



# Role of Career Decision-Making in the Development of Academic Stress among Adolescents

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## Abstract:

*The present study examined the role of career decision-making in the development of academic stress among adolescents. For the study, a sample of 360 adolescents was selected by using stratified random sampling technique. For the collection of data Scale of Academic Stress and Career Decision-Making Inventory were used. Various statistical techniques like t-test, one way analysis of variance and Pearson product moment correlation were used for the analysis of data. Results of the study showed that significant gender differences were observed on academic frustration and academic pressure dimensions of academic stress except academic conflict, academic anxiety and total academic stress. Boys and girls differed significantly only on career decidedness dimension of career decision-making. Also, significant stream differences were observed on the variables of academic frustration (dimension of academic stress) and career decision-making. Correlational analysis showed that academic stress and its dimensions were found to be negatively correlated with career decidedness and positively correlated with career indecision dimension of career decision-making. The results of the study indicated that career related decisions affect the academic environment of adolescents. High level of career decidedness decreases the level of academic stress but high level of career indecision increases the level of academic stress.*

**Keywords:** *Academic stress, Career decision-making, Career decidedness, Career indecision*

## 1. Introduction

Academic stress refers to the pressure experienced by students to perform well in final school examinations and competitive entrance examinations. Research suggests that there are many sources of academic stress such as parents' expectations, teachers' attitude and expectations, teaching methods, career decision-making and larger societal origins (Verma, Sharma & Larson, 2002; Lee & Larson, 2000; Schoolland, 1990; Verma & Gupta, 1990). Learning related stress arises from task-demands as these have to be done within time schedules. Technological and societal changes have induced greater competition among students and teachers. The increased accountability, the eroding of the bases of professional authority, the undervaluing of profession, love of coaching or tutoring have led to increase the stress (Singhal, 2004). Academic stress is anything that imposes an extra demand on a person's ability to cope, often with something that is new and different in academics (Firman, 1992). In the opinion of Endler, Kantor and Parker (1994), academic stress contribute to major health hazards associated with problems of physical and mental stress related ailments. According to Banerjee (2011), "Academic stress is a type of stress that arises due to academic factors such as heavy school schedule, unrealistic expectation and demands of parents and teachers, low academic performance, poor study habits and not having enough time to deal with school's multiple priorities."

Adolescents experience many developmental changes within and around them. These changes necessitate making adjustments and choices based on rational decision-making. One of the developmental transitions include making decisions pertaining to educational and career choices that can have important implications for their future. Decision-making is the process whereby some sort of

choice is made between alternatives by evaluating the information which is favorable or unfavorable to each alternative (Harre & Lamb, 1983, p. 139). According to Swanson and D'Achiardi (2005), career choice or career decision-making may be defined as a process-oriented construct that deals with how client makes career decisions or the circumstances surrounding those decisions. The client's understanding on this construct influences their level of decidedness or indecision. In the present study career decision-making has two constructs i.e. career decidedness and career indecision. Shashikant (2007) defined career certainty or career decidedness as the confidence student feels about choosing an educational major and in making a career choice. According to Gauy, Senecal, Gauthier and Fernet (2003), career indecision refers to an inability to make a decision about the career that one wish to pursue or it is a temporary state in an individual's career direction.

The process of career exploration and decision-making can be particularly stressful time in an adolescent's life (Taveira, Silva, Rodriguez & Maia, 1998). It also causes school dropout or decrease in academic achievement and motivation (Fleming, Boyle & Offord, 1993). High school can thus, be a turbulent time for youth, which causes an enormous amount of stress and confusion, and may lead to academic and emotional concerns during high school. Making the right career choice requires effort and thought. Some individuals seem to make this choice easily, at least apparently, while others experience problems and difficulties in it (Gati, Krausz & Osipow, 1996). A number of studies have assessed symptom related concepts such as general symptom distress, depression and anxiety in the context of vocation related thoughts in more general populations.

