

# Comparing The Attitudes of Students Towards Team Based Activities: A Study of Management, Science and Commerce Students

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**Abstract:** Today more and more emphasis is being placed on teamwork. Many organizations have started adopting team based projects. The education institutes have also started incorporating team based activities in their course curriculum. However, students prefer to work alone due to the complexities in working in teams. Due to the gap in industrial expectations and students perception towards teamwork, different researches have been done in the past.

The present research has been conducted to develop a better understanding of students attitudes towards team based activities and different factors influencing and determining the same. The main intent of the investigation was to compare attitudes of students from different academic disciplines. It is a cross sectional descriptive research undertaken to explore any variations in the attitudes of students from three main streams, namely; Commerce, Science and Management. Thus, the sample of 152 respondents was taken by way of judgment sampling, which consisted of respondents from MBA, B.Com and B.Tech courses.

The results indicated that no significant difference exists in the attitudes of students with variation in the Age profile, Educational Qualification, Family type and gender of the respondent. However, a difference does lie in the attitudes due to the change in Course stream of respondents. A possible reason could be due to the types of skill focused by the disciplines while imparting education.

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Sachdeva, S  
Sachdeva, R  
Sachdeva, AK

It is highly recommended for educational institutes to incorporate Team based activities in their curriculum, keep in constant touch with industry experts and assess continuously on soft skill as main parameter.

**Keywords:** Team based activities, educational institutes, industrial expectations, student's attitude, Commerce, Science and Management.

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## 1. INTRODUCTION

In today's scenario there has been an invariable growth in team based activities conducted by different training experts for developing the various skill sets of individuals. A team usually refers to a group of people who share common goal and strive to achieve the same through coordinated efforts. Each member of the team has complimentary skill set with regards to the other team mates. There prevails mutual understanding, adding to the synergy levels of the team. Each member tries to their maximum potential level so as to fulfil the expectations of other team members. Personal interests subordinate the team interests. Most of the organizations are stressing upon the increased use of Team based activities to beat the competition at the Global level.

Team based learning is a special technique used to enhance students engagement and the quality of students in a learning team environment. The concept was first popularised by Larry Michaelsen. It is therefore an educational strategy used often in academic settings.

There are different benefits and motivational factors inducing the increased use of team based learning in Educational backgrounds. It has transformed the traditional approach to content with application, problem solving and interpersonal skills development approach. It has immense applications in business organisations and industries. It can be applied in every field of education, be it science, management, commerce or humanities. It enhances the ability to collaborate with extremely different individuals and face the ever-changing or dynamic environment.

Team building is a special type of design that identifies individual employees to create a team and motivates them to stay together in the team to work and achieve together. Various activities are introduced to enhance the overall performance levels of the team. It not only aims to motivate team members but also grooms them to perform the best. For Team Building activities to become successful, trust is a must factor or an important requisite. These activities help in strengthening the bond between the team mates.

There are different teamwork skills expected from an individual to work effectively in teams. The teams are also faced with different challenges. Teams

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work in a dynamic environment that has both the elements of problems and opportunities. Another important aspect to be considered while functioning of the team is the decision about the evaluation of individual members' performance. For this it is important that the team should be well structured to hold individuals for their actions.

Despite the growing recognition for team based activities in the organizational settings, students prefer to work alone instead of knowing the importance of teamwork. Thus, academicians and trainers are placed with increased need to embrace team based activities in their pedagogy.

There are five stages in developing effective teams, namely; FORMING, STORMING, NORMING, PERFORMING and ADJOURNING. Specific actions can be taken to support the team performance during these stages.

Forming is the first stage in the team development process. It is recognised as a stage driven by the desire to be accepted by the team mates. Thus, individuals possess a positive approach and attitude. Exchange of ideas take place at this stage.

Storming is the next stage in which individuals compete for acceptance of their ideas by the rest of the team members. It can be resolved quickly, if, some team members have a certain maturity level. It can sometimes be an unpleasant or painful experience for few or all the members. It can also lead to termination of the team. Thus, it determines the fate of the team.

Norming forms the third stage in the team development process. The group here becomes a cohesive functional unit. Team members possess high morale, become interdependent and leadership is shared. Flow of information is seamless and members feel secure.

Performing is the fourth stage in the team development process. High productivity is witnessed. Group members become loyal and supportive to each other. There also exists high level of autonomy in Decision making process. The main intent at this stage is to achieve the stated mission in a very effective and efficient manner.

