



Perception and Attitude towards Open and Distance Learning Education in Sri Lanka with reference to Open University of Sri Lanka

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1. Introduction

Distance Education in Sri Lanka had its beginnings with the establishment of the Sri Lanka Institute of Distance Education (SLIDE) in 1976. The objective was to provide tertiary education in Mathematics, Science, Management and Technical Studies. The open university of Sri Lanka (OUSL) was statutorily established in 1980 by incorporating SLIDE and the External Services Agency (ESA). Its main objectives are providing higher education for the employed and for those who missed opportunities in higher education at conventional universities. (Kotalwawela and Samarasundara, 1987; Weerasinghe, 1994). The Open University is open to people those who are above 18 years of age.

Today, the OUSL has expand the study programmes in a variety of areas which leading to Certificates, Diplomas, Degrees, post graduate Diplomas, post graduate degrees. OUSL foundation programmes offer the opportunities for students who don't have the required G.C.E Advance Level passes to qualify for the undergraduate programmes. The current population of OUSL (2019) is about 35000+ (www.ou.ac.lk)

The dynamics of globalization and introduction of information and communication technologies (ICT) resulted in a tidal wave of information that, in many cases where it destroyed and also development of many countries. This has been resulted in a huge change of educational needs of individuals and society at large, phenomena that reflected in the emerging need for extra specialization in the learning process. World of work is completely full with complexities and fluid, newer approaches are important in working and learning process. As the demand for above is rising up more than ever, educational institutions are required to imbue their students with lifelong learning skills they need to survive and to meet the challenges and changes the made-ups in twenty-first century. It shows by most researches and professionals that nationally and internationally, conventional education is hard to meet the demands of today's socio-educational background, especially for developing countries like Sri Lanka.

With comparison to conventional education system of Sri Lanka, OUSL brought and innovative and cost effective approach to the educative process to both students who are working and full-time students. To bridge the gap between participants in the instructional process, ODL offers structured learning in which instructor and the students are separated by time and space. It makes more effective to use the instructional materials such as, printed books, audios, online activities and multi-media components. (Petal and Helland, 2002). In OUSL it's not compulsory to attend the tutorial sessions in university or study centers. But to foster the interaction between learners, online support is offered through the real time chat in study sessions, advice and email discussions, and online platform group discussions. In many

respects ODL remain the alien system of inculcating knowledge to students in Sri Lanka, because it's completely different from conventional system of education.

This study assesses undergraduate and post graduate students' attitude and perception of distance learning university (OUSL) in Sri Lanka towards the quality and standard of education method. This study aims to reduce the existing gap in the literature on students' perception attitude towards the Distance Education in OUSL Sri Lanka and to provide useful and practical information to distance education providers. With the effect of Covid-19 pandemic to Sri Lanka distance learning is highly encourage by the universities in the learning process. Hence, OUSL practice the ODL system long before since university started. The paper discussed the strengths and weaknesses and transforming the ODL with digital technology to be more effective in the 21st century.

Open and Distance learning in Sri Lanka-OUSL

The Open University of Sri Lanka is the first institution formally established in Sri Lanka to offer courses through the ODL methods. Predominantly OUSL offered them through the print materials as internet was not there for all around the country. With the time, currently OUSL offer courses in online system where each and every student can log in to their personal profile. For instance, course materials like DSE [NVC] which are Non-compulsory subjects for all the students enrolled at OUSL are supplemented with on-line system. Tutorials and on-line platforms for compulsory subjects also organized at study centers, which are scatted all over the country. OUSL has 19 study centers, which are carried out face-to-face to by full-time and temporary facilitators.

Unlike conventional education delivery methods, there are no structured face-to-face contacts between students and teachers. Instead of that, OUSL has self directed, high quality; learner-centered instructional materials are made available to students. Also instructional facilitation like day schools for to clarify the problems, to get more ideas about questions, practical classes is carried out according to the pre-arranged dates for the necessity of students. Similar to other distance learning institutions in the world, day schools are optional for students. For OUSL students, counseling services are provided at the point of registration of their courses. (OUSL Guideline, 2017/18)

For effective instructional process in distance education in OUSL all the above arrangements are important. By the researches and by practice also it confirmed that, individualized learning is a lonely activity and many of the students are faced with the challenges of family, work and other social demands, some of which take prominence over their programme of study. In the conventional system, student remain in close and they are very easy to contact with the university peers, lecturers and others, but in the ODL method students are often isolated and contact with their university is infrequent and more often than not take place at a distance. Also the fact remain that distance learning approach demands a great deal of personal sacrifice on the part of learners. In ODL method students need to have good study skills, discipline and self-motivation-attributes needed to attain learner autonomy. (Collis, 1996).

Perception of Distance Education

"Distance education" refers to an educational approach, where it shows the major separation of the learner and the instructor in space and time (Keegan, 1996). The term "Open learning" refers to the philosophical construct that seeks to remove the barriers and constraints that may prevent learners from accessing and succeeding in quality and life-long education. ODL is an educational method and philosophical construct which identified as the most potential instrument for facing the educational problems and to develop the economy of a nation like Sri Lanka.

"...in developing countries, human knowledge resource development through initial and continuing education is not only seen as crucial for growth and competitiveness, but also has far reaching social impact, for example in influencing birth rate, increasing the independence of women, and improving standards of health and rural environment" (Moore and Tait;P.17,2002)

This affirms the crucial role that education can play in developing countries like Sri Lanka. Education is an important ally in the role of social and economic development. The potential of ODL in realizing these educational goals has been viewed ambivalently, however. In efforts to meet the new and changing demands for education, ODL may be seen as an approach that is at least complementary – and in some circumstances a more appropriate substitute – for face-to-face classroom methods that still dominate most educational systems.

Despite the rapid growth and increased popularity of distance learning, the question has been arising about the quality of higher learning via distance learning. Walter Perry, the Vice-chancellor of the first Open University of United Kingdom had splash that, “skepticism garnished with ridicule and hostility” of distance education universities. (Young 1994). In the education system of ODL, its benefits can be measured by technical, social and economic criteria’s and even it has their pedagogical merit, which direct students to a different way of conceiving knowledge generation.

People via the ODL perceive advantages differently and their perception have influenced attitude toward the acceptance of distance education method in Sri Lanka. However, coming along it there are concerns remain on effectiveness of distance learning education for learners who may be considered for less independent. Another concern which arises was, cost of ODL programme for students. (Ojo, Ogidan and Olakulehin, 2005). There is perception that most of all distance learners are members of working class, but according to the statics of registered students in the OUSL not entirely students are in working class but also students who missed the chance to the conventional universities of Sri Lanka.

The paper presents the main key questions which cover the objective of research as following,

01. Perception and attitude of students when they choose entering to ODL education system.
02. To identify the questions that mainly arises in ODL system and to find solution in limited time duration.
03. To increase effectiveness using digital technology in ODL concept.
04. Output of qualitative and standard workforce through ODL to growing economy of Sri Lanka

2. SIGNIFICANCE OF THE STUDY

The online learning platform exposes the students to take the assignments, take home assignments and work modules. In some instant students not focused to continue the online activities and to find the issues and to identify the strengths and weaknesses in order to enhance the quality of the online learning approach.

3. METHODOLOGY

The sample for this study comprised 2.10% of the total students registered in the last two years’ undergraduate degree programmes in Open University of Sri Lanka with covering the regional centers of Kandy and Colombo. A structured questionnaire entitled to the student’s Perception and the attitude rating Open University of Sri Lanka was developed by the researchers to gather the required information. Randomly selected final year Students are participating from faculty of Humanities and social sciences, Faculty of Engineering, Faculty of Natural Sciences, Faculty of Management, and Faculty of Education.

The questionnaire is a 17 item Liker-type & short answer inventory designed to measure distance learning student’s attitudes and perceptions towards ODL. The instrument was administered using English as language as OUSL conduct its programmes by English medium. The instrument was administered face-to-face and through Google forums to the distance learners during the tutorial sessions and online through the assistance of the Department of Social studies in The Open University of Sri Lanka. Students were expected to respond on a voluntary basis to this questionnaire. [Shaughnessy J., Zechmeister E. and Jeanne Z. 2011]

Data Collection Instruments

The study gathered data via one particular instruments; a questionnaire because of the current Covid-19 pandemic in the world.

Data Analysis

The quantitative data obtained from the questionnaire was analyzed using SPSS software and represent using charts and tables. The qualitative data which were gathered via online mode with given restrict amount words to maintain the transparency, validity and the reliability of the data. The qualitative data analyzed using thematic analysis approach to maintain the validity and transparency of data.

Response Rate

The percentage responses for each programme selected for the study are presented in Table 01 below, The Highest rate of the responses was observed by Faculty of Humanities and Social Studies and minimum rate of responses were from faculty of health science, since there were no responses calculated.

Faculty_of;

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Education	5	1.7	1.7	1.7
	Engineering	112	38.9	38.9	40.6
	HSS	140	48.6	48.6	89.2
	Management	22	7.6	7.6	96.9
	Science	9	3.1	3.1	100.0
	Total	288	100.0	100.0	

Table 1 Table of statistics of Faculties

Degree_category

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	General	176	61.1	61.1	61.5
	Honors	112	38.9	38.9	38.9
	Total	288	100.0	100.0	100.0

Table 2 Frequency of degree category

Age_category

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18_25	165	57.3	57.3	57.3
	26_35	108	37.5	37.5	95.1
	36 & above	15	4.9	4.9	100.0
	Total	288	100.0	100.0	