Above discussion showed that career decision-making affects the academic environment of adolescents and help in the development of academic anxiety, academic stress etc. The variables selected in the present study have been studied individually but not much of work has been done in the present combination of variables. Thus, the current study aims to examine the role of career decision-making in the development of academic stress among adolescents.

## 2. Delimitations

The study under investigation was delimited to the following:

1. The study was delimited to XI class students studying in Government Model Senior Secondary Schools (co-educated) of Chandigarh only.
2. The study was delimited to the variables of academic stress and career decision-making only.

## 3. Objectives

For the present study following objectives were framed:

1. To study the gender differences on the variables of academic stress and career decision-making.
2. To study the stream differences on the variables of academic stress and career decision-making.
3. To study the relationship between academic stress and career decision-making among adolescents.

## 4. Hypotheses

On the behalf of above stated objectives following hypotheses were framed:

1. There are no significant gender differences on the variables of academic stress and career decision-making.
2. There are no significant stream (science, arts and commerce) differences on the variables of academic stress and career decision-making.
3. There is no significant relationship between academic stress and career decision-making among adolescents.

## 5. Methodology

### 5.1 Design of the Study

For the present study descriptive survey method was employed to find out the relationship of academic stress with career decision-making in a sample of adolescents (age range 14-17 years).

### 5.2 Sample

A sample of 360 adolescents consisted of 180 boys and 180 girls (pursuing science, arts and commerce streams in XI standard from Government Model Senior Secondary Schools of Chandigarh) was selected by using stratified random sampling technique. There was no clinical history of adolescents.

### 5.3 Tools

For the present study following tools were used:

#### 5.3.1 Scale of Academic Stress (SAS)

Scale of Academic Stress (Bisht, 1995) was used to measure academic stress among adolescents. It contains a total of 80 items. It has four dimensions namely Academic Frustration, Academic Conflict, Academic Pressure and Academic Anxiety. The scale consisted of item and content validity. The dependability, stability and internal consistency of scale were found to be 0.87, 0.82 and 0.88 respectively.

#### 5.3.2 Career Decision-Making Inventory (CDMI)

The Career Decision-Making Inventory (Singh, 1999) was used to measure career decision-making of students (age 14-17 years). It consists of career decidedness scale (5 items) and career indecision scale (13 items). The test-retest reliability coefficients for career decidedness scale and career indecision scale were found to be 0.97 and 0.94 respectively. The criterion related with career decision scale (Osipow, 1986) yielded significant coefficients of correlation of 0.69 and 0.59 for career decidedness scale and career indecision scale respectively.

### 5.4 Procedure

For the data collection a prior permission was taken from the school principals and investigator explained the purpose of present study to adolescents. The subjects were assured that their responses and information given about them will be kept confidential and used for research purpose only. After assurance the tools were administered to adolescents with a time period of forty minutes.

### 5.5 Statistical Techniques

For the analysis of data following statistical techniques were used:

- 1 t-test was used to check the significant difference between two groups.
- 2 One way analysis of variance was used to find out the stream (science, arts and commerce) differences and further t-ratios were calculated wherever F-ratio was found to be significant.
- 3 Pearson product moment correlation was used to find out the relationship of dependent variable with independent variable.

