



Understanding Institutional Environment Using Need Press Model

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ABSTRACT

Questionnaire surveys of perceptions of institutional environment have been found to be a good diagnostic tool to facilitate self-renewal, leading to effective management of institutions of Higher education. Normally, such tools are developed by interviewing multiple stakeholders (faculty, students, staff, etc.). By now, a number of tools have been developed and used. This paper presents one such tool that have been used extensively as diagnostic tools. The one we are using was developed using the Stern's framework based on Henry Murray's need-press model, which attempts to study student preference for activities or student interests (needs) and correlate them with corresponding Institutional environment (press) as perceived by the students. The questionnaire have been found to give more useful data about institutions, in addition to what the theoretical models offer. In using these tools, the authors promote a collaborative approach of Institutions based in the same location or managed by the common stakeholders of these institutions for bench marking, self-renewal and improvements. The analysis is based on responses of 110 students who have analyzed the institution on 30 parameters like Achievement, exhibition, order, competition to name a few. All parameters are representative of human needs and how much an institution is able to fulfill it. Study will give good insight into institutional gaps that may exist.

KEYWORDS

Institutional environment ,Need- Press Index, Stern's Index, Management Education

Introduction

Good professionals are the products of good institutions. Good institutions are those that are managed well. Such institutions are vision driven, process sensitive, leadership driven, systems driven, encouraging achievements and at the same time, are value driven. Students and the professionals being prepared there are likely to imbibe the values and qualities promoted by these institutions. For this purpose, an "Institution Building Mind Set" (IBMS) is a prerequisite by the leaders and faculty of these institutions. Institutions that prepare various professionals in Engineering, Technology, Information Technology, Medicine, Law, Chartered Accountancy, Management, Education, Social Work, Design etc. will do well if they understand the kind of environment, they are facilitating. There is a need to periodically assess themselves on the climate they have generated and use such assessment for renewal, rejuvenation and mid-course correction where needed. Perceptions of the institutional environment by various stakeholders provide insights for such institution building activities and generate IBMS in the stakeholders.

The first author of this paper has been involved for the last several years in studying the Institutional environment of Educational institutions (Rao, 1974; 1976; Mathai, Pareek and Rao, 1977, Rao, Indiresan and Jomon, 1998 etc.). In a series of studies conducted on Medical colleges, Management Schools, Schools of Social work, Agricultural colleges and Universities, Schools of Education etc, the first author of this paper has used institutional environment questionnaires. Some of these are research studies and others are consulting reports. In many of these cases, survey feedback mechanism has been used as Institution Building or OD interventions, intended to bring about change.

The questionnaires have been improvised in consultation with various stakeholders. The normal strategy in developing the Institutional Environment questionnaire is by meeting various stakeholders like the faculty, students, administrative staff, and top management like the Board members etc. Later, they are asked to provide their inputs or are asked to do a SWOT of the Institution and then develop a list of times, classify them and shorten the same after a pretesting on a small sample.

This paper presents four such tools. Two of them were exten-

sively used in institution Building programs of IIMA and the others were used for the self-renewal exercises of Institutions. The paper also presents a need-press framework for understanding the gaps in the engagement with the institution by student communities.

The paper also gives states the sample data based on the studies and contribution of studies on institutions of IIM A, IPM and also through the example of a research study on Project IMPACT. The first set of tools are based on the assumption that, an understanding of student behavior is necessary for the effective planning and management of curricula, institutional structures, process and learning experience. In the changing times, where, there is a pressure on revamping the outlook towards the prevailing practices and systems from every corner of the world, there is a need to identify what student's requirements and needs are and to take the steps to address the same. The paper is presented in three parts: and the appendices* present the tools that could be used by researchers, who are interested in this area.

- 1) Students orientations in Professional education (Need – Press Framework Study), A study of 2010 batch of management students from institution in comparison to 1977 batch of the same institution.
- 2) Brief analysis of research study on Project IMPACT (A Institutionalizations of innovation In Higher education, 1999,)
- 3) Institutional Environment for Self Renewal at Institute of Professional Management (IPM) Appendices (Four Questionnaires on institutional environment, Data on analysis of students activity index (Needs) (31- 34) and institutional environment (Press) (35 -37).

