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Examining the Linkage between Students' Participation in Co-curricular Activities and their Soft Skill Development

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ABSTRACT

The paper aims to investigate the association between students' participation in Co-curricular Activities (CCAs) and their soft skill development. Moreover, the study attempts to find out whether the association between these two variables is statistically significant. The study reasonably employed survey method where primary data were collected from a total of 135 students who were sampled from 16 academic departments of a public university in Bangladesh based on non-probability sampling techniques. The study found that the students have developed diverse soft skills (which involve different personal skills and social skills) much via their participation in CCAs. The study observed that there is a moderate positive association between students' participation in CCAs and their various personal and social skills excepting presentation skill, organizing skill and network-building skill in which strong positive association was found. Moreover, the study found that there is a significant association between students' participation in CCAs and their diverse personal skills and social skills. Hence, the study argued that the association between students' participation in CCAs and their soft skill development is statistically significant. Finally, the study suggested that the Government and the authority concerned should undertake suitable policy in order to utilize CCAs and thereby ensure quality education.

1. Introduction

Co-curricular activities (CCAs) involve those activities and programs that complement the formal academic learning of the students in educational institutions. While these activities are not directly associated with academic syllabus, they are designed to support the students to gain a better understanding of the course, and facilitate their various skill development tasks (California State

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University, Fullerton [CSUF], 2010; Dhanmeher, 2014; Ingale, 2014). Mehmood, Hussain, Khalid, and Azam, (2012) indicated that the CCAs are a series of activities pertaining to the school program, which facilitate bringing out all-round development of the students, outside the subjects for examination schedule. According to Vos et al. (2018), CCAs are the programs and learning experiences outside the classroom that complement those inside the classroom. Thus, CCAs are the activities and programs that typically take place outside the classroom learning while they complement the curricular or main educational activities. These activities are very important elements of educational institutions to develop the students' morality, personality, integrity and ethics, and strengthen the classroom learning (Ingale, 2014; Singh, 2017). CCAs are also critical for physical, mental, moral, intellectual, behavioral and civic development of the students alongside extra-curricular activities or ECAs (Ingale, 2014; Siddiky, 2019). However, CCAs and ECAs are the two words often used interchangeably across the world (Leung, Ng, & Chan, 2011; Lunenburg, 2010; Singh & Mishra, 2015). At present, there is no clear-cut distinction between these two types of activities since many of such activities are overlapping (Siddiky, 2019; Singh, 2017). Most of the universities throughout the world do not generally differentiate between CCAs and ECAs (Siddiky, 2019). As such, the study consciously has made no conceptual differentiation between these two sorts of activities. Examples of CCAs or ECAs may include: general knowledge competition, essay writing competition, debating, drawing competition, various sports, diverse cultural programs, science exhibition, social awareness building, blood donation program, and so on. CCAs have received much attention from different researchers and academics across the world due to their positive effects on academic performance, various skills and personality development of the students (Ahmed, Rahman, Ali, Rahman, & Al-Azad, 2015; Bashir & Javed, 2012; Brandfon, 2018; Cariaga & Molina, 2016; Daniyal, Nawaz, Hassan, & Mubeen, 2012; Dhanmeher, 2014; Freeman, 2017; Ismail et al., 2016; Ivaniushina & Zapletina, 2015; Ivanova, Martins, & Kaftasev, 2017; Jamal, 2012; Kumar & Selvaraju, 2014; Le, 2013; Mehmood et al., 2012; Nghia, 2017; Prianto, 2016; Ritchie, 2018; Siddiky, 2019; Singh & Mishra, 2015; Villalobos et al., 2016).

Mehmood et al. (2012) found that CCAs have significant relationship with the development of such personality traits as self-confidence, honesty, adaptation, sociability, sympathetic attitude, social obligation and sense of responsibility among secondary school students. They indicated that the CCAs have stronger impact on male secondary school students for the development of such personality traits than female secondary school students. Daniyal et al. (2012) put forward that the CCAs, in particular, athletic and sports enhance the academic performance of the students. Jamal (2012) put forward that the involvement in the ECAs develops the interpersonal skills and professional behaviors of the medical students of the King Abdulaziz University at Jeddah. An experimental study carried out by Bashir and Javed (2012) in order to determine whether the CCAs have an impact on academic performance of the secondary school students. Their study revealed that the CCAs could contribute to the academic performance of the students.