Adjourning marks the end of the team development process. It is used to wrap up the activities of the group. Closely attached to it is the feeling of loss or separation from near and dear team mates. The stage acknowledges the efforts and participation of team mates.

Team building process can be wisely adopted and implemented by academicians and trainers to embrace team work skills in individuals. The main aim should always be to create balanced teams. It will help in developing better communication, leadership and other soft skills of individuals indulged in such activities.

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Commerce  
Students

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## **2. PROBLEM STATEMENT:**

Previous researches done, have focussed upon only one academic discipline to understand the attitudes of students towards teamwork and team based activities. However, in today's scenario, teams are formed consisting of individuals from varied disciplines in order to incorporate diverse attributes and improve the overall chances of success. Keeping this in mind, the current study aims to compare the attitudes of students, especially Commerce, Science and Management towards teamwork, so as to get a better insight as to whether there exists any difference or not. This will help in formation of teams with correct mix of individuals of different fields.

## **3. REVIEW OF LITERATURE:**

A team refers to a interconnected people who aim to fulfil a common objective, generally in form of groups. Each member possess complimentary skills so as to help each other fulfil their duties in the best possible way. The concept of team became popular after the publication of Belbin's research on Successful Teams. Later many such studies were conducted that depicted the roles and usefulness of Teams. The concept of Team Teaching also emerged on the screen due to the advantageousness of Teams. According to Goetz, Team Teaching refers to "simply team work between two qualified instructors who, together, make presentations to an audience.". Thus, Team based activities have always been given lot of importance for its ability to enable people in negotiating meaning and reflect upon their ideas and learnings. Team based activities play a vital role in grooming of students and exposing them to situations that require cooperation and understanding. Team cognition and effectiveness should be high so that team results are extremely as desired. Following studies have been conducted in the past by various researchers. These are:

- A study was conducted by Azleen Ilias, Mohd. Zulkeflee, AbdRazak, Nek Kamal Yeop Yunus, and Siti Fara Fadila AbdRazak on "How Accounting Students Perceived towards Teamwork Skills". It was published in "Journal of Education and Vocational Research, Vol. 3, No. 12, pp. 387-398, Dec 2012 (ISSN 2221-2590)".

The main intent of the research was to study Soft Skills pertaining to Teamwork Skills. The object was to study and examine the relationship among the six dimensions of teamwork skills. The sample included the accounting students from final year from Universiti Tenaga Nasional. The sample size was 179 respondents by way of purposive sampling. Data was collected through Questionnaire adopted from O'Neil et al (1997). It was based upon the six dimensions of teamwork, namely; coordination, decision making,

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leadership, interpersonal skills, adaptability and communication. Data was analyzed with the help of SPSS for checking the data reliability, Descriptive Statistics, ANOVA and Pearson Correlation. The study found the top important skills perceived by the Accounting Students. The correlation between the six dimensions was high, with most students having same feelings with regards to specific teamwork skills for effective team based activities.

- Another study was conducted by Rodley C. Pineda, Bonita Barger and Linda D. Lerner on “Exploring Differences in Student Perceptions of Teamwork: The Case Of U.S. And Lithuanian Students”, and was published in “Journal of International Business and Cultural Studies”.

The main focus of the study was to understand the attitudes of U.S. and Lithuanian students regarding the teamwork and thereby compare the differences in their attitudes. It also sought to investigate the satisfaction levels of both the groups while working in the teams. It surveyed 151 undergraduate students from a regional university of U.S and 95 undergraduate and graduate students from an urban university situated in Lithuania. The data was analyzed with the help of T-test and Mean. The result indicated that the pedagogical benefits of the teamwork had same attitudes at the students end. However, students had different attitudes with regards to whether teams are able to accomplish in better way when compared to individuals working. Thus, despite knowing the benefits of working in the teams, students hesitated in working in teams due to the disadvantages offered and therefore preferred to work alone.

- A study was conducted on “Students’ Perception On The Effectiveness Of Teamwork Based Activities In Enhancing The Learning Process” by Anitha Sundrum and Muthukumaran Kanasan. It was presented in an International Conference on Social Science Research in the year 2013 in the month of June, organised at Malaysia.

The study attempted to explore how students perceived towards the effectiveness of team based activities in enriching the learning process. The sample consisted of 70 students selected through random sampling technique from first year accounting diploma students. A questionnaire was used to collect the data. The data so obtained was then analysed with the help of qualitative and quantitative methods. The results indicated that the students irrespective of the gender perceived that the team based activities are helpful in enhancing the learning process. Further, students believed that the team based projects help them to improve academically and in their personal lives.