The Institution where one studies, has an unmistakable impact on the professionalization of the students. Unless, the institutional experiences are designed appropriately, the students may not learn the right things. Using the tools, the institutional managers can assess the image of their own institutions, understand the experience offered by their own institutions to students and redesign their institutional policies, procedures, and learning experiences, so that they facilitate student-learning experiences and help enhance the effectiveness of their institution.

In this context, the institutional culture and processes be-

come important, as they influence the values of the student. The questions covered in these tools are comprehensive and relate to academic culture, student – faculty relations, work – facilities, peer relationships, leadership, systems etc. These dimensions constitute significant areas of professionalism in any profession. The questions and its responses would provide insights for academic administrators to make appropriate interventions that would facilitate the development of the student.

Institutional Environment

An institution is any structure or mechanism of social order and cooperation, which governs the behavior of a set of individuals within a given human community. Institutions are identified with a social purpose and permanence, transcending individual human lives and intentions, and with the making and enforcement of rules governing cooperative human behavior. The term "institution" is commonly applied to customs and behavior patterns important to a society, as well as to particular formal organizations of government and public service. They are also considered as structures and mechanisms of social order among humans. Institutions are one of the principal objects of study in the social sciences, such as political science, anthropology, economics, and sociology (the latter being described by Durkheim as the "science of institutions, their genesis and their functioning"). (I.G. Patel, 1999).

This concept was more thoroughly defined by Esman and Blaise (1966), Selznik (1963), Perlmutter (1965), Mathai, Paareek and Rao (1977, 1992), Paareek (1994) etc. This based on the studies mentioned above, Institutions can be defined as relatively permanent and indispensable organizations which: (1) Reflect society's enduring needs, values and requirements through their functions and services they provide, (2) Embody and protect norms in terms of their internal structure, and (3) Influence the environment in positive ways by making themselves available to other institutions which are linked with them.

Part 1: Institutional Press and Students Needs

Institutional 'press' are the different dimensions of the institutions' climate. The term 'press' has been used by Murray (1938) for the environmental conditions that operate on the individual in his psychological field. Murray also developed a list of personality needs and environmental presses. His model reflects that, behavior is determined by the need for press interactions. Psychologists like Lewin (1935, 1936) have presented theoretical views expressing the importance of person environment interactions as determinants of behavior. (Murray (1938), Fromm (1941, 1955), Sullivan (1953, 1956) Murray and Wuckhonnee (1953) and Getzels and Thelene (1960)

Hutchins (1962) distinguished between objective situational characteristics and subjective climate variables for colleges. The objective situational characteristics for a college are characteristics like age of the institutions, size, number of faculty with PhDs, funds available etc, which gives no scope for subjective interpretations as they are facts. The subjective climate dimensions are the participants (students, faculty, administrators and community) perceptions of the campus environment (teaching, administration, competition, academic excellence, working conditions library, laboratory etc.).

Gage's (1963) review of the paradigms for research on teaching indicates that, several researchers have incorporated concepts related to this kind of interaction. Based on a series of research studies, Stern (1964) offered the following conclusions with regard to the need of press research:

- 1) Perceptions of institutional environments are not a function of the personal characteristics of the participant.
- 2) Perception of the environment by experienced participants is consensual.
- 3) The consensual perception of the environment reflects the objective environment.
- 4) The collective needs of selected groups of people reflect their objective personality characteristics.

Stern (1969) has also presented a few instruments to measure the need press dimensions of college students. These have been factorially validated and used in the past few years for the study of college students. The College Characteristic Index (CCI) measured the perceived institutions press on 30 press needs dimensions. The Activity Index (AI) measures the students' needs on the same dimension. These scales have been modified and tried out by Mathura and Rao (1974).

The higher education institutions have embraced the marketing concept more than ever and the idea of the student as consumer and the customer, who is involved in the purchase of higher education programs and services, has become predominant (Kotler and Levy 1969).

Nowadays, the students' search for institutions that will provide them with unique, memorable, and personal educational experiences. Further, he/she is a customer, who seeks an educational program that will prepare him/her for a successful career and a job.

