FACTORS INFLUENCING ORGANISATIONAL EFFECTIVENESS IN THE EDUCATIONAL SECTOR

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Abstract:

Organisations in the educational sector are being influenced by several aspects such as political environment, deteriorating financial aid from the government, rising aspirations of first generation learners in higher education and so on. Along with this, it is also noteworthy to mention that the society is investing huge amount of human, financial and material resources in establishing and running institutions of higher learning. This makes it imperative to study the effectiveness of educational institutions which are non-profit organisations. The study therefore attempts to ascertain the factors influencing organisational effectiveness in the educational sector. The researcher has identified four variables that are expected to influence organisational effectiveness measured in terms of perceived gains from post-graduate education. The factors identified include organisational health, psychological wellbeing of students, satisfaction with quality of campus life and student engagement. The study has adopted the descriptive method of the correlational type. The sample comprised of 273 post graduate students of University of Mumbai selected randomly through stratified random sampling techniques. When analysed using multiple regression techniques, it was found that (9.28%, 8.32%, 18.34% and 23.42% of the variance in perceived gains from post-graduate education is contributed by organisational health, psychological well-being of students, satisfaction with quality of campus life and student engagement respectively. In all, 77.05% of the variance in perceived gains from post-graduate education is explained by the variables included in the study. Almost one fifth of the variance in the perceived gains from post-graduate education is contributed by

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organisational health and student engagement. The findings of the study suggest that any effort to enhance organisational effectiveness should focus on improving organisational health and student engagement.

Keywords: organisational effectiveness, organisational health, psychological wellbeing of students, satisfaction with campus life, student engagement, perceived gains from post-graduate education

1. Introduction

Concern with the effectiveness, productivity, efficiency, excellence or quality of organisations is a subject that has motivated the writings of economists, organization theorists, management philosophers, financial analysts, management scientists, consultants, educationists and practitioners. It has served as a unifying theme for over a century of research on the management and design of organisations, yet the empirical research has not contributed to the development of a universal theory of organizational effectiveness. There is a golden thread that connects people and their performance to organisational effectiveness. This thread weaves together many issues. Organisational effectiveness requires the satisfaction of multiple constituencies – each having an influence on the priorities against which organisational performance should be judged.

While National Assessment & Accreditation Council (NAAC) deals with the issues of quality, it does not focus on the factors leading to organisational effectiveness and the magnitude of the effect of these factors. This necessitates an in-depth study of the effectiveness of institutions of higher education. The present research therefore attempts to study organisational /institutional effectiveness. Post-graduate education is at the apex of the system of higher education and its importance is immense as it is not only expected to provide educated and trained manpower to the economy but also provide an important input into the system of undergraduate education in the form of teachers. Thus, studying the effectiveness of post-graduate education institution is of paramount significance. Students are one of the most important stake-holders as well as the beneficiaries of the post-graduate education system and thus, studying the effectiveness of post-graduate education from their perspective is essential and a priority.

2. Concept of Organisational Effectiveness

The concept of organizational effectiveness is one the most elusive and controversial one in the organization theory literature. A major contributor to the controversy

appears to be the fact that organizational effectiveness has come to be regarded by many as synonymous with goal attainment. In the simplest form, an organisation is said to be effective if it achieves the outcomes the organization intends to produce. Thus, it refers to outcome accountability. In the research, it will include student-outcomes in particular.

Whilst all disciplines have an interest in the issue of organisational/institutional effectiveness, it is the "people and performance" aspects that this research focuses on. In addition, the most important "people" in this research is the students. Organisational/institutional performance is an indicator of organisational effectiveness. Institutional effectiveness is not just assessment of student learning. It also includes all non-instructional components of the institution that either directly or indirectly contributes to student success in the institution. To capture this work, the research has adopted a broad definition of performance, beyond of course just financial performance – hence the term organisational effectiveness – and tapping into the achievement of important outcomes, such as their perceptions of gains from post-graduate education. It has focused on the intermediate performance outcomes that are necessary to achieve other strategic outcomes.

The central focus of organisational effectiveness research needs to be based on the premise that institutions matter, that they do have major effects upon students' development and that, to put it simply, institutions do make a difference.

Definitions of organisational effectiveness are dependent upon a variety of factors such as type of organisations/institutions examined (education-focused versus research-focused, Government versus Private-aided versus Private-self-financed), choice of outcome measures (studies which focus on only one or two outcomes giving only a partial picture of effectiveness, both in terms of effects and the correlates of effectiveness) a broad range reflecting the aims of education being desirable (for example inclusions of several cognitive measures and a range of social/affective outcomes), adequate control for differences between institutions/departments in intakes to ensure that 'like is compared with like' (ideally, information about individual student-background including baseline measures of prior attainment, personal, socio-economic and family characteristics are required), methodology (value added approaches focusing on progress over time and adopting appropriate statistical techniques such as Dyer's Regression Residuals Method or multilevel modelling to obtain efficient estimates of institutional effects and their attached confidence limits), timescale (longitudinal approaches following one or more age cohorts over a period of time rather than cross sectional "snapshots" necessary for the study of institutional effects on their students).