- A study was also conducted by Jane Burdett on “Making Groups Work: University Students’ Perceptions”. It was published in the International Education Journal in Vol. 4 No.3 in the year 2003.
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Sachdeva, S  
Sachdeva, R  
Sachdeva, AK

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The study's main aim and rationale was to investigate the students experience while working in groups. And the aspects that contributed positively. It also sought to explain the extent to which students believed that they have acquired the required competences after working in the group environment. It took into consideration Teamwork, Group work Challenges, Group Dynamics, Assessment and Competition, and Group work organisation. A questionnaire consisting of open ended and close ended questions. The sample consisted of 344 final year business degree students selected from the University of South Australia. Data analysed led to the conclusion that students felt positive about the group based activities. The study also revealed the best aspects of working in groups. Different strategies adopted by students to cope up with the issues were also recommended by these students.

- Further, a study has been conducted by AnnegretGoold, Annemieke Craig and Jo Coldwell on "The Student Experience of Working in Teams Online". It was published in Ascilite 2008 Melbourne.

The study was conducted in an Australian University in the year 2005. Main aim of the research was to identify the key characteristics in student learning through online environment. Questionnaire was used to gather primary data, and it consisted of a set of 60 questions. The total respondents of the survey tolled to 2711 from the total population of 32,354. The results revealed the general issues faced by the students in working in online teams. It also indicated the need for teacher involvement and their role in forming and ensuring smooth team working and formation.

- Published in the online journal of University of Wollongong was a research conducted by Venkata K. Yanamandram and G.Noble on "Student Experience and Perceptions of Team-Teaching in a large Undergraduate Class.

It was conducted in an Australian University. Its main intent was to understand student perception and experience towards two models adopted by the University for team teaching of a large undergraduate course, studying marketing subjects. The data was primarily collected through the questionnaire method of collecting data. The sample included two different groups of students from consecutive semesters. The survey response was collected from 440 students who attended the final week of the semesters. Majority of students understood the need for working in teams; however the success depends largely upon the composition of teams.

- Lisa Gueldenzoph Snyder and Kimberly R.McNeil conducted a study on "Enhancing Students' Perception of Collaborative Projects with Pre-Group Instruction Methods." It was published in Research in Higher Education Journal.
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The study sought to explore the efforts to assess students' perceptions on group based activities and also to determine the best practices in assigning group based activities in a collaborative environment setting. It also intended to identify whether the pre-group instructions helped or affected the students' perception towards collaborative activities. It focussed on two student categories wherein one received the instructions beforehand and other did not received them. A total of 95 students were randomly selected as sample. The study found that pre-group instructions helped the students to implement the idea in better ways.

- Dr. Laura K Alford, Dr. Robin Fowler, Dr. Stephanie Sheffield conducted a study in the College of Engineering at the University of Michigan on "Evolution of Students Attitude Towards Teamwork in a Project-based, Team-based, First Year Introductory Engineering Course."

The main purpose of this research was to investigate the attitude of students towards teamwork while pursuing team based course. The study of this research was done at three points of time; namely; before students have actually begun working in teams on completion of small scale activity in a group consisting of 4-5 members; on completion of comparatively larger scale projects and in similar sized team. The sample consisted of 55 students from first year of Engineering course, by way of Judgment Sampling. It used Qualitative and quantitative methods to analyse the data collected with the help of Questionnaires. The research results revealed the teaching methods that could be adopted to engage students in learning and practicing of team skills. It identified five essentials i.e. positive interdependence, individual accountability, face to face interaction, social skills and group processing. It led to the conclusion the through fun related activities and stress reducing efforts, a higher degree of positive attitude could be attained while working in teams.

- An online research was done at Edith Cowan University and it was published online at <http://ro.ecu.edu.au/ceducom>. The research was conducted on "Asian Student's Perceptions of Group Work and Group Assignments in a New Zealand Tertiary Institution" by Jacqui Campbell and Mingsheng Li, Massey University. It was originally published in proceedings of the EDU-COM 2006 International Conference Engagement and Empowerment: New opportunities for growth in Higher Education, Edith Cowan University, Perth Western Australia, 22-24 November 2006.

The aim of the study was to understand the perceptions of Asian students about collaborative learning concepts. Semi- structured interviews were conducted with 22 students that stretched to an hour for each individual. Letters of invitation were send to business undergraduate students to participate in the investigation process. In-depth analysis was used to interpret the findings of the interviews conducted.

