

TEACHERS' ATTITUDE TOWARDS BRAIN BASED LEARNING AND ITS EFFECT ON THE ACHIEVEMENT MOTIVATION OF THE STUDENTS AT UNIVERSITY LEVEL

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ABSTRACT: *This study was undertaken to explore the attitude of university teachers regarding brain-based learning and its effect on achievement motivation of the students at university level. This study was intended to; explore the teachers' attitude towards brain based learning at university level; determine the achievement motivation of the students at university level and investigate the effect of BBL on achievement motivation of the students at university level. This study was descriptive in nature. Random sampling technique was used for this study. In the sample, 311 teachers and 622 students were selected from both public and private universities of Islamabad. Survey method was used and data were collected through two questionnaires. BBL questionnaire was developed by Shelly Klinek (2009) and questionnaire regarding Achievement Motivation, developed by McInerney (1997). Findings of this study indicated that teachers rarely practice positive attitude towards brain based learning and students often showed high degree of achievement motivation at university level. Teachers' attitude towards BBL and achievement motivation of students are highly correlated with each-others.*

Keywords: Teachers' attitude towards Brain based learning, Achievement motivation of the students, University Teachers & Students

INTRODUCTION

There are many important implications for education come out from the last three or four decades through the revolution in the study of the mind. A very different approach of learning has been introduced that helps in the designing of assessment, teaching and curriculum for the educators today. This new learning theory is known as brain based learning because BBL elegance is not a formula for all learning and it was recycled to develop schemes that are ashore with the current advancement in learning process. Caine and Caine[2] supported this concept of teaching learning process by recognizing the mind's rubrics through eloquent knowledge and shaping instruction with BBL principles in the educational institutes because it can be said that individual's brain is a meticulous article that works according to some specific pattern of brain's principles.

Similarly, learners improve their inner most power of dealing proficiently and effectively in the reaction of daily experiments and complications which they faced during learning process. Achievement Motivation is a psychological motive in a man and it defined as a determination of individual's paramount to accomplish somewhat and to expand his/her act of learning. [8] Therefore, the knowledge, belief and practices of teachers regarding brain based learning play vital role in generating learning activities, strategy of interrogations and answer back to students' determinations in teaching learning process.[20,25] This research was accompanied to expound how apprentice wellbeing, distinctiveness, and sentiment intermingle with intellectual proficiency of their teachers. It was observed that the attitude

of both students and university lecturers and professors are equivalently important in teaching learning process. This study examines the attitudes of university teachers on the subject of brain-based learning techniques and also discovers its effect on the achievement motivation of the students.