In the study, an organisation is said to be effective if the Mean Perceived Gains from Post-Graduate Education is high. In the paper, organisational effectiveness and factors affecting it are conceptualised keeping in mind some specific aspects. In view of the review of conceptual and empirical literature, the following variables have been identified by the researcher for the research:

It included Perceived Gains of PG Education of students as an indicator of organisational effectiveness. Thus, it studied organisational effectiveness from the perspective of its clients, namely, students. It included individual student as the unit of analysis. The purpose of the study is to identify the factors influencing organisational effectiveness and develop and test the model of organisational effectiveness suitable for PG education in the Indian context. This would in turn throw light on how to enhance organisational effectiveness. The factors identified for the study are organisational health, psychological well-being of students, students' satisfaction with quality of campus life and student engagement. The time-frame for studying organisational effectiveness is short-term in nature. It used quantitative data obtained from students for the study with high inference measure. Organisational effectiveness was judged using specific, pre-determined, quantitative criterion.

3. Statement of the Problem

It has been observed that the post-graduate education system in Mumbai University has witnessed several positive changes. At the same time, there are also some pressures on the students due to internal and external influences on the campus. The system of higher education is also witnessing immense student diversity in terms of medium of instruction, divergence in the student-body composition in terms of socio-economic status, urban-rural background etc. These are likely to influence their academic engagement, psychological well-being as also their academic performance. The researcher being a teacher at the post-graduate level is concerned with students' well-being, what they gain from the system of higher education, their performance and ultimately the effectiveness of the organisation (institution). This makes it imperative that organisational effectiveness is examined.

The present paper therefore, deals with the following research questions:

1. What is the magnitude of organisational effectiveness measured in terms of students' perceptions of gains from post-graduate education?
2. What is the magnitude of the effect of the factors affecting organisational effectiveness measured in terms of students' perceptions of gains from post-graduate education?

4. Need of the Study in the Indian Context

Prior research done in the developed countries in the present decade focus on Value-Added Models, Baldrige Model, Cameron's Models of Organizational Effectiveness and Sustainability Framework with a focus on accreditation, bench-marking. Another prominent feature of these studies is to focus on institutional efficiency and improvement based on findings pertaining to organizational effectiveness in higher education. Besides, studies have also focussed on resource dependence on public funding and the amount of money institutions spend per student have an influence on some aspects of effectiveness, institutional characteristics, organizational citizenship behaviour and typology of information cultures.

On the other hand, prior research conducted in the developing countries in the present decade have focussed on identifying perceptions of the respondents about definition of organizational effectiveness, studying students' perceptions of teaching & evaluation, infrastructure facilities, availability of resources, social life, student progress as indicators of organisational effectiveness, reviewing the existing models and explore different dimensions of organizational effectiveness, developing the components and indicators of organizational effectiveness for public higher education institutions, developing an instrument for the evaluation of administrative effectiveness, by discussing the aspects of organizational effectiveness, identifying the variables and factors associated with effectiveness, to understand the basis of attaining effectiveness in academic institutions and reflecting on the ways in which effectiveness can be enhanced, comparison of the various models of organisational effectiveness.

This implies that the developing countries are still striving to define organisational effectiveness in the higher education sector, identify its dimensions and identify factors influencing it. This is essential and logical since the socio-economic and cultural conditions, the needs and problems of students, teachers and the system in these countries are entirely different from those of the developed countries. Thus, findings and suggestions of research conducted in developed countries may not hold in case of developing countries. This justifies the need for research on organisational effectiveness in the higher education sector in the Indian context.

Moreover, the organisational effectiveness research paradigms have been used mostly in isolation of each other and without a conceptually integrated model to guide research, thus ignoring organisational variables identified in other paradigms. Most prior research has been undertaken in either industrialized or developed countries, possibly obscuring the importance of certain organisational variables present in other developing countries.

Very little prior research has been done on *organisational effectiveness at the level of higher education* especially involving post-graduate level. Most of the researches on organisational effectiveness at the level of higher education deal with variables such as leadership, conflicts, motivation or organizational culture.

Prior researches are correlational in nature. Many of the prior studies are of survey type. Very little prior work has dealt with identifying factors influencing organisational effectiveness at the level of higher education.

Scanty work has been done on students and teachers as members of organisation. Very few prior studies have included the "customers' (viz., students) of the system of higher education as the sample of the study. Extremely few studies have been conducted on post-graduate students in the Indian context. Prior research has not focussed on building a model of organisational effectiveness suitable to the Indian context and testing its validity.

Outcomes variables in prior research do not focus on students' *perceptions of gains from education* in the organization. Outcome variables in prior research do not focus high inference measures of outcomes of organisational performance. A high inference measure is a subjective measure of organisational effectiveness obtained through perceptions, opinions and ratings as opposed to a low inference measure which is more specific, denotable and relatively objective.