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Sachdeva, S  
Sachdeva, R  
Sachdeva, AK

It was concluded that classroom group discussion was preferred by the Asian students. Students were able to develop better understanding of varied cultures, improve their English based communication skills and grab opportunities to make new friends. However, when it came to assess the group performance, students felt little disheartened due to the fact of sharing marks with others.

- A study was conducted on “Teamwork in College of Business Courses:

Student Perceptions” by Stanley M. Widrick, Rochester Institute of Technology. The research aimed to assess how the business students perceived towards teamwork. 393 students were surveyed for the study through the systematic sampling technique. The research results indicated the improvements and their satisfaction levels on working in teams.

Apart from these many other significant researches have been conducted contributing immensely to the understanding of Teamwork activities, its components, factors influencing it and perceptions of students and trainers towards the same.

#### **4. RESEARCH METHODOLOGY RESEARCH DESIGN**

The current research investigation is Cross-Sectional Descriptive Research design. It aims to understand and describe different variables affecting the teamwork skills and attitudes of students towards the same.

#### **5. RESEARCH OBJECTIVE**

Based upon the main intent of the study, the objectives (O) and their corresponding hypothesis (H) can be stated as follows:

- O1: To study teamwork skills and attitudes of students from three fields, namely: Commerce, Science and Management.
  - O2: To check whether teamwork skills and attitudes vary with course stream pursued by the student.
  - H1: Teamwork skills and attitudes does not vary with the course stream.
  - O3: To check whether the teamwork skills and attitudes vary with age of the student.
  - H2: Teamwork skills and attitudes does not vary with the age.
  - O4: To verify whether there exists any difference in the attitudes and teamwork skills with the gender of student.
  - H3: There lies no difference in the attitudes and teamwork skills with the gender of student.
  - O5: To check whether educational qualification of the student has any impact on the teamwork skills and attitudes of these students.
  - H4: Educational qualification of the student does not impact the student’s teamwork skills and attitudes.
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- O6: To check whether the type of family of the student causes any difference in their attitudes and teamwork skills.
- H5: Type of family of the students does not cause any difference in student's attitude and their teamwork skills.

Comparing The Attitudes of Students Towards Team Based Activities: A Study of Management, Science and Commerce Students

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## 6. POPULATION

The population for the research consists of all the students pursuing their studies in different fields of COMMERCE, SCIENCE, and MANAGEMENT from Delhi, India.

## 7. SAMPLE

The sample for the current research consists of 152 student respondents. Students were selected through Purposive Sampling Technique for the simple reason that specific types of students who conformed to the criteria were to be studied. The students were selected from three course streams. These were; for Commerce students pursuing their B.Com were selected, for Science, students studying B.Tech and for Management, students pursuing MBA were selected.

## 8. INSTRUMENT USED FOR DATA COLLECTION

Primary Data was collected with the help of Questionnaire. The questionnaire developed by O'Neil et al was modified according to the need of current study. This questionnaire was personally administered and also published on internet through Google.docs. The questionnaire consisted of 5 questions on demographic profile of the respondents and 35 statements on Likert scale, where 1 stood for Strongly Disagree and 5 for Strongly Agree.

Secondary data was gathered from different published and online journals.

## 9. STATISTICAL DATA ANALYSIS

The data was analysed with the help of 19 version of SPSS software. The analysis was done using the Reliability Test-Cronbach Alpha, Independent Sample T-test for demographic profile (Gender and Family Type), One-Way ANOVA for demographic profile (Course Stream, Age, and Educational Qualification), and Factor analysis for the 35 statements on Likert Scale.

## 10. LIMITATIONS

The research suffered from lack of time and resources which are major requisites to conduct a mass level investigation.

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## 11. DATA ANALYSIS AND INTERPRETATIONS

A total of 152 respondents were surveyed for the investigation. It comprised of 61 respondents from Commerce stream, 44 from Management and 47 from Science stream. These respondents were from 5 major age groups; 5 from the age group of 16-18 years, 36 from 18-20 years, 79 from 20-22 years, 25 from 22-24 years and 7 from the age group of 24 years and above. Out of the total respondents were 81 females and 71 males. This study consisted of 6 diploma holders, 60 postgraduates, 80 undergraduates and 6 from varied educational backgrounds. The respondents either belonged to Joint family-50, and Nuclear family type-102.

## 12. CRONBACH ALPHA

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Reliability Statistics	
Cronbach's Alpha	N of Items
.956	40

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The value of Cronbach Alpha reliability analysis is 0.956. Since the value is extremely high, data can be regarded as very/highly reliable. This is because, the past studies indicated that in case value of Cronbach alpha is greater than 0.70, data can be regarded as sufficient and appropriate to conduct the further research.

