

OUTCOME-BASED EDUCATION (OBE): UNIVERSITY POSTGRADUATE STUDENTS' PERCEPTION AND IMPLEMENTATION



ABSTRACT

The aim of the study is to analyze the University Postgraduate students' perception and implementation of Outcome-Based Education. The innovative teaching strategy is known as outcome-based education (OBE), which focuses on students' learning. This study sought to investigate the perspectives on the introduction of OBE in state universities. A primary data set was created for the data collection. The survey method was used in the study. This study was conducted on a representative sample of 1110 university postgraduate students of different districts in Tamil Nadu. Proper representations were given to the relevant sub-sample categories such as gender, locality, and type of family. A simple random sampling technique was used for the study. The results showed that putting the OBE principles into practice in the classroom helped teachers better plan and create their instructional materials and set learning objectives based on the requirements and expectations of their students. According to the students, OBE is relevant in all types of classes where teachers and students actively participate in the teaching and learning processes.

Keywords: Outcome-Based Education, Postgraduate Students, Perception, Implementation, Teaching learning process

Introduction to OBE

An educational paradigm known as "outcome-based education" places more emphasis on goals or results than on performance. The teachers create goals for the students, who must then complete those goals in order to be prepared to take the final test. Tests, assignments, practicals, and projects will all be used to evaluate the students' accomplishments. Their outcomes will demonstrate the student's success or effectiveness in that particular course (Kumbhar, V. S., 2020). The OBE model already specifies the knowledge and skill set needed for a specific degree. The curriculum expects the students to develop the necessary abilities.

Under the outcome-based education system, students are prioritized over learning from what their professors have taught in the classroom. In outcome-based education, goals are set that students must achieve at the conclusion of each course as well as goals that they must achieve by the time they graduate. Professors play the same role as knowledge facilitators for the students in outcome-based education. The successful integration of program outcomes, course outcomes, and educational objectives into students' learning curricula constitutes outcome-based education. The method of outcome-based education is always evolving (Nazira, S.K., 2021).

Objectives

To determine the statistically significant association between university postgraduate students' perceptions of outcome-based education and the following demographic variables: gender (male and female), area (urban and rural), and medium of instruction (English and Tamil).

Hypotheses

There is no statistically significant association between university postgraduate students' perceptions of outcome-based education and the following demographic variables: gender (male and female), area (urban and rural), and medium of instruction (English and Tamil).

Methodology

A normative survey method was used for this study. This study was conducted on a representative sample of 1110 university postgraduate students of different districts

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in Tamil Nadu. Proper representations were given to the relevant sub-sample categories such as gender, place, and medium of instruction. A simple random sampling technique was used for this study.

Instruments Used

The perception of outcome-based education tools was constructed and validated by the investigator. It contains 30 test items with five alternative responses such as (5=Strongly Agree, 4=Agree, 3=Undecided 2=Disagree, 1=Strongly Disagree). Perception of outcome-based education tools consists of five dimensions such as general

awareness of OBE, commitment to implementing OBE, teaching-learning method, teacher's role in OBE, and assessment technique. The estimated reliability of the scale in the present study is high as Cronbach's alpha is 0.887.



Statistical Techniques Used

Statistical Packages for Social Sciences (SPSS) version 21.0 was used to analyze the collected quantitative data. Preliminary descriptive analysis, Test of Normality, and χ^2 -test were used to analyze the data.