In an educational institution, students are the main customers of the organization (IWA, 2007; Sakhivel et al., 2005; Hill, 1995; Zairi, 1995). The students' satisfaction should always be considered by the institutions because of the intensive competition among institutions, internationalization spirit, higher expectation of customers on higher educational institution, an increase in the tuition fee, and the classification of education as a marketable service (Kwek et al., 2010). Letcher and Neves (2010) reported, "Student satisfaction helps build self-confidence, which helps the student develop useful skills, and acquire knowledge". Based on the explanation, it is important to discuss the factors, which determine students' satisfaction.

Assessing Institutional Environment through Need - Press-Assessment Methodology

In the mid-seventies, the first author developed an Institutional environment measurement tool (Rao, 1974). This questionnaire was (designed) to study the student's needs on a 117-item inventory. This tool was used in 1977 to study the student orientations in Professional education. The objective of the study was to gain insights into the professional behavior of students in different professions, to assess the extent of differences in the profiles of students and to prepare institutional case studies with strategies of renewal. (BJ Medical College, LD engineering college, Ahmedabad Faculty of engineering and technology, Baroda, Centre of Advanced studies in Education, Baroda, IIM Calcutta, School of social work, Udaipur, NM college of Agriculture Navsari, School of Social Work Baroda,, RNT medical College Udaipur, and IIM Ahmedabad were part of that study).

This tool has two parts: Part 1 consists of an Activities Index (to measure needs) and the second part consists of an Institutional environment questionnaire (environmental press). The items of both the questionnaires center round the list of 30 needs cited by Henry Murray and used by researchers like Stern. The assumption is that, when a student expresses that he/she likes certain types of activities, the underlying need or motive can be inferred (for example, the need for achievement, aggression, reflectiveness, affiliation, abasement, nurturance, sensuality etc.).

The second part of the questionnaire also attempts to study the extent to which the institute's environment reflects the scope for satisfying these needs by offering a corresponding environment as reflected in the activities or culture promoted by the institution. Both the questionnaires are given in the appendices in two parts – the first part concentrating on the individual aspects of the students life is what has been defined as activity index, which has questions related to personal experience of students and their personal take on activities, which they may indulge in. The second part, termed as "institutional inventory" is on the various activities that are part of the system and processes at the campus, including the teaching mechanisms, festivals, grievance handling, class dis-

cussions, faculty student's interaction etc. There are 240 items out of which, 117 are for activity index and remaining 123 items are for the institutional inventory. These have been modified for their contemporary use.

This tool was used first in 1977 for studying the institutional environment of various institutions across the country through a project sponsored by the ICSSR for the education systems unit of IIMA. The same questionnaire was administered on 2010 batch during the Golden Jubilee year of IIMA to study the perceived changes in the institutional environment and the student needs.

For the data collector, this can be a tough task, as the daily cycles of student's differ drastically. Therefore, we converted the whole questionnaire into a Google form, thus enabling the students to respond to it anytime, and it made our life easier as well, as we were looking at real time updates on our data and able to follow up accordingly. We think that it was the prompt responses from the students of PGP that made this task possible. They regularly kept coming with suggestions in the questionnaires. We had received 111 responses during the time of the study, which was between September to October 2010.

Profile of Respondents

The respondents were from the PGP batch only. We had 46 respondents from PGP 1 and 65 respondents from PGP II. Respondents had a varied work experience profile: 53 people had a work experience of about 1 to 2 years, 11 people had the work experience between 2 to 3 years, 16 people between 3 to 5 years, 2 people with an experience of 5 years or more and 29 people with no work experience. The profile of experienced students was important for us as many of the questions were on their work experience and their involvement with the institution and the student activities.

Need Analysis

1) The degree of abasement in students at IIMA has not changed much, in the years. Students still do not like to take blame, understand the other person's point of view, when criticized. Interestingly, 50 % students from the 2010 batch do not mind taking criticism.

2) IIM A has a competitive environment, and it is no different for the current batch as well. Students are more competitive and they try to push themselves for the maximum. The only point of caution for the students from the 2010 batch (75 % of the batch) is that they would prefer easier tasks.