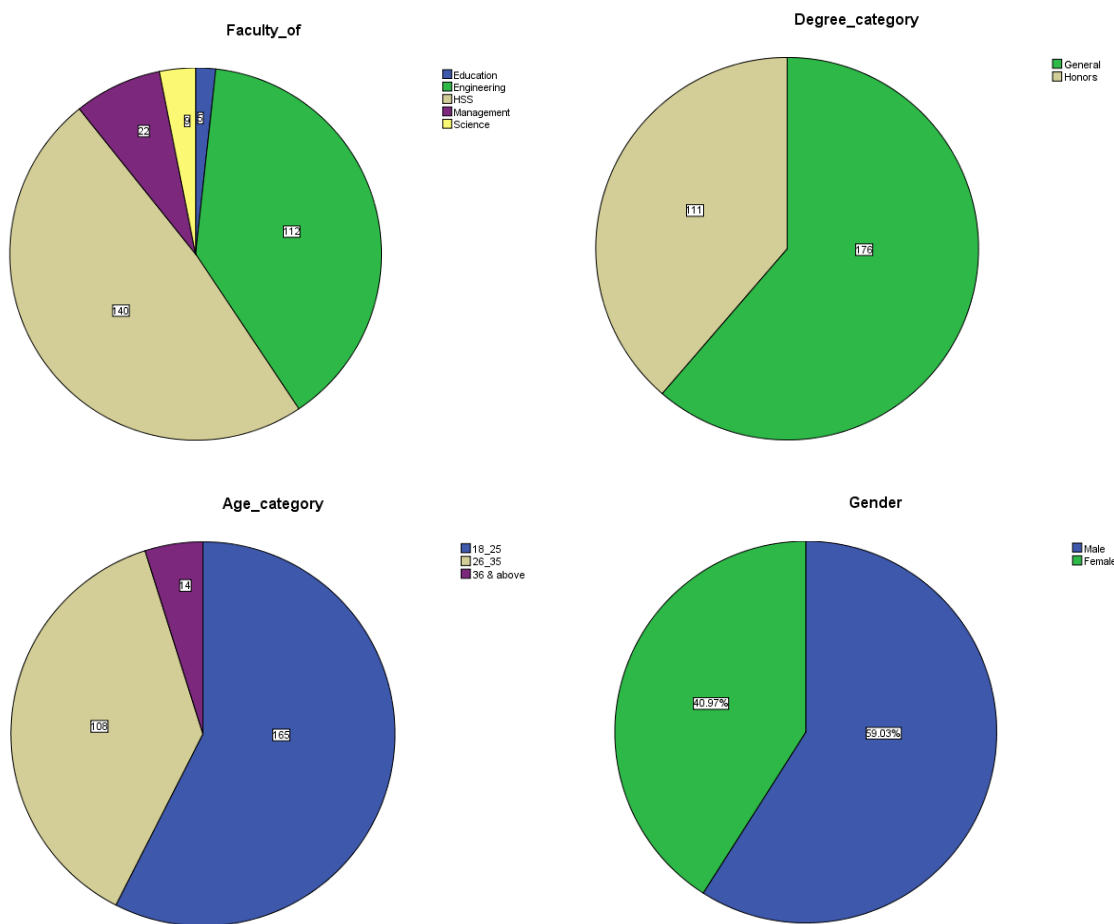
Table 3 Age category

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	170	59.0		59.0
	Female	118	41.0	41.0	100.0
	Total	288	100.0	100.0	

Table 4 Gender

4. FINDINGS



Frequency table of the questions in the questionnaire of the survey;

What do you think about the facilities resources available in

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	highly satisfied	120	41.7	41.7	41.7
	not satisfied	168	58.3	58.3	58.3
	Total	288	100.0	100.0	100.0

Can you easily manage to work with the Learning Management System

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid prefer to have course on learning management system(LMS))	117	40.6	40.6	40.6
yes	170	59.0	59.0	99.7
yes, prefer to have course on learning management system(LMS))	1	.3	.3	.3
Total	288	100.0	100.0	100.0

The Reliability of the questionnaire;

Case Processing Summary

		N	%
Cases	Valid	288	100.0
	Excluded ^a	0	.0
	Total	288	100.0

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.767	.761	13

a. Listwise deletion based on all variables in the procedure.

According to the Cronbach's Alpha the questionnaire is >0.7 and it's highly reliable.

Item Statistics

	Mean	Std. Deviation	N
I know the Vision and the Mission of OUSL	1.08	.277	288
I am mostly happy about doing selfstudies rather than following	1.42	.495	288
The number of day schools for each module was enough to discuss	1.70	.458	288
The counseling done at the registration table was helpful and ef	1.26	.440	288
Assignments online activities presentation and practical sess	1.26	.442	288
I would have enrolled in an honors degree program had the OUSL	1.12	.331	288
It is efficient if the unemployed students are registered at the	1.15	.354	288
The way the OUSL conducts exams is flexible for students#	1.35	.479	288
The study materials received from OUSL are better in quality and	1.25	.436	288
I would yes if I can sit for a repeat exam without waiting a yea	1.06	.236	288
I have a sound knowledge about open distance learning system a	1.11	.310	288
Is ODL education effective with the current covid19 pandemic si	1.22	.416	288
Gender	1.41	.493	288

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between People	112.281	287	.391		
Within People					
Between Items	109.546	12	9.129	62.553	.000
Residual	502.608	3444	.146		
Total	612.154	3456	.177		
Total	724.435	3743	.194		

Grand Mean = 1.26

Factor Analysis of data set;

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.702
Bartlett's Test of Sphericity	Approx. Chi-Square
	320.450
	df
	66
	Sig.
	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.535	21.124	21.124	2.535	21.124	21.124
2	1.279	10.661	31.785	1.279	10.661	31.785
3	1.091	9.093	40.878	1.091	9.093	40.878
4	1.033	8.608	49.486	1.033	8.608	49.486
5	1.012	8.432	57.917	1.012	8.432	57.917
6	.928	7.737	65.654			
7	.849	7.078	72.732			
8	.761	6.344	79.077			
9	.741	6.176	85.253			
10	.708	5.898	91.151			
11	.609	5.076	96.226			
12	.453	3.774	100.000			

Extraction Method: Principal Component Analysis.

