STUDENTS PERCEPTION IS THE INSTRUMENT TO PREDICT THE QUALITY OF TEACHERS IN HIGHER EDUCATION: A REGRESSION ANALYSIS

By

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ABSTRACT

The main purpose of the paper was to study the students' perception towards teachers' depth of content knowledge, teachers' skill of using instructional strategies, diagnosis of learning difficulties and teachers' knowledge of students' understanding in relation to their professional health. The students' of different Indian Universities were the population of the study. Among them 2000 students and 500 University teachers from the population were the Selected sample of the study. All the samples were collected by following random sampling techniques. The present study was an survey by means of enquiring the present status of learners' perception of teachers' depth of content knowledge, teachers' skill of using instructional objective, diagnosis of learning difficulties and knowledge of students understanding as the instruments for professional health check up at University level. It indicated that there was a positive significant relationship between all the factors above. It was resulted that students' perception on these factors were the predictors of teachers' professional health check-up. Therefore, teachers should be aware and they should increase their overall depth of knowledge for the flexible teaching-learning process. It is necessary to conduct investigation regarding all teachers' depth of knowledge, Academic career and the relation with age and gender.

Keywords: Depth of Content Knowledge; Diagnosis of Learning Difficulties; Knowledge of Student's Understanding; Skill of Using Instructional Objectives.

INTRODUCTION

Recently, teachers are empowered with smart classroom, besides the conventional black board. This practice is no doubt but good, at the same time, this might reduce students' capacity of imagination of a problem. A teacher's diagram, or a solution of a problem in the black board, which students follow, and calculate, is not possible by power point presentation. The traditional method of teaching has imparted knowledge for many years, but group activities and community practice are, somehow better introduction in the world of Education (Arlene & Tiffany, 2009; Jacob & Lefgren, 2004). These methods of instructions, teachers are practicing, and they have been applying at their students' learning. A teacher may be knowledgeable himself/herself, but it's a matter, how he/she will assimilate those in the knowledge of the students. In this context, not only the teacher is responsible, but also the students need to be equally eager to learn from the teacher (Little, 1993). However; now-a-days, students justify that earning marks from the examination more a priority than wisdom. That is why, teachers are in a bifurcate way, and they are unable to choose, whether to provide rote way or meaningful way of learning to the learners (Clareke & Hollingsworth, 2002). Because, an effective teaching process and learning environment of the classroom mostly depends on teacher's responsibility (Betts et al., 2011). It means the enthusiasm of the teachers, their actions and decisions, determines the interest of students. Most teachers' have good idea about the classroom atmosphere, but throughout the teaching process, developing the students' ability to learn, is an important accountability (Ahmad & Aziz, 2011). It is the capacity of a teacher, to cultivate the love and interest among the students towards the subject. Teacher can create and promote a positive environment and learning attitude among the

students to feel comfortable with learning. Teachers must be creative and they should be ready to respond to different kinds of questions asked by the students (Cater & Doyle, 1987; Mulholland & Wallace, 2005). In the post few decades, there has been growing interest in the notion of the teachers' professional development, because many novice college teachers with Doctoral degrees of the subject matter do not teach effectively (Loucks-Horsley et al. 1987, Loucks-Horsley et al. 1998). College teachers are not required to get a teacher's certificate, but require more pedagogical knowledge (Loucks-Horsley & Matsumoto, 1999; Maehr, 1976). Teacher's pedagogical content knowledge is the key to promote the professional growth of teachers, because pedagogical content knowledge represents concepts, prior knowledge, theories and epistemology. It also involves knowledge of teaching strategies that incorporate appropriate conceptual representation in order to address learners' difficulties and misconceptions and to foster meaningful understanding (Darling-Hammond, 1997).