However, the study deals with the "customers' (viz., students) of the system of higher education and not employees. Thus, it is seen that prior, studies have not included variables of *organisational health (as perceived by students)*, *satisfaction with campus life* and *student engagement* as factors influencing organisational effectiveness. Besides, psychological well-being of employees has been studied in previous research. This is an important variable for students too as it is expected to influence their behaviour and ultimately their performance too. Thus, *psychological well-being of students* is also identified as an important factor affecting organisational effectiveness in the study.

5. Theoretical Underpinnings of the Study

In the paper, organisational effectiveness and factors affecting it are conceptualised keeping in mind some specific aspects. In view of the review of conceptual and empirical literature, the following variables have been identified by the researcher for the research:

Organisational effectiveness has been studied in the paper by adopting a combination of the Rational Goals Model (Perrow, 1961 Etzioni, 1964; Price 1968; Perrow, 1970), Multivariate Effectiveness Model (Caplow, 1964; Friedlander and Pickle,

1968) and Cameron's Model of Organizational Effectiveness for Higher Education (1976). The study has also drawn from the socio-ecological psychology approach (Shweder's, 1991).

The Rational Goals Model has been adopted for identifying the goal or the student-outcome of the study i.e. the criterion of organisational effectiveness in the study.

The Multivariate Effectiveness Model has been adopted as the study aims at model-building which focuses on relationships between important independent variables as they jointly influence organizational effectiveness. In addition, such a model typically demonstrates or at least hypothesizes, how the variables under study are related to one another.

The study at hand is also based on the Cameron's Model of Organizational Effectiveness for Higher Education (1976) which includes several dimensions of organisational effectiveness such as (a) Student educational satisfaction, 2) Student academic development, 3) Student career development, 4) Student personal development, 5) Faculty and administrator employment satisfaction, 6) Professional development and quality of the faculty, 7) System openness and community interaction, 8) Ability to acquire resources and 9) Organizational health. Furthermore, according to Cameron (1978), there are four main fields of organizational effectiveness which are compatible with the effectiveness dimensions. The following are the outlines: 1) The academic field which is concerned with the students' academic progress, professional development and the productivity of the lecturers as well as the potential to obtain resources. 2) The moral field. This deals with the student's educational satisfaction, the organizational health and the faculty and administrator employment satisfaction. 3) The external adaptation field which deals with the student's career progress and system openness and community interaction. 4) The extracurricular field discusses the single dimension of student's personal development. Later, Cameron incorporated the student's personal progress dimension into the academic field and deleted the last field. The study has included those dimensions of Cameron's model which directly deal with students and hence excluded Faculty and administrator employment satisfaction, System openness and community interaction and Ability to acquire resources from its purview.

In addition, the study has also drawn from the socio-ecological psychology which is defined as an approach that investigates how mind and behaviour are shaped in part by their natural and social habitats and how natural and social habitats are in turn shaped partly by mind and behaviour. The main goal of this approach is to delineate how individuals and social ecologies define each other. Social ecology comprises of the social and physical environments that constitute people's

surroundings. As ecological biologists study animals' behaviours in relation to their natural habitats (Stutchbury & Morton, 2001), socio-ecological psychologists study how natural and social environments affect human mind and behaviour and how human mind and behaviour in turn affect natural and social habitats. Social ecology represents both physical and human environments that affect mind and behaviour. Specifically, social ecology includes macrostructures such as economic systems, educational systems, societal and organizational reward systems, population structures, geography, climate and religious systems. It also includes intermediate structures such as the characteristics of cities, towns and neighbourhoods and socio-economic status. Socio-ecological approach explicitly tests the relations between objective macro-environments and human mind and behaviour.

It has also derived logic from interactionists who see behaviour as a function of both person and situation, with the nature of the combined effect broadly conceived. Thus behaviour is viewed as a combined result of contextual and individual-difference effects. Besides, James and Jones's (1974) approach has also been helpful in conceptualizing the study which distinguished objective characteristics of the organizational context, which are the antecedents of climate, from individuals' interpretive perceptions, which ascribe meaning to the context. This conceptualization views climate perceptions as a result of both contextual and individual influences. In addition, James and Jones distinguished psychological (that is, individual-level) climate from organizational climate, arguing that homogeneous perceptions could be aggregated to represent climate as a property of the organization.

The study at hand was aimed at developing a descriptive model which typically takes a more empirically-based approach, simply attempting to describe those characteristics that emerge as a result of investigation.

6. Variables and their Operational Definitions

The research included the following variables:

Organisational Effectiveness: It refers to the extent to which post-graduate education achieves the goals of superior perceptions gains from post-graduate education.

Organisational Health (OH): It refers to the goodness of the psycho-social subsystems of an organization as perceived by students.