Extraction method of the data set is; Principal component analysis:

Component Matrix^a

	Component				
	1	2	3	4	5
I_know_the_Vision_and_the_Mission_of_OUSL	.283	.195	-.065	.436	.740
Is_ODL_education_effective_with_the_current_covid19_pandemic_si	.351	-.048	-.476	.496	-.139
I_have_a_sound_knowledge_about_open_distance_learning_system_a	.314	.563	.068	.128	-.161
The_study_materials_received_from_OUSL_are_better_in_quality_and	.584	-.094	-.022	-.171	-.166
I_am_mostly_happy_about_doing_selfstudies_rather_than_following	.430	-.299	.500	.331	.080
The_way_the_OUSL_conducts_exams_is_flexible_for_students#	.652	-.044	-.075	-.177	.174
The_number_of_day_schools_for_each_module_was_enough_to_discuss_	.558	-.139	.363	.032	-.342
The_counseling_done_at_the_registration_table_was_helpful_and_ef	.543	-.215	.027	-.342	.318
Assignments_online_activities_presentation_and_practical_sess	.674	-.227	-.393	-.181	-.075
I_would_have_enrolled_in_an_honors_degree_program_had_the_OUSL	.321	.512	-.312	.077	-.249
It_is_efficient_if_the_unemployed_students_are_registered_at_the	.340	.466	.464	.065	-.071
I_would_yes_if_I_can_sit_for_a_repeat_exam_without_waiting_a_yea	.045	.475	.014	-.500	.254

Extraction Method: Principal Component Analysis.

5. ANALYSIS

According to the survey we found the behavior of the students in the university towards the online learning process. Findings are as below;

A. Background information of the respondents

The sample of the study contains 689 students from the Open University of Sri Lanka representing the major Five Faculties. The response rate was given in the Table [01]. The age category is wide from 18-more than 36 & above. Age category 18-25 participant's rate was 166, 26-35 rate was 259 and age range 36 & above rate was 46 participants.

B. Students perception on the distance learning approach

According to the statement of "can you easily manage to work with online system via the internet" the highest response rate was 69.7 which include the preference of participants in five faculties. The highest response rate was from the age category of 26-35. The response rate shows that 68% of the participants are employed while studying. According to the Creed and Robinson in 2002 stated that ODL system is known for different system where it provides learning/course materials to the learner and the distance learners have opportunity to manage their education without attending the university. [Akhter,2005] the students who preferred to have pre-course on [LMS] learning management system is about 30.3%. The age capacity is highest in the 18-25.

In the study we analysis the responses categorizing to two major ways as,

- I. Responses according to the age range
- II. Responses according to the Faculties

A. Perceptions of students towards ODL were identified using the statement 1-13 via questionnaire conducted by online survey mode. The responses were analysis using SPSS software and represent via charts and tables.

