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CHALLENGES OF COGNITIVE DEVELOPMENT AMONG THE STUDENTS, (CCD)

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Abstract

This study was conducted to find out the Challenges of Cognitive Development among the students, faced by the faculties of Higher Education, of Namakkal District, Tamilnadu, India. A sample of 750 Faculties from various disciplines was selected by convenience sampling technique. To collect the data, Challenges of Cognitive Development Scale (CCDS) was used which was designed and constructed by Dr.K.Saileela. CCDS consists of 16 items with a four-point scale, Strongly Agree, Agree to Disagree, Strongly Disagree. The Cronbach coefficient alpha for raw score variables for the instrument was 0.79. The data was collected with the help of Google forms and was analyzed using statistical techniques like Percentage analysis, Mean, Standard Deviation, t-test and ANOVA. The finding of this study reveals that there are no significant differences among all the Demographic variables like Gender, Location, Age, Designation, Experience, and Monthly Income of the Faculties in the Challenges of Cognitive Development among the students for the Faculties of Higher Education

Keywords: Challenges of Cognitive Development, Higher Education teachers, students

I Introduction

Globally, education systems have been pushed to create substitutes for in-person instruction as a result of the COVID-19 crisis. Colleges went into emergency mode as the epidemic intensified, closing campuses to stop the spread of COVID-19, the illness brought on by the novel corona virus, and transferring academic life online. As a result, teachers and students were making unprecedented use of online teaching and learning. The majority of the time, online classes consists of a combination of recorded or live lectures, readings, and independent examinations. online classes are more effective because they provide PPTs in front of every student, lectures are heard by all students at the sound level of their choice, and walking/travel to reach classes is eliminated(Darius, P.S.H, et.al, 2021). Hussain, Ijaz et.al 2020 findings revealed that the online learning was an effective and

efficient system of learning to fulfill the educational needs of learners at distant locations. Ugyen Pem et.al., (2021) found that students have experienced major constraints such as internet connectivity, financial support, IT facilities, power fluctuation and household chores while learning online from homes. Generally, they have found online learning through VLE as a new enriching opportunity to learn ICT tools, communication skills and social skills for collaborative online learning. The corona virus, however, has forced a quick shift to online schooling with little time to prepare for it. In this context this study was studied on teachers to find out the problems in implementing teaching learning process.

II Objectives

1. To find out the level of Challenges of Cognitive Development among the students
2. To find out if there any significant difference in the Challenges of Cognitive Development among the students with regard to certain demographic variables

III METHODS

Descriptive-survey study was conducted to find out the Challenges of Cognitive Development among the students. A sample of 750 Faculties from various disciplines was selected by convenience sampling technique from the faculties of Higher Education, of Namakkal District The data were collected using (i) Personal data form,

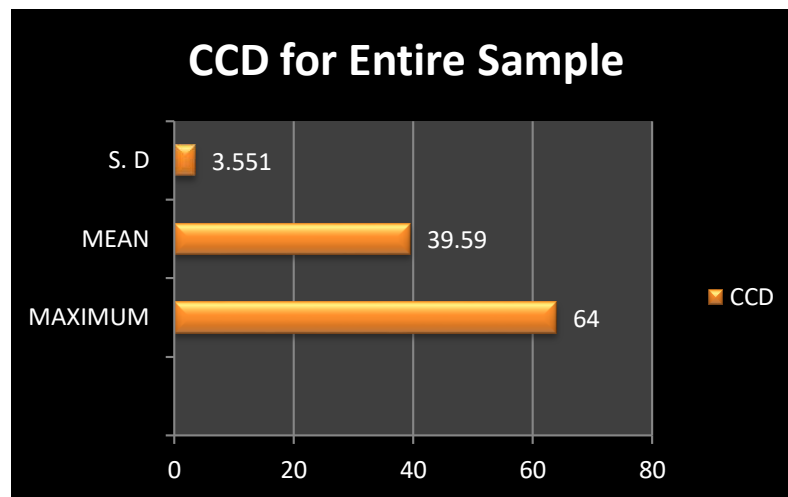
(2) Challenges of Cognitive Development Scale among the students was designed and constructed by Dr.K.Saileela. The questionnaire consists of 16 items and was designed with a four-point scale Strongly Agree, Agree, Disagree, Strongly Disagree, with the scoring 4, 3, 2, and 1. There are positive statements and contain negative statements. 1,2,3,7,13,14,15,16 are positive statements and 4,5,6,8,9,10,11,12 are negative statements. Thus, the maximum score is 64 and the minimum is 16. A Cronbach's alpha analysis was used to determine the reliability of the scale .792. The Cronbach Alpha internal consistency coefficient (.792) of the scale shows that the reliability of the scale is acceptable all the 16 items were retained for the final study

IV Findings of the study

- a. Percentage Analysis
 - From the Table-1 it can be found that 18.7% of the faculties have Strongly Agreed and 55.7% of the faculties have Agreed to the statement, "Students hesitate to answer questions immediately in the Online classes"
 - From the Table-2 it can be found that 18.0% of the faculties have Strongly Agreed and 56.5% of the faculties have Agreed to the statement "Students do not participate in fruitful discussions in the Online classroom"
 - From the Table-3 it can be found that 29.5% of the faculties have Strongly Agreed and 62.9 % of the faculties have Agreed to the statement "Students concentration is retained when taught with PowerPoint presentations"

- From the Table-4 it can be found that 24% of the faculties have Strongly Agreed and 56.9 % of the faculties have Agreed to the statement “Students face communication problems with the teachers in the Online classes”
- From the Table-5 it can be found that 27.9% of the faculties have Strongly Agreed and 55.5% of the faculties have Agreed to the statement “Students do not get individual attention from the teachers in the Online classes”
- From the Table-6 it can be found that 29.6% of the faculties have Strongly Agreed and 56.5% of the faculties have Agreed to the statement “Students do not concentrate in the class because of distractions in their home”
- From the Table-7 it can be found that 15.5% of the faculties have Strongly Agreed and 52.8 % of the faculties have Agreed to the statement “Students find it difficult to complete assignments and tests and submit them in Online mode”
- From the Table-8 it can be found that 22.9% of the faculties have Strongly Agreed and 62.9 % of the faculties have Agreed to the statement “Students do not listen because of continued exposure to mobile phones”
- From the Table-9 it can be found that 21.1% of the faculties have Strongly Agreed and 62.5% of the faculties have Agreed to the statement “Students Self-confidence is affected as they do not participate in group discussions”
- From the Table-10 it can be found that 29.7% of the faculties have Strongly Agreed and 58.7% of the faculties have Agreed to the statement “Students learning is affected as they do not take online classes seriously”
- From the Table-11 it can be found that 11.1% of the faculties have Strongly Agreed and 43.5% of the faculties have Agreed to the statement “Students do not understand concepts in the Online classes”
- From the Table-12 it can be found that 18.5% of the faculties have Strongly Agreed and 51.9% of the faculties have Agreed to the statement “Students’ progress in learning cannot be checked in the Online classes”
- From the Table-13 it can be found that 28.7% of the faculties have Strongly Agreed and 64.0 % of the faculties have Agreed to the statement “Students understand concepts easily when learned through Video content”
- From the Table-14 it can be found that 11.1% of the faculties have Strongly Agreed and 40.0 % of the faculties have Agreed to the statement “Students ask more doubts in the Online classes”
- From the Table-15 it can be found that 18.9% of the faculties have Strongly Agreed and 51.3% of the faculties have Agreed to the statement “Students participation and understanding cannot be checked by the teacher in the Online classes”
- From the Table-16 it can be found that 14.5% of the faculties have Strongly Agreed and 50.4% of the faculties have Agreed to the statement “Students do not interact with the teacher in the Online classes”

b. Descriptive Analysis



The mean and standard deviation of CCD for the total group are 39.59 & 3.551 respectively. It may be remembered maximum score of CCD is 64. The mean value is greater than the mid score of 32. To sum up, the level of faculties' CCD among the students is high.

c. Differential Analysis

H_0 : There is no significant difference in the Faculties' CCD among the students in terms of Gender

Table-1

Difference in the Faculties' CCD among the students in terms of Gender

Variable	Gender	N	Mean	Std Deviation	t-value	p-value
CCD	Male	280	39.81	3.967	1.316	.189
	Female	470	39.46	3.276		

It is inferred from Table 1 that the p-value is greater than the 5% level of significance. Hence the respective null hypothesis is accepted ($p > 0.05$). Thus, the result shows that there is no significant difference in the Faculties' CCD among the students in terms of Gender

H_0 : There is no significant difference in the Faculties' CCD among the students in terms of Location

Table 2

Difference in the Faculties' CCD among the students in terms of location

Variable	Location	N	Mean	Std Deviation	t-value	p-value
CCD	Urban	322	39.63	3.366	1.534	.686
	Rural	428	39.56	3.688		

It is inferred from Table 2 that the p-value is greater than the 5% level of significance. Hence the respective null hypothesis is accepted ($p>0.05$). Thus, the result shows that there is no significant difference in the Faculties' CCD among the students in terms of Location

H_0 : There is no significant difference in the Faculties' CCD among the students in terms of Age

Table 3

Difference in the Faculties' CCD among the students in terms of Age

Variable	Age	N	Mean	Std Deviation	F-value	p-value
CCD	20-30	115	39.03	3.638	2.699	.045
	30-40	365	39.94	3.374		
	40-50	213	39.28	3.646		
	Above 50	57	39.67	4.018		

Upon using the One-Way ANOVA, it is observed from Table 4.7.03 that the p-value is greater than the 0.05 level and thus we can infer that there is no significant mean difference in the CCD. Hence the respective null hypothesis is accepted ($p>0.05$). Thus, the result shows that there is no significant difference in the Faculties' CCD among the students in terms of Age

H_0 : There is no significant difference in the Faculties' CCD among the students in terms of Designation

Table 4

Difference in the Faculties' CCD among the students in terms of Designation

Variable	Designation	N	Mean	Std Deviation	F-value	p-value
CCD	Assistant Professor	454	39.79	3.594	.911	.473
	Associate Professor	46	39.09	3.527		
	Professor	31	39.73	4.118		
	Lecturer	61	39.16	3.917		
	Instructor	4	40.50	.577		
	Schoolteacher	154	39.30	3.189		

Upon using the One-Way ANOVA, it is observed from Table 4 that the p-value is greater than the 0.05 level and thus we can infer that there is no significant mean difference in the CCD.

Hence the respective null hypothesis is accepted ($p>0.05$). Thus, the result shows that there is no significant difference in the Faculties' CCD among the students in terms of Designation

H_0 : There is no significant difference in the Faculties' CCD among the students in terms of Experience

Table 5

Difference in the Faculties' CCD among the students in terms of Experience

Variable	Experience	N	Mean	Std Deviation	F-value	p-value
CCD	less than 5 years	192	39.45	3.525	.361	.837
	6 to 10 years	211	39.74	3.284		
	11 to 15 years	205	39.61	3.582		
	16 to 20 years	77	39.77	3.824		
	21 and above	65	39.26	4.067		

It is inferred from Table 5 that the p-value is greater than the 5% level of significance. Hence the respective null hypothesis is accepted ($p > 0.05$). Thus, the result shows that there is no significant difference in the Faculties' CCD among the students in terms of Experience

H_0 : There is no significant difference in CCD of Faculties in terms of Monthly Income

Table 6

Difference in the CCD of the Faculties in terms of Monthly Income

Variable	Monthly Income	N	Mean	Std Deviation	F-value	p-value
CCD	less than 25000	402	39.64	3.592	.403	.751
	25001-50000	168	39.52	3.485		
	50001-100000	103	39.25	3.449		
	above 100000	77	39.83	3.687		

It is inferred from Table 6 that the p-value is greater than the 5% level of significance. Hence the respective null hypothesis is accepted ($p > 0.05$). Thus, the result shows that there is no significant difference in the Faculties' CCD among the students in terms of Monthly Income

V Conclusion

There is no significant difference in the Faculties' CCD among the students in terms of Gender, Location, Age, Designation, Experience and Monthly Income. This implies that all the faculties face difficulty in developing cognition among the students. The mean values of CCD for entire sample are 39.59 and S.D is 3.55. The mean value is greater than the mid score of 32. Hence, the level of faculties' CCD among the students is high, they find difficult to handle students in their online classes. Percentage Analysis reveals the difficulties of faculties face during their online classes. Reasons are Poor Internet Connectivity, consumption of more GB if videos are switched on, Lack of devices, and interruptions in the home etc. Recorded videos can be the solutions for this problem. Students' today struggle with concentration problems because of being bombarded and

overwhelmed with information. Keeping students' attention for an extended period of time has proven to be one of the biggest classroom obstacles. The effectiveness of teacher-student communication is the foundation of education, and new technological developments are contributing to this improvement. Soon, the classrooms will be changed into a community where teachers and students may collaborate through advanced flipped classroom techniques, Virtual learning, Electronic and interactive textbooks and chat bots etc for the benefit of teachers and students

VI References

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