## 13. FACTOR ANALYSIS

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KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.940
Bartlett's Test of Sphericity	Approx. Chi-Square	3328.489
	Df	595
	Sig.	.000

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The value of KMO and Bartlett's Test is greater than 0.50. it is perhaps 0.940. This indicates that the data is highly adequate for applying the factor analysis on present dataset.

The Eigenvalues for 7 components is greater than 1. These components can thus be regarded as the factors for our research.

These factors were called as Leadership Skills, Interpersonal Skills, Task Competency, Information Handling Skills, Delegation Skills, Adaptability Skills and Coordination Skills. These seven factors were further analysed for their variations with the changing demographic profiles of the respondents. We used the significance value of 0.50 as the ideal value for evaluating our hypothesis acceptance or rejections.

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## ANOVA FOR COURSE STREAM

Comparing The Attitudes of Students Towards Team Based Activities: A Study of Management, Science and Commerce Students

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
factor1	13.617	2	149	.000
factor2	6.687	2	149	.002
factor3	5.532	2	149	.005
factor4	2.085	2	149	.128
factor5	.973	2	149	.380
facto6	1.248	2	149	.290
facto7	2.220	2	149	.112

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
factor1	Between Groups	2614.307	2	1307.154	6.644	.002
	Within Groups	29313.686	149	196.736		
	Total	31927.993	151			
factor2	Between Groups	300.726	2	150.363	7.315	.001
	Within Groups	3062.793	149	20.556		
	Total	3363.520	151			
factor3	Between Groups	35.029	2	17.515	1.437	.241
	Within Groups	1816.550	149	12.192		
	Total	1851.579	151			
factor4	Between Groups	.898	2	.449	.067	.935
	Within Groups	1002.865	149	6.731		
	Total	1003.763	151			
factor5	Between Groups	74.540	2	37.270	2.684	.072
	Within Groups	2069.355	149	13.888		
	Total	2143.895	151			
facto6	Between Groups	56.787	2	28.394	2.454	.089
	Within Groups	1724.154	149	11.572		
	Total	1780.941	151			
facto7	Between Groups	58.852	2	29.426	1.506	.225
	Within Groups	2911.121	149	19.538		
	Total	2969.974	151			

Sachdeva, S  
Sachdeva, R  
Sachdeva, AK

		Robust Tests of Equality of Means			
		Statistic <sup>a</sup>	df1	df2	Sig.
factor1	Welch	6.286	2	97.826	.003
factor2	Welch	6.669	2	98.990	.002
factor3	Welch	1.040	2	96.737	.357
factor4	Welch	.578	2	95.628	.563
factor5	Welch	6.173	2	83.493	.003
facto6	Welch	1.212	2	83.113	.303
facto7	Welch	1.651	2	80.947	.198

a. Asymptotically F distributed.

The hypothesis for analysing the Course Stream was “Teamwork skills and attitudes does not vary with the course stream.” The significance value greater than 0.50 indicates that the hypothesis stands true. Keeping this in mind, Hypothesis H1 is accepted for Factors 3, 4,5,6,7 i.e. for Task Competency, Information Handling, Delegation Skills, Adaptability skills and Coordination Skills as the significance value for these factors is greater than 0.50. This implies that these factors remain unaffected with the change in course stream. However, for factors 1 and 2, namely Leadership Skills and Interpersonal skills the significance value is smaller than 0.50. Hence the hypothesis H1 stands rejected. It further indicates that there lies a difference in the Leadership skills and Interpersonal skills of students with the change in Course stream. The probable reason could be that Management students are groomed better for becoming leaders in their future while Commerce students are less given training for the same and Science students are seldom guided for these skills.

#### 14. ANOVA ON AGE GROUP OF RESPONDENT

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
factor1	.972	4	147	.425
factor2	.268	4	147	.898
factor3	.752	4	147	.558
factor4	.382	4	147	.821
factor5	.406	4	147	.804
facto6	.253	4	147	.908
facto7	.305	4	147	.874