Psychological Well Being (PWB): It is defined as the being fulfilled and making a contribution to the community and includes a) positive attitude toward oneself, b) satisfying relationships with others, c) independence and self-determination, d) sense of mastery and competence, e) purpose in life and f) feeling of personal growth.

Satisfaction with Quality of Campus Life (SWCL): It is defined as the extent to which a student experiences fulfilment of his/her expectations from academic, interpersonal and intrapersonal occurrences on the campus.

Student Engagement (SE): It refers to the amount of physical and psychological energy that the student devotes to the academic experience on the campus.

Perceived Gains from Post-Graduate Education (PGFPGED): It refers to a student's perceptions of his/her gain in the field of knowledge, attitudes, values and skills received from post-graduate education in order to be a socially useful and economically productive individual.

7. Objectives of the Study

In the educational sector, there can be several indicators of organizational effectiveness. The paper focuses on one of the high inference measure of organizational effectiveness, namely, perceived gains of PG education (PGFPGED) as this will indicate students' perceptions of the effectiveness of PG education in terms of what they have gained through the academic and co-curricular life in the organisation.

Hence, the first objective of the study is as follows:

1. To study perceived gains of PG education as an indicator of organizational effectiveness in the educational sector and ascertain its magnitude. It is equally essential to understand which factors influence organizational effectiveness measured in terms of PGFPGED. This will enable the researcher to recognise how to enhance organizational effectiveness. Hence, the second objective of this paper is as follows:

2. To study the factors influencing perceived gains of PG education.

On the basis of review of related literature and the subsequent gap analysis, some specific variables to be included in the study were identified. Their relationship with PGFPGED is explained in the following paragraph which forms the basis of formulating the research hypothesis of the study.

Students' psychological well-being is expected to influence their perception of the organisational health, satisfaction with quality of campus life and student engagement. Moreover, students' psychological well-being is likely to influence their perceived gains of PG education as it will enable them take part in the organisational activities more positively. Similarly, a conducive organisational health will lead to better adjustment to the campus life and enhance their satisfaction with quality of campus life and student engagement. This in turn is expected to enhance students' gains from PG education. In other words, organisational health, psychological well-being of students, satisfaction with quality of campus life and student engagement are

expected to be some of the important factors which are expected to have a combined relationship with students' perceived gains of PG education.

8. Research Design

The study has adopted the quantitative approach as it has used structured instruments of data collection. Besides, statistical techniques have been used to analyse numerical data so as to arrive at a nomothetic body of knowledge. Methodology of the study is an essential component of a research design.

8.1 Methodology of the Study

The study has adopted the descriptive method of the correlational type as it is focussed on studying organisational effectiveness in the present times and neither studies the past nor administers an intervention programme to test its effectiveness.

8.2 Sample Size and Sampling Techniques

According to Green (1991), "*If we assume that the cases are a random selection, an alpha level of 0.5, good reliability and a normally distributed dependent variable, the minimum sample size for detecting a medium-sized R is 50 plus eight times the number of independent variables*" (Kent, 2015 : 164). Some statisticians suggest that the number of cases should be 20 times the number of independent variables (Kent, 2015: 167) Hence; it was decided to select the sample size keeping in mind these minimum numbers. However, the total final sample size included is more than this minimum number as the population is heterogeneous in nature.

The sample size was determined based on the basis of the following criteria : (a) The population of the study is heterogeneous in nature in terms of different faculties, subjects, student background (SES, medium of writing examination, first generation versus non-first generation exposure to higher education etc.). The sample therefore was selected using a three stage sampling technique. At the first stage, four faculties were selected using stratified random sampling technique. At the second stage, subjects were selected using stratified random sampling technique. At the third stage, students from intact classes were selected.

Initially, data were collected from 284 students. Of this, 11 students had given incomplete data and hence were rejected. Thus, the final sample size was 273 with a response rate of 96.13%. The sample consisted of 121 (44.32%) boys and 152 (55.68%) girls. The distribution of the sample by subjects is given in table 1.

Table 1: Sample size

Faculty	Sample Size	%
Arts	157	57.51
Science	75	27.47
Commerce	26	9.52
Law	15	5.50
Total	**273**	**100**

Moreover**,** the sample consisted of 92 boys and 181 girls. It included 106 students from the open category and 167 students from the reserved category. (The Constitution of India provides for reservation of seats in educational institutions to students from socio-economic disadvantaged sections based on caste. These are known as reserved category students. The rest are known as open category students.) This implies that 61.17% of the sample is from socio-economic disadvantaged section of the Indian society. Besides, 34 (12.45%) students' parents were illiterate, 109 (39.93%) students' parents had completed primary or secondary education, 48 (17.58%) students' parents were graduates, 43 (15.75%) students' one parent was a post-graduate, 25 (9.16%) students' both parent were post-graduates and 14 (5.12%) students' parents had qualifications higher than post-graduation. Thus, 52.38% students had parents who had no access to higher education.