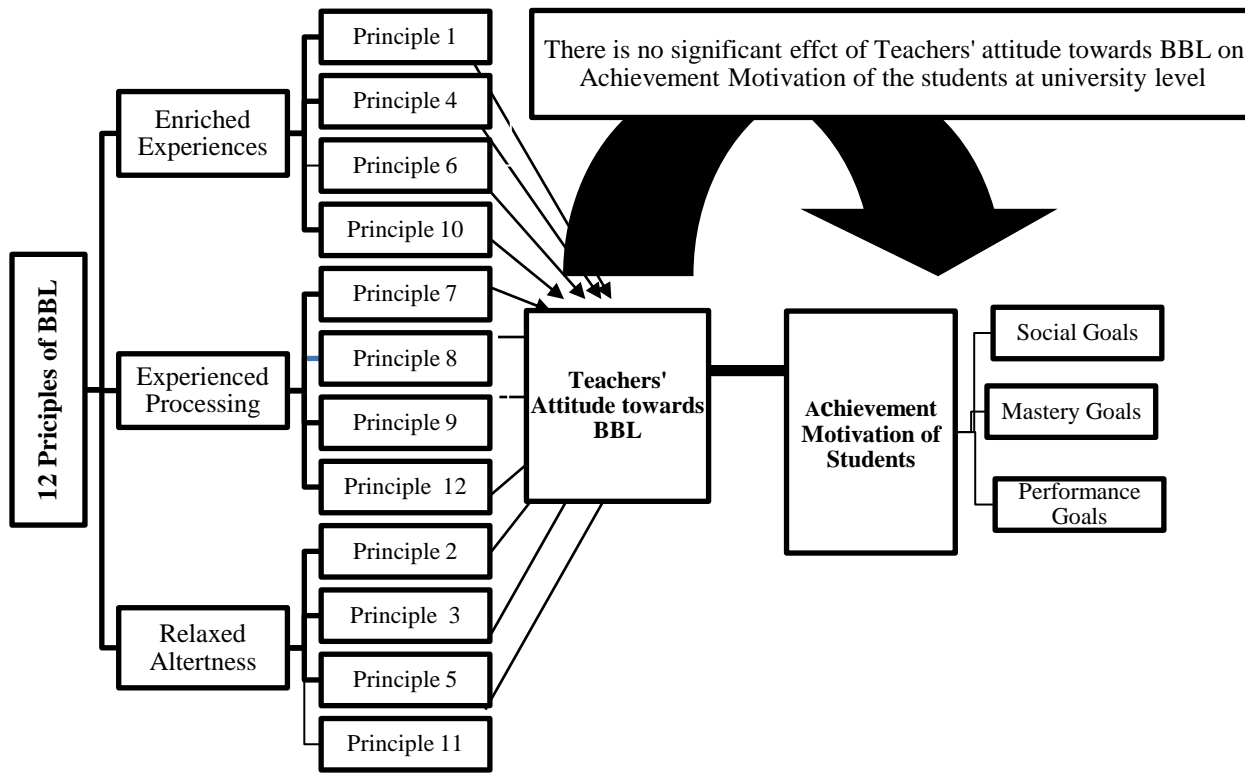
OBJECTIVES OF THE STUDY

This study was intended to;

1. Examine the attitude of teachers towards brain based learning at university level.
2. Determine the achievement motivation of the students at university level.
3. Explore the influence of brain based learning on achievement motivation

THEORETICAL FRAMEWORK

This research is concerned with theory of Caine and Caine in 1995.[3] Achievement Motivational theory developed by Dowson & McInerney demarcated achievement motivation as a personage's longing for noteworthy completion, become proficient at capability, regulator or has high standards.[8] The conceptual model for this study was shown in figure.1. H1 was the main purpose of study through which researcher found an effect of teachers' attitude towards Brain based learning on the achievement motivation of the students at university level; it was shown in Figure 1. Dowson & McInerney in 2001 introduced an Achievement Goals Motivation theory, according to which every student must possess at least three main achievement goals such as social goals, mastery goals and performance goals.



(BBL= Brain based learning)

Figure.1 Theoretical Framework of Teachers' attitude towards BBL and Achievement Motivation of Students

All these twelve principles and dimensions of brain based learning were collectively used as a teachers' attitude towards brain based learning while 03 kinds of accomplishment areas such as social aims, mastery & performance goals were collectively used as the achievement motivation of the students. Dowson & McInerney in 2001 introduced an Achievement Goals Motivation theory, according to which every student must possess at least three main achievement goals such as social goals, mastery goals and performance goals. It was observed that the main variable of this research work was the brain based learning that was developed in this way that 12 principles (36-items) of brain based learning were divided into three dimensions and each dimension contained 4 principle of BBL and each principle was measured through three items of BBL questionnaire.

LITERATURE REVIEW

“In brain grounded erudition, apprentices practice stories and multifaceted leitmotifs to bond evidence and indulgent thoughts”.[20,1,17] Beforehand, the institute had old-fashioned possessions, such as manuals, discourses, cartridges, or motion picture. Outmoded valuation was grounded on quantifiable statistics with manifold optimal and true-false quizzes. At the present, by means of the brain in mind, erudition takings an all-inclusive style, beholding at instruction improvement and socio-cultural development. [11] Instructors practice styles such as thematic teaching, accommodating erudition, and denotation positioned prospectus. The goalmouth was for teaching to transferal from remembering evidence to eloquent erudition. They sought to grasp instructors and apprentices practice stories

and multifaceted leitmotifs to bond evidence and indulgent thoughts. Apprentices are accountable for both their particular comportment and assemblage evolvment. In additional learning in 1994, an institute operates a set out to ascertain in what way brain examination would have an emotional impact on apprentice erudition. [5] The subsequent verdicts achieved as groundwork for their exertion:

1. The brainy configuration variations produced through the consequence of taking part within surroundings. One’s environs regulate to an enormous amount of the utility and capability of the brain then educators must be responsible for an atmosphere that is thought-provoking hitherto encouragement. [21]
2. Sensation impacts on erudition. Affirmative sentiment expedites erudition; individuals keep in mind further as soon as the brain is acquainted with a convenient familiarity. In distinction, erudition secures when an apprentice recognizes a familiarity as intimidating. [19,22]
3. Astuteness has manifolds. Compound astuteness can afford an underpinning for healthier education and unfathomable sensations in the apprentice.[1,17,25] The operate investigators industrialized year-long leitmotifs to provide apprentices further eloquent and associated erudition openings. This prepared erudition exhilarating and prepared sagacity to apprentices.[4]

Caine *et al.*[3] proposition twelve common sense and cognizance erudition doctrines grounded on an extensive assortment of exploration verdicts from consciousness to natural science and neuroscience that ascertain with aggregate meticulousness in what way the brain, cognizance and frame of reference are intersected and correlated and in

what way these distress the manner we acquire any knowledge. [1,17,25] The twelve doctrines of erudition that they acknowledged are:

1. Entire learning is corporeal or functional.
2. The pursuit of examining meaning ensue through systematic Prefiguring.
3. The brain/mind progressions move from fragments to ensembles concurrently.
4. Learning is developmental
5. Intensive consideration and peripheral insight encompasses in Learning.
6. Conscious and unconscious progressions constantly comprise in Learning.
7. Constructing logic of experience and archiving inaccessible actualities and assistances are at least two styles of memory involve in brain based learning.
8. Every brain is distinctively systematized
9. The brain/cognizance is communal
10. The exploration of connotation is inborn.
11. There are a precarious configurations of sensations are in Cognizance/brain.
12. Multifarious knowledge is enriched by encounter and withdrawn by Menace or risks that escorting by defenselessness. [1,2,3,17,25]

The investigators had amount to the doctrines for the proof of identity and prerogative that no standard is further imperative than any former. Although every standard has an explicit concentration and utility, they are wholly interlocked and do not detached. The canvassers privilege that accepting and expending these doctrines in the teaching space can be responsible for deepened atmospheres that assistance apprentices in education and are reliable with constructivist erudition, a tactic that they sustenance. They prerogative that these moralities endorse expected erudition: somewhat that is not extensively treasured in teaching. They advocate that entire doctrines are alienated into three ultimate foundations of prodigious instruction that necessity beget to grips with instructors. It is precarious to apprehend that these three foundations have philosophical possessions on each other and are in datum correlated. All of these foundations interconnect with four of the doctrines. The three ultimate foundations are:

1. Peaceful Attentioness (Optimum Cognizance State)
2. Augmented familiarity
3. Familiarity dispensation

Although unperturbed preparedness is interrelated to an optimum erudition surroundings, augmented know-how encirclements the moralities that the whole thing of erudition is biological or functional, erudition is progressive, the mind/cognizance progressions ensembles and chunks concurrently and the exploration for connotation ensues over and done with prefiguring. [1,2,17,25] Teaching spaces comprehend in augmented environs and an assortment of know-how is responsible for the erudition environment in which apprentices' prerequisite to be engrossed. Innovation, multiplicity, instantaneous criticism, proficiencies and occasion for apprentice adoptions are in the midst of the influences that requisite to be accessible to apprentices. [7] Researchers pressure that it is the instructor's protagonist to organize the preoccupation of these components in the

instruction and erudition progression on condition that with incessant apprentice participation. [1,3,17,25]

The rest of four doctrines that plummet underneath this division are: the dualistic line of attack of reminiscence like archiving in accessible actualities and assistances or constructing sagacity of familiarity, erudition encompasses in cooperation of engrossed thoughtfulness and bordering discernment for the reason that erudition is due to in cooperation of cognizant and insentient and every brain is distinctively systematized. An optimum state-run of cognizance with augmented and multifaceted familiarities are not an adequate amount of its particular and apprentices requisite correspondingly are prearranged a fortuitous to imitate or practice their proficiencies. Consideration countenances apprentices to brand sagacity of what is erudite; they could occasionally want to learn by heart actualities and run-through assistances over and over in a progression that encompasses reminiscence. [1,17,25]

Caine and Caine [2] are not the merely canvassers to be familiar with that educationists have not engrossed adequately on in what way to fetch nearby erudition. A researcher in the past frazzled that this is the foremost problematic issue confronted by educationists who do not be familiar with the brain as the body part for erudition and have no appropriate form of teaching and atmosphere that were according to the shape' of the brain. [1,2,16,17,25]

The two ways strategy of solicitation of brain based philosophy at the classroom level has been observed by the ground breaking intention of twelve doctrines of BBL concept.