		ANOVA					Comparing The Attitudes of Students Towards Team Based Activities: A Study of Management, Science and Commerce Students
		Sum of Squares	df	Mean Square	F	Sig.	
factor1	Between Groups	1168.654	4	292.164	1.396	.238	
	Within Groups	30759.339	147	209.247			
	Total	31927.993	151				
factor2	Between Groups	116.019	4	29.005	1.313	.268	
	Within Groups	3247.501	147	22.092			
	Total	3363.520	151				
factor3	Between Groups	34.355	4	8.589	.695	.597	
	Within Groups	1817.224	147	12.362			
	Total	1851.579	151				
factor4	Between Groups	7.006	4	1.752	.258	.904	
	Within Groups	996.757	147	6.781			
	Total	1003.763	151				
factor5	Between Groups	11.211	4	2.803	.193	.942	
	Within Groups	2132.683	147	14.508			
	Total	2143.895	151				
facto6	Between Groups	13.106	4	3.277	.272	.895	
	Within Groups	1767.835	147	12.026			
	Total	1780.941	151				
facto7	Between Groups	9.245	4	2.311	.115	.977	
	Within Groups	2960.728	147	20.141			
	Total	2969.974	151				

The hypothesis used to analyse the effect of age group on the perceptions and teamwork skills of students was “Teamwork skills and attitudes does not vary with the age.” The significance value for all the factors is greater than 0.50. It indicates that our hypothesis is true and hence, we can conclude that the change in age group does not cause any significant difference in the attitudes and teamwork skills of the students.

The hypothesis used for this demography was “There lies no difference in the attitudes and teamwork skills with the gender of student.” As we can notice that the significance value for all the factors is greater than 0.50 we can say that our hypothesis stands true and gender of the respondent does not affect any factor of teamwork skills.

Sachdeva, S  
 Sachdeva, R  
 Sachdeva, AK

**Independent Samples Test**

		<b>Levene's Test for Equality of Variances</b>		<b>t-test for Equality of Means</b>							
		<b>F</b>	<b>Sig.</b>	<b>t</b>	<b>df</b>	<b>Sig. (2-tailed)</b>	<b>Mean Difference</b>	<b>Std. Error Difference</b>	<b>95% Confidence Interval of the Difference</b>		
									<b>Lower</b>	<b>Upper</b>	
factor1	Equal variances assumed	.057	.812	.550	150	.583	1.30256	2.36948	-3.37931	5.98443	
	Equal variances not assumed			.552	149.461	.582	1.30256	2.35813	-3.35703	5.96214	
factor2	Equal variances assumed	.476	.491	.584	150	.560	.44914	.76897	-1.07027	1.96855	
	Equal variances not assumed			.588	149.857	.557	.44914	.76382	-1.06011	1.95839	
factor3	Equal variances assumed	.497	.482	1.245	150	.215	.70736	.56826	-.41546	1.83018	
	Equal variances not assumed			1.207	112.360	.230	.70736	.58586	-.45342	1.86813	
factor4	Equal variances assumed	.306	.581	-1.468	150	.144	-.61311	.41756	-1.43817	.21195	
	Equal variances not assumed			-1.551	97.104	.124	-.61311	.39534	-1.39774	.17152	
factor5	Equal variances assumed	.946	.332	-.846	150	.399	-.51887	.61316	-1.73041	.69267	
	Equal variances not assumed			-.893	98.881	.374	-.51887	.58118	-1.67208	.63434	
factor6	Equal variances assumed	.543	.462	-.264	150	.792	-.14797	.56005	-1.25458	.95864	
	Equal variances not assumed			-.278	100.336	.781	-.14797	.53134	-1.20209	.90614	
factor7	Equal variances assumed	1.793	.183	1.209	150	.229	.87046	.71990	-.55200	2.29292	
	Equal variances not assumed			1.137	74.960	.259	.87046	.76533	-.65417	2.39509	

## 15. ANOVA FOR THE EDUCATIONAL QUALIFICATION OF THE RESPONDENT

Comparing The Attitudes of Students Towards Team Based Activities: A Study of Management, Science and Commerce Students

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
factor1	1.213	3	148	.307
factor2	1.535	3	148	.208
factor3	.353	3	148	.787
factor4	.744	3	148	.527
factor5	.741	3	148	.529
facto6	.595	3	148	.619
facto7	.835	3	148	.477

### ANOVA

	Sum of Squares	df	Mean Square	F	Sig.								
factor1	Between Groups	1033.523	3	344.508	1.650	.180	Within Groups	30894.471	148	208.746	Total	31927.993	151
factor2	Between Groups	83.670	3	27.890	1.259	.291	Within Groups	3279.850	148	22.161	Total	3363.520	151
factor3	Between Groups	19.841	3	6.614	.534	.659	Within Groups	1831.738	148	12.377	Total	1851.579	151
factor4	Between Groups	7.863	3	2.621	.390	.761	Within Groups	995.900	148	6.729	Total	1003.763	151
factor5	Between Groups	6.807	3	2.269	.157	.925	Within Groups	2137.087	148	14.440	Total	2143.895	151
facto6	Between Groups	7.407	3	2.469	.206	.892	Within Groups	1773.533	148	11.983	Total	1780.941	151
facto7	Between Groups	25.624	3	8.541	.429	.732							
	Within Groups	2944.350	148	19.894									
	Total	2969.974	151										