9. Questionnaire Development

Psychological Well-being (PWB): A ready-made tools developed by Ryff's (2005) was used to measure PWB of students. It consisted of 42 items. Its internal consistency reliability & test-retest reliability were found to be 0.80 and 0.79 respectively on a sample of 87 post-graduate students in the Indian context in a pilot study.

Organisational Health (OH): This tool was developed by the researcher for measuring students' perceptions of organisational health. It is a self-report measure and is descriptive in nature rather than evaluative. It covered the dimensions of psycho-social climate in the department, psycho-social climate on the campus, nature of classroom activities and availability of teachers inside and outside the class. These dimensions were identified on the basis of literature review in the subject. The content and face validities of the tools were established by obtaining opinions of 8 experts and an item analysis of the tool was conducted was conducted in a pre-pilot study. Its final form consisted of 30 items. Its internal consistency reliability & test-retest reliability were found to be 0.83 and 0.81 respectively on a sample of 87 post-graduate students in a pilot study.

Satisfaction with Quality of Campus Life (SWCL): This tool was developed by the researcher for measuring students' Satisfaction with Quality of Campus Life. It is a self-report measure and covered the dimensions of students' satisfaction with the quality of physical and infrastructural facilities, teaching and evaluation processes, interpersonal relationships with peers, faculty and administrative staff and emphasis on student development. These dimensions were identified on the basis of literature review in the subject. The content and face validities of the tools were established by obtaining opinions of 8 experts and an item analysis of the tool was conducted was conducted in a pre-pilot study. Its final form consisted of 22 items. Its internal consistency reliability & test-retest reliability were found to be 0.84 and 0.81 respectively on a sample of 87 post-graduate students in a pilot study.

Student Engagement (SEn): This tool was developed by the researcher for measuring Student Engagement. It is a self-report measure and covered academic, cognitive, emotional, social and action dimensions. These dimensions were identified on the basis of literature review in the subject. The content and face validities of the tools were established by obtaining opinions of 8 experts and an item analysis of the tool was conducted was conducted in a pre-pilot study. Its final form consisted of 25 items. Its internal consistency reliability & test-retest reliability were found to be 0.86 and 0.80 respectively on a sample of 87 post-graduate students in a pilot study.

Perceived Gains of PG Education (PGFPGED): This tool was developed by the researcher and will be used to measure the gains of PG education as perceived by students. It is a self-report measure and covered the dimensions of students' perceptions of knowledge in the subject areas as well as a broad knowledge base in related subjects, preparation for future career/profession, cognitive, affective and psychomotor development and self-awareness. These dimensions were identified on the basis of literature review in the subject. The content and face validities of the tools was established by obtaining opinions of 8 experts and an item analysis of the tool was conducted was conducted in a pre-pilot study. Its final form consisted of 33 items. Its internal consistency reliability & test-retest reliability were found to be 0.82 and 0.80 respectively on a sample of 87 post-graduate students in a pilot study.

10. Results of the Study

The first objective of the study was to ascertain the magnitude of perceived gains of PG education as an indicator of organizational effectiveness in the educational sector.

For this purpose, the Mean PGFPGED is computed and is used to ascertain the magnitude of organizational effectiveness. In the present case, Mean PGFPGED = 90.31

The following criteria have been used for judging the magnitude of the organisational effectiveness measured in terms of PGFPGED as shown in Table 2.

Table 2: Magnitude of Mean PGFPGED

Magnitude of the Adjusted Mean	Interpretation
33-52	Negligible
53-72	Low
73-92	Moderate
93-112	Substantial
113-132	Superior

The first objective does not require any hypothesis. However, it is addressed in the conclusions of the study. It was found that the Mean PGFPGED = 90.31. This is moderate in magnitude in accordance with the criterion laid down in Table 3.

Thus, on the basis of the criterion shown in Table 3, it may be concluded that the Organisational Effectiveness measured in of PGFPGED is moderate in magnitude. In other words, it may be concluded that students' perceive that gains from post graduate education are moderate in magnitude. i.e. the organizational or the institutional effectiveness is moderate in magnitude when Gains from Post-Graduate Education as perceived by students is taken as an indicator of effectiveness.

Having ascertained the magnitude of the organisational effectiveness measured in terms of students' perceived gains of PG education, it is necessary to identify the contribution of some of the factors expected to influence PGFPGED through testing of hypothesis using a statistical technique as shown in the following section.

The present section provides details about testing of the research hypothesis as follows:

H₁: There is a significant combined relationship of organisational health, psychological well-being of students, satisfaction with quality of campus life and student engagement with students' perceived gains of PG education.