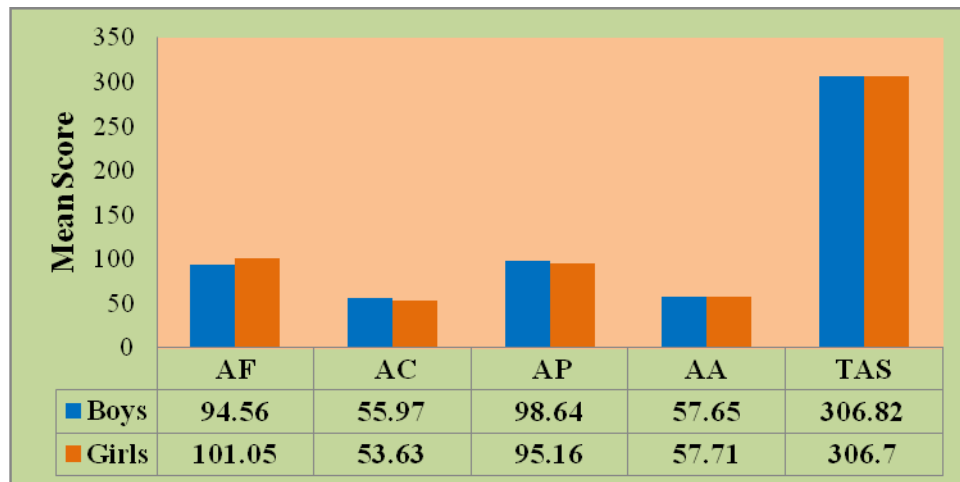
## 6. Results

Analysis and interpretation of results have been done hypothesis-wise as given below:

**Table 1: Comparison of Boys (N = 180) and Girls (N = 180) on the Variables of Academic Stress and Career Decision-Making**

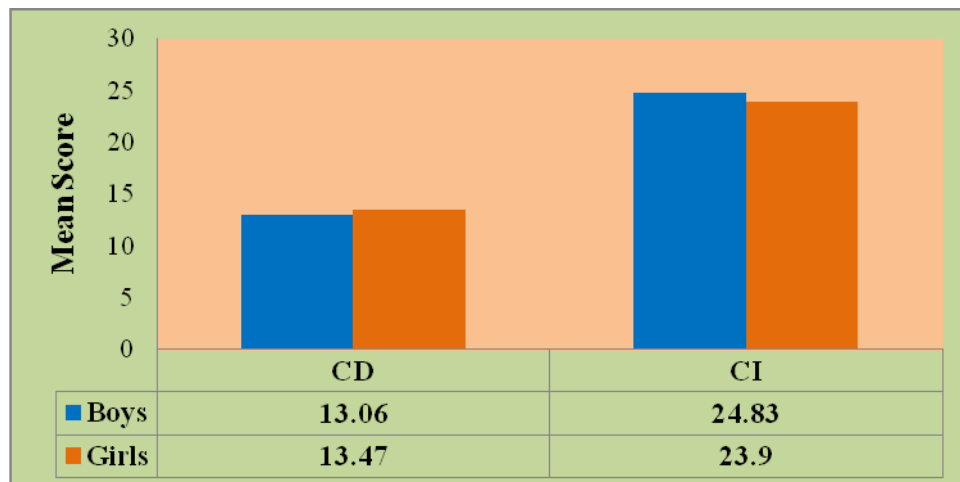
Sr.	Variables	Boys		Girls		t-ratio
		Mean	S. D.	Mean	S. D.	
1.	Academic Frustration (AF)	94.56	16.066	101.05	15.349	3.92**
2.	Academic Conflict (AC)	55.97	13.413	53.63	14.802	1.57
3.	Academic Pressure (AP)	98.64	14.624	95.16	13.665	2.33*
4.	Academic Anxiety (AA)	57.65	12.483	57.71	12.562	0.04
5.	Total Academic Stress (TAS)	306.82	40.754	306.70	42.063	0.03
6.	Career Decidedness (CD)	13.06	1.836	13.47	1.814	2.14*
7.	Career Indecision (CI)	24.83	4.515	23.90	5.002	1.86

\*\* Significant at 0.01 level (t = 2.59), \* Significant at 0.05 level (t = 1.97)



**Figure 1: Comparison of Boys and Girls on the Variable of Academic Stress**

Table 1 represents the gender differences on the variables of academic stress and career decision-making. From Table 1 it was found that significant gender differences were observed on the variables of academic frustration ( $t = 3.92$ , significant at 0.01 level) and academic pressure ( $t = 2.33$ , significant at 0.05 level) dimensions of academic stress. This is diagrammatically shown in Figure 1 which indicated that girls ( $M = 101.05$ ) were more academically frustrated than boys ( $M = 94.56$ ) but boys were more academically pressurized ( $M = 98.64$ ) than girls ( $M = 95.16$ ). Also, no significant gender differences were found on academic conflict, academic anxiety and total academic stress. Thus, the null hypothesis, “There is no significant gender difference on the variable of academic stress” stands rejected for academic frustration and academic pressure dimension of academic stress but accepted for academic conflict, academic anxiety and total academic stress.