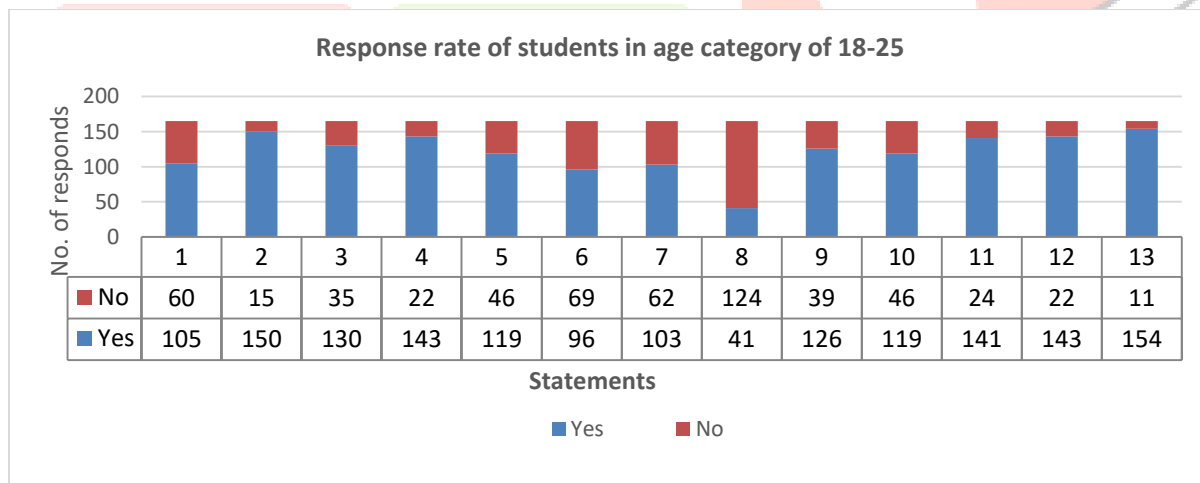


Figure 1 Response rate of students in age category of 18-25

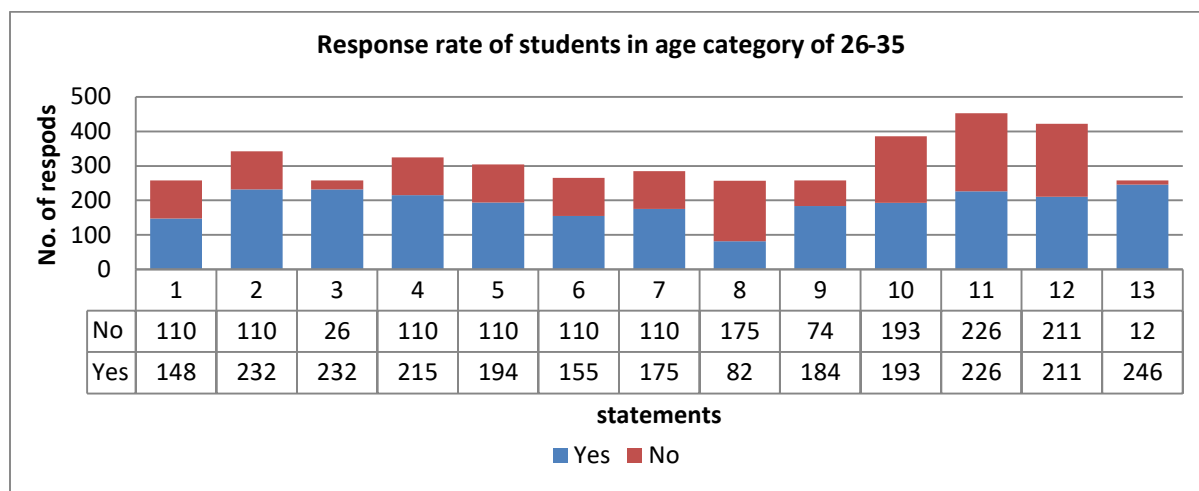


Figure 2 Response rates of students in age category of 26-35

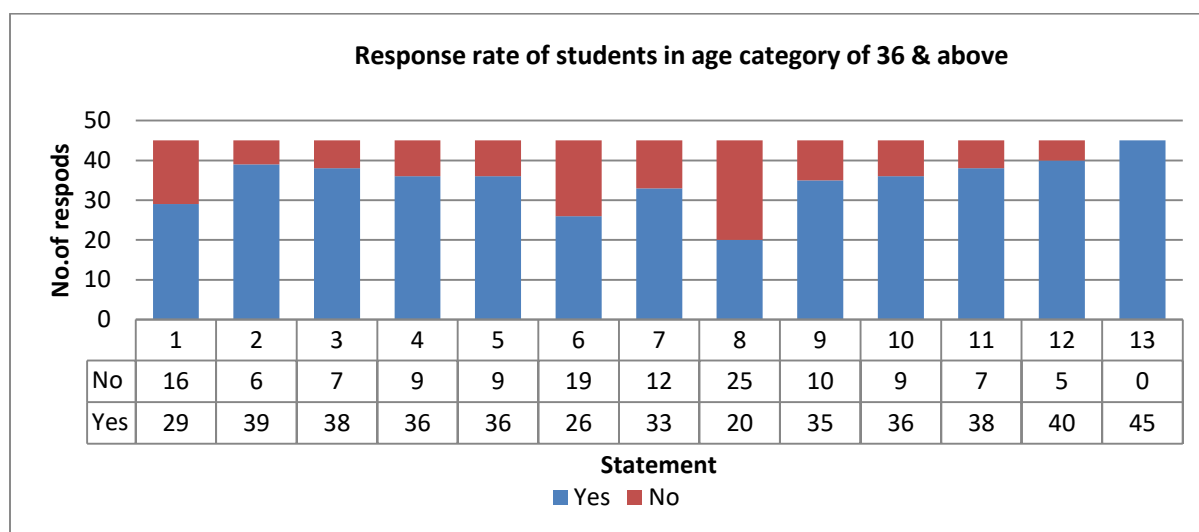


Figure 3 Response rate of students in age category of 36 & above

Vision of the OUSL is “To be the premier Open and Distance Learning Institution in Asia through excellence, efficiency and equity in lifelong learning” and the mission is “To enhance access to high quality, affordable and relevant education, through Open Distance Education and ensure lifelong learning opportunities to face challenges in a knowledge society”. The tables represent response rates of students and the perception of students towards the ODL system. The Vision and the mission of the Open University of Sri Lanka, 18-25 age category 105 student’s response yes and 60 student’s response as No. 26-35 age category 148 yes and 110 No. 36 & above age range response as 29 as yes and 16 No.

Is ODL education effective with the current Covid-19 pandemic situation in Sri Lanka?

With the Covid-19 pandemic that spread all around the world it was a big opportunity to identify the effectiveness of ODL approach in the Open University of Sri Lanka as it is represent and stand for the distance learning method. The survey basically based for the students of the undergraduate level in last two years. The reason was, students have better knowledge and experience in the method as they were exposed to the studies. The response rate of the students in relevant age categories were representing in the Figure 1, 2 & 3 respectively.

According to the statement 03 represent that most of the students in the respective three age categories have thorough knowledge about “what is Open and Distance learning approach”. The response rates of the three age categories were represented in the above three figures 1, 2 & 3.

The statements include in the questionnaire no. 4,5,6,8 & 9 reflects that course materials of the university, examination schedules, presentations, practical sessions and assignments, the counseling session conducted by departments at

student's registrations and the self-study method indicated high rate of negative answers in common to students in the all faculties. The response rates were represent using the bar charts in figure 1,2 & 3 according to three respective age categories.

Statement no.07 which question about the day school requirement indicates that students were showing higher percentage of response towards satisfied. This has analyzed in the three age categories that students use new technology such as email, online forums to raise the questions they had. All the faculties have their own subject wise online platforms and students can engage in the activities and lecture/instructor can access to the programme. The response rate was representing in the figure 1, 2 & 3 respective to the age categorization.

Statement No.10 is about the opportunity of completing a degree with Honors [4 years]. In the current context Faculty of education, science, management and engineering offers the Honors degree except the Faculty of Social sciences. The response rates of students show in the above three respective age categories. The thorough analysis according to the faculty levels are shown in below diagram.