3) Students from the 2010 batch are flexible and they are adaptable to changes as compared to the 1977 batch. They would prefer not to have clear-cut likes or dislikes, but they would prefer to have a more structured routine.

4) There is an increase in the area of conjunctivity. The students would like to be more organized and work in a more purposeful manner. For the batch of 2010, output is of utmost importance and they would like to plan ahead for each step. Interestingly, 63 % do not like to organize work in order to use the time efficiently.

5) A need to dominate has increased in the 2010 batch as compared to the batch of 1977, be it be the need to pursue their group or to follow ideas. They would like people to depend on them for ideas and like guiding other people. These activities clearly indicate that the students nature to dominate is coming out more prominently.

6) In terms of energy dimensions of the students, they are high in cases of enjoying sports, sleeping hours or doing something every minute of the day. However, there is a big variation in the activities that require concentration. A large chunk of the 2010 batch would prefer to avoid such activities.

7) There is a reduction in the dimensions of exhibitionism,

self-display and attention-seeking behavior. These qualities are generally avoided by the 2010 batch. Interestingly, they would avoid being expressive at social gatherings and would not entertain others in a large social gathering.

8) The dimension of keeping order is more applicable for the 2010 batch in arranging things such as managing a diary or a notebook. However, the sense of order has significantly decreased in the case of managing finances.

9) Students from the 2010 batch have active interest in learning about new things, or how they may work, but they are not interested in having hands on approach in doing things or doing practical's has to understand the aspects of science by themselves.

10) Students from both the batches have a significant pre-occupation with aesthetic experience. They would like to eat good food, use things which are soft, like to enjoy the voice of nature. However, one significant difference in the 2010 batch is that they will not mind wasting money also, if it is just for their needs.

11) In the dimensions of sexuality, it is a mixed bag of responses for the 2010 batch. They would not prefer to talk openly about love as compared to the 1977 batch, but they would like to read novels, stories about love and also daydream about being in love, watch a particular movie or entertainer, but they won't like to listen to the love life of their friends.

Press Analysis

1) The environment at IIM A encourages the students to fulfill the need for abasement, they are open to criticize policies, they are encouraged to interrupt and they believe there is no buttering culture at IIMA.

2) There is an intense sense of competition at IIM A. The press of achievement is high in their institute, and students feel that exams measure their understanding of the subject. Interestingly, the students do not feel that the standards set by professors are tough to achieve.

3) A strong sense of change mechanism exists at IIM A, students from the 2010 batch also agree that diversity is a part of IIM A: exams keep changing regularly. But they do not feel that attitudes, behavior, and beliefs of people are similar here.

4) The students from the 2010 batch, believe that the activities at IIM A are organized and well planned. The sessions are well defined. but the students feel that the student activities are less planned and they are aware about the expectations about them. (30% increase for 2010 batch).

5) The 2010 batch strongly feels there is no dominance or personal rivalries in the institute. (there is an increase of more than 30 % in both cases), and they strongly agree that the only way to be at IIM A is by merit (93% of which batch? agree to this statement).

6) A high amount of energy is put in by the students and faculty for the teaching-learning activity. The students give out their 100 % and they believe that the faculty also puts in their 100 % for the lectures etc., They agree that the professors push them to their maximum limits.

7) Self display and attention seeking has increased a bit in the 2010 batch. They try to promote each and every activity, that they are part of, and students want to be part of clubs, committees etc.

8) There is a good sense of order prevalent in the institute. The students have to sit at the same place every time, ambience of class is maintained. Interestingly, the students feel that they are pushed to have written permissions, if they miss a class etc. as compared to the 1977 batch.

9) The press of practicalness has increased a bit as perceived by students. They feel that they have to be members of the right club to grow. There is a lot of emphasis on efficiency and usefulness. The students feel that the current courses have reduced a bit in their practicalness.

10) There is a strong lack in the press of sensuality as the students feel that not much is invested in activities such as drama. The classes will generally take place at the same place, irrespective of the tampons. The rooms are not decorated with pictures of film stars etc.