**Figure 2: Comparison of Boys and Girls on the Variable of Career Decision-Making**

On the variable career decision-making, significant gender difference was observed on career decidedness ( $t = 2.14$ , significant at 0.05 level) dimension of career decision-making and it was favoured by girls ( $M = 13.47$ ) than the boys ( $M = 13.06$ ). This is shown by Fig. 2 which demonstrated that girls were more decided about the career as compared to their counterparts. But no significant gender difference was observed on career indecision. Thus, the null hypothesis, “There is no significant gender difference on the variable of career decision-making” stands rejected for career decidedness but accepted for career indecision dimension of career decision-making.

**Table 2: One Way Analysis of Variance for Science, Arts and Commerce Stream Adolescents on the Variables of Academic Stress and Career Decision-Making**

Sr.	Variables	Source of variation	Sum of Squares	Df	Mean Square	F-ratio
1.	Academic Frustration (AF)	Between Groups	1536.739	2	768.369	3.03*
		Within Groups	90625.650	357	253.853	
		<b>Total</b>	<b>92162.389</b>	<b>359</b>		
2.	Academic Conflict (AC)	Between Groups	547.506	2	273.753	1.37
		Within Groups	71366.692	357	199.907	
		<b>Total</b>	<b>71914.197</b>	<b>359</b>		
3.	Academic Pressure (AP)	Between Groups	81.450	2	40.725	0.20
		Within Groups	72716.950	357	203.689	
		<b>Total</b>	<b>72798.400</b>	<b>359</b>		
4.	Academic Anxiety (AA)	Between Groups	480.606	2	240.303	1.54
		Within Groups	55662.017	357	155.916	
		<b>Total</b>	<b>56142.622</b>	<b>359</b>		
5.	Total Academic Stress (TAS)	Between Groups	1293.800	2	646.900	0.38
		Within Groups	612708.175	357	1716.269	
		<b>Total</b>	<b>614001.975</b>	<b>359</b>		
6.	Career Decidedness (CD)	Between Groups	157.939	2	78.969	26.86**
		Within Groups	1049.517	357	2.940	
		<b>Total</b>	<b>1207.456</b>	<b>359</b>		
7.	Career Indecision (CI)	Between Groups	1103.217	2	551.608	27.73**
		Within Groups	7102.383	357	19.895	
		<b>Total</b>	<b>8205.600</b>	<b>359</b>		

\*\* Significant at 0.01 level (F = 4.66), \* Significant at 0.05 level (F = 3.02)

Table 2 presents the one way analysis of variance for science, arts and commerce stream adolescents on the variables under study. From Table 2 it was found that significant stream differences were observed only on academic frustration dimension of academic stress (F = 3.03, significant at 0.05 level) except all other dimensions and total academic stress. Thus, the null hypothesis, “There are no significant stream (science, arts and commerce) differences on the variable of academic stress” stands rejected for academic frustration dimension of academic stress except all other dimensions and total academic stress.