Statement no.11 it is efficient if the Unemployed students are registered at the Licenses industrial center to get the direct internships. For those who are students freshly join the university mostly agreed and prefer if they have support from the university to find an internship. Response rates are as shown in the figure of 1, 2 & 3 respectively.

In the university even though ODL approach is continued the examination method shows response of negative perception. In the statement 12 students highly preferred to have examinations to those who repeat or re-sit their final examinations with alternative examination without waiting for another year. The major reason for this was students who repeat or re-sit a single subject which is compulsory or non-compulsory student need to face the examination after another year. The response shows that most of the students in the three age categories are prefer to have alternative examination for repeat or re-sit students.

The statement 12 reflects the student's perception about the facilities and the resources of university which mainly affect the ODL approach. Rich number of Students participated to the survey response highly satisfied with the resources and facilities as shown response rate in the above table 1, 2 & 3.

B. Responses according to the Faculties

The responses of the students according to the faculties will help research to identify perception and attitude of students respective to their ODL programmes conducted by the Faculties. Furthermore, analysis helps to identify the issues and problems of students with their feedbacks to go deep down to stress the strengths & weaknesses. Each of the Faculty has separate departments and students represent the faculty in the analysis.

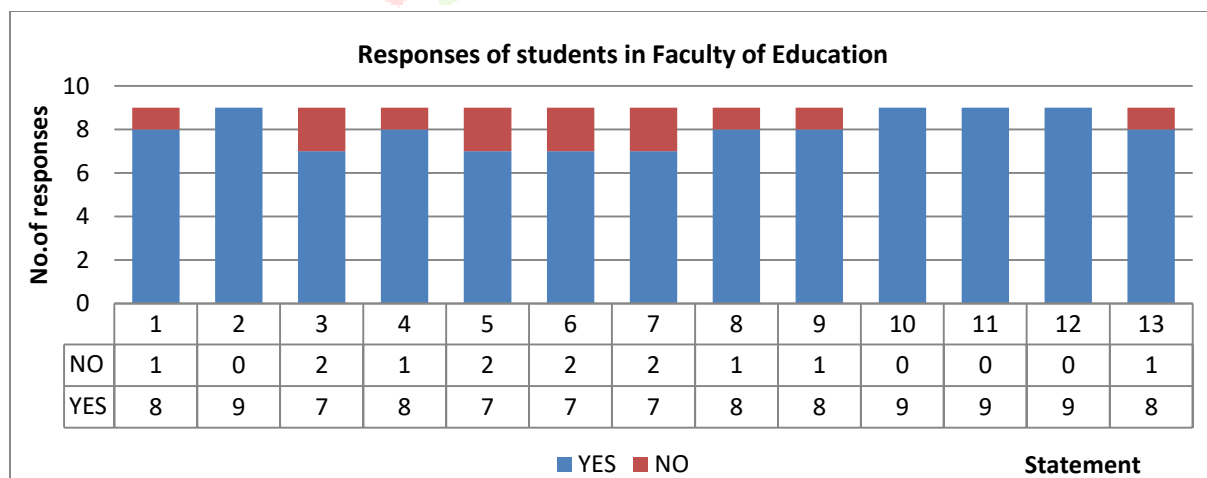


Figure 4 Responses of students in Faculty of Education

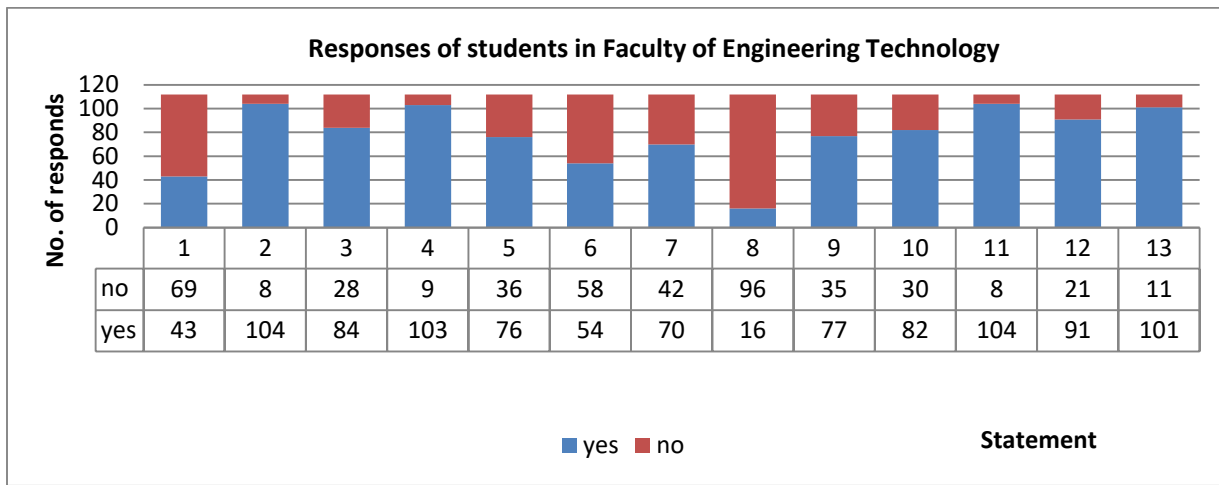


Figure 5 Responses of students in Faculty of Engineering

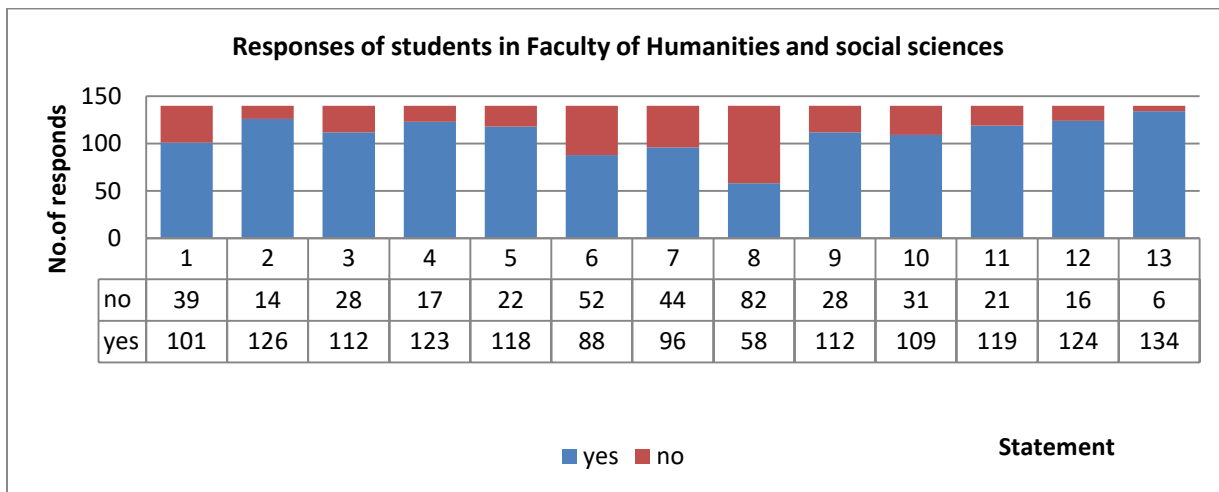


Figure 6 Responses of students in Faculty of Humanities and Social sciences

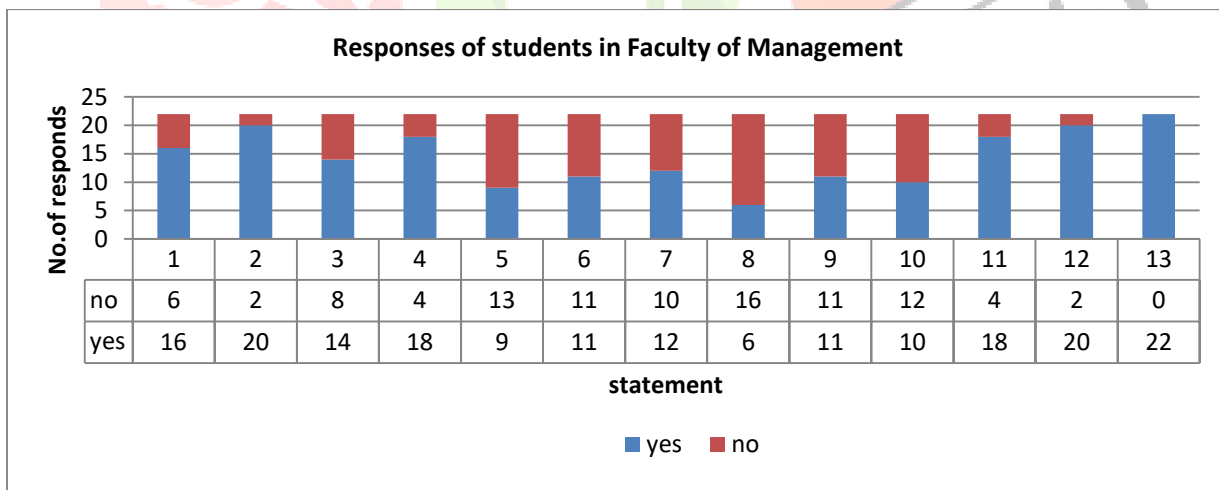


Figure 7 Responses of students in Faculty of Management

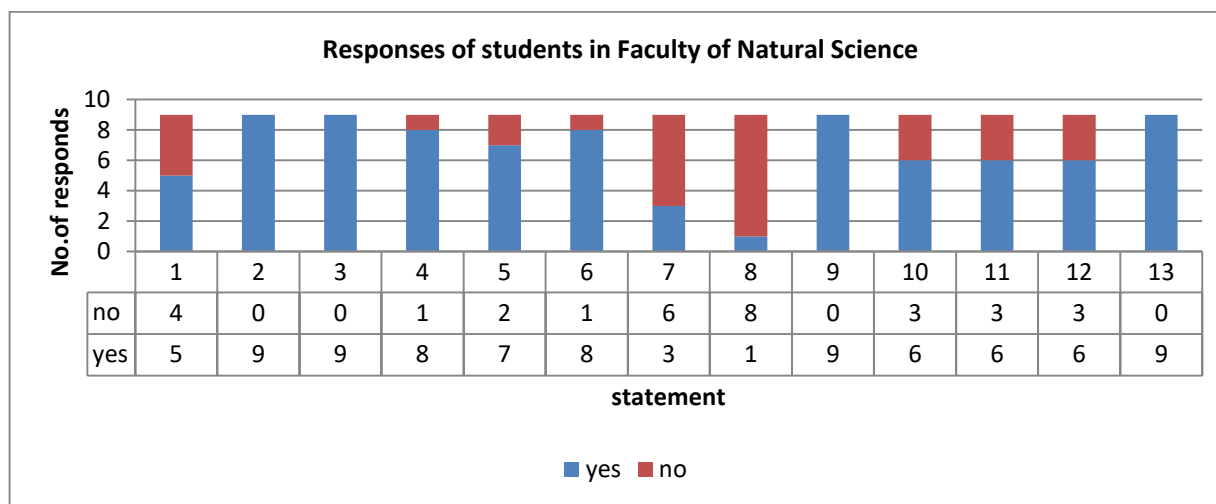


Figure 8 Responses of students in Faculty of Natural Science

6. RESULTS AND FINDINGS

Perception of the students according to the age category

When comparing with the literature by previous researches in the field it is identical that majority of the students have better ideology about the ODL concept. However, part of the students mainly when analyzed age between 18-15 and 36 & above popularity has less understanding about the ODL concept. It is identical that majority of the students were not answered the question in between above mentioned age categories. statement 1 represent, In the study we identify that when students enroll to any of the programme in ODL approach students should have thorough idea about the vision and mission statement therefore they'll get to know that what it actually stand for ODL. Except for the faculty of