- Leading approach of BBL is to engross the apprentices into cognizance founded undertakings that were well-matched with the expected working of the brain.
- An additional approach is to engender an augmented atmosphere that supports to brain in such a way that it functions appropriately deprived of intimidations or pressures.[1,12,17,25]

In the cooperation of above mentioned approaches are intended for encompassing the students in instruction culture and learning progression over and done with improving the instinctive aptitudes of anthropological mind. It can be understand as that from twelve doctrines of BBL, 5 ideologies are associated with five instinctive capabilities of humanoid understanding that can be pragmatic on teaching environs from side to side erudition happenings of intellectual applies. In the similar way, the enduring seven philosophies of BBL founded on 7 intuitive abilities of anthropological common sense which are functional by the cohort of augmented atmosphere.[1,6,17,25]

Through the 12 codes of brain based learning theory, it is confirmed that particular learning happenings like remembering pre-information about the subject by the apprentices, apprentices scrutinizing drifted philosophies of peers, protrusive themselves in assemblage education, interrogation and response assemblies, and collaboration must be bring together in the teaching space to improve the knowledgeable proficiency of apprentices independently.[1,2,3,4,6,17,21,25,36] It can be said that all the above given philosophies of BBL are pertinent and

operational in instructional progression. Through the effort of Caine and Caine and he practically applied these moralities at teaching space meritoriously. [1,3,6,11,12,17,21,25] That's why a new development has been started in the field of learning that is related to brain based learning and different theories emerged regarding cognizance and brain. Some of them are listed below;

1. Manifold Astuteness
2. Cognitive learning theory
3. Meta-cognition. [12,13,14,17,19,20,24,25]

These three theories are directly associated with the concept of brain based learning because all these explain the basic role of brain in teaching learning process of an individual. It can be said that these three theories were considered as the foremost foundation of brain based learning. Definite arrangements and undertakings of the gauges in brain centered erudition heighten the chromatic, altitudinal and perceptual motorized zones of the brain to heighten erudition. Brain centered teaching correspondingly amplifies inscription. [7,10,17,18,22,23,25] Brain centered erudition stratagems support all of those extents and tactics to heighten erudition.[11] Tapping these approaches to practice is imperative. Conferring to university apprentices, inspiring or appealing teachers are individuals who have the subsequent physiognomies: enthusiastic and engrossed in the measureable things, accountable, authorization adoptions, be responsible for reassurance, be responsible for thought-provoking substantial things, bounce appropriate criticism, rankings for determination and expansion, accentuates the erudition progression, be responsible for a number of goalmouths, and indulgence apprentices like grown-ups.[15] Those are completely analogous to the brain centered learning goalmouths and intentions.[17]

What is Achievement Motivation?

Developmental researchers have discerned that particular individuals have a passionate longing to accomplish somewhat although others possibly will not give the impression that anxious about their accomplishments over the centuries. [27,30,39] This spectacle has fascinated an allocation of considerations and deliberations in which researchers have perceived that publics with an extraordinary glassy of attainment impetus reveal certain physiognomies which are following;

- An ambition to surpass in erudition errands joint with the dimensions to practices trained in completion is baptized as Achievement motivation.[28,29,38]
- Attainment impetuses have impact on the development of psychosomatic conventions.[34]
- Accomplishment inspiration is the inclination to attempt for triumph and to pick out penalty area concerned with accomplishment or catastrophe undertakings.[33]
- It is commonly comprehended that attainment enthused individuals demonstrated an ominously advanced degree of progression in their association equated to others.[29,31]

Finally, realization impetus is a constant knowledgeable representative in which consummation originates from striving for and accomplishing glassy of brilliance.[31] An idiosyncratic, interior, and psychosomatic enterprise,

empowering personages to chase exertion, they recognize to be treasured and ultimately accomplish their goalmouths is acknowledged as achievement motivation.[32,35,37,39]