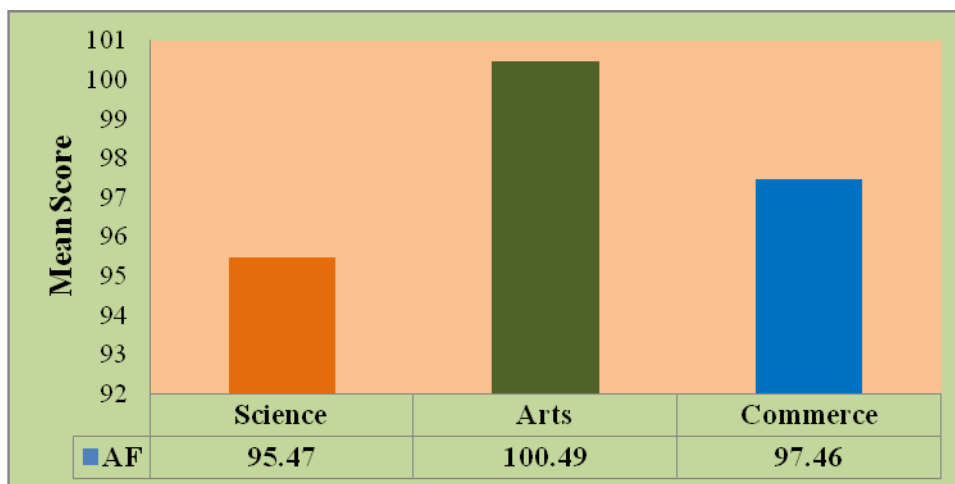
The F-ratio for career decidedness (dimension of career decision-making) was found to be 26.86, significant at 0.01 level of confidence. This demonstrated that significant stream differences exist on career decidedness. Also, on the variable career indecision, significant stream differences were observed (F = 27.73, significant at 0.01 level). Hence, the null hypothesis, “There are no significant stream (science, arts and commerce) differences on the variable of career decision-making” stands rejected.

Further t-ratios were calculated wherever F-ratios were significant on the variables of academic frustration (dimension of academic stress), career decidedness and career indecision (dimensions of career decision-making).

**Table 3: *t*-ratio for Science, Arts and Commerce Stream Adolescents on the variable of Academic Frustration**

Streams	Science N = 120 M = 95.47 S. D. = 14.69	Arts N = 120 M = 100.49 S. D. = 15.79	Commerce N = 120 M = 97.46 S. D. = 17.23
Science	-	2.55*	0.96
Arts		-	1.42
Commerce			-

\*\* Significant at 0.01 level (t = 2.60), \* Significant at 0.05 level (t = 1.97)



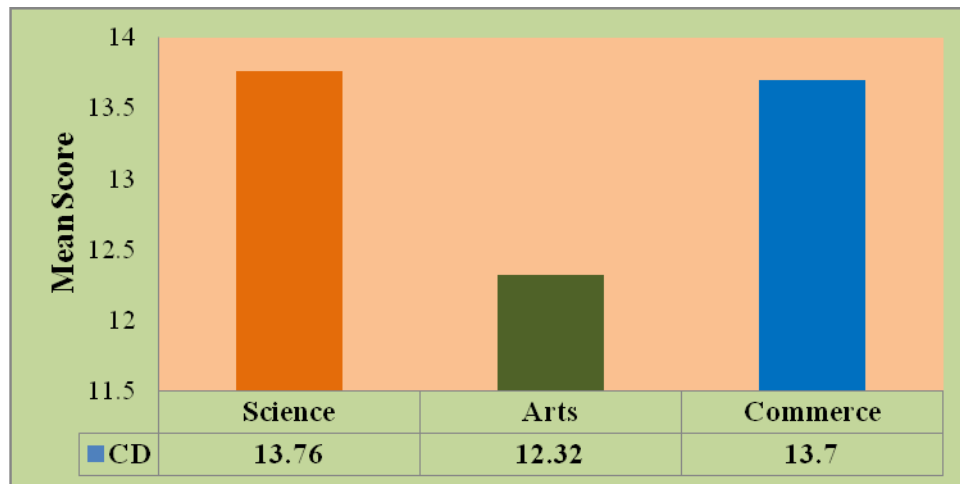
**Figure 3: Comparison of Science, Arts and Commerce Stream Adolescents on the Variable of Academic Frustration**

Table 3 showed that science and arts stream adolescents differed significantly on academic frustration dimension ( $t = 2.55$ , significant at 0.05 level) and it also indicated that arts stream students ( $M = 100.49$ ) were more academically frustrated than the science stream students ( $M = 95.47$ ) as shown in Figure 3. But no significant difference was observed between science and commerce stream adolescents ( $t = 0.96$ ) on academic frustration, and also no significant difference was observed between arts and commerce stream adolescents on academic frustration ( $t = 1.42$ ). This indicated that commerce stream adolescents showed similar level of academic frustration with arts and science groups.