engineering remaining faculties show higher number of students who were basically understands the ODL concept. The counseling session which were conducted at the registration table by the facilitators gave deep idea to the students before choose the courses. The only faculty which represents the positive feedback is Education. Since the participants were very low the reliability of the data is questionable. Aluvihare De Silva showed in his research that students did not showed understanding about ODL concept (86%)

In the ODL concept students are more encourage to self learning mode while if it is somewhat questionable about problem solving issue of the students. The availability of the lecture or the facilitator to relevant program, time period, the contact method of the facilitator and student is problematic. Why because of the faculty of engineering, natural science more in to the practical aspect and students is more demand for the physical classrooms to solve the issues. Therefore, the analysis shows that more demand to the day schools to clarify the questions students have.

Another aspect that study focus is student's knowledge on LMS platforms [Learning management platform]. The students from the age category of 18-25 students are more preferred with pre-course on the LMS system. The reason identified was that students who started higher education since after advance level examination was not more tech savvy but into traditional learning methods. It will be more effective if the students given with the option of short video to learn how to use learning platforms in the university. Furthermore, the students who are in the age category of 26-35 are more tech savvy as they are exposed to Job market.

Validity of the degree is another focus aspect because it highlighted that in the faculty of Humanities and social studies that more number of students preferred the Bachelor degree with Honors or the Four year degree. Furthermore, many of the universities in the world looking for students who have completed degree with four years when applying for masters or the doctoral degrees. It's been little unfair for the students to continue the higher studies after undergraduate degree.

Students' attitudes towards the open and distance learning

To understand the effectiveness of the ODL concept the short answer questions were formed. Critically analyzing the questions using the thematic analysis, it is identified that students were more preferred in the online classes, classroom

forums because it save the time to self learning process. The interaction between facilitator and the student indicate unsatisfied in the some faculties. The reason mainly represent is the lack of contribution of lectures to course. Issues in the communication, delay of the emails and some information. A major factor identified in the answers related to the internship opportunities were highly recommended by the students in the age between 18-15. As the students start higher education as fresher's lack of plenty of opportunities are problematic. It is suggest that via the industrial license of the university provided the support of finding internships to the students as it is compulsory to complete the internship. Furthermore, students record that the effectiveness of the Industrial license unit should be more efficient. Moreover, students suggest having career development via the university to develop the student progression. According to the identified factor investigate through the research it was identified that university offers plenty of opportunities to the fresh graduates to develop career path.

7. CONCLUSION AND RECOMMENDATIONS

According to the findings of the study, ODL concept has been identified to be mixed with strengths and weaknesses. The effectiveness of the university learning method, the interaction between facilitators and students, the availability of facilitators should develop and enhance the efficiency of open and distance learning. With the Covid-19 pandemic it is identical the importance of distance learning approach in order to continue the learning in the today's context. Furthermore, we suggest to that it is better to identify the easy access platform with high security platform to continue the final examinations, continuous assessments without attending physically to the study centers. Moreover, as OUSL concern more with Distance learning approach it is important to use digital devices and applications to students in more effective method. The new technological platforms such as use of MS teams, LMX platforms and tool introduced newly known as Gamification. The Gamification is a tool which helps to motivate students to learn by using video game designs and elements in learning environments. The objective of introducing Gamification is to inspire the students to continue learning in distance learning approach. Augmented Reality (AR) is a digital tool which gives real world experience to students in their study places. At a situation which exists in current world Augmented Reality is being researched to develop with feelings and sensitiveness. With using the new technological tools in an appropriate condition it is important OUSL to increase and develop the ODL concept. (T. Narumi, S Nishizaka, T Tanikawa, Meta cookie+an illusion based gustatory display)

As overall indicator, the university performance represents success in the ODL concept. Therefore, it is important by future researchers to identify the negative aspects which represent by faculties and to investigate the root causes to enhance the effectiveness and efficiency of the university. As the OUSL become first open and distance learning university in Sri Lanka with identifying the suitability of ODL concept, strengths and weaknesses, implications, limitations ODL concept can be implement to government universities under the current situation to continue. The positive facts of the ODL identified as youth contribute the development economy; students motivate to self-learning process and incline to investigate the information.

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