Review of Related Literature

Students' Perception towards their Teachers' Depth of Subject Knowledge

It is also true that quality of teaching depends on the eagerness of the teachers', his/her wisdom and depth of knowledge (Kubota & Olstad, 1991). University teachers' have good academic career than college teachers and their depth of knowledge is also good (Clareke and Hollingsworth, 2002; Major and Palmer 2006). University teacher's knowledge of subject matter is more important than their pedagogical knowledge. Content knowledge is an important base for the University teachers (Grossman, 1990; Guskey, 1994; Lenze and Dinhalm, 1994; Munby et al. 2001). University teachers should enrich their content knowledge regarding subject matter and pedagogy. Though many universities of India and abroad have lot of good teachers, student's perception towards their teacher's depth of knowledge is not so good (Grossman, 1990; Mishra and Koehler, 2006). In fact, this is a challenge in front of the teachers to integrate subject knowledge and pedagogy in the context of their work, suggested, students' perception towards teachers' depth of knowledge is not an easy task to recognize (Ball & Cohen, 1999; Ball, 2000; Mulholl and Wallace,2005). However, the depth of knowledge and, teacher's knowledge transfer in front of the students in the form or clarification or misunderstanding among learners, cannot be evaluated (Fishman et al. 2003, Franke et al. 2001; Georghiades, 2000; Girod et al. 2003). The college and university students' perception of teachers' depth of knowledge was prominent in their subject matter knowledge (Borko & Putnam, 1995; Carter and Doyle, 1987; Cravens, 1996; Thomas et al. 1998). In this context, some researchers suggested that teacher's depth of knowledge, can be perceived by the students in these ways (i.e. subject matter knowledge, use of instructional objects, content and knowledge of students understanding (Bressoux, 1996; Calderhead, 1996). The teachers depth of content knowledge, can be evaluated inside the classroom and the learners discussed those outside the classroom (Cochran-Smith, 2005; Cohen,1990). It is also seen (e.g. Glazerman et al. 2008) that, student's perception might not be consistent with the reality generated by outside observers. Now-a-days depth of content knowledge is the powerful tool to measure the teachers' professional growth and development (Jeanpierre et al. 2005; Johnson et al. 2007).

University Students' Perception towards the Teachers' Skill of Using Instructional Strategies

Teaching learning process depends on teachers' pedagogical content knowledge and how they utilize these in the classroom transaction and management (Darling-Hammond & McLaughlin, 1999; Darling-Hammond & Sykes, 1999). Students always follow teachers' skill of using instructional strategies. In fact, students' perception towards teachers' knowledge of subject matter, classroom transaction, attitude to work and teaching skill are absolutely helpful for teachers' feedback (Cohen & Ball, 1990; Desimone, 2006). However, it may not possible by all learners to perceive the knowledge of the teachers and skill of using instructional strategies (Desimone et al. 2002; Dettmann-Easler & Pease, 1999; Dweck & Leggett,1988; Ehman,1970; Elmore & Burney, 1996; Feiman-

Nemser,1985; Fennema et al. 1998; Munby et al. 2001; Stallings & Kaskowitz, 1974). It is also found from some studies, that pedagogical knowledge is not the knowledge of subject matter and use of appropriate methodology, but the required skill of using different methods for students' diagnosis (Fishman et al. 2003; Franke et al. 2001; Garet et al. 2001; Georghiades, 2000; Mishra & Koehler, 2006; Wong & Fraser, 1996). A skillful teacher summarizes the ideas together at the end of his lesson (Fazio & Roskes, 1994; Fraser, et al. 1995; Girod et al. 2003; Griffin & Symington,1997; Porter et al. 2001). Essential teaching skills and teaching methods are the two sides of the same coin. Skills are the required ingredients for effective teaching (Hamilton et al. 2008; Phelps & Schilling, 2004; Porter et al. 2001; Putnam & Borko, 2000; Saxe et al. 2001; Schultz et al. 2008;Van Driel, 1998).

Diagnosis of Learning Difficulties

Why some children do not learn effectively in school and what can be done to remedy the situation? (Brueckner, & Bond, 2012). Literature found, students who attended tutoring for diagnosis; dropped out at a much slower rate than other students (Hawley & Valli,1999; Hook & Rosenshine,1979). It is especially concerned with the procedures, that teachers can use to appraise the outcomes of the educational program, and the techniques that teachers may use to diagnose the nature and causes of learning difficulties (Heck et al. 2008). In fact, difficulties in reading, arithmetic, spelling, language, and handwriting are dealt with understanding and practice. Along with, recognition of students' prior knowledge status and providing diagnosis, may enhance learners' motivation and performance, and diagnostic evaluation is most crucial in classroom. (Moxey & Sanford,1992; Nir & Bogler, 2008). That is why, two stage diagnostic evaluations were conducted in some studies, to assess, whether the diagnoses system is consistent with the decisions of experts or not. The results demonstrate, that the proposed system effectively assist instructors and students in diagnosing, and strengthen the prior knowledge before new instruction is undertaken (Lin et al. 2011). Repeated diagnostic monitoring across grades could reap tangible benefits over the course of a students' career (Betts et al. 2011).