**Table 4: *t*-ratio for Science, Arts and Commerce Stream Adolescents on the variable of Career Decidedness**

Streams	Science N = 120 M = 13.76 S. D. = 1.46	Arts N = 120 M = 12.32 S. D. = 2.10	Commerce N = 120 M = 13.70 S. D. = 1.50
Science	-	6.13**	0.31
Arts		-	5.83**
Commerce			-

\*\* Significant at 0.01 level (t = 2.60), \* Significant at 0.05 level (t = 1.97)



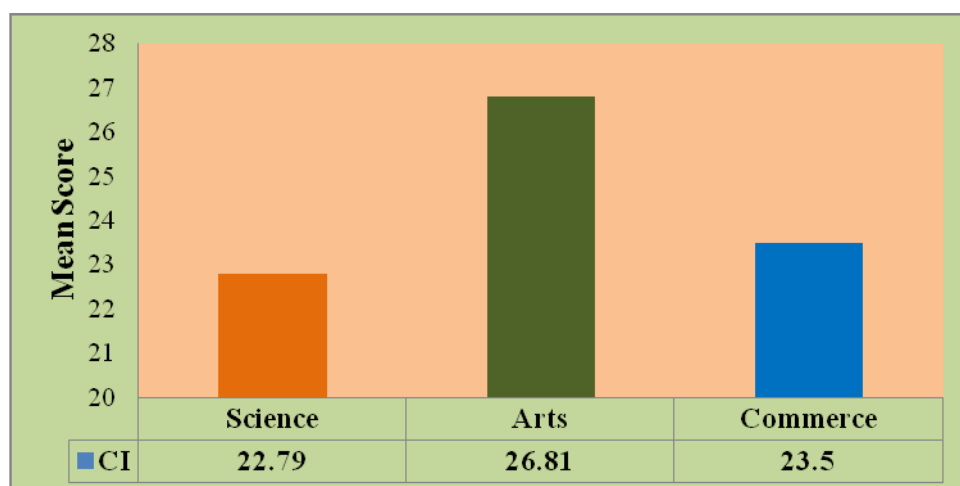
**Figure 4: Comparison of Science, Arts and Commerce Stream Adolescents on the Variable of Career Decidedness**

Table 4 showed t-ratios for career decidedness dimension. From Table 4 it was found that arts stream adolescents differed significantly from science ( $t = 6.13$ , significant at 0.01 level) and commerce ( $t = 5.83$ , significant at 0.01 level) stream adolescents on career decidedness. It also demonstrated that arts stream adolescents ( $M = 12.32$ ) were less decided about career than science ( $M = 13.76$ ) and commerce adolescents ( $M = 13.70$ ) as shown in Figure 4. Also, no significant difference was observed between science and commerce stream adolescents on career decidedness variable ( $t = 0.31$ ) which showed that the two groups exhibited similar level of decidedness about career.

**Table 5: t-ratio for Science, Arts and Commerce Stream Adolescents on the variable of Career Indecision**

Streams	Science N = 120 M = 22.79 S. D. = 4.55	Arts N = 120 M = 26.81 S. D. = 4.28	Commerce N = 120 M = 23.50 S. D. = 4.55
Science	-	7.05**	1.21
Arts		-	5.81**
Commerce			-

\*\* Significant at 0.01 level ( $t = 2.60$ ), \* Significant at 0.05 level ( $t = 1.97$ )



**Figure 5: Comparison of Science, Arts and Commerce Stream Adolescents on the variable of Career Indecision**

Further, the t-ratios in Table 5 showed that arts stream students differed significantly from science ( $t = 7.05$ ) and commerce students ( $t = 5.81$ ) on career indecision. It indicated that arts students exhibited high level of career indecision than the other two groups as shown in Figure 5. Also, it was observed that science and commerce stream students did not differ on career indecision. This showed that the two groups were having similar career indecision.