11) The perception regarding the press of sexuality is also perceived to be less by the students. They don't think that during the weekdays, the students will be going on dates etc. This students don't feel that IIMA is a good place to find a matrimonial match.

Need-Press Congruence Methodology to Calculate Gap
Formula = Need (Mean of responses For every individual) - Press(Mean of responses(For each individual) = Gap)

Each individual's response on a particular item on need (Like or Dislike) and Press (True or False) was calculated from the response sheet. The Average of the responses in terms of Like/Dislike or True or false were taken for each of the 30 dimensions. They were tabulated for each dimension. Later, the mean (Average) derived from the average of 4 or 5 items for a particular press dimensions was subtracted from the mean (Average) number obtained for the need dimension to assess the extent of congruence.

All the responses were converted into percentages. For example, agreeing with all 34 items of the "need" for abasement will give a 100% need score for a given student and agreeing with only two of the four items as true will give a 50% abasement on the "press" or environment score and the difference on abasement for that student will be 50%. This is the need-press congruence score.

Table 1, presents the extent of congruence between the various needs and the correspondence press or institutional environment. The percentage agreeing with each item of the needs scale and the perceived environment characteristic on the same dimension were computed for each individual. For example, if an individual indicates that all the four items as achievement, he gets a score of 100% and if he perceives the environment as only characterizing achievement on 2 of the four items, his press score is 50% and the gap score is 50%. The percentage need, press and the gap scores were computed. The results are presented in the table below.

Table 1
Institutional environment scale and student needs and Institutional Environment offerings Gaps (2010 data)
(The scores are converted into percentages.)

| | Dimension | Percentage scores from the items under each dimension | | |
|---|---------------|---|---|---|
| | | Extent to which the students express the need | Extent to which the Institute has climate that meets the need | Gap between the need and environment offering |
| 1 | Abasement | 54.5 | 23 | 31.5 |
| 2 | Achievement | 59.5 | 51 | 8.5 |
| 3 | Adaptability | 66.5 | 66 | 0.5 |
| 4 | Affiliation | 47.75 | 54.25 | -6.5 |
| 5 | Aggression | 58.5 | 48.75 | 9.75 |
| 6 | Change | 53 | 76.75 | -23.75 |
| 7 | Conjunctivity | 49.25 | 72.25 | -23 |
| 8 | Counteraction | 63.25 | 60.75 | 2.5 |

| | | | | |
|----|-----------------------|-------|-------|--------|
| 9 | Difference | 63.75 | 64 | -0.25 |
| 10 | Dominance | 78.75 | 38.75 | 40 |
| 11 | Ego Achievement | 61 | 51.75 | 9.25 |
| 12 | Emotionality | 61 | 76.5 | -15.5 |
| 13 | Energy | 51 | 75.5 | -24.5 |
| 14 | Exhibitionism | 38.5 | 75 | -36.5 |
| 15 | Fantasied Achievement | 75 | 85 | -10 |
| 16 | Harm Avoidance | 75.3 | 53.5 | 21.8 |
| 17 | Humanities | 70.25 | 70.25 | 0 |
| 18 | Impulsiveness | 60 | 48.25 | 11.75 |
| 19 | Narcissism | 48.5 | 59 | -10.5 |
| 20 | Nurturance | 68.5 | 62.5 | 6 |
| 21 | Objectivity | 40.33 | 33 | 7.33 |
| 22 | Order | 49 | 75.25 | -26.25 |
| 23 | Play | 60 | 52.75 | 7.25 |
| 25 | Practicalness | 55.25 | 75.25 | -20 |
| 26 | Reflectiveness | 66.5 | 58.75 | 7.75 |
| 27 | Science | 60.25 | 63.75 | -3.5 |
| 28 | Sensuality | 67.5 | 27.5 | 40 |
| 28 | Sexuality | 61.25 | 36.75 | 24.5 |
| 29 | Supplication | 60 | 58.75 | 1.25 |
| 30 | Understanding | 60 | 77.25 | -17.25 |

The table reveals that, in 20 of the 30 dimensions, the institutional environment seems to meet the individual needs or activity preferences. However, in nine of the dimensions, the gap is more than 22%. The environment seem to offer scope for more change, conjunctivity, energy exhibitionism, order and practicalness as compared to the extent to which the students need it. The campus environment seem to lacking on abasement, dominance, sensuality, and sexuality as compared to the extent to which the students seem to like it.