The leading quintessence on the revision of accomplishment impetus were came from David McClelland and Atkinson for the reason that individuals who endeavor for superiority in a ground for the sake of accomplishing and not for particular recompense are well-thought-out to have an extraordinary prerequisite for accomplishment.[26,28,29,37] The cutting-edge line of attack in realization impetus is a "Onion-Ring-Model of Achievement Motivation" that embraces an assortment of proportions that are applicable to attainment at exertion but which are not conservatively observed as being fragment of enactment enthusiasm.[26,29,39]

Exclusively it assimilates previously disconnected methodologies as Prerequisite for Accomplishment with like communal purposes of supremacy and it is grounded on the principle that enactment impetus fallouts from the approach of wide-ranging constituents of disposition are concentrating in the direction of enactment.[30,35]

In today's learning, there is split-up of existence and erudition. The fluctuating atmosphere is correspondingly prompting the scholastic set up. If one needs to modify this form of informative set up, the conservatory predetermined conditions gear up and used to modify its stratagems of instruction and erudition.[1,3,17,21,23,25,36] There is a prerequisite that is used to announce those instruction approaches which endorse evocative erudition, the wisdom that brands a transformation in the familiarity base of apprentice's cognizance, the erudition that brands a metamorphosis in what way one interpretation the biosphere or the erudition that brands a variance in one's assistances relatively to memorization erudition or erudition grounded on memorization of evidences. One such approach endorsing it as brain based learning. [10,11,17] Brain centered learning constructs erudition atmospheres that brand the apprentices impression comfortable and contented. Instructions that came out through the brain-based teaching are exceedingly collaborating and such erudition used to form an assembly of connotation and sympathetic meaning. Surrounded by such an atmosphere, manifold astuteness methodologies are also applied in it.[31,32] The dominant resolution of learning is to improve cerebral capabilities and discerning supremacy of apprentices for that reason such platform necessities to geared up an improve thinking capacities of apprentices. Numerous studies exposed that Brain centered Erudition expands speculative attainment, progresses phonological, discerning assistances conforming perilous discriminating, assertion assembly, inventive intelligent, assertiveness towards erudition, bounds juveniles' pressure, engross the brain in erudition progression. [1,3,17,21,23,25,36] So, Nationwide Prospectus Agenda (NCF, 2005) correspondingly presumes that instructors ought to create unswerving exertions to afford erudition atmosphere in which the apprentices resolve their probe interrogations, embark on accomplishments, derive unruffled to deliberate and treasure out resolutions to the complications. Contemporary exploration moreover accentuate on elevating erudition atmosphere which is responsible for apprentices with numerous prospects such as; proactive undertakings, teamwork with other apprentices and

instructors. Make available tangible existence instances and acquaintances with apprentices; generate a teaching space with different erudition elegances by keeping in mind the individual's differences. Apprentices are further efficacious when regarded as self-determining apprentices and Brain centered erudition affords such adapted erudition atmosphere alongside with cooperation to segment evidence or acquaintance produced .[1,3,17,21,23,25,36]

An evaluation of interrelated collected works point out innumerable revisions that accompanied to disclose that brain constructed erudition has an affirmative influence on accomplishment, discount in anxiety level, and expansion of constructive assertiveness in the direction of erudition, augmentation of self-esteem. The investigator was inquisitive to discern whether in Pakistan also does brain based learning has the equivalent influence on attainment and instructors' assertiveness in the direction of learning. It was observed that BBL is still considering a novel and young field of study because some researcher created a misconception about it that it was not an easy way of teaching through their misinterpretation of their results of brain investigations. That's why instructors feel hesitation in the use of BBL in their respective classroom and prefer some alternative way of instruction.[11,17] Regardless the level of knowledge about the theoretical aspect, the way the principles were designed may not be fully compatible with the Asian teacher-student context. While teachers indicated that they held positive beliefs about a BBL intuitively, the application of BBL may possibly depend on other factors such as culture and education system. Even if the principles were regarded as helpful for teachers and students for classroom engagement but due to under the influence of cultural factors teachers may demonstrate their own way of how best to engage students in a classroom.[1,3,17,21,23,25,36]

Teachers are expected to become literate in knowledge about a BCC and they will embrace the knowledge, especially in relation to how the brain functions in learning because they have been applying those techniques intuitively.[34,37] Even though brain-based learning has been used intuitively in the classroom, not all techniques follow the brain-based guidelines.[17,19] Particular investigations interconnected to brain; cognitive progressions have been accompanied in sequestration, which has substantiated to be operative in Pakistan. Henceforth, a dearth of exploration (exactly in Pakistan setting) in this ground created a prerequisite for the investigator to demeanor the subsequent investigation. So the concerns of whether the diverse echelons of goal line are spawned from the same cerebral acquaintance configuration, and in what way interior familiarity configurations interrelate with circumstantial evidence to bounce intensification to the contemporary goal, need to be reconnoitered in impending exploration on the dimension of goal lines. At the equivalent phase, psychometric apprehensions have to be toughened with an apprehension for the hypothetical archetypal that triggers the paradigm of attentiveness, so a prototypical that undertakes that penalty areas are very unbalanced and approachable to the state of affairs would not practice with the equivalent category of consistency evaluations to determine consistency as a prototypical that undertakes that

goal line alignments are a further run wavering distinct alteration.

Through the detail review of brain based learning and achievement motivation theories, it was found that self-understanding is required in these theories because the teachers' acquaintance of brain-based learning practices consider as the important role in the achievement motivation of the students at any educational level. Both teachers and students are directly linked with each-others. Teachers are consider as the pillar of teaching learning process and their main responsibility is to develop their students through their advanced and most successful techniques of teaching. Brain based learning is one of that advanced technique of teaching through which teachers will better understand the individual differences of their students and also understand that how they effectively engaged their students in teaching learning process. It was observed that the achievement attitude of the students can also be enhanced through their goal oriented behavior in the form of social interaction, excellent performance within the assigned tasks and taking mastery over the subject that are directly or indirectly linked with their dynamic involvement in instruction progression and it is only possible when their brain is active. This study was an attempt to treasure the effect of teachers' attitude towards BBL over the accomplishment impetus of apprentices at higher education level in Pakistan.

RESEARCH METHODOLOGY

Descriptive study was applied in this study and for this reason investigator castoff a survey method. The population of this study was all public and private teachers and students of Islamabad Universities. In the case of sample, convenient and random sampling techniques were applied. 311 teachers and students were selected from both public and private universities of Islamabad. Two questionnaires were used to collect data. Brain based learning inventory developed by Shelly Klinek [25] and questionnaire regarding Achievement Motivation, developed by McInerney [27] were used. Mean, percentages, Regression, t-test and ANOVA by using SPSS were applied to test the desired data. Permission was requested from the authors of questionnaires regarding teachers' attitude towards brain based learning and achievement motivation of the students through email. These standardized questionnaires were finally used as an instrument to obtain quantitative survey in the investigation of university teachers' attitude towards BBL and its effect on the Achievement Motivation of the university students.

Table 1 shows the means the sub-scales of teachers' attitude towards brain based learning and achievement motivation of the students. Results shows that 1.9 for Principle one; 1.4 for Principle two; 1.7 for Principle three; 2.1 for Principle four & five; 2.2 for Principle six, seven, eight, nine, eleven & twelve; 2.3 for Principle ten while in the case of dimension 2.2 for enriched experiences; 2.1 for experience processing and 2.2 for relaxed alertness. Therefore, teachers show rarely positive attitude towards brain based learning which was 2.1 because they rarely agreed with twelve principles of brain based learning and its three dimensions while students often shows high degree of achievement motivation which was 3.3, especially in the case of social goals which 3.1; mastery goals which was 3.1 and performance goals which was 3.7.

ANALYSIS

Table 1: Means of Teachers' attitude towards Brain Based Learning and Achievement Motivation of Students' Factors

Sr. No	Variables	Means
01	P.1	1.9
02	P.2	1.4
03	P.3	1.7
04	P.4	2.1
05	P.5	2.1
06	P.6	2.2
07	P.7	2.2
08	P.8	2.2
09	P.9	2.2
10	P.10	2.3
11	P.11	2.2
12	P.12	2.2
13	Enriched Experiences	2.2
14	Experience Processing	2.1
15	Relaxed Alertness	2.2
16	Teachers' attitude towards Brain Based Learning	2.1
17	Social Goals	3.1
18	Mastery Goals	3.1
19	Performance Goals	3.7
20	Achievement Motivation of Students	3.3

*Principle: P

Table.2: Regression between Teachers' Attitudes towards BBL & Achievement Motivation of Students

Model	R	R Square	Adjusted R Square	F	Sig
1	.398a	.159	.156	58.275	.000a
2	.473b	.223	.218	44.272	.000b
3	.503c	.253	.245	34.575	.000c
4	.522d	.272	.263	28.613	.000d
5	.531e	.282	.271	24.013	.000e

a, b,c,d,e = Predictors

Table 2 shows that teachers' attitude towards brain based learning and achievement motivation of students have resilient influence over each other's for the reason that the R values are 0.398, 0.473, 0.503, 0.522 and 0.531 show that teachers' attitude towards brain based learning and achievement motivation of students are extremely interrelated with each-others. It was observed that a noteworthy association was present between two variables, so this assumption was rejected.