Results of the study

Table-1 : Descriptive Analysis for dimensions of OBE

Variables		N	Mean	S.D.	Skewness	Kurtosis	95% Confidence Interval for Mean	
							Lower Bound	Upper Bound
General Awareness of OBE	Male	449	4.036	0.728	-0.299	-0.382	3.968	4.103
	Female	661	4.039	0.723	-0.711	1.277	3.984	4.095
	Rural	444	4.088	0.732	-0.692	1.054	4.020	4.156
	Urban	666	4.005	0.718	-0.446	0.323	3.950	4.059
	English	948	4.067	0.723	-0.622	0.84	4.020	4.113
	Tamil	162	3.870	0.715	-0.114	-0.361	3.760	3.981
Commitment in implementing OBE	Male	449	4.005	0.782	-0.683	0.83	3.932	4.077
	Female	661	4.030	0.814	-0.918	1.439	3.968	4.092
	Rural	444	4.050	0.788	-0.728	0.848	3.976	4.123
	Urban	666	4.000	0.810	-0.886	1.406	3.938	4.062
	English	948	4.038	0.796	-0.898	1.465	3.987	4.089
	Tamil	162	3.914	0.822	-0.449	0.098	3.786	4.041
Teaching Learning method	Male	449	4.056	0.743	-0.679	1.128	3.987	4.125
	Female	661	4.159	0.809	-1.088	1.948	4.097	4.221
	Rural	444	4.173	0.766	-0.851	1.18	4.102	4.245
	Urban	666	4.080	0.795	-0.97	1.838	4.019	4.14
	English	948	4.120	0.794	-0.955	1.641	4.070	4.171
	Tamil	162	4.099	0.733	-0.732	1.352	3.985	4.212
Teachers role in OBE	Male	449	3.982	0.738	-0.307	-0.274	3.914	4.051
	Female	661	4.065	0.802	-0.808	0.967	4.004	4.126
	Rural	444	4.070	0.734	-0.488	0.237	4.001	4.138
	Urban	666	4.006	0.804	-0.672	0.57	3.945	4.067
	English	948	4.033	0.780	-0.633	0.571	3.983	4.082
	Tamil	162	4.025	0.764	-0.55	0.156	3.906	4.143
Assessment Technique	Male	449	3.996	0.835	-0.64	0.436	3.918	4.073
	Female	661	4.071	0.778	-0.743	1.091	4.012	4.131
	Rural	444	4.063	0.784	-0.704	0.938	3.990	4.136
	Urban	666	4.026	0.814	-0.701	0.709	3.964	4.087
	English	948	4.064	0.793	-0.727	0.931	4.014	4.115
	Tamil	162	3.901	0.843	-0.566	0.211	3.770	4.032

The table 1 the descriptive statistics of the study, including mean (M), standard deviation (SD), Skewness, and kurtosis of the variables with regards to gender (male and female), area of university (rural and urban), and medium of instruction (English and Tamil) were also measured. The values of general awareness of OBE for male (M= 4.036, SD= 0.728, Skewness = -0.299 , Kurtosis = -0.382), for female (M=4.039, SD=0.723, Skewness =-0.711, Kurtosis = 1.277), rural (M= 4.088, SD=0.732, Skewness =-.692 , Kurtosis=1.054), for urban (M= 4.005, SD= 0.718, Skewness = -.446 , Kurtosis =.323), for English(M=4.067, SD=0.723, Skewness =-0.622 , Kurtosis =0.84) and for Tamil (M= 3.870, SD= 0.715, Skewness =0.715 , Kurtosis =-0.361). The values of Commitment in implementing OBE for male (M=4.005, SD= 0.782, Skewness = -0.683, Kurtosis = 0.83), for female (M= 4.030, SD= 0.814, Skewness = -0.918, Kurtosis = 1.439), rural (M=4.050, SD=0.788, Skewness = -.728, Kurtosis =.848), for urban (M= 4.000, SD= 0.810, Skewness = -.886, Kurtosis = 1.406), for English(M= 4.038, SD= 0.796, Skewness = -0.898 , Kurtosis=1.465) and for Tamil (M= 3.914, SD= 0.822, Skewness =-0.449, Kurtosis = 0.098).The values of Teaching Learning method for male (M=4.056, SD=0.743, Skewness = -0.679, Kurtosis = 1.128), for female (M= 4.159, SD=0.809, Skewness =-1.088, Kurtosis = 1.948), rural (M=4.173, SD= 0.766, Skewness = -.851, Kurtosis =1.180), for urban (M=4.080, SD=0.795, Skewness = -.970, Kurtosis =.1.838), for English(M= 4.120, SD= 0.794, Skewness = -0.955, Kurtosis = 1.641) and for Tamil (M= 4.099, SD= 0.733, Skewness =-0.732, Kurtosis = 1.352). The values of Teachers role in OBE for male (M= 3.982, SD= 0.738, Skewness = -0.307, Kurtosis = -0.274), for female (M= 4.065, SD= 0.802, Skewness = -0.808, Kurtosis = 0.967), rural (M= 4.070, SD= 0.734, Skewness = -.488, Kurtosis =.237), for urban (M= 4.006, SD= 0.804, Skewness = -.672, Kurtosis = .570), for English (M= 4.033, SD= 0.780, Skewness = -0.633 , Kurtosis = 0.571) and for Tamil (M= 4.025, SD= 0.764, Skewness = -0.55, Kurtosis = 0.156). The values of Assessment Technique for male (M= 3.996, SD= 0.835, Skewness = -0.64, Kurtosis = 0.436), for female (M= 4.071, SD= 0.778, Skewness = -0.743, Kurtosis = 1.091), rural (M= 4.063, SD= 0.784, Skewness = -.704,

Kurtosis =.938), for urban (M= 4.026, SD= 0.814, Skewness = -.701 , Kurtosis = .709), for English (M= 4.064, SD= 0.793, Skewness = -0.727, Kurtosis = 0.931) and for Tamil (M= 3.901, SD= 0.843, Skewness = -0.566, Kurtosis = 0.211).

