and above).

The average score of the students on the academic stress scale was 13.05 which is less than the 15.00. It means that the students were with low stress.

Psychological well being scale of Dr. Devender Singh Sisodia and Ms. Pooja chaudhary was used. In this scale individual with score 242-250 may be considered to have very high level of well being. Scores ranging with from 217-242 represent high level of well being. The scores ranging from 83-217 would represent normal individuals with moderate well being. The average scores on the five areas of psychological well being were as: satisfaction (34.50), efficiency (37.00), sociability (33.75), mental health (34.40), and interpersonal relations (38.25). These all values are with in 16-43 intervals. It indicates that students were normal individuals with moderate well being. Students were with less academic stress and have moderate well being.

There was a significant correlation between academic stress and psychological well being having value  $-.489^{**}$ . Correlation is significant at the 0.01 level 2-tailed).It mean that as academic stress increased the psychological well being decreased or vice- vera. The academic stress among science students was more due to cognitive and motivational factors and less due to affective, physical and interpersonal factors. It mean that there is correlation between these two variables psychological well being of the science students 10+2 class depend upon the magnitude of the academic stress which they have been felt.

There was a strong correlation (-.450\*\*) between academic stress and life satisfaction. It shows that as academic stress increased the life satisfaction get decreased. Life satisfaction is the act of satisfying, or state of being satisfied, gratification of desire, contentment in possession and enjoyment, response of mind resulting from compliance with desires or demands. Similarly there was strong negative correlation (-.555\*\*) between academic stress and efficiency. It means as academic stress increased the efficiency to do work decreased. As academic stress increased the sociability decreased. There was negative correlation (-.244\*\*) between academic stress and sociability. There was no significant correlation between academic stress and mental health. Its magnitude was -.066. As academic stress increased the interpersonal relation or social relation decreased as there negative correlation (-.314\*\*) between academic stress and interpersonal relation. As academic stress increased the interpersonal relations or social relations decreased.

Regression method was used to know that academic stress as predictor of psychological well among students. Perceived Stress accounts for 23.4% variance (sig, .000) in overall psychological wellbeing. Academic stress accounts for 19.6% variance (sig, .000) in life satisfaction with others dimension of psychological wellbeing. Academic stress is counterproductive to having and maintaining negative relations with others. Academic stress accounts for 30.4% variance (sig, .000) in efficiency of psychological wellbeing. Academic was is negatively related to the experience of efficiency that shows that higher the score on academic stress the lower will be the efficiency thus working in opposite direction. Academic stress is counterproductive to psychological well being. Academic stress accounts for 5% variance (sig, .000) in sociability dimension of psychological wellbeing.

## CONCLUSION

Despite these limitations, the present study makes a significant contribution to our understanding of academic stress and its effects of psychological wellbeing among 10+2 science students. Results indicated that Perceived academic stress was found to be negatively correlated with psychological wellbeing. There have been, to the best of my knowledge, very few studies conducted that study the relationship between perceived academic stress and psychological wellbeing among Indian youth though both these variables have been studied extensively individually.

## References

1. Anand, Kalpna & Nagle, Y.K.(2016). Perceived Stress as Predictor of Psychological Well-being among Indian Youth. *The International Journal of Indian Psychology*. Volume 3(4).
2. Auerbach, M.S., and Grambling S.E.(1998). Stress Management Psychological Foundations U.S.A: Prentice- Hall, Inc.
3. Bernstein, D.A; Penner, L.A; Stewart, A.C and Roy, E.J (2008) Psychology (8th edition). Houghton Mifflin Company Boston New York.
4. Bradburn (1969), The Structure of Psychological Well-Being (Aldine, Chicago).
5. Chen, H., Wong, Y.C., Ran, M.S. & Gilson, C.(2009). Stress among Shanghai University Students. *Journal of Social Work*. Volume 9(3), Page 323-344.
6. Huppert, F.A. (2005). Positive mental health in individuals and populations. In F.A.Huppert, N.Baylis, & B.Keverne (Eds.), *The science of well-being* (pp. 307–340). Oxford: Oxford University Press.
7. Kaur, S. (2014). Impact of Academic Stress on Mental Health: A Study of School going Adolescents. *Global Journal for Research Analysis*, 3(5).
8. Komal Ali Hussain(2013) Academic Stress and Psychological Well-Being of School Students. *Psychological Abstract*. Institute of Applied Psychology University of the Punjab, Lahore-Pakistan.
9. Munir , T., Shafiq , S. , Ahmad, Z. & , Khan, S.(2015). Impact of Loneliness and Academic Stress on Psychological Well Being among College Students. *Academic Research International* Vol. 6(2).Page 343-355.
10. Park, S.Y. Jung, Y.S.(2010) Moderating effects of ego-resilience and social support on academic stress that cause from parental pressure for academic achievement. *The Korean Journal of Developmental Psychology*. Vol23(1). 17-32
11. Sibnath, D., Esben, S.& , Jiandong. S.(2012). Academic Stress, Parental Pressure, Anxiety and Mental Health among Indian High School Students. *International Journal of Psychology and Behavioral Sciences* 2015, 5(1): page 26-34.
12. Komal Ali Hussain and Rukhsana Kausar (2010). Academic Stress and Psychological Well-Being of School Students. *Psychological Abstracts* .2011-2013.

### How to cite this article:

Prakash Sankhyan (2021) 'Academic Stress In Relation To Psychological Well Being Among 10+2 Science Students In District Bilaspur (H.P.)', *International Journal of Current Advanced Research*, 10(08), pp. 24970-24974.  
DOI: <http://dx.doi.org/10.24327/ijcar.2021.4979.24974>

\*\*\*\*\*