Johnston (2013) also found that the participation in ECAs have a positive effect on student grade point average, and the students who are involved in ECAs are more likely to persist to graduation. Le (2013) observed that there is statistically a significant relationship between involvement in ECAs and less engagement in risky behaviors among the Australian adolescents. However, the effects vary depending on activity type, gender, and partly by socio-economic status. Dhanmeher (2014) propounded that the CCAs have stronger association with the development of various personality qualities that involve adaptation, self-confidence, honesty, sociability, sympathetic attitude, social obligation, sense of responsibility, time management and leadership qualities among Junior College Students. Kumar and Selvaraju (2014) observed that the students' participation in CCAs have a positive effect on their personality development taking into account seven dimensions involving appearance, verbal mannerism, gesticulation, mental alertness, stability of thoughts, leadership skills and self-confidence.

Ivaniushina and Zapletina (2015) put forward that the ECAs have a positive effect on the development of personality and interpersonal skills of the Russian students. Singh and Mishra (2015) observed that participation in ECAs, in particular, yoga, horse-riding, sport activities, dance, music have positive effects on their academic performance of the students in the Government and Private Schools of India. Ahmed et al. (2015) found among the students of a Bangladeshi medical college, who have participated in ECAs, have better academic performance than those who have not participated in such activities. Ismail et al. (2016) observed that the ECAs have a positive effect on the development of personality traits of the students of different universities in Pakistan. Villalobos et al. (2016) asserted that the CCAs have a positive impact on the development of the relationship skills, academic performance and time management of the Pilipino Financial and Management Accounting students. Prianto (2016) found that the more intensively the college graduates are involved in ECAs, the better the quality of soft skills and readiness to work they have. Ivanova et al. (2017) observed that the students who participate in ECAs are more likely to develop their soft skills than the students who do not participate in such activities. Cariaga and Molina (2016) indicated that the students of some universities in Philippine have developed their personality through their participation in diverse ECAs.

Nghia (2017) claimed that the students' involvement in ECAs has enhanced their generic skills that involve communication skills, creative thinking skills, presentation skills and teamwork skills in some Vietnamese Universities. Freeman (2017) observed that there is a positive relationship between students' academic performance, in particular GPAs and their involvement in the ECAs. Ritchie (2018) put forward that the participation in CCAs improves Catholic High School students' learning as measured by GPAs. Brandfon (2018) claimed that the students who participate in CCAs in college, are more likely to develop important leadership skills and competencies, and are more likely to gain skills as required by employers and necessary for job success. Siddiky (2019) observed that the undergraduate students of a public university of Bangladesh have developed diverse personal skills and social skills including knowledge acquisition, communication skill, organizing skill, presentation skill, public speaking skill, and

analytical skill through their involvement in various CCAs. Hence, it may be argued that the CCAs have positive effects not only on the academic performance of the students but also on the development of their personality traits and interpersonal skills. However, the availability of empirical studies to find out the extent to which soft skill development of the students is linked with their participation in different CCAs is far from satisfactory. Moreover, there has not been so far any empirical study in Bangladesh, especially in a public university perspective to find out the statistical association between the students' participation in CCAs and the development of their diverse personal and social skills, that is, soft skills. As such, the study has been intended to examine the linkage between students' participation in CCAs of a public university in Bangladesh and their soft skill development. The study has set three research questions pertaining to its purpose. In this regard, the study has sought to investigate several queries corresponding to its research questions as depicted below in Table 1:

Table 1. Research Questions and Queries

No.	Research Questions	Specific Queries
1	To what extent does students' participation in CCAs contribute to their soft skill development?	a) To find out the extent to which students' personal skills have developed via their participation in CCAs b) To find out the extent to which students' social skills have developed via their participation in CCAs
2	What sort of association does exist between students' participation in CCAs and their soft skill development?	c) To find out the nature of association between students' participation in CCAs and their personal skill development d) To find out the nature of association between students' participation in CCAs and their social skill development
3	Is there any significant association between students' participation in CCAs and their soft skill development?	e) To find out whether there is a significant association between the students' participation in CCAs and their personal skill development f) To find out whether there is a significant association between students' participation in CCAs and their social skill development

Conceptual Framework of Soft Skill Development

Soft skills involve a set of skills or capacities that a person should possess in an attempt to face the challenges of daily life successfully. According to Cimatti (2016) soft skills incorporate personal transversal competences such as social aptitudes, language and communication capability, friendliness and ability of working in team and other personality traits that characterize relationships between people. Usually soft skills are learned through observations, practice, experience and the students' participation in various CCAs. Numerous studies pointed out that the students' involvement in various CCAs or ECAs, lead to the development of their diverse personal skills and social skills, that is, soft skills (Brandfon, 2018; Dhanmeher, 2014; Ivaniushina & Zapletina, 2015; Ivanova et al, 2017; Nghia, 2017; Prianto, 2016; Villalobos et al., 2016).

Hence, soft skills combine both personal skills and social skills (Cimatti, 2016). Personal skills may incorporate the level of knowledge acquisition, creative thinking skill, presentation skill, punctuality, self-motivation, language skill, analytical skill and so on. Learning Disabilities Association of Canada [LDAC], (n.d.) suggested that social skills are those skills which are used in every environment linking two or more people. Put differently, social skills are such skills or aptitudes that people apply to communicate or interact with each other. Hence, social skills may involve communication skill, leadership skill, organizing skill, friendliness, adaptability, social responsibility, network-building skill, extroversion, and so on (Chua, Chuatoco, Dela Pena, Jimenez, & Co, 2017; Cimatti, 2016; National Association of School Psychologists [NASP], 2002; Prianto, 2016; Villalobos et al., 2016). Thus, Cimatti (2016) put forward that personal skills mainly incorporate cognitive skills including knowledge and thinking skills whereas social skills are principally associated with relationships with other people. However, this is to note that personal and social skills cannot be differentiated properly since many of such skills may overlap each other.

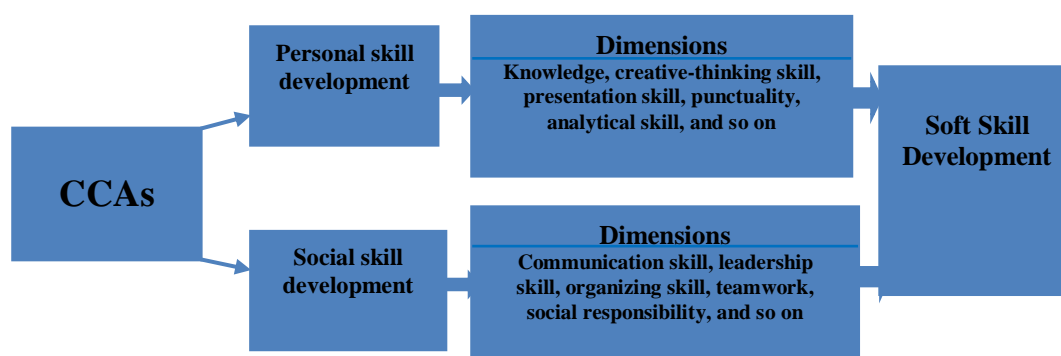


Figure1. Conceptual Framework of Soft Skill Development

Figure 1 depicted above shows the conceptual framework of soft skill development. Students' participation in CCAs may contribute to their personal skill development by cultivating a number of skills and personality traits pertaining to personal skills. As shown above in conceptual framework, personal skill development may be measured on the basis of eight dimensions or indicators which include the level of knowledge acquisition, creative-thinking skill, presentation skill, punctuality, self-motivation skill, language skill, analytical skill, and problem-solving skill. Similarly, students' participation in CCAs may facilitate their social skill development by cultivating a wide range of skills and personality traits concerning social skills. Hence, social skill development may be measured on the basis of nine dimensions involving leadership skill, communication skill, organizing skill, network-building skill, adaptation skill, friendliness skill, sense of social responsibility, teamwork-building skill, and extroversion. As such, the students' participation in diverse CCAs may result in their soft skill development by facilitating their personal skill development and social skill development. The study views the students' participation in CCAs as independent variable while corresponding dimensions of personal skills and social skills as dependent variables. Hence, the study has been intended to investigate whether independent variable is associated with the corresponding dependent

variables, in other words, whether the students' participation in diverse CCAs is linked with their soft skill development.

2. Methodology

Study area

The paper represents the study which was carried out in Noakhali Science and Technology University (NSTU) which is a public university in Bangladesh where about seven thousand students have been receiving undergraduate and postgraduate education in a variety of disciplines. There are 30 academic departments under six faculties and two institutes. Out of 30 departments, a total of 16 were purposively selected for the study that involved Applied Chemistry and Chemical Engineering, Bangladesh and Liberation War Studies, Business Administration, Computer Science and Telecommunication Engineering, Economics, Education, English, Environmental Science and Disaster Management, Fisheries and Marine Science, Food Technology and Nutrition Science, Information Science and Library Management, Management Information System, Microbiology, Sociology, Statistics, and Tourism and Hospitality Management.

Type of study, sampling and data collection

The study mainly employed a quantitative approach. However, data used in the study were collected from both primary and secondary sources. A total of 135 respondents were selected for this research project by using purposive and snow-ball sampling procedures from the students undertaking bachelor and master's programs at 16 academic departments of the NSTU. Primary data were collected from sample survey conducted by the researcher and his team comprising five undergraduate students of the Department of Sociology of the NSTU from August, 2019 to September, 2019 by using a structured questionnaire. In contrast, secondary data were gathered from various journal articles, relevant dissertations, online resources, and so on. All the respondents were informed of the purpose of the study. They took part in this survey willingly. The researcher did not have any financial involvement.

Data analysis

The primary data were analyzed employing both descriptive and inferential statistics. 5-point Likert type scales were used to measure the magnitude of participation in CCAs and that of soft skill development. Likert scales were defined in order of very negative to very positive degree of favorableness. Median is the appropriate measure when data is ordinal in nature (Nachmias & Nachmias, 2008). As such, due to ordinal nature of data, the study reasonably used median values rather than mean values to measure students' soft skill development via their participation in diverse CCAs. The Mann-Whitney *U* test was carried out in order to find out the significance of difference between male

and female students in terms of their participation in CCAs. Moreover, because of ordinal character of data, Kendall's tau-b was used to find out the nature of association between the students' participation in CCAs and their soft skill development rather than Pearson's or Spearman's Correlation Coefficients (Kraska-Miller, 2014; Nachmias & Nachmias, 2008). The study employed Kendall's tau-b through SPSS software in order to test a number of research hypotheses for investigating the significance of association between the students' participation in CCAs and their soft skill development.

3. Results and Discussion

Table 2 shown below describes the descriptive statistics of the respondents' characteristics. In other words, Table 2 portrays the classification of statistical data on the respondents' characteristics pertaining to five variables - department, sex, academic year, age, and the major CCAs participated by the respondents.

Table 2. Descriptive Statistics of the Respondents' Characteristics

Variables		Frequency	Percent (%)
Department	ACCE	5	3.7
	DBA	7	5.2
	BLWS	19	14.1
	CSTE	5	3.7
	ECO	6	4.4
	EDU	5	3.7
	ENG	12	8.9
	ESDM	13	9.6
	FIMS	6	4.4
	FTNS	5	3.7
	ISLM	5	3.7
	Micro	6	4.4
	MIS	15	11.1
	SOC	16	11.9
	STAT	5	3.7
THM	5	3.7	
	Total	135	100.0
Sex		Frequency	Percent (%)
	Male	88	65.2
	Female	47	34.8
	Total	135	100.0
Academic Year		Frequency	Percent (%)
	1Y	7	5.2
	2Y	85	63.0
	3Y	19	14.1
	4Y	12	8.9
	5Y(Masters)	12	8.9
	Total	135	100.0
Age		Mean	SD
	21.70	21.00	1.542
Major CCAs		Frequency	Percent (%)
	Sports	29	21.5
	Cultural	54	40.0

Debating	19	14.1
MUN	18	13.3
Others	15	11.1
Total	135	100.0

Source: Fieldwork, 2019

As can be seen above in Table 2, the Bangladesh and Liberation War Studies (BLWS) Department has the highest share of the respondents (about 14%) followed by the Sociology (SOC) Department (roughly 12%), the Management Information System (MIS) Department (about 11%), the Environmental Science and Disaster Management (ESDM) Department (9.6%), the English (ENG) Department (around 9%), the Business Administration (DBA) Department (5.2%). However, the Economics (ECO) Department, the Microbiology (Micro) Department, the Fisheries and Marine Science (FIMS) Department each shares 4.4% of the respondents. Finally, the Applied Chemistry and Chemical Engineering (ACCE) Department, the Computer Science and Telecommunication Engineering (CSTE) Department, the Food Technology and Nutrition Science (FTNS) Department, the Information Science and Library Management (ISLM) Department, the Statistics (STAT) Department, and the Tourism and Hospitality Management (THM) Department each shares 3.7% of the respondents. As shown above in Table 2, with regard to sex, about 65% of the respondents are males while about 35% of the respondents are females. A great majority of the respondents (63%) belong to the 2nd year of the undergraduate programs, followed by the 3rd year (14%). The 4th year and the Masters each shares about 9% of the respondents while the 1st year shares about 5% of the respondents. The respondents' mean age is 21.70 years while their median age is 21.00 years. A majority of the respondents (40%) favored cultural programs for their participation in CCAs, followed by sports (21.5%), debating (roughly 14%), Model United Nations' Programs or MUN (13.3%), and finally others (roughly 11%).

Table 3. Respondents' Participation in CCAs by Sex

Type of Respondent	Mean	Median	SD	Statistical Test	Mean Rank	Z	p-value
Male	3.90	4.00	.607	Mann-Whitney	74.94	-	.002
Female	3.53	3.00	.654	<i>U</i>	55.01	3.167	

Note: 1= never; 2= rarely; 3= occasionally; 4= regularly; 5= very often

Table 3 shows respondents' participation in CCAs by sex. It is found that the males regularly participate in CCAs since their median value is 4.00 whereas the females occasionally participate in CCAs since their median value is 3.00. The Mann-Whitney *U* test suggests that there is a significant difference between male and female students concerning their participation in CCAs since *p*-value (.002) is less than the alpha value of 0.01. Hence, the male students are more likely to participate in CCAs than the female students.

Table 4 shown below portrays the evaluation summary of the respondents' personal skill development. This is to note that Table 4 is concerned with the research question-1 and shows the extent to which students' personal skills have

developed via their participation in CCAs. As indicated earlier, personal skill development has been measured by eight indicators involving knowledge acquisition, creative-thinking skill, presentation skill, punctuality, self-motivational skill, language skill, analytical skill, and problem-solving skill.

Table 4. Evaluation Summary of Personal Skill Development

No.	Measurement Instruments/ Indicators	Mean	Median	SD	Rating
1	The extent to which level of knowledge has developed	3.77	4.00	.743	Much
2	The extent to which creative thinking skill has developed	3.73	4.00	.737	Much
3	The extent to which presentation skill has developed	3.81	4.00	.833	Much
4	The extent to which punctuality has developed	3.80	4.00	.799	Much
5	The extent to which self-motivational skill has developed	3.79	4.00	.764	Much
6	The extent to which language skill has developed	3.57	4.00	.728	Much
7	The extent to which analytical skill has developed	3.53	4.00	.741	Much
8	The extent to which problem-solving skill has developed	3.67	4.00	.773	Much
Personal Skill Development		3.71	4.00	.765	Much

Note: 1= not at all; 2= not; 3= moderately; 4= much; 5= very much

As shown above in Table 4, all of the indicators or measurement instruments have a median value of 4.00 which indicate that the respondents' personal skills or dimensions of personal skill development (i.e. knowledge acquisition, creative-thinking skill, presentation skill, punctuality, self-motivational skill, language skill, analytical skill, and problem-solving skill) have much developed as a result of their participation in diverse CCAs. The personal skill development of the respondents as a whole has a median value of 4.00 that indicates that it has much developed as a result of their participation in such activities.

Table 5 depicted below shows the evaluation summary of the respondents' social skill development. Table 5 corresponds to the research question-1 and shows the extent to which students' social skills have developed via their participation in CCAs. As mentioned earlier, social skill development has been measured by nine indicators such as leadership skill, communication skill, organizing skill, network-building skill, sense of social responsibility, adaptation skill, friendliness skill, teamwork-building skill, and extroversion.

Table 5. Evaluation Summary of Social Skill Development

No.	Measurement Instruments/ Indicators	Mean	Median	SD	Rating
1	The extent to which leadership skill has developed	4.00	4.00	.801	Much
2	The extent to which communication skill has developed	4.01	4.00	.810	Much
3	The extent to which organizing skill has developed	3.94	4.00	.790	Much
4	The extent to which network-building skill has developed	3.99	4.00	.824	Much
5	The extent to which sense of social responsibility has developed	3.82	4.00	.781	Much
6	The extent to which adaptation skill has developed	3.77	4.00	.801	Much

7	The extent to which friendliness skill has developed	3.99	4.00	.743	Much
8	The extent to which teamwork-building skill has developed	3.98	4.00	.738	Much
9	The extent to which extroversion has developed	3.99	4.00	.828	Much
Social Skill Development		3.94	4.00	.790	Much

Note: 1= not at all; 2= not; 3= moderately; 4= much; 5= very much

As shown above in Table 5, all of the indicators or measurement instruments have a median value of 4.00 that indicate that the respondents' social skills or the dimensions of social skill development (i.e. leadership skill, communication skill, organizing skill, network-building skill, sense of social responsibility, adaptation skill, friendliness skill, teamwork-building skill, and extroversion) have much developed as a result of their participation in diverse CCAs. The social skill development of the respondents as a whole has a median value of 4.00 indicating that it has also much developed due to their participation in CCAs. However, the overall mean value of social skill development (3.94) is stronger than the overall mean value of personal skill development (3.71).

Table 6 depicted below shows the hypotheses testing results summary of personal skill development. Put differently, Table 6 shows the nature of association between students' participation in CCAs and their personal skill development corresponding to research question-2, and the significance of association between students' participation in CCAs and their personal skill development pertaining to research question-3.

By applying Kendall's tau-b, we have found that there is a moderate positive association between students' participation in CCAs and their knowledge development since the value of Kendall's tau-b is .594. In this regard, the empirical evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their knowledge development [p -value < 0.01]. We have found that there is a moderate positive association between students' participation in CCAs and their creative-thinking skill development since the value of Kendall's tau-b is .547. In this regard, the empirical evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their creative-thinking skill development [p -value < 0.01]. It has been found that there is a strong positive association between students' participation in CCAs and their presentation skill development since the value of Kendall's tau-b is .610. In this regard, the empirical evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their presentation skill development [p -value < 0.01]. It has been found that there is a moderate positive association between students' participation in CCAs and their punctuality development since the value of Kendall's tau-b is .544. In this regard, the empirical evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their punctuality development [p -value < 0.01]. It is evident that there is a moderate positive association between students' participation in CCAs and their self-motivational skill development since the value of Kendall's tau-b is .595. In this connection, the empirical

evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their self-motivational skill development [p -value < 0.01].

Table 6. Hypotheses Testing Results Summary (Personal Skill Development)

No.	Research hypotheses (H_a)	Statistical Test	Value(τ)	Alpha-value	p -value
1	There is an association between the students' participation in CCAs and their knowledge development*	Kendall's tau-b	.594	0.01	.000
2	There is an association between the students' participation in CCAs and their creative-thinking skill development*	Kendall's tau-b	.547	0.01	.000
3	There is an association between the students' participation in CCAs and their presentation skill development*	Kendall's tau-b	.610	0.01	.000
4	There is an association between the students' participation in CCAs and their punctuality development*	Kendall's tau-b	.544	0.01	.000
5	There is an association between the students' participation in CCAs and their self-motivational skill development*	Kendall's tau-b	.595	0.01	.000
6	There is an association between the students' participation in CCAs and their language skill development*	Kendall's tau-b	.515	0.01	.000
7	There is an association between the students' participation in CCAs and their analytical skill development*	Kendall's tau-b	.583	0.01	.000
8	There is an association between the students' participation in CCAs and their problem-solving skill development*	Kendall's tau-b	.509	0.01	.000

*Statistically significant at 1% level of significance [p -value < 0.01]

As shown above in Table 6, there is a moderate positive association between students' participation in CCAs and their language skill development since the value of Kendall's tau-b is .515. In this regard, the empirical evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their language skill development [p -value < 0.01]. We have also found that there is a moderate positive association between students' participation in CCAs and their analytical skill development as the value of Kendall's tau-b is .583. In this regard, the empirical evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their analytical skill development [p -value < 0.01]. Finally, it has been found that there is a moderate positive association between students' participation in CCAs and their problem-solving skill development since the value of Kendall's tau-b is .509. In this regard, the empirical evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their problem-solving skill development [p -value < 0.01]. As such, the study argued that students' participation in CCAs is positively associated with their personal skill development involving knowledge development, creative-thinking skill development, presentation skill development, language skill development,

analytical skill development, problem-solving skill development, and so on. Therefore, these findings are in line with the findings indicated by Ivanova et al. (2017); Nghia (2017); and Prianto (2016).

Table 7 depicted below shows the hypotheses testing results summary of social skill development. In other words, Table 7 shows the nature of association between students' participation in CCAs and their social skill development pertaining to research question-2, and the significance of association between students' participation in CCAs and their social skill development relating to research question-3.

By applying Kendall's tau-b, we have observed that there is a moderate positive association between students' participation in CCAs and their leadership skill development since the value of Kendall's tau-b is .539. In this regard, the empirical evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their leadership skill development [p -value < 0.01]. As shown below in Table 7, there is a moderate positive association between students' participation in CCAs and their communication skill development since the value of Kendall's tau-b is .584. In this regard, the empirical evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their communication skill development [p -value < 0.01]. It has been found that there is a strong positive association between students' participation in CCAs and their organizing skill development since the value of Kendall's tau-b is .609. In this regard, the empirical evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their organizing skill development [p -value < 0.01]. It is evident that there is a strong positive association between students' participation in CCAs and their network-building skill development since the value of Kendall's tau-b is .649. In this regard, the empirical evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their network-building skill development [p -value < 0.01].

Table 7. Hypotheses Testing Results Summary (Social Skill Development)

No.	Research hypotheses (H_a)	Statistical Test	Value(τ)	Alpha-value	p -value
1	There is an association between the students' participation in CCAs and their leadership skill development *	Kendall's tau-b	.539	0.01	.000
2	There is an association between the students' participation in CCAs and their communication skill development *	Kendall's tau-b	.584	0.01	.000
3	There is an association between the students' participation in CCAs and their organizing skill development *	Kendall's tau-b	.609	0.01	.000
4	There is an association between the students' participation in CCAs and their network-building skill development *	Kendall's tau-b	.649	0.01	.000

5	There is an association between the students' participation in CCAs and their sense of social responsibility development*	Kendall's tau-b	.494	0.01	.000
6	There is an association between the students' participation in CCAs and their adaptation skill development*	Kendall's tau-b	.471	0.01	.000
7	There is an association between the students' participation in CCAs and their friendliness skill development*	Kendall's tau-b	.497	0.01	.000
8	There is an association between the students' participation in CCAs and their teamwork-building skill development*	Kendall's tau-b	.518	0.01	.000
9	There is an association between the students' participation in CCAs and their extroversion development*	Kendall's tau-b	.511	0.01	.000

*Statistically significant at 1% level of significance (p -value < 0.01)

As shown above in Table 7, there is a moderate positive association between students' participation in CCAs and their sense of social responsibility development since the value of Kendall's tau-b is .494. In this connection, the empirical evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their sense of social responsibility development [p -value < 0.01]. We have found that there is a moderate positive association between students' participation in CCAs and their adaptation skill development since the value of Kendall's tau-b is .471. In this connection, the empirical evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their adaptation skill development [p -value < 0.01]. It is evident that there is a moderate positive association between students' participation in CCAs and their friendliness skill development since the value of Kendall's tau-b is .497. In this regard, the empirical evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their friendliness skill development [p -value < 0.01].

We have also found that there is a moderate positive association between students' participation in CCAs and their teamwork-building skill development as the value of Kendall's tau-b is .518. In this regard, the empirical evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their teamwork-building skill development [p -value < 0.01]. Finally, we have found that there is a moderate positive association between students' participation in CCAs and their extroversion development since the value of Kendall's tau-b is .511. In this regard, the empirical evidence has supported our hypothesis (H_a) that there is an association between the students' participation in CCAs and their extroversion development [p -value < 0.01]. Hence, the study put forward that students' participation in CCAs is positively associated with their social skill development involving leadership skill development, communication skill development, sense of social responsibility development, adaptation skill development, teamwork-building skill development, friendliness skill development, extroversion development, and so on. Therefore,

these findings are in line with the findings put forward by Brandfon (2018); Cariaga and Molina (2016); Dhanmeher (2014); Ivaniushina and Zapletina (2015); Jamal (2012); Mehmood et al. (2012), Nghia (2017); and Villalobos et al. (2016).

As a whole, the outcomes of the study have been supported by the findings presented by a number of researchers that students' participation in CCAs contribute to the development of their diverse soft skills, personality traits and interpersonal skills (Brandfon, 2018; Cariaga & Molina, 2016; Dhanmeher, 2014; Ivaniushina & Zapletina, 2015; Ivanova et al., 2017; Ismail et al., 2016; Jamal, 2012; Kumar & Selvaraju, 2014; Mehmood et al., 2012; Nghia, 2017; Prianto, 2016; Villalobos et al., 2016). However, this is noteworthy that most of the studies have focused on the development of personality traits and interpersonal skills of the students through their participation in CCAs rather than concentrating on their soft skill development. While some studies have indicated that the students' participation in CCAs has effect on the development of their generic skills or soft skills, they have not focused on the extent to which diverse personal skills and social skills have developed among the students via their participations in CCAs (Ivanova et al., 2017; Nghia, 2017; Prianto, 2016). Moreover, the existing studies have not examined the extent to which soft skill development of the students is linked with their participation in diverse CCAs through proposing a conceptual framework. Whereas Ivanova et al. (2017) and Prianto (2016) have argued that the students' participation in CCAs is associated with the development of soft skills among the students, they have not investigated the degree of association between the students' participation in CCAs and their soft skill development. As such, the study argued that the contemporary studies have not focused on examining the nature and degree of relationship between students' participation in CCAs and their soft skill development based on a conceptual model.

4. Conclusion

The study indicated that students' soft skill development involving personal skill development and social skill development has much developed via their participation in CCAs. Hence, the study put forward that CCAs would contribute to soft skill development of the students by raising their diverse personal skills and social skills. The study found that students' participation in CCAs has a moderate positive association with all the skills or traits associated with personal skill development and social skill development excepting presentation skill, organizing skill, and network-building skill in which strong positive association was observed. Hence, the study argued that students' participation in CCAs has a positive association with their soft skill development. The hypotheses testing results put forward that there is a significant association between students' participation in CCAs and their personal skill development and social skill development. As such, the study proposed that there is a significant association between students' participation in CCAs and their soft skill development. The study observed that students' participation in CCAs is positively associated with their knowledge acquisition, language skill development, adaptation skill

development, sense of social responsibility development, and extroversion development and thereby would contribute to their socialization, personality formation and civic development. The soft skills are pivotal not only for all-round development of the students but also for attaining SDGs, especially promoting lifelong learning opportunities for all, ensuring quality education, and generating a skilled workforce. As such, the study suggested that there should be much focus on all sorts of sports (indoor & outdoor), cultural programs, debating and MUN programs in order to develop diverse CCAs. As the female students are less likely to participate in CCAs, they should be strongly encouraged to take part in such activities.

Since CCAs contribute to soft skill development of the students by raising a wide range of personal skills and social skills including knowledge acquisition, creative-thinking skill, presentation skill, analytical skill, problem-solving skill, leadership skill, organizing skill, communication skill, adaptation skill and sense of social responsibility, the Government and the authority concerned should pay much attention to CCAs alongside formal academic learning and undertake proper policy in order to maximize the benefits from such activities and thereby ensure a quality education. Whereas the study put forward some key policy implications, it has two important shortcomings: first, the study employed non-probability sampling while selecting samples and hence, sampling process could involve biasness; second, the study deliberately examined the co-variation of two variables involving students' participation in CCAs and their soft skill development. However, other factors including students' sex, motivation, group activity, undertaking any short-term training, and so on might have effects on the development of soft skills alongside their participation in CCAs. Therefore, the study identified the need for conducting an empirical explanatory study taking into account probability sampling procedure, and multiple regression analysis in order to find out the factors influencing soft skill development of the students.

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