**Table 6: 7X7 Intercorrelation Matrix of the Dependent Variable Academic Stress with Independent Variable of Career Decision-Making for Adolescents (N = 360)**

S. No.	Variables	AF	AC	AP	AA	TAS	CD	CI
1.	Academic Frustration (AF)	1	0.361**	0.105*	0.467**	0.689**	-0.171**	0.231**
2.	Academic Conflict (AC)		1	0.443**	0.549**	0.797**	-0.244**	0.441**
3.	Academic Pressure (AP)			1	0.291**	0.623**	-0.216**	0.306**
4.	Academic Anxiety (AA)				1	0.764**	-0.198**	0.348**
5.	Total Academic Stress (TAS)					1	-0.286**	0.457**
6.	Career Decidedness (CD)						1	-0.516**
7.	Career Indecision (CI)							1

\*\* Significant at 0.01 level ( $r = 0.128$ ), \* Significant at 0.05 level ( $r = 0.098$ )

Table 6 presents the intercorrelation of the dependent variable academic stress and its dimensions with independent variable of career decision-making (dimension-wise). Table 6 showed that career decidedness (dimension of career decision-making) was found to be significantly and negatively correlated with academic frustration ( $r = -0.171$ , significant at 0.01 level), academic conflict ( $r = -0.244$ , significant at 0.01 level), academic pressure ( $r = -0.216$ , significant at 0.01 level), academic anxiety ( $r = -0.198$ , significant at 0.01 level) and total academic stress ( $r = -0.286$ , significant at 0.01 level). This demonstrated that as the level of career decidedness increases, the level of academic stress decreases and vice-versa.

Also, career indecision (dimension of career decision-making) was observed to be significantly and positively correlated with academic frustration ( $r = 0.231$ , significant at 0.01 level), academic conflict ( $r = 0.441$ , significant at 0.01 level), academic pressure ( $r = 0.306$ , significant at 0.01 level), academic anxiety ( $r = 0.348$ , significant at 0.01 level) and total academic stress ( $r = 0.457$ , significant at 0.01 level) and indicated that as the career indecision increases, the level of academic stress also increases among adolescents. This showed that academic stress depends upon the career decision-making. Hence, the null hypothesis, "There is no significant relationship between academic stress and career decision-making among adolescents." stands rejected.

## 7. Main Findings of the Study

Following are the main findings of the study:

1. Significant gender differences were observed on the variables of academic frustration and academic pressure dimensions of academic stress favoured by girls on academic frustration and by boys on academic pressure. But no significant gender differences were found on academic conflict, academic anxiety and total academic stress.
2. Significant gender difference was observed only on career decidedness dimension of career decision-making favoured by girls. But no significant gender difference was observed on career indecision.
3. Significant stream differences were observed only on academic frustration dimension of academic stress which is favoured by arts stream adolescents.
4. Significant stream differences were observed on career decision-making. On career decidedness dimension it was favoured by science group adolescents and on career indecision dimension it was favoured by arts group adolescents.



5. Academic stress and its dimensions were found to be negatively correlated with career decidedness dimension of career decision-making.
6. Academic stress and its dimensions were found to be positively correlated with career indecision dimension of career decision-making.

## 8. Conclusion

Results of the current study showed that academic stress was found to be significantly correlated with career decision-making among adolescents. This demonstrated that academic stress is caused by the lower level of career decidedness or high level of career indecision. If the adolescent is decided about the career his interest will increase in studies and he will not feel any burden, academic pressure will not disturb him and no academic frustration will come. Also, results showed that arts stream adolescents showed high level of career indecision and academic frustration than the science and commerce group adolescents. Results of the study suggested that school and family environment should be congenial. Workshops on stress management should be organized from time to time. Also, career counseling should be started at secondary stage. Guidance cell should be opened in schools and well versed counselors should be appointed. Regular parents teachers meet should be organized to know the academic performance and academic difficulties of adolescents. Before selecting the streams testing of aptitude and interest should be done to know the aptitude and interest of adolescents. Findings of the present study have important implications for all those who play a more prominent role in career education of adolescents i.e. parents, teachers, administrators, counselors, psychologists and researchers.

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