DISCUSSION

It was concluded that university lecturers, assistant, associate professors and full professor had rarely practice brain based learning at university level and this finding was supported with the work of Klinek[25] and Wan Rosmini Hassan[17] who found that teachers have been practicing brain based learning intuitively but they are not able to articulate a clear rationale for their actions, yet they are still able to practice effectively because the descriptive analysis of this study showed that teachers have pedagogical belief that are aligned with the brain based learning such as they had knowledge

about the use analogies; meaningful themes; group projects; novelty relate lesson with students' life experiences and taught in small segments during their teaching learning process. These teachers gave opportunities to students to reflect; taught according to their capabilities; gave them much time in group work and prefer students' choices in activities had mostly practice brain based learning in their classroom. Such teachers agreed to be serious; allowing criticism and punishment in their teaching and considering decoration as waste of time because they believe that art has little relevance to teaching learning process. These findings were quite similar to the findings of Klinek [25], Thomas [39] and Wan Rosmini Hassan [17].

The second major conclusion of this study was that students often showed high degree of achievement motivation at university level because the descriptive statistics of this study showed that student helped others, praised, feel confidence in doing their university work, doing better than others and in-charge of a group then they high degree of achievement motivation. This outcome was supported through the findings of Dowson & McInerney [8], Pintrich [30], McInerney &

Marsh [28] and Dowson, Barker & McInerney [9] who found that achievement motivation is a drive to excel in learning tasks and the pursuit aim oriented components in the forms of their collective interaction, mastery over the subject and displaying excellent performance within the assigned task of study. It would also be helpful in realization oriented behavior and also enhanced through pleasing others. It may enhance students' conceptions about themselves and through praise, helping and pleasing others enhanced their goal oriented behavior at university level.

Another major conclusion showed that both the teachers' attitude towards brain based learning and achievement motivation of students were highly correlated with each-others. It means that BBL can be considered as aptitude friendly education that is feasible when it counterparts with the collective intelligence and stimulate instruction through which learners can easily learn about their surroundings. It was also found that BBL was considered as a submission of evocative assemblage of main beliefs that signifies our understanding about common sense in the perspective of edification.[12,24] This correlation is also supported by the Bandura's social learning theory (1982) in which he prescribed that learner's perceived efficacy or inefficacy can change the perceptions and outcomes of teaching learning process in which a teacher becomes further originator and learning becomes more cooperative and helpful. This result was also related with brain based learning theory which described that the body, emotions and brain are an integrated system and aim oriented philosophy undertakes that motives of the individual have rational illustration through which they are trying to accomplish their purposes.[18,30] Therefore, this finding was supported with the work of different researchers or scholars such as McClelland, Atkinson, Clark & Lowell [26]; Paul R. Pintrich [30]; Eric Jensen [23]; Geoffrey Caine & Renata N. Caine [3]; Usha Goswami [13]; Klinek [25] and Wan Rosmini Hassan [17].

CONCLUSION

1. Teachers generally not practice positive attitude towards brain based learning at university level.
2. Students generally showed high degree of achievement motivation at university level.
3. Teachers' attitude towards brain based learning and achievement motivation of students were highly correlated with each-others.

RECOMMENDATIONS

- The conclusion of this study showed a significant correlation between teachers' attitude towards brain based learning and achievement motivation of the students, so higher authorities of both public and private university may afford training about the BBL and its effects on the achievement motivation of the students for their teaching staff.
- Senior teachers may act as mentors to pass their valuable skills, knowledge and insights into the freshly appointed teachers who act as mentees and to help them in the development of brain based learning strategies at university level.

- Mastery learning approaches like project formation and thematic works and role-playing may be used by the teachers in the classroom to enhance the mastery goals and social goals among the students at university level.

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