In order to test this hypothesis, two major steps have been followed:

Step 1

The first step was to compute the inter-correlations of different variables included in the study and test their significance. These are shown in table 3 in the form of a matrix of inter-correlations as follows:

Table 3: Inter-correlations among the variables

	X_1 (PWB)	X_2 (OH)	X_3 (SWCL)	X_4(SEn)	Y (PGFPGED)
X_1 (PWB)	1	0.123	0.141	0.148	0.337 (0.01)*
X_2 (OH)	0.123	1	0.198	0.265	0.368 (0.01)*
X_3 (SWCL)	0.141	0.198	1	0.258	0.412 (0.01) *
X_4 (SEn)	0.148	0.265	0.258	1	0.451 (0.01)*
Y (PGFPGED)	0. 337	0. 368	0.412	0.451	1

* Figures in parenthesis show the level of significance

The Issue of Multi-Collinearity: The extent of multi-collinearity was computed using the following two methods:

A. The determinant of ′XX can be used as an index of multi-collinearity. Since the matrix is in correlation form, the possible range of values of the determinant is $0 \leq |′XX| \leq 1$. If $|′XX| = 1$, the regressors are orthogonal, while if $|′XX| = 0$, there is an exact linear dependence among the regressors. The degree of the multi-collinearity becomes more severe as $|′XX|$ approaches zero (Paul, 2012)

In the present case, $|′XX| = 0.8182920343849999$. This implies that there the magnitude of partial multi-collinearity is very low and within tolerable limits.

B. The following table 4 shows Variance Inflation Factors (VIF) for the independent variables included in the study :

Table 4: Magnitude of VIF

No.	Variable	VIF
1	PWB-OH	1.015
2	PWB-SWCL	1.02
3	PWB-SEn	1.022
4	OH-SWCL	1.04
5	OH-SEn	1.076
6	SWCL-SEn	1.071
Mean VIF		**1.041**

Since the individual VIF as well as Mean VIF < 10, the extent of multi-collinearity is much below the permissible limit (Jeeshim and KUCC, 2002). Hence it may be concluded that the multi-collinearity is not statistical significant.

For 271 degrees of freedom, these coefficients of correlation are significant at 0.05 level. Hence, these coefficients of correlation were included in computing multiple regression equation and multiple correlation. The preceding table shows that the relationship of Gains from Post-Graduate Education as perceived by students with

Psychological Well-Being is positive and low in magnitude, with Organisational Health is positive and low in magnitude, with Satisfaction With Campus Life is positive and moderate and with Student Engagement is positive and moderate.

The results obtained in Table 3 are used for further analysis in Table 5.

Step 2

This is followed by testing of hypothesis of the study using the statistical technique of multiple regression in this section.

H₁: There is a significant combined relationship of organisational health, psychological well-being of students, satisfaction with quality of campus life and student engagement with students' perceived gains of PG education.

This is shown mathematically as follows: PGFPGED = f (PWB, OH, SWCL, SEn) This implies that PGFPGED is a function of PWB, OH, SWCL and SEn.

In order to test this research hypothesis statistically, it was written in the null form as follows:

**H₀:** There is no significant combined relationship of organisational health, psychological well-being of students, satisfaction with quality of campus life and student engagement with students' perceived gains of PG education.

The relationship of PGFPGED (1) with PWB (2), OH (3), SWCL (4) and SEn (5) is shown statistically through the multiple regression equation as follows:

$$R^2_{1.2345} = \beta_{12.345} r_{12} + \beta_{13.245} r_{13} + \beta_{14.235} r_{14} + \beta_{15.234} r_{15}$$

The following are the statistics obtained from the data:
Multiple Correlation of PGFPGED (Raw) with PWB, OH, SWCL and SEn: $R^2_{5.1234} = 0.5936$ (P<0.0001) and $R_{1.2345} = 0.7705$.

$$R^2_{1.2345} = 0.0832 + 0.0928 + 0.1834 + 0.2342 = 0.5936$$

This is followed by testing the significance of the β coefficients obtained in the preceding multiple regression equation as follows in Table 5.

Table 5: Significance of β coefficients

Variable	Standardised Regression Weight	Magnitude	t	LoS
PWB	$\beta_{12.345}$	0.2469	3.72	0.01
OH	$\beta_{13.245}$	0.2522	4.02	0.01
SWCL	$\beta_{14.235}$	0.4451	5.99	0.01
SEn	$\beta_{15.234}$	0.5193	6.58	0.01

11. Conclusion of the Study

The obtained $R_{1.2345}$ is significant at 0.0001 level. Hence, the null hypothesis is rejected.

It may be concluded that there is a significant combined relationship of organisational health, psychological well-being of students, satisfaction with quality of campus life and student engagement with students' perceived gains of PG education. Table 5 also shows that all the four β coefficients are significant at 0.01 level.

The study found that organizational effectiveness measured in terms of Gains from Post-Graduate Education as perceived by students is moderate in magnitude. Students' Psychological Well-Being, Organisational Health, Satisfaction with Quality of Campus Life and Student Engagement have been found to be influencing organizational effectiveness measured in terms of Gains from Post-Graduate Education as perceived by students.