Table-2
Test of Normality for dimensions of OBE

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
General Awareness of OBE	0.288	1110	0.000	0.817	1110	0.000
Commitment in implementing OBE	0.285	1110	0.000	0.821	1110	0.000
Teaching Learning method	0.268	1110	0.000	0.805	1110	0.000
Teachers role in OBE	0.272	1110	0.000	0.83	1110	0.000
Assessment Technique	0.259	1110	0.000	0.829	1110	0.000

It is inferred from the table 2 that p-value for general awareness of OBE, commitment in implementing OBE ,teaching learning method, teachers role in OBE and assessment technique are 0.000,0.000,0.000,0.000 and 0.000 respectively. The test reveals all the p- value are lesser than .05 which means that the data is normally distributed.

Table-3
Association between dimensions of Outcome-Based education and gender

Variables	Degrees of freedom	Calculated Value of 'χ ² '	p-value	Remarks at 5% Level
General Awareness of OBE	4	9.8	0.044	S
Commitment in implementing OBE	4	2.281	0.684	NS
Teaching Learning method	4	12.637	0.013	S
Teachers role in OBE	4	12.432	0.014	S
Assessment Technique	4	6.205	0.184	NS

It is inferred from the table 3 that the chi-square test results suggest that there is statistically significant association between general awareness of OBE, teaching learning method and teachers role in OBE with regards to gender of University Postgraduate students ,since [$\chi^2(4) = 9.8, 12.637$ and 12.432 , $p=0.044, 0.013$ and $0.014 < 0.05$], hence we reject the null hypothesis. But there is no statistically significant association between commitment in implementing OBE and assessment technique with regards to gender of University Postgraduate students, since [$\chi^2(4) = 2.281$ and 6.205 , $p=0.684, 0.184 > 0.05$]

Table-4
Association between dimensions of Outcome-Based education and area

Variables	Degrees of freedom	Calculated Value of ' χ^2 '	p-value	Remarks at 5% Level
General Awareness of OBE	4	5.803	0.214	NS
Commitment in implementing OBE	4	2.213	0.697	NS
Teaching Learning method	4	4.817	0.307	NS
Teachers role in OBE	4	4.301	0.367	NS
Assessment Technique	4	2.073	0.722	NS

It is inferred from the table 4 that the chi-square test results suggest that there is no statistically significant association between general awareness of OBE, commitment in implementing OBE, teaching-learning method, teachers role in OBE and assessment technique with regards to the area of University, since [$\chi^2(4) = 5.803, 2.213, 4.817, 4.301$ and 2.073 , $p=0.214, 0.697, 0.307, 0.367$ and $0.722 > 0.05$], hence we accept the null hypothesis.

Table-5
Association between dimensions of Outcome-Based education and medium of instruction

Variables	Degrees of freedom	Calculated Value of ' χ^2 '	p-value	Remarks at 5% Level
General Awareness of OBE	4	16.908	0.002	S
Commitment in implementing OBE	4	10.328	0.035	S
Teaching Learning method	4	1.866	0.76	NS
Teachers role in OBE	4	2.214	0.696	NS
Assessment Technique	4	13.364	0.01	S

It is inferred from the table 5 that the chi-square test results suggest that there is a statistically significant association between general awareness of OBE, commitment in implementing OBE and assessment technique with regards to the medium of instruction, since [$\chi^2(4) = 16.908, 10.328$ and 13.364 , $p=0.002, 0.035$ and $0.01 < 0.05$], hence we reject the null hypothesis. But there is no statistically significant association between the teaching-learning method and teachers' role in OBE with regards to the medium of instruction, since [$\chi^2(4) = 1.866$ and 2.214 , $p=0.76$ and $0.696 > 0.05$]

Conclusion

Hence, there is a statistically significant association between general awareness of OBE, teaching-learning method, and teacher's role in OBE with regards to the gender of University Postgraduate students. There is a statistically significant association between general awareness of OBE, commitment to implementing OBE, and assessment technique with regards to the medium of instruction, there is no statistically significant association between general awareness of OBE, commitment to implementing OBE, teaching-learning method, teacher's role in OBE and assessment technique with regards to the area of University. The method of outcome-based education bases the formulation of the curriculum on the competencies

of the students after their educational program. It is concluded that postgraduate students should gain knowledge about outcome-based education for better employment opportunities in the future.



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