Knowledge of Students' Understanding

Asquith et al. 2007 found that teachers' prediction of students' understanding was related with students' actual response to corresponding items. Grossman et al. 1998 has failed to establish a clear relation between teachers' knowledge of students' achievement. Shulman (1986) has contributed greatly to what teachers need to know about students' learning. He referred mainly to understand what makes learning of specific topics easy or difficult; and the conceptions and preconceptions that student of different ages make. Ball & Cohen, 1999; Kazemi & Franke, 2004 have felt tension in work to perceive teachers' knowledge of students' thinking. The analysis of teachers' knowledge of their own students was based on the match between a teacher's predictions about each student's performance for a given item and the student's actual performance. Another explanation that is often given for this error is that students face cognitive difficulties in accepting lack of closure and tend to perceive open expressions as incomplete due to understanding problems (Booth, 1988; Collis, 1975; Davis, 1975).

Professional Health Check up

Highly qualified teacher possesses the ability to raise students' achievement (Darling-Hammond & Bell, 1997). In a study, Elmore (2002) has suggested that the knowledge, skills and abilities necessary for a teacher are: (1) Deep knowledge of the subject matter and skills that are to be taught; (2) Expertise in instructional practices that cut across specific subject area, or general pedagogical knowledge: and (3) Expertise in instructional practices that address the problems of teaching and learning associated with specific studies and bodies of knowledge, referred to as pedagogical content knowledge. The knowledge of both subject matter and how to teach provides some guidance on how teachers can make sense of their learning. Similarly, Ahmad & Aziz,2009; Thomas et al.1998 found, (1) The teachers were ready to teach their own specialist subjects but not other subjects; (2) Pupils' achievement is the single most

important outcome in teaching; and (3) The right way of teaching pupils is more important than knowledge of their specialist subjects. Assessing teachers' professional competence is a difficult and complex procedure, as competence is ensured through the acquisition of multiple-in terms of amplitude and content-qualifications. In this context, it was found that the depth of content knowledge is an instrument to measure pedagogical competence, and it is a degree to evaluate the teaching skills but difficult to monitor their viewpoints, attitudes and beliefs, as well as capabilities (Maria, 2011). Few studies viewed, elementary teaching is not only a woman's profession, but however, it is true that female teachers adapt to the profession less easily than their male colleagues. When compared to vice principals, principals believe that elementary teaching is a difficult branch of application of skill and diagnosis approaches among learners (Mehme & Muhammed,2011).

Significance of the Study

On the basis of literature, content knowledge is important base for the University Teachers (Lenze and Dinhalm 1994), while student's perception towards their teacher's depth of knowledge is not so good (Mishra and Koehler 2006); Many college teachers with doctoral degree have sufficient depth of knowledge on the subject matter, but do not teach effectively (Clareke and Hollingsworth 2002; Major and palmer, 2006). That is why, it is significant to study the students' perception towards University teachers' depth of content knowledge for the prediction of teachers' professional status. It is even found by researchers, that students individually applied their sense organs, to perceive the knowledge of the teachers and skill of using instructional strategies, which may not be possible by all learners (Desimone et al. 2002). So, it needs further study to search, whether the students' perception towards University Teachers' skill of using instructional strategies, recharge their teaching profession or not. However, literature stressed, the perception of students 'towards University teachers' use of diagnostic methods for students' is related with teachers' professional health check up (Brueckner & Bond, 2012). Now it is a question, why some children do not learn effectively in school and it could be suggested, what can be done to remedy the situation. This promoted the need for more studies, to be carried out on the same purpose. Some authors (Grossman et al.1998; Maria, 2011) failed to establish a clear relation between knowledge of teachers' and students' achievement. So, the students' perception towards University teachers' knowledge of students' understanding is a predictable factor of teachers' professional health check up, and is a significant issue at recent. In the literature, there was no clear equal evidence found on professional health check up with student's perception. Therefore, the present investigation was undertaken to investigate the relationship between the independent variables and the dependent variable (i.e. professional health).

Research Question

After having a thorough study on the various reviews and the significance of the study, the following question raised as:

Q1: Does the students' perception towards teachers' depth of content knowledge, skill of using instructional strategies, diagnosis of learning difficulties and teachers' knowledge of students' understanding has a relationship with teachers' professional health?

Objective

To study the students' perception towards teachers' depth of content knowledge, skill of using instructional strategies, diagnosis of learning difficulties and teachers' knowledge of students' understanding in relation to teachers' professional health.

Hypothesis

H1: Students' perception towards teachers' depth of content knowledge, skill of using instructional strategies, diagnosis of learning difficulties and teachers' knowledge of students' understanding has significant relationship with teachers' professional health.

Methodology

The present study was a descriptive survey, by means of enquiring the perception of learners' behaviour towards teachers' depth of knowledge, teachers' skill of using instructional strategies, diagnosis of learning difficulties

and teachers' knowledge of students' understanding to check-up the teachers' professional health. Both qualitative and quantitative data analysis techniques were used to draw the conclusion and generalization on the whole population. Through quantifying the evidence (i.e. sense) in the qualitative form, the researcher has answered the empirical questions. Literature found, (e.g. Adediwura and Tayo, 2007) have combined both qualitative and quantitative forms of analysis to get better answer to the research questions.

Participants

The total numbers of students and teachers of different Indian Universities were the population of the study. Among them 2000 students and 500 teachers from the population were selected as the sample of the study. All the samples were collected by following stratified random sampling technique.

Tools used

Students' Perception Towards Teachers Inventory (SPTI)

Students' Perception towards Teachers' Inventory (Jena, 2010a) is a Likert type scale having four sub-areas, like; Content Knowledge (CK), Skill of Using Instructional Strategies (SUIS), Diagnosis of Learning Difficulties (DLD) and Knowledge of Students' Understanding (KSU) and each area has seven items respectively. All items' reliability, ranged from .81-.79 and the respondent would take 10-12 minutes to respond to the items. The inventory has four point options (e.g. Strongly Agree, Agree, Undecided and Strongly Disagree) and any one option is to be responded with for each item. Both qualitative and quantitative techniques were used to interpret. For the quantitative analysis, all item responses were scored with 4, 3, 2 and 1 and weiged respectively.

Teachers' Professional Health Check-up Scale (TPHCS).

Teachers' Professional Health Check-up Scale (Jena, 2010b) was developed to realize University Teachers' professional health status. This scale has four sub-areas, i.e. Mastery on Contents (MC), Meaningful Instructional Strategies (MIS), Mode of Diagnosis of Learners' Difficulties (MDLD) and Knowledge of Students Understanding (KSU) and each area has seven items with, Strongly Agree, Agree, Undecided and Strongly Disagree responses. All the items' reliability ranged from, .80 - .72 and the respondent would take 10-12 minutes to respond to the items. To analyze the data, both qualitative and quantitative techniques are used. For the quantitative analysis, all item responses were scored with 4, 3, 2 and 1 and weighed respectively.

Procedure for Data Collection

From the beginning of first week of February 2011, the Students' Perception towards Teachers Inventory (SPTI) was administered upon Fine Arts, Social work, Economics, Physics, Chemistry and Life-sciences students of different Universities of India and Professional Health Check-up Scale (PHCS) was administered upon five hundred teachers of same departments of same universities, where Students' Perception towards Teachers' Inventory was administered. The data collection was continued up to the end of second week of June, 2011. By the help of book-post and e-mail, the researcher had sent the data sheets to collect the data from the students and teachers of those Universities. Here, the Heads and Deans of different departments of different Universities helped to collect the data.

Data Analysis and Result

H1: Students' perception towards teachers' depth of content knowledge, teachers' skill of using instructional strategies, diagnosis of learning difficulties and teachers' knowledge of students' understanding has significant relationship with teachers' professional health.

The percentage of students' and teachers' responses which was analyzed with Pearson's correlation value, indicated that there was a positive significant relationship between students' perception of teachers' depth of content knowledge, teachers' skill of using instructional objective, diagnosis of learning difficulties and knowledge of student's understanding, with teachers' professional health status. It was also observed, that students' perception towards teachers' depth of content knowledge, skill of using instructional objective, diagnosis of learning difficulties and knowledge of students' understanding were the predictors of teachers'

professional health (Tables 1a,1b & 2).

With a comparison between Table 1a and Table 1b it was found that out of 2000 samples, 1196 and 200 responded agree (59.8%), and undecided (10%) respectively, for student's perception towards teacher's knowledge of subject matter (i.e. perception score less than 12) while 604 respondents were strongly agree (30.2%) and the perception score was greater than 25. Accordingly, out of 500 (i.e. teachers') of the professional health check up respondents, 298 and 50 respectively were agree (59.6%) and undecided (10%) respectively, in depth of content knowledge, while, 152 (30.4%) teachers were strongly agree in depth of content knowledge (Table 1b).

Variables	Students' Perception				
	Strongly Agree	Agree	Undecided	Disagree	Total
Teachers 'depth of content knowledge	604 (30.2%)	1196 (59.8%)	200 (10%)		2000
Teachers 'skill of using instructional strategies	380 (19%)	1012 (50.6%)	608 (30.4%)		2000
Teachers' diagnosis of learning difficulties	200 (10%)	986 (49.3%)	614 (30.7%)	200 (10%)	2000
Teachers 'knowledge of students' understanding	202 (10.1%)	798 (39.9%)	800 (40%)	200 (10%)	2000

Table 1a. Students' Perception towards University teachers' response in percentage

Variables	Teachers' Professional Health Check up				
	Strongly Agree	Agree	Undecided	Disagree	Total
Mastery on contents	152 (30.4%)	298 (59.6%)	50 (10)		500
Meaningful instructional strategies	96 (19.2%)	253 (50.6%)	151(30.2%)		500
Diagnosis of learners' difficulties both inside and outside classroom	52 (10.4%)	248 (49.6%)	153 (30.6%)	47 (9.4%)	500
Knowledge of students' understanding	53 (10.6%)	198 (39.6%)	201(40.2%)	48 (9.6%)	500

Table 1b. Teachers' professional health check up response in percentage

In addition, 608(30.4%) respondents were undecided for perception on teachers 'skill of using instructional strategies', while 1012(50.6%) and 380(19%) had a positive (i.e. agree and strongly agree) perception of the same variable. Relation to this variable, out of 500 teachers' 151(30.2%) and 253 (50.6%) respectively responded undecided and agree, in providing meaningful instructional strategies to the learners, while only 96 (19.2%) strongly agreed.

In students' perception towards teachers' diagnosis of learning difficulties, 200 (10%) strongly and 614 (30.7%) undecided and, 986 (49.3%) agree while, 200 (10%) respondents disagree that teachers' diagnosis of learning difficulties was related with professional health status. Comparing to students' perception with teachers' professional health check up score, it is shown, 47 (9.4%) and 153 (30.6%) responded disagree and undecided but, 248 (49.6%) and 52 (10.4%) teachers' agree and strongly agree in giving remedies for learners' difficulties both inside and outside classroom.

Similarly, out of 2000 respondents, 200 (10%) and 800 (40%) were disagreed and undecided, but 798 (39.9%) and 202 (10.1%) agreed and strongly agreed in perception towards teachers' knowledge of students' understanding. However in teachers' response towards professional health check-up scale, 48 (9.6%) and 201(40.2%) are disagree and undecided, but 198(39.6%) are 53(10.6%) agree and strongly agree

Table 2 shows the Pearson Correlation of students' perception of teachers' depth of content knowledge of

		Professional health check up	Depth of content knowledge	Skill of using instructional objective	Diagnosis of learning difficulties	Knowledge of students' understanding
Pearson Correlation	Professional health check up	1.00	.97	.90	.97	.97
	Depth of content knowledge	.97	1.00	.92	1.00	1.00
	Skill of using instructional objective	.90	.92	1.00	.92	.92
	Diagnosis of learning difficulties	.97	1.00	.92	1.00	1.00
	Knowledge of students understanding	.97	1.00	.92	1.00	1.00
Sig. (1-tailed)	Professional health check up		.00	.00	.00	.00
	Depth of content knowledge	.000	.	.00	.00	.00
	Skill of using instructional objective	.000	.00	.	.00	.00
	Diagnosis of learning difficulties	.000	.00	.00	.	.00
	Knowledge of students understanding	.000	.00	.00	.00	.

Table 2. Pearson correlations among professional health check up, depth of content knowledge, skill of using instructional objective, diagnosis of learning difficulties and knowledge of students understanding

the subject matter with professional health check-up to be (r=.97 p<.05) and the average raw score of the respondents was (X = 12.32). Table 2 also shows that students' perception of teachers' skill of using instructional strategies of the subject matter correlates positively and significantly with teachers' professional health check-up with Pearson product moment correlation value (r = .90 p< .05). It implied that there was a significant and high positive relationship between students' perception of teachers' skill of using instructional strategies of subject matter and teachers professional health check-up. Thus, students' perception regarding teachers' skill of using instructional strategies may be a component of their professional health check-up. It results that, students' perception of teachers' diagnosis of learning difficulties of the subject matter with professional health check-up to be (r=.97 p<.05) and the average raw score of the respondents was (X = 12.23), while, the correlation between teachers' knowledge of students understanding and professional health check-up was (r=.97 p<.05). This concluded, that there was a significant and high positive relationship between students' perception of teachers' knowledge of students understanding of subject matter with teachers' professional health check-up.

This assumption was confirmed from the information relevant to the hierarchical multiple regression analysis (Shown in Tables 3a, 3b & 3c). With reference to the professional health check-up model (R=.97, R^2 = .95 and adjusted R^2 =.95 p<.05) significant positive relationship was found with teachers' depth of content knowledge (β=.10 p<.05). Similarly, teachers' skill of using instructional strategies (β=-.12 p>.05), teachers' diagnosis of learning difficulties (β= .05 p>.05), and teachers knowledge of students' understanding (β= .98 p>.05) found significant positive relationship with teachers' professional health check-up. Their F-value (df 4/2049, 9464.69 p<.05) was significant.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	R Square Change	F Change		
1	.975(a)	.950	.950	.286

a Predictors: (Constant), Depth of content knowledge ,Skill of using instructional objective, Diagnosis of learning difficulties and Knowledge of students understanding
b Dependent Variable: Professional health check up

Table 3a. Regression Model Summary professional health check up, depth of content knowledge ,skill of using instructional objective, diagnosis of learning difficulties and knowledge of students understanding

Discussion

In the recent study, the researcher found that Pearson's correlation value was positive and it showed significant relationship with students' perception of teachers' depth of content knowledge and teachers' professional health check-up. The professional health check-up regression model predicts significant relation between teachers' depth of content knowledge with teachers' professional health. In support to the result, review of the literature suggested that there are less numbers of researches that has been concerned with the relationship between the four medium of assessment for professional health check-up (Munby et al.2001). The lack of pedagogical content knowledge of teachers' diversely affected the teaching learning process because teachers' mastery and use of content knowledge in the classroom indicates the depth of subject matter (Cravens, 1996). This was also supported by the researchers Grossman, 1998; Guskey, 1994. Including these evidences, Fishman et al. 2003; Franke et al. 2001; Glazerman et al. 2008 also supported this recent finding.

Similarly, the percentage of students' response indicated that there was positive significant relationship between

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	773.83	4	773.83	9464.69	.00(a)
	Residual	167.69	2045	.08		
	Total	814.55	2049			

a Predictors: (Constant), Depth of content knowledge, Skill of using instructional objective, Diagnosis of learning difficulties and Knowledge of students understanding
b Dependent Variable: Professional health check up

Table 3b. ANOVA of professional health check up, depth of content knowledge ,skill of using instructional objective, diagnosis of learning difficulties and knowledge of students understanding

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	β	Std. Error	Beta		
(Constant)	2.82	1.04		2.69	p<.05
Depth of content knowledge	.12	.12	.10	1.01	p<.05
Skill of using instructional objective	.10	.21	.12	1.50	p<.05
Diagnosis of learning difficulties	.06	.07	.05	1.85	p<.05
Knowledge of students understanding	.90	.09	.98	9.80	P<.05

a Predictors: (Constant), Depth of content knowledge, Skill of using instructional objective, Diagnosis of learning difficulties and Knowledge of students understanding
b Dependent Variable: Professional health check up

Table 3c. Coefficients(a) professional health check up, depth of content knowledge ,skill of using instructional objective, diagnosis of learning difficulties and knowledge of students understanding

students' perception of teachers' skill of using instructional objectives and teachers' professional health check-up. The professional health check-up regression model predicted the significant relation between teachers' skill of using instructional objectives with the teachers' professional health. The literature was supported by (Mishra & Koehler, 2006). Contrast to this point, Wong & Fraser, 1996 remarked that learners sometimes fail to meet the teachers' comprehend messages. However, students are unable to reach the proficiency of the teacher (e.g. Stallings & Kaskowitz, 1974). Student's perception on the teachers' teaching atmosphere with repeated questions and providing feedback to the learners, create the ways of better learning atmosphere to the classrooms (Porter et al.2001). Accordingly, Saxe et al.2001 stressed that implication of prototype classrooms assessment task on teachers' pedagogical and assessment particulars helps some students' learning and performance. Social constructivist paradigm is a different process than classroom teaching learning process. Teaching of literature communicates no longer in a classroom for students, and students' perception towards language teaching is not so good for them (Phelps & Schilling, 2004).

Pearson's correlation value indicated that there was positive significant relationship between students' perception of teachers' diagnosis of students' difficulties with the teachers' professional health check-up. The professional health check-up regression model predicts the significant relation between teachers' diagnosis of students' difficulties with the teachers' professional health. Similarly, the study (e.g. Heck et al.2008; Moxey & Sanford, 1992) supported the finding of this study, that teacher' diagnosis of students' difficulties can be assessable by students. Hawley & Valli, 1999; Hook & Rosenshine, 1979 also supported that the diagnosis ability of teachers' have equal importance with pedagogical knowledge. Some researchers' viewed teachers' depth of knowledge and diagnosis ability is not possible to be recognized by listening to a series of lectures (Nir & Bogler, 2008).

The percentage of students' and their teachers' response indicates, that there is positive significant relationship between students' perception of teachers' knowledge of students' understanding with the teachers' professional health check-up (Asquith et al. 2007). The professional health check-up regression model predicts the significant relation between teachers' knowledge of students' understanding with the teachers' professional health. The result was partially supported by (e.g. Ahmad & Aziz, 2011) that teacher's expressive characteristics such as warmth, enthusiasm and extroversion affect the teaching learning process. However, Schultz et al.2008 emphasized that knowledge of students' understanding in local context is particularly important in a teaching learning process. It means local language is suitable for the learners.

Conclusion

The study concluded that the percentage of students' and teachers' response regarding teachers' depth of content knowledge, skill of using instructional objective, diagnosis of learning difficulties and knowledge of students understanding towards their professional health check-up is significant. Similarly, the Pearson's correlation value indicates that there is positive significant relationship between students' perception of teachers' depth of content knowledge, skill of using instructional objective, diagnosis of learning difficulties and knowledge of students understanding with professional health check-up. The regression models shows that students' perception of teachers' depth of content knowledge, skill of using instructional objective, diagnosis of learning difficulties and knowledge of students understanding are the predictors of teachers' professional health check-up. However, there is no such malady for their diagnosis and cure. Therefore, teacher should be aware and they should increase their overall depth of knowledge for the flexible teaching learning process. So, university teachers should update their depth of content knowledge by reading different reference books, attending refresher courses, attending seminars, conferences etc. One refresher course, one orientation course for university teachers is not sufficient, because in the present study, students perceived teachers' skill of using classroom instructional strategy significantly. That is why, Government of all Nations should take precautions to

reorient and update frequently their teachers, on the proper use of instructional strategy in the classrooms. Students' diagnosis of learning difficulties need more feedback from their teachers for their better understanding (Mishra & Koehler, 2006; Munby et al.2001) but lack of pedagogical content knowledge, skill of using instructional objectives, diagnosis of learning difficulties among students are the crucial issues today to check professional health.

Recommendations

The researcher has put the findings of the study to colleagues and educationists to study more on the following points.

- Studies related to university teachers' professional development in relation to learners' achievement needs further investigation.
- It is necessary to study the comparative effects of feedback on students' clarification of misunderstanding.
- Use of ICT in teaching of higher education and student's achievement needs further study.
- Students' feedback and teachers' attitude towards teaching needs further study.
- It is necessary to conduct investigation regarding teachers' depth of knowledge, academic career and the relationship with age and gender.

Limitations

The present study investigated the students' perception towards teachers' depth of content knowledge, teachers' skill of using instructional strategies, diagnosis of learning difficulties and teachers' knowledge of students' understanding in relation to teachers' professional health. This was a good effort to investigate the effect of student feedback on teachers; professional health status, but still, the study has few limitations, because learners are not able to assess the teachers' depth of content knowledge in one or two or a year of classes. Except the recent study scale, no standard format is available to assess or evaluate teachers' skill of using instructional strategies and teachers' diagnosis of learning difficulties.

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