The preceding analysis shows that the contribution of students' Satisfaction with Quality of Campus Life (18.34%) and Student Engagement (23.42%) is relatively more than (together 41.76%) than that of their Psychological Well-Being (8.32%) and Organisational Health (9.28%) – together 17.6%. It implies that if we enhance (a) Psychological Well-Being by 1 standardised unit, Gains from Post-Graduate Education as perceived by students will increase by 0.2469 standardised units, (b) Organisational Health by 1 standardised unit, Gains from Post-Graduate Education as perceived by students will increase by 0.2522 standardised units, (c) Satisfaction with Quality of Campus Life by 1 standardised unit, Gains from Post-Graduate Education as perceived by students will increase by 0.4451 standardised units and (d) Student Engagement by 1 standardised unit, Gains from Post-Graduate Education as perceived by students will increase by 0.5193 standardised units. In all, 77.05% of the variance in Perceived gains from Post-Graduate Education is associated with students' Psychological Well-Being, Organisational Health, Satisfaction with Quality of Campus Life and Student Engagement. Moreover, 22.95% of the variance in Perceived gains from Post-Graduate Education is associated with factors not included in the study.

The percentage of variance in Perceived Gains from Post-Graduate Education explained by the various factors included in the study is shown in figure 1.

CONTRIBUTION OF VARIOUS FACTORS EXPLAINING VARIANCE IN PGFPGED

■ PWB ■ OH ■ SWCL ■ SEn ■ Other Factors
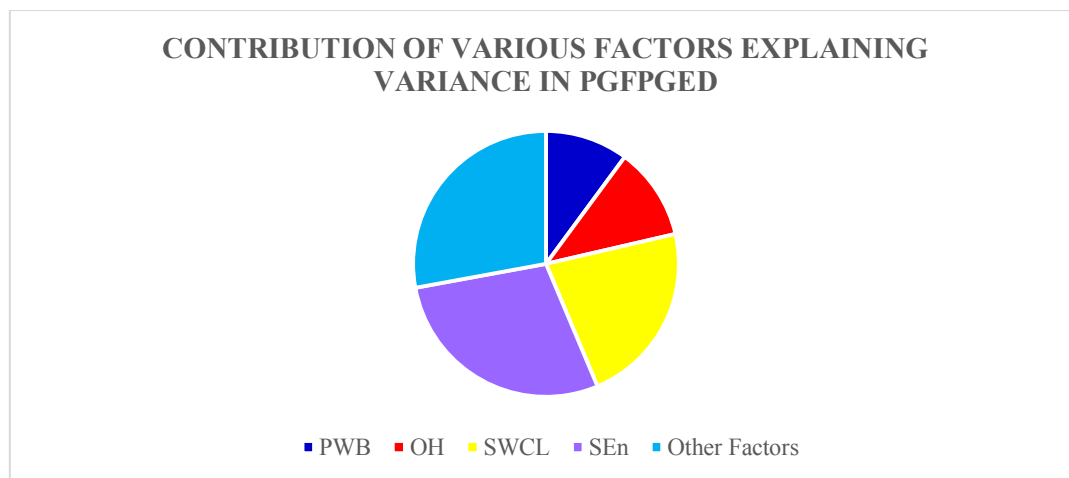
The finding regarding positive and moderate relationship between student engagement and student-outcomes is consistent with prior research. This is corroborated by Kuh et al. (2008, 555) who state that student engagement in educationally purposeful activities is positively related to academic outcomes as represented by first-year student grades and by persistence between first and second year of college. Besides, Harper and Quaye (2009, 3) state that they are persuaded by a large volume of empirical evidence that confirms that strategizing ways to increase the engagement of various student populations, especially those for whom engagement is known to be problematic, is a worthwhile endeavour. The gains and outcomes are too robust to leave to chance and social justice is unlikely to ensue if some students come to enjoy the beneficial by-products of engagement but others do not. Krause and Coates (2008, 495) observe that [engagement] data have the potential to inform understanding of many aspects of university life, such as student affairs, pedagogical quality, recruitment and selection, attrition and retention, equity, and student learning processes. Engagement allows students to develop in important ways, as noted by Bensimon (2009), productive engagement is an important means by which students develop feelings about their peers, professors, and institutions that give them a sense of connectedness, affiliation, and belonging, while simultaneously offering rich opportunities for learning and development. According to Kuh (2009 : 684), students gained more from their studies and other aspects of the college experience when they devoted more time and energy to certain tasks that required more effort than others – studying, interacting with their peers and teachers about substantive matters, applying their learning to concrete situations and tasks in different contexts, and so forth. Lizzio and Wilson (2009: 81) observed that students reported, on average, moderate to high levels of learning and

development as a result of undertaking the representative role. The types of personal benefits they described generally reflected their motivations for originally accepting the role (i.e. developing skills and confidence, making contacts, helping fellow students).