Sachdeva, S  
 Sachdeva, R  
 Sachdeva, AK

The hypothesis used was “Educational qualification of the student does not impact the student’s teamwork skills and attitudes.” The significance value for all the factors is greater than 0.50. We can say that the hypothesis is correct and so the educational qualification of the respondent has no effect on the attitudes towards teamwork and teamwork skills.

**Independent Samples Test**

		t-test for Equality of Means		Levene's Test for Equality of Variances						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
factor1	Equal variances assumed	.057	.812	.550	150	.583	1.30256	2.36948	-3.37931	5.98443
	Equal variances not assumed			.552	149.461	.582	1.30256	2.35813	-3.35703	5.96214
factor2	Equal variances assumed	.476	.491	.584	150	.560	.44914	.76897	-1.07027	1.96855
	Equal variances not assumed			.588	149.857	.557	.44914	.76382	-1.06011	1.95839
factor3	Equal variances assumed	.497	.482	1.245	150	.215	.70736	.56826	-.41546	1.83018
	Equal variances not assumed			1.207	112.360	.230	.70736	.58586	-.45342	1.86813
factor4	Equal variances assumed	.306	.581	-1.468	150	.144	-.61311	.41756	-1.43817	.21195
	Equal variances not assumed			-1.551	97.104	.124	-.61311	.39534	-1.39774	.17152

factor5	Equal variances assumed	.946	.332	-.846	150	.399	-.51887	.61316	-1.73041	.69267	Comparing The Attitudes of Students Towards Team Based Activities: A Study of Management, Science and Commerce Students
	Equal variances not assumed			-.893	98.881	.374	-.51887	.58118	-1.67208	.63434	
facto6	Equal variances assumed	.543	.462	-.264	150	.792	-.14797	.56005	-1.25458	.95864	
	Equal variances not assumed			-.278	100.336	.781	-.14797	.53134	-1.20209	.90614	
facto7	Equal variances assumed	1.793	.183	1.209	150	.229	.87046	.71990	-.55200	2.29292	
	Equal variances not assumed			1.137	74.960	.259	.87046	.76533	-.65417	2.39509	

## 16. INDEPENDENT SAMPLE T-TEST FOR FAMILY TYPE OF RESPONDENT

The hypothesis for this demographic profile was “Type of family of the students does not cause any difference in student’s attitude and their teamwork skills.” The significance value for all the factors is more than 0.50. this implies that the family type of the respondent is immaterial in affecting the teamwork skills and students attitudes towards the same.

## 17. CONCLUSION

The study led to derivation of seven factors significantly affecting Teamwork skills. These are namely, Leadership Skills, Interpersonal Skills, Task Competency, Information Handling Skills, Delegation skills, Adaptability Skills and Coordination Skills. These factors help one study the concept of Team Dynamics in different fields of education. Further, these factors can be studied with regards to the demographic profiles of the respondents to develop a better understanding of how attitudes change with a change in demographics. From the data analysis, we can conclude that no significant difference is caused to the perceptions of students towards the teamwork skills with a change in the Age, Gender, Educational Qualification and family type of the student. However, a difference does lie in the attitudes when students from different

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Sachdeva, S  
Sachdeva, R  
Sachdeva, AK

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course streams are compared. A possible reason could be the difference in the KSA's (Knowledge, Skills and Ability) delivered by the trainers of different education fields. While, focus is more on developing better interpersonal skills or human skills and leadership qualities of Management Students, emphasis is shifted to enhancing the technical skill set of the student and it is on developing the information and conceptual skills when it comes to Commerce as an education field.

## **18. RECOMMENDATIONS**

Today, education needs have diversified. The need to adopt a more holistic approach, combining best of every discipline is highly needed.

The educational institutes must focus to collaborate with the industry experts in order to get a glimpse of what to incorporate in the course curriculum and what type of teaching pedagogy should be adopted to suit the demands of the industry.

More and more team activities should be incorporated in delivering teaching lectures.

Assessment criteria should be based upon how well the student is able to use interpersonal and soft skills while presenting/ working in groups or teams.

