CHAPTER – 5

Results and Discussion

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RESULTS AND DISCUSSION

5.1) Findings of the study

The main findings of the present research study are given below:

15) Emotional maturity and emotional immaturity have differential effect on teaching effectiveness of school teachers. More specifically, teaching effectiveness of emotionally mature teachers was found much superior than that of emotionally immature teachers.

16) Hardiness variation had a significant impact on teaching effectiveness of school teachers. More specifically hardy teachers were more effective in teaching as compared to non hardy teachers.

17) Job satisfaction and job dissatisfaction have differential effect on teaching effectiveness of school teachers. More specifically teaching effectiveness of job satisfied teachers was found to be higher than job dissatisfied teachers.

18) No significant interactional effect was found between emotional maturity and hardiness on teaching effectiveness of school teachers.

19) There was no significant interactional effect between emotional maturity and job satisfaction in respect of teaching effectiveness of school teachers.

20) There was no significant interactional effect of hardiness and job satisfaction on teaching effectiveness of school teachers.

21) A significant interactional effect was found among emotional maturity, hardiness and job satisfaction on teaching effectiveness of school teachers.

22) The three independent variables, emotional maturity, hardiness and job satisfaction in combination contributed significantly and accounted 51.5% variance in the dependent variable teaching effectiveness of school teachers. Emotional maturity explained 31%, Job satisfaction 12.5 % and hardiness explained 8.1 % variances in teaching effectiveness of school teachers.

23) Gender had no influence on teaching effectiveness of school teachers.
24) Marital status had a significant influence on teaching effectiveness of school teachers. The teaching effectiveness of unmarried teachers was significantly higher than their respective married counterparts.

25) There was a significant influence of years of teaching experience on teaching effectiveness of school teachers. The teaching effectiveness of teachers having more than twenty years of teaching experience was found to be much higher than teachers having 0-10 and 11-20 years of teaching experience.

26) Emotional maturity, hardiness and job satisfaction in combination exhibited a significant influence on both male and female teachers’ degree of teaching effectiveness and in combination contributed 53.1% variance in teaching effectiveness scores of male teachers while 50.4 % variance in female teachers.

27) A significant (p < 0.01) combined effect of emotional maturity, hardiness and job satisfaction was observed on teaching effectiveness of both married and unmarried teachers. In combination they accounted for 44.1% of variance in teaching effectiveness scores of married teachers and 53.3% variance in teaching effectiveness of unmarried teachers.

28) Emotional maturity, hardiness and job satisfaction in combination had a significant influence on teaching effectiveness of school teachers irrespective of their years of teaching experience. The three independent variables in combination contributed 52.9% variance in teaching effectiveness scores of teachers having 0-10 years of teaching experience; 47.3 % for teachers having 11-20 years of teaching experience and 57.7 % variance in the teaching effectiveness scores of teachers having more than twenty years of teaching experience.

5.2) Discussion of Findings

The first finding of the present research study i.e. emotionally mature teachers were found to be more effective in teaching than emotionally immature teachers, is in consonance with the findings obtained by other researchers. For instance Dosajh, (1965); Sethi and Patel, (1985); Bansibihari and Surwade (2006); Gupta, Kaur and
Raina (2011) have reported that teaching carried out by emotionally mature teachers was much effective in comparison to emotionally immature teachers. This finding also draws support from the findings obtained by Chhaya, (1974), Gupta (1976), Wangoo (1984), and Mattoo (1987) who have consistently reported that emotional stability was one of the chief characteristics of effective teachers. Numerous explanations may be offered for positive impact of emotional maturity rather than emotional immaturity on teaching effectiveness. First emotional maturity helps in adjustment (Veeraraghawan, 1984; Shakuntala, 2001; Anderson, 2008; Hameed & Tahira, 2010; Mahmoudi, 2012; Soundararajan, 2012) which in turn helps in developing and maintaining positive relationship with others, emotional maturity thereby helps in teacher adjustment at their workplace that is essential for developing healthy relationship with their colleagues and creating rapport with their students for better accomplishment of their teaching goals. On the other hand emotionally immature persons suffer from problems in adapting with individuals and community.

This explanