Evidence Based Classroom Management Practices : An Analysis Through Kano's Model

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Abstract

Managing a classroom is much more difficult than it seems. Often, it is mistaken as only creating discipline in the class, but it is about engaging students in a meaningful and effective learning environment through discipline. According to LaCaze, McCormick, and Meyer (2012), creation and maintenance of a productive classroom environment is what teaching competency primarily depends upon. Those teaching practices should be adopted/used that can make students learn effectively. In other words, teaching practices should be supported by evidence that they are effective. There are two major challenges here. One is to identify effective classroom management practices backed by evidence. Second is to categorize them in terms of their contribution towards learning. Categorization helps in chalking out a plan to effectively manage a classroom (Yadav, Jain, Shukla, Avikal, & Mishra, 2013). This paper identified effective classroom management practices through a thorough literature review followed by categorization of different classroom management practices' contribution in learning through Kano's model, which provides a two-dimensional view of service quality wherein components of service quality can be categorized in terms of contribution towards customer satisfaction, which is very significant as students do assess service quality (Gupta, 2016). This paper would help academia in improving learning of students in a typical business school classroom environment through categorization of evidence based classroom management practices.

Keywords : **classroom management, Kano's model, service quality, customer satisfaction, evidence, teaching practices**

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Evidence based management (EBM) is an efficient use of an evidence which is considered best to improve a specific management practice (Pfeffer & Sutton, 2006). EBM helps practicing managers become experts who take vital decisions backed by organization and social science research (Rousseau, 2006). That means the decisions that are taken at vital positions would be free from idiosyncratic situations and any sort of biasness (Tranfield, Denyer, & Smart, 2003). Evidence based management has a wide application, and classroom management isn't an exception. Instructors can minimize unruly behaviour of students and maximize the effectiveness of teaching through classroom management practices, which are tried and tested to create an effective learning or are evidence based in other words (Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008). For instance, experiential learning has been found to make learning effective (Taneja, 2016). However, instructors are either not aware about these practices or aren't trained in these. Most of the teacher training programmes fail to train teachers adequately in classroom management (Bergeny & Martens, 2006). Most of these programmes don't have any follow-up, which means neither effect of training is figured out nor a need for change/improvement in training methodology is ascertained, that makes these programmes virtually ineffective (Allen & Forman, 1984; Fixsen, Naoom, Blase, Friedman, & Wallace, 2005).

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Student Behaviour : Concerns

A classroom is a place where *'The Exchange'* takes place. The aim behind this exchange isn't only limited to a job or students' professional success for that matter, but there are other concerns as well. Among them, there are three major concerns, which are :

(i) The Societal Concern : Students are human beings and a part of society like others. They should be good citizens who would create opportunities not only for themselves but for others to contribute to the well being of society at large. They should be ethical and shouldn't get themselves involved in something which is not expected out of them. Above all, they should be role models for others.

(ii) The Adaptive Concern : They should have the capacity to adapt themselves in all situations. Though this is not something which can be taught perfectly in the class, but students may have something as a part of their curriculum where they have exposure of something like this.

(iii) The Emotional Quotient Concern : Students should have a good emotional quotient as well as this compliments IQ and is an important attribute of a professional. There is no literature which suggests that ineffective classroom management or disruptive student behaviour in class would lead to students performing low on above concerns, but definitely there is some contribution of classroom management which is evident from teaching practices like role playing. It is also evident from the fact that a classroom isn't merely an assembly of students and instructor, but it includes the layout and design of physical parts (Sulisworo & Maniquiz, 2012).

The Kano Model

Figuring out components/features of a service isn't an easy task. A lot goes into this. Customers would outrighly reject service in the absence of a feature which is very important as compared to other features. Inclusion of those features that can delight customers would help taking on competition head on. Dr. Noriaki Kano developed a model that gives a two-dimensional view of service quality and is called Kano's model. According to this model, there are five categories of product/service attributes which are :

(1) Threshold/Must be Attributes : These are the attributes that must be there as customers expect these without knowing about them so they must be included. These increase dissatisfaction when these aren't there, but presence doesn't increase satisfaction.

(2) One Dimensional Attributes : These result in satisfaction when are included in service and absence of these would dissatisfy customers.

(3) Attractive Attributes : These attributes increase satisfaction, but absence doesn't make any difference.

(4) Indifference Attributes : Their presence and absence don't make any difference in satisfaction.

(5) Reverse Attribute : Presence of these results into dissatisfaction and absence in satisfaction.

Need of the Study

Teachers in their early careers have been complaining for long about the insufficiency of their pre-job readiness in classroom management, especially behaviour management (Atici, 2007; Veenman, 1984). This as per Australian Education Union Report of 2009 is one of the major concerns of teachers there. In a recent survey in Australia

revealed that first-year primary teachers found it hard to handle students' negative behaviour which they attributed to ineffective pre - job course work (O'Neill & Stephenson, 2013). This isn't limited to Australia alone as similar findings were reported in a similar study carried out in USA. Majority of the programmes related to pre-service teacher preparation in USA schools weren't up to the mark and resulted into teacher churn. Increasing student diversity in USA schools has made it even more difficult to handle problematic student behaviour. Poor classroom organization, planning, and teaching were the primary reasons behind 80% of the unruly behaviour in UK schools. Classroom organization also includes the design of a physical setup including furniture (Jylhä & Junnila,2015). British teachers said that such behaviour was stress inducing and a challenge for learning (Elton Report, 1989). Primary issue for teachers and students is the negative effect of continuous disruption of low intensity (Steer, 2005). Most wearing for instructors is lower level behaviour that lowers their efficiency to make students learn (Munn, Johnstone, Sharp, & Brown, 2007). Classroom management has been studied through many models, but through the Kano model, it was first used by Paraschivescu and Cotirlet (2012).

Literature Review

Five evidence based classroom practices identified by Simonsen et al. (2008) were used in this study. Gupta and Srivastava (2011) suggested to use QFD (quality function deployment) along with Kano's model, but to keep it uncomplicated, only one model has been used. Rationale behind using these five practices in this specific study was that these practices were considered evidence based upon the study of Simonsen et al. (2008) if these were : (a) tested using strong experimental design; (b) proved to be effective through demonstrations; (c) backed by at least three studies of empirical nature which must have been published in peer reviewed refereed journals.

As per Simonsen et al. (2008), the five practices for effective classroom management are : (a) maximize structure and predictability; (b) post, teach, review, monitor, and reinforce expectations; (c) actively engage students in observable ways; (d) use a continuum of strategies for responding to appropriate behaviors; and (e) use a continuum of strategies to respond to inappropriate behaviors.

The detailed interpretation of strategies is shown in the Table 1. Maximizing structure in the classroom results in a sharp decline in disruptive behaviour. Structure should depend upon desired behaviour and academic task. For example, group structure is more appropriate for academic tasks which require student interaction ; whereas, row structure is better in case of independent academic tasks. There have been less low level disruptions in classrooms with an adequate space in between rows and aisles than where it wasn't so (Wannarka & Ruhl, 2008). Desired social and academic behaviour apart from greater involvement in tasks allocated has been shown by students in classrooms which had more structure (Morrison, 1979). Students were more helpful, empathetic, attentive, and less aggressive in classrooms with more structure (Huston-Stein, Friedrich-Cofer, & Susman, 1977 ; Susman, Huston-Stein, & Friedrich-Cofer, 1980). Classrooms with more structure are safe, comfortable, and efficient in terms of classroom behaviour and are conducive to learning. The way a classroom has been arranged affects movement and concentration of students. In other words, a good classroom layout and design results into less or no distraction and an orderly movement. Students should be seated in a way that their attention at all times is diverted towards the instructor and areas prone to clutter should have no congestion as it disturbs learning and increases low level disruptive behaviour (Dunbar, 2004).

Reinforcement is very effective in minimizing the probability of undesirable behaviour and maximizing the probability of desirable behaviour. A planned positive reinforcement has been proved to be effective in improving students' behaviour. Reinforcement should be on an individual basis as something might not work in case of one student that was effective in case of another student. It should be delivered consistently and immediately (Burke, 1992). If mutually exclusive desired behaviour set is defined, posted through an IT interface or through a physical medium and taught, the probability of a desired behaviour goes up (Colvin, Sugai, Good, & Lee, 1997). This all, put together, helps in maximizing academic engagement, better conflict resolution capacity, and

Table 1. Evidence Based Classroom Management Practices/Strategies

Strategy	Description	Example	References
Maximize Structure and Predictability	a. Magnitude of activities directed by instructor b. class layout and design	Instructor removed dais so that there was nothing in between students and him. Though this is psychological in nature, but students contained themselves as they perceived that the instructor is open to everything and is confident. Apart from it, instructor divided the class into visible sections with aisles in between columns and rows to freely move and sent a message that everybody is in reach, negating whispering and use of communication devices like mobile phones. The furniture was designed in such a way that wouldn't be seen as an obstruction.	Wannarka & Ruhl (2008) Dunbar (2004) Susman, Huston-Stein, & Friedrich-Cofer (1980) Morrison (1979) Bennur & Jin (2012) Huston-Stein, Friedrich-Cofer, & Susman (1977)
Post, Teach, Review, Monitor, and Reinforce Expectations	a. Clear communication of expected behaviour followed by periodic review of behaviour and reinforcement of behaviour which is in line with expected behaviour. b. Active Supervision	Instructor had a session on expected behaviour right in the first class covering consequences of inconsistent behaviour. Instructor monitored students while delivering a lecture or in a practical, correcting as and when needed.	De Pry & Sugai (2002) Schuldheisz & van der Mars (2001) ; Colvin, Sugai, Good, & Lee (1997) Johnson, Stoner, & Green (1996) Sharpe, Brown, and Crider (1995) Burke (1992) Mcnamara, Evans, & Hill (1986) Rosenberg (1986) Greenwood, Hops, Delquadri, & Guild (1974)
Actively Engage Students in Observable ways	Giving students opportunities to express themselves.	Instructor gave substantial weightage to a parameter of interaction in case based presentations wherein students would be evaluated on the basis relevant questions they would ask to presenters. Teacher divided time of 90 minutes into two sections of 30 and 60 minutes each. 30 minute section was for conceptual understanding and 60 minute section for discussion on Live examples/recent happenings related to that topic.	Sutherland, Alder, and Gunter (2003) Ota & DuPaul (2002)
Use a Continuum of Strategies for Responding to Appropriate Behaviors	Identifying and Recognizing Desired Behaviour	Instructor started 'Student of the Day' and 'Student of the Week,' a small campaign limited to the class to to encourage students to interact, discuss, and behave as desired.	Palmer (2007) ; Truby (2010) Frey & Fisher (2010) Sutherland & Wehby (2001) Sutherland, Wehby, & Coperland (2000)
Use a Continuum of Strategies to Respond to Inappropriate Behaviors	a. Error Correction b. Differential Reinforcement c. Response Cost	The moment a student behaves in an undesired way, he/she is corrected and told about the desired way by the instructor. Instructor marks a student absent as a result of repetitive undesired behaviour.	Maguire, Ball, & Braun, (2010) Kohn (2006) ; Slee (1995) Raby (2010) Didden, Moor, & Bruyns (1997) Barbetta, Heward, Bradley, & Miller (1994) O'Leary and Becker (1967)

Source: Adapted from Simonsen et al. (2008)

leadership quality ; whereas, disruptive behaviour is considerably reduced (Johnson, Stoner, & Green, 1996 ; McNamara, Evans, & Hill, 1986; Rosenberg, 1986 ; Sharpe, Brown, & Crider, 1995). Instructions coupled with feedback on desired or undesired behaviour enhances the magnitude of desired behaviour (Greenwood, Hops, Delquadri, & Guild, 1974). Active supervision, on the other hand, not only improves desired behaviour in a classroom setting, but in non classroom settings as well. It considerably reduced low level unpleasant incidents (De Pry & Sugai, 2002). It wasn't only limited to reducing the number of unpleasant experiences, but similar supervision practices considerably improved participation of class in discussions (Schuldheisz & van der Mars, 2001).

More opportunities to students to respond resulted into more participation and a pleasant behaviour (Sutherland, Alder, & Gunter, 2003). When there is a need for one to one interaction with students, which is normally related to non class interaction for solving their queries, technology can be used to give not only an opportunity to respond, but giving feedback on the same platform (Ota & DuPaul, 2002).

In order to achieve learning outcomes, an instructor should define the learning outcomes in the beginning of a lecture, explain the lesson in simple and easy way, encourage students to raise issues/doubts, if any, and give practical assignments (Palmer, 2007). Another good way to motivate students is to give them choices as motivation levels are higher when we work on something of our choice, for example, students can be given choice in terms of whom they want to work with, which book to study from, which teacher to study from, etc. (Truby, 2010). Assignments which would be related to their real life have more capacity to motivate students. So, a connection should be established in terms of scope of the assignment or outcome that would help a student in his/her real life (Frey & Fisher, 2010). Another very important strategy is a simple praise or a tap on back that not only motivates that specific student but others also in addition to improvement in participation (Sutherland & Wehby, 2001). Effect of praise becomes manifold when praise is for a specific behaviour and in union with other practices (Sutherland, Wehby, & Copeland, 2000).

Sanctions are used as a medium to discourage students to show inappropriate behaviour that affects learning environment of the class (Kohn, 2006 ; Maguire, Ball, & Braun, 2010; Slee, 1995). This includes sanctions with higher magnitude of consequences if such behaviour is repetitive in nature. This strategy is called 'step systems'. Instructors use this to be fair and logical to help students through choices (Raby, 2010). Hot Stove Rule is also quite effective in specific cases wherein students are either corrected or punished immediately after an inappropriate behaviour has been shown (Barbetta, Heward, Bradley, & Miller, 1994).

Objectives of the Study

(1) To study the effect of evidence based practices in classroom management (Simonsen et al., 2008) in a graduate level business education class setup.

(2) To categorize evidence based classroom management practices in terms of their contribution towards learning through Kano's model.

(3) To study the effect of evidence based classroom management practices on students' behaviour and participation in the class.

Research Methodology

Fifty instructors in the capacity of Assistant Professor or above with more than 5 years experience of teaching MBA classes from five government and five private universities in India were interviewed. It was found that low level disruptions is a common phenomenon in classrooms in most of the cases. Instructors were of the opinion that

they would have performed better had there been no disruptions. So, on the basis of literature review, some evidence based classroom management strategies were identified. A major part of them was adopted from Simonsen et al.'s (2008) study titled "Evidence based practices in classroom management : Considerations for research to practice". Classroom setup in Simonsen et al. (2008) was of schools, but was adopted to also test its generalizabilty in classroom settings of higher business education. Two structured questionnaires (functional & dysfunctional) were prepared on the basis of Kano's model of customer satisfaction. Questionnaires were administered to 600 MBA students in those 10 universities proportionally. Responses were taken from each student on both the questionnaires. Classroom management practices/strategies were categorized on the basis of Kano's model, and customer satisfaction index values were calculated and subsequent analysis was done.

Once data related to contribution of these strategies in effective learning was produced, an experiment was carried over two consecutive terms of four months each. In these, all 10 sections of MBA were divided randomly into two groups (A & B) of five sections each. In the autumn term of 2014, data of students' CA (continuous assessment), TGPA, no. of low level disruptions, and attendance was recorded of both the groups. In the spring term of 2015, Group A of five sections was made the control group and Group B of the same no. of sections was made as the test group. The test group was exposed to all 15 strategies throughout the spring term. Data was continuously recorded throughout the term and some data like TGPA was recorded after the term's result got declared. Eventually, the data from the pre-test term and post - test term was compared and analysis was done.

Analysis and Findings

The Table 2 shows functional and dysfunctional questions in Kano's model questionnaires. In a dysfunctional questionnaire, questions are the same as there in a functional questionnaire, but as a negative statement. Students' responses were taken on both the questionnaires and with the help of evaluation criteria shown in the Table 2.

The Table 3 shows categorization of attributes on the basis of responses received through two questionnaires on functional and dysfunctional attributes. If, on a specific question in functional & dysfunctional, response is 3 and 4, respectively then that response is treated as 'I' category that stands for '*Indifferent'*. In this way, all responses were categorized in different categories. For every attribute, a total was calculated against all categories which is shown in the Table 3. For example, the first attribute total was highest in 'one dimensional' category, so it was considered a *one dimensional category.* In this way, all attributes were divided into distinct categories.

With the help of data in the Table 4, customer satisfaction coefficients in Table 5 have been calculated which are category wise percentages of each attribute of classroom management (refer to Table 4 for category in which a

Table 2. Functional & Dysfunctional Questions in Kano's Model Questionnaires

Functional Form of the Question ↓	
Teacher prompts and corrects students on the spot.	1. I like it that way. 2. It must be that way. 3. I am neutral. 4. I can live with it that way. 5. I dislike it that way.
Teacher doesn't prompt and correct students on the spot.	1. I like it that way. 2. It must be that way. 3. I am neutral. 4. I can live with it that way. 5. I dislike it that way.
Dysfunctional form of the question ↑	

Source : Adapted from Kano, Seraku, Takahashi, and Tsuji (1984)

Table 3. Kano's Evaluation Table

		Dysfunctional Negative Questions				
	Customer Requirements	***1. Like***	***2. Must Be***	***3. Neutral***	***4. Live With***	***5. Dislike***
Functional Positive Questions	1. *Like*	Q	A	A	A	O
	2. *Must Be*	R	I	I	I	M
	3. *Neutral*	R	I	I	I	M
	4. *Live With*	R	I	I	I	M
	5. *Dislike*	R	R	R	R	Q

Source: Adapted from Kano et al. (1984)

Table 4. Categorization of Attributes

	Attributes	I	M	R	A	O	Q	Category
1.	Explanation of predictable routines.	06	15	08	21	48	03	**O**
2.	Getting predictable routines followed.	47	09	20	10	02	11	**I**
3.	Minimizing distraction & clutter through layout & design.	13	37	19	03	02	25	**M**
4.	Posting of common school rules & policies.	50	09	26	10	01	04	**I**
5.	Expectations' explanation and review.	55	09	19	08	00	08	**I**
6.	Correcting students on the spot.	52	07	21	10	00	10	**R**
7.	Active supervision of students.	07	14	14	15	43	07	**O**
8.	Consistent reinforcement of expectations.	47	09	25	10	01	7	**I**
9.	Providing opportunities to students to express themselves.	19	05	06	15	40	15	**O**
10.	Usage of discussion method.	17	04	12	15	43	09	**O**
11.	Moderating discussion to maximize understanding.	21	05	07	50	07	10	**A**
12.	Praising students for expected academic & social behaviour.	16	01	16	14	45	08	**O**
13.	Usage of methods like token economies, group contingencies etc., to praise students.	03	11	09	18	41	17	**O**
14.	Giving specific feedback & correcting error/s in case of a contingent behaviour.	06	11	14	15	43	12	**O**
15.	Using restrictive practices of low magnitude to discourage students' contingent behaviour.	03	11	08	17	48	13	**O**

specific strategy falls and Table 5 for customer satisfaction coefficients). Out of 15 attributes, eight fall in *'one dimensional'* category.

The attribute in this category is 'explanation of predictable routines'. Customer satisfaction coefficients of this attribute are 0.77 and -0.57, which means presence of this attribute influences satisfaction by 77%, whereas absence influences dissatisfaction by 57%. In short, this strategy satisfies students more than it dissatisfies them and there is a reasonable difference between the two.

An instructor should, on the basis of level of class he/she is teaching, have customized ways to explain predictable routines. But predictable routines shouldn't be explained in the form of negative statements with mentioning of what is to be avoided or direct consequences if not avoided. A negative explanation may result in students taking it as a challenge and finding disruptive behaviour which isn't part of the routine. Common classroom rules though would depend on class type, but should be kept as less as possible.

The second strategy that falls under 'one dimensional' category is 'active supervision of students'. Customer satisfaction coefficients of this strategy are 0.73 and -0.63, respectively which suggests that presence influences satisfaction by reasonably a good amount. One possible reason can be that students like to get supervised on a variety of situations where they can't do much. Absence influences dissatisfaction by a good amount as well, but

Table 5. Customer Satisfaction Coefficients

	Service Attributes	I	M	R	A	O	Q	A+O	O+M
1.	Explanation of predictable routines.	17	45	23	62	143	10	0.77	-0.57
2.	Getting predictable routines followed.	142	28	60	30	06	34	0.17	-0.19
3.	Minimizing distraction & clutter through layout & design.	39	112	57	10	7	75	0.10	-0.49
4.	Posting of common school rules & policies.	151	28	77	29	3	12	0.15	-0.07
5.	Expectations' explanation and review.	165	28	56	25	1	25	0.12	-0.12
6.	Correcting students on the spot.	155	22	62	30	1	30	0.15	-0.15
7.	Active supervision of students.	22	42	41	45	129	21	0.73	-0.63
8.	Consistent reinforcement of expectations.	142	28	75	31	4	20	0.17	-0.12
9.	Providing opportunities to students to express themselves.	56	16	18	46	120	44	0.70	-0.69
10.	Usage of discussion method.	52	11	36	45	128	28	0.73	-0.66
11.	Moderating discussion to maximize understanding.	64	15	20	150	20	31	0.68	-0.20
12.	Praising students for expected academic & social behaviour.	48	4	47	42	134	25	0.77	-0.70
13.	Usage of methods like token economies, group contingencies etc. to praise students.	10	34	27	55	123	51	0.80	-0.78
14.	Giving specific feedback & correcting error/s in case of a contingent behaviour.	18	32	41	45	128	36	0.78	-0.74
15.	Using restrictive practices of low magnitude to discourage students' contingent behaviour.	8	34	23	50	145	40	0.82	-0.78

the degree is lower than satisfaction.

The third attribute in this category is 'providing opportunities to students to express themselves'. Customer satisfaction coefficients of this strategy are 0.70 and -0.69, respectively that means that this attribute results in a great deal of satisfaction when it is there and almost an equal level of dissatisfaction when not there. Whether students would or wouldn't participate is dependent upon a lot of reasons. But all those students who normally don't participate for any reason are to be made to participate. It is the responsibility of the teacher to actually give them opportunities to speak, participate in discussion, and participate in co and extracurricular activities. This not only helps students to open up and expose themselves to the action, but it decreases disruptions in the class as well as almost everybody is involved into discussion.

The fourth attribute in this category is 'usage of discussion method'. Customer satisfaction coefficients of this strategy are 0.73 and -0.66, respectively. This is another attribute that accounts for a good level of satisfaction which is close to 75%. Absence of it results into 66% of dissatisfaction. At the MBA level, one has to teach with methods that would result into an effective learning environment. Discussion method is unlike teaching through power point presentations where less emphasis is on discussion. The discussion method brings new ideas into picture and is a more holistic approach to learn and understand concepts and applications. Also, it encourages students to speak up.

The fifth attribute in this category is 'Praising students for expected academic & social behaviour'. Customer satisfaction coefficients of this strategy are 0.77 and 0.70, respectively. Everybody likes a word of praise and students aren't an exception. This attribute results in a good level of satisfaction. Effect on satisfaction increases manifolds when students are praised in front of other students. Absence of this attribute results in dissatisfaction to a great deal.

The sixth attribute in this category is 'Usage of token economies to encourage students to consistently show a desired behaviour'. Customer satisfaction coefficients of this strategy are 0.80 and 0.78, respectively. This attribute results in highest satisfaction when there and almost highest dissatisfaction when not there. This is a kind of reward system wherein a student gets a token that can be exchanged for something a student normally doesn't have an

access to. For example, a student who has been showing desired behaviour and is consistently participating in learning activities is given a token that can be used in a variety of ways like getting reserved books from library, relaxation for 3 days to submit a specific assignment, 2% extra marks for a specific assignment, access to some University events where not every student is allowed, or may be a free meal.

The seventh attribute in this category is 'Giving feedback & correcting error/s in case of contingent behaviour'. Customer satisfaction coefficients of this strategy are 0.78 and -0.74, respectively. This attribute influences satisfaction by 78%. That means students do want to get corrected. Also, they look for feedback to improve themselves. Absence of this attribute influences dissatisfaction by 78%, which suggests that this attribute should be there. Just correcting errors might not work that much as correcting errors with a feedback. So, error correction should be followed by a feedback.

The eighth attribute in this category is 'Using restrictive practices of low magnitude to discourage students' contingent behaviour'. Customer satisfaction coefficients of this strategy are 0.82 and 0.78, respectively which is very close to the above attribute. The customer satisfaction index suggests that presence and absence influences satisfaction and dissatisfaction, respectively. Like the above attribute, this attribute should also be there. The magnitude of restrictive practices should be low. Too low and too high is less likely to work and would have a temporary effect.

There are three attributes that fall in the *'Indifferent Category'*.

The first attribute in this category is 'getting predictable routines followed'. Customer satisfaction coefficients of this strategy are 0.17 and -0.19, respectively that suggests that presence and absence don't influence satisfaction and dissatisfaction, respectively.

The second strategy that falls under indifferent category is 'posting of common school rules & policies'. Customer satisfaction coefficients of this strategy are 0.15 and -0.07, respectively that suggests that this neither contributes to satisfaction nor to dissatisfaction. An unstructured interview was taken of 10% of the sample randomly and 98% students of those 10% had not gone through common school rules and policy documents in their UMS [1] (university management system) account or any other transactional medium. So, this strategy doesn't seem effective at all.

The third strategy that falls under indifferent category is 'expectations, explanation, and review'. The customer satisfaction coefficients of this strategy are 0.12 and - 0.12, respectively that suggest that this neither contributes to satisfaction nor to dissatisfaction. This specific variable is closely related to the first and the second one in indifferent category. Assuming that students already know about predictable routines isn't a guarantee for an acceptable behaviour and that is quite evident from the results that we have got for the first three variables in indifferent category. So, students should be made to know about the degree of expectations on those predictable routines in the context of behaviour. It should be followed by a periodic review of expected behaviour that helps keeping it alive in students' mind, which, in-turn, help to take necessary measures.

The fourth strategy that falls under indifferent category is 'consistent reinforcement of expectations'. The customer satisfaction coefficients of this strategy are 0.17 and -0.12, respectively that suggest that it neither contributes to satisfaction nor to dissatisfaction. This can be attributed to graduate students not liking the same thing being told to them repetitively.

'Minimizing distraction & clutter through layout & design' is the only attribute that falls in the *'Must Be'* category. The customer satisfaction coefficients of this strategy are 0.10 and -0.49, respectively. Figures show it as an important attribute, the absence of which would dissatisfy students greatly, but students expect this to be there,

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[1] UMS is an interface, rights of which every student gets in some of the Universities where this study was carried out. UMS acts as a medium in between the university and students. Students can see their attendance, continuous assessment scores, TGPA/CGPA, notification by University/faculty etc. or send a request/complaint of something/someone.

so its presence doesn't influence satisfaction much. So, an ideal classroom's physical space should be managed in a structured way with clear distinction between rows and columns. Aisles should have a good space so that a teacher may move freely that would discourage students to use any electronic device or get them involved in low level disruptions which normally are there when there is no structure. This attribute also helps a teacher to have a nice and full view of the class and chances of unknowingly neglecting a student or a set of students for discussion due to a poor view go down. Students would also get encouraged to be a part of discussion in the class.

'Correcting students on the spot' is the only strategy that falls under the *'Reverse'* category. Customer satisfaction coefficients of this strategy are 0.15 and -0.15. This strategy results in dissatisfaction and absence satisfies students. Correcting students in front of other students isn't a good idea because more often than not, it results into students being humiliated in front of others. And this is temporary in nature and may spoil students' relationship with instructors.

The Figure 1 shows the customer satisfaction index through a scatter plot. All strategies concentrated in the top right hand corner are the ones falling in the *'One Dimensional'* category. The 3rd and 11th strategies belong to *'Must Be'* and *'Attractive'* categories, respectively. All concentrated in the lower left corner except 6th belong to the *'Indifferent'* category. The 6th strategy belongs to the *'Reverse category'*. To improve overall satisfaction, strategies

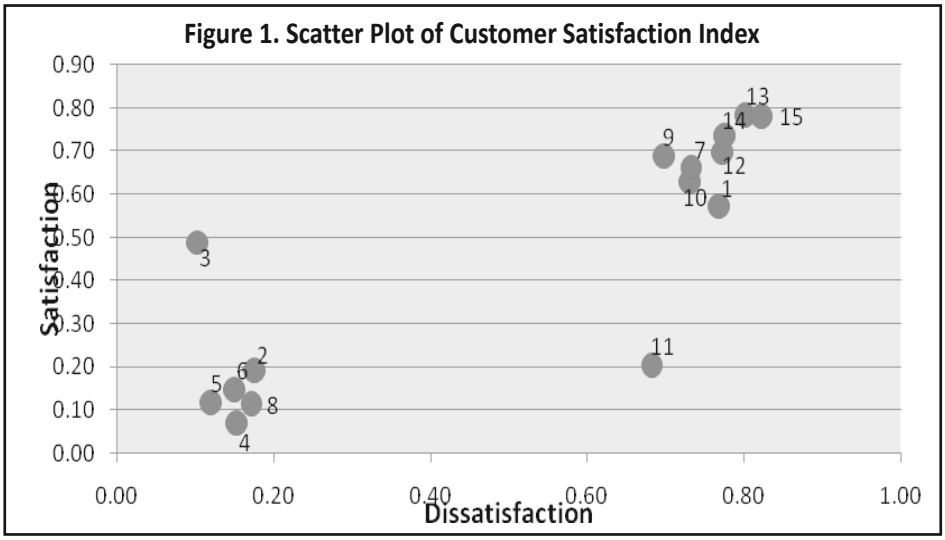

Table 6. Effect of Evidence Based Classroom Management Practices

Autumn Term, 2014	**Group A**	**Group B**	**Remarks**
Average Attendance (%age)	73	72.6	
Average (Continuous Assessment Marks)	60	59	Out of 105
No. of Low Level Disruptions	1812	1869	
Average TGPA	4.8	5.1	
Spring Term, 2015	**Control Group**	**Test Group**	
Average Attendance (%age)	75	86	
Average (Continuous Assessment Marks)	61	73	Out of 105
No. of Low Level Disruptions	1550	640	In 360 classes of 1 hour each
TGPA	5.1	6.7	

in the *'Must category'* can't be ignored at all as their absence would dissatisfy students. The next important category is *'One Dimensional'* followed by *'Attractive'* and *'Indifferent,'* and quite obviously, *'Reverse'* must not be there as the strategies in this category decrease overall satisfaction.

The Table 6 shows the figures recorded on parameters like CA (continuous assessment), TGPA, no. of low level disruptions, and attendance. There is a drastic difference in figures of the control & test group. The test group's attendance, average CA marks, and TGPA rose by 18%, 24%, and 31% as compared to control group's 3%, 2%, and 6%, respectively. No. of low level disruptions came down by 66% as compared to control group's just 14%.

This substantial difference can be attributed to the evidence based classroom management practices the test group was exposed to as the difference in the particulars of the groups was almost negligible before the test.

Discussion and Conclusion

Simonsen et al.'s (2008) work titled "Evidence Based Practices in Classroom Management: Considerations for Research to Practice" was based on a school setting wherein they came up with five practices to effectively manage a classroom to enhance learning. It was adopted in this study to ascertain its effectiveness in a MBA classroom setting through Kano's model. Despite testing it on an altogether different setting, it is found that the results are in line with Simonsen et al.'s (2008) work on a similar topic and it was found to be effective in bringing down low level disruptions in the class and in turn enhancing learning of the students. Through literature review, some evidence based effective classroom practices were identified that are discussed in the findings. But through Kano's model, it was found that their contribution in effective learning was different. For instance, 'minimizing distraction & clutter through layout & design' is found to be the most significant in terms of contribution in making learning effective, which is in line with the findings of Huston et al. (1977) and Bennur and Jin (2012). So, this is a must practice to have. Through interviews of instructors and personal observations, it was found that most of the classrooms' physical setting were faulty. It doesn't take much to create a structured physical arrangement in a class. All you have to do is to have a theatre classroom with enough space between rows, columns, and aisles for an instructor to freely move and the same was observed by Wannarka and Ruhl (2008). There should be enough space in between the first row and whiteboard for a role play. There should always be at least one side board for an effective case discussion. Curtains should always be drawn not to distract students.

In terms of contribution, *'One Dimensional'* category comes after *'Must Be'*. Quite a few strategies fell in this category with a marginal difference in contribution in effective learning. Practices like 'Praising students for expected academic & social behaviour,' 'Usage of methods like token economies, group contingencies, etc. to praise students,' and 'Giving specific feedback & correcting error/s in case of a contingent behaviour' motivate students to be disciplined ; whereas 'Usage of discussion method' and 'Moderating discussion to maximize understanding' are found to improve participation, and in turn, learning.

Managerial Implications

Despite all the strategies that have been observed to contribute in learning, an instructor must understand the specific needs of a class. Every student is unique and different from others ; so, an instructor has to access specific needs of the students and alter these strategies to manage students so as to improve learning. This can be done by making small groups of 2-3 students each and exactly knowing the needs of individual members of the group and needs of that group as a whole. The next step should be for instructors to address individual as well as group needs and keep a track of changes in those needs over a period of time so that not at any point students feel that they are not being taken care of. If this much is done, rest of the things would fall in place automatically, and lesser efforts would be needed to manage the classroom that would result in desired learning of the students.

Limitations of the Study and Scope for Further Research

The nature of the study required data to be collected after an interval of few months apart that could have had some effect on the study due to change in students' attitude over that time. Another limitation was to use data from many different groups with different instructors, which might have resulted in non uniformity which is a bottleneck for generalization.

This study was conducted in a business school where mode of teaching is very different than an engineering school probably. So, a similar study can be carried out in some other school with different program altogether to see how the results shape up as compared to a business school setup.

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