## **19. MANAGERIAL IMPLICATIONS**

This research has got an immense scope when it comes to deciding its managerial implications. The study can be used to learn about the attitudes of students who are potential trainees for the organisation. It can also be used by the companies operating at international level who offer technical products but simultaneously require managers from varied disciplines to run the organisation smoothly, for collaborating such people into a correct and profitable mix. This study can be used by Hr personnel to decide about the job profile and career plan for each individual hired. When the managers will be well equipped with the information needs and KSA's of individuals from different fields, they will be in a better position to gain a higher competitive edge.

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## QUESTIONNAIRE REFERENCE

The original Questionnaire given by Henry O' Neil was adopted and modified for the research purpose.

## ANNEXURE: TEAMWORK SKILLS QUESTIONNAIRE

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Sachdeva, S  
Sachdeva, R  
Sachdeva, AK

We are conducting a study on “**EXPLORING DIFFERENCES IN STUDENTS PERCEPTIONS TOWARDS TEAMWORK BASED ACTIVITIES**”. This questionnaire measures the differences in the perceptions of students having different education streams (science and commerce). The data from this questionnaire will be solely used for academic purpose and your identity will not be disclosed. Please answer all the questions as per your true feelings and behaviour.

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(TICK AGAINST THE MOST CORRECT ANSWER)

1. Course Stream  
Commerce \_\_\_\_\_ Science \_\_\_\_\_ Management \_\_\_\_\_
2. Age  
16-18 years \_\_\_\_\_ 18-20 years \_\_\_\_\_ 20-22 years \_\_\_\_\_  
22-24 years \_\_\_\_\_ 24 years and above \_\_\_\_\_
3. Gender  
Male \_\_\_\_\_ Female \_\_\_\_\_
4. Educational Qualification  
Undergraduate \_\_\_\_\_ Postgraduate \_\_\_\_\_ Diploma \_\_\_\_\_  
Any other \_\_\_\_\_
5. Type of Family  
Joint Family \_\_\_\_\_ Nuclear Family \_\_\_\_\_

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Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. When I work as part of a team, I exercise leadership.					
2. When I work as part of a team, I ensure the instructions are understood by all the team members prior to starting the task.					
3. When I work as part of a team, I understand and contribute to the organizational goals.					
4. When I work as part of a team, I teach other team members.					
5. When I work as part of a team, I don't interact cooperatively with other team members.					
6. When I work as part of a team, I allocate the tasks according to each team member's abilities.					

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Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
7. When I work as part of a team, I serve as a role model in formal and informal interactions.					
8. When I work as part of a team, I conduct myself with courtesy.					
9. When I work as part of a team, I ask for the instructions to be clarified when it appears that not all the team members have understood the task.					
10. When I work as part of a team, I help ensure the proper balancing of the workload.					
11. When I work as part of a team, I give appropriate weightage to different issues.					
12. I lead my team only in the situations, when I feel there is a need for mentoring or guidance for optimum performance.					
13. When I work as part of a team, I respect the thoughts and opinions of others in the team.					
14. When I work as part of a team, I can identify potential problems readily.					
15. When I work as part of a team, I communicate in a manner to ensure mutual understanding.					
16. When I work as part of a team, I do my job in a timely manner.					
17. When I work as part of a team, I prepare sufficiently to make a decision.					
18. When I work as part of a team, I lead the team effectively.					
19. When I work as part of a team, I treat others with courtesy.					
20. When I work as part of a team, I willingly contribute solutions to resolve problems.					

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Comparing The Attitudes of Students Towards Team Based Activities: A Study of Management, Science and Commerce Students

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Sachdeva, S  
Sachdeva, R  
Sachdeva, AK

<b>Statements</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
21. When I work as part of a team, I seek and respond to feedback.					
22. When I work as part of a team, I track other team members' progress.					
23. When I work as part of a team, I invite input for decision making from my team members.					
24. When I work as part of a team, I demonstrate leadership to ensure team results.					
25. When I work as part of a team, I adapt readily to varying conditions and demands.					
26. When I work as part of a team, I listen attentively.					
27. When I work as part of a team, I am able to change decisions based upon new information.					
28. When I work as part of a team, I try to bring out the best in others.					
29. When I work as part of a team, I recognize conflict.					
30. When I work as part of a team, I clearly and accurately exchange information.					
31. When I work as part of a team, I emphasize the meeting of deadlines.					
32. When I work as part of a team, I don't accept individual differences among members.					
33. When I work as part of a team, I identify needs or requirements and develop quality/timely solutions.					
34. When I work as part of a team, I pay attention to what others are saying.					
35. When I work as part of a team, I treat all my team members as equals.					

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