Sample Items interpretations

1) The institution needs to work on the abasement aspect. For example, the students do not like to take blame for someone they like. They do not like to take criticism as well and believe that the staff at the institute is not cooperative and they are not encouraged to oppose against administrative policies or work

2) There is a gap between the dominance dimension as perceived by the students and the way the institution is providing it. The students prefer to be independent and would like to do things their own way. They would like to have people depend on them for ideas, whereas the institutional environment discourages favoritism, encourages merit and discourages student rivalries.

3) There is a strong need of sensuality among the students. They feel that the institute does not invest in drama. The students suggest that even if it is a nice day, the classes will not take place outside. Although, the students would like to listen to rain falling on the top of the roof or looking at trees

4) The need press gaps exist on the dimension of sexuality. Dating does not take place in the campus openly and students avoid talking about their relationships openly. The students feel that they would like to talk about how it feels to be in love and they also like to read about love stories.

How to Use these Tools?

The Climate surveys can be used to initiate and manage changes in the academic and administrative environment of

the institutions of Professional education. The following are some of the ways of using them to enhance effectiveness.

1. Survey feedback to various stake holders- The data could be feedback with the help of internal or external consultants or change facilitators and used to initiate a change program. The case of IPM as well as the project IMPACT demonstrates this (Refer Part 3 and 4 of the Appendix).

A) In the IMPACTproject, the feedback was given to the respective institutions and they were helped to prepare their project plans for the second phase of the funding to enable them to use the resources appropriately.

B) In the case of IPM, the inputs were used to appoint task forces and bring about improvements in off-site retreats and self-renewal laboratories. Based on the findings of such surveys, off sites can be initiated to diagnose and prepare areas of action.

2. Training and development work shops. The diagnosis may also indicate the need for competency building through training and other development activities like the field visits to benchmark innovative institutions of excellence and initiating changes.

3. Policy and system changes –Often, such interventions result in changes of the appraisal system, organizational restructuring, changes in decision-making, delegation and such other mechanism. In the case of Gujarat Agricultural University, the study has resulted in enhancing the linkages between teaching, research, and extension.

4. City based inter-institutional collaboration to enhance effectiveness of institutions and quality of education. Educational Institutions in the same city can form a Network (example Jaipur IPE Network JIPEN, or Ahmedabad IPE Network- AIPEN, or HIPEN or BIPEN, CIPEN, KIPEN etc.). These institutions can have a joint research or action group which can keep modifying the tool and administering it periodically, on their stakeholders, collect data and share with the respective institutions to track their program effectiveness. An IE Progress card can be established. Professional bodies like the NIPM, LMAs, LHRDNs, ISTD chapters etc., may facilitate this kind of interventions.

The results of such interventions can be phenomenal. The Education sector is one such place, where competitiveness can be very healthy and win-win games are possible. If the quality of education improves, everyone gets the benefit and many organizations may come forward to support such innovations, which are aimed at enhancing the quality of professional education.

**Appendix
Illustrative Sample calculation for the Abasement Dimension for an individual**

• In case of negative items of a dimension, the values are to be reversed for e.g. if we have got 35 % likes for the point of being ready with an excuse or explanation, when criticized(Adaptability), then the value for Need is derived by subtracting 35 from 100 i.e. 100-35 =65, So 65 will be taken as value for getting mean

| | Need | | | | Press | | | | Gap |
|--|------|----|----|-----|---|------|----|----|-----|
| Q | 1 | 28 | 72 | 106 | Q | 1 | 42 | 55 | 111 |
| Like | 50 | 49 | 49 | 50 | True | 47 | 8 | 17 | 28 |
| Dislike | 50 | 31 | 51 | 50 | False | 53 | 92 | 83 | 79 |
| Average (Like) Calculated by taking mean of responses for Q | | | | | Average (True) Calculated by taking mean of responses for Q | | | | |
| | 84.5 | | | | | 23 | | | |
| | | | | | | 84.5 | | | |

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