The findings regarding positive and moderate relationship of Perceived gains from Post-Graduate Education with students' Satisfaction with Quality of campus Life is corroborated by similar findings on the positive relationship between QoL and academic achievement reported by Chow (2005) in a Canadian study and Rodgers and Summers (2008), who investigated why black students who went to predominantly white higher educational institutions in the United States did less well than their white counterparts, even when they had higher school-level grade point averages. A study of Canadian students included housing conditions, divided into "living environment" (defined as the physical condition of the residence) and "living arrangements" (defined as the people being lived with) as determinants of the life satisfaction of university students (Chow 2005). Both factors were found to be positive and statistically significant determinants of QoL, but effects were much smaller than factors like self-esteem, relationship with "significant other," and socio-economic status. Bean (1980), Hendel (1985), Lenning and Ebbers (1999), Schuh (2009) and Schuh and Upcraft (2001) have supported the argument that satisfaction is "one of the most direct tests of postsecondary success, and a positive relation has been established between academic satisfaction and retention (Li et al., 2005, 177). Machado et al. (2011) concluded that students would also prefer improved access to interactions with faculty outside the classroom as well as quality academic advising. They also suggested that being involved in social aspects as well as the academic realm retains students and an institution must recognize "that the social dimension in learning activities is critical" (Machado et al., 2011, 420).

12. Discussion

It implies that if organizational effectiveness measured in terms of Gains from Post-Graduate Education as perceived by students is to be enhanced, improvement in students' Satisfaction with Quality of Campus Life and Student Engagement need to be emphasised.

Based on the individual items in the tool used in the study to measure students' satisfaction with quality of campus life, the following recommendations are made for enhancing organisational effectiveness in the educational sector. These items included those items on which students had a low score. These findings, recommendations and suggestions are applicable to a context where at least 50% of the students are from the socio-economic disadvantaged sections of a developing country.

In other words, for this purpose, adequate number and quality of books and e-journals in the library need to be maintained, adequate number of computers and internet facilities in the department need to be ensured along with availability of computers in the department to students, adequate number and quality of the equipment in the laboratories in the department, availability of furniture in the department, good building of the department and its cleanliness must be guaranteed, teaching methods used in the class and its quality and quality of evaluation of performance need to be maintained, opportunities for participation in co-curricular and cultural activities on the campus, to interact with students of other departments, to participate in sports and games need to be provided to students, emphasis need to be placed on developing the personality of students, on developing life skills, information literacy skills and positive attitudes in students. This is expected to enhance students' satisfaction with campus life. The paper therefore recommends the need for enhancing students' satisfaction with quality of campus life for enhancing organisational effectiveness in the educational sector.

Based on the individual items in the tool used in the study to measure student engagement, the following recommendations are made for enhancing organisational effectiveness in the educational sector:

Besides, student engagement could be enhanced if opportunities are provided to students to ask questions or participate in classroom discussions, give a presentation in the class, work hard to master difficult content, use resources from the library, work on a project/assignment that required ideas or information from different sources, include diverse perspectives (e.g. different religions, genders, political beliefs, linguistic or caste groups etc.) in class discussions or written assignments, put together ideas or concepts from different subjects when completing assignments or during class discussions, combine ideas from different courses when completing assignments, come to class having completed readings or assignments, keep up-to-date with their studies, work with other students on projects during class, work with other students outside class to prepare assignments, participate in a community-based project by volunteering as part of their study, use e-mail or a forum to communicate with teachers, discuss their grades or assignments with teachers, talk about career plans with a faculty member, discuss ideas from their readings or classes with teachers outside class, discuss their academic performance with a faculty member, work harder so as to meet teachers' standards or expectations, work with teachers on activities other than coursework, discuss ideas from their readings or classes with others outside class, have conversations with students of a different cultural group than their own, have conversations with students who are very different from them in terms of their religious beliefs, political opinions or personal values, learnt from classmates through discussions and explain course

material to other students. The paper therefore recommends the need for enhancing cognitive, behavioural and emotional engagement of students for enhancing organisational effectiveness in the educational sector.

13. Limitations of the Study

The research is unable to study the expectations of the students before they took admission for the post-graduate course. One of the reasons for this was that admissions to each subject is done separately and in some of the subjects, the process of admissions go on till the month of September due to various rules and regulations beyond the control of the university. Besides, initially, the attendance in some subjects is very poor. In addition, students also take time to adjust to post-graduate studies.

14. Implications of the Study

The findings of the study could be useful in understanding whether students are satisfied with their campus life, how conducive they find the organisational health and whether the institution/organisation is effective and to what extent. This in turn is expected to find out ways of enhancing organisational effectiveness further.

The paper contributes to the field of higher education in India as there is very little empirical evidence concerning the field of higher education. Thus, this contribution would be more practical and to some extent, theoretical in nature. Besides, it also provides details of factors that need to be taken care of in order to enhance organisational effectiveness. This is the practical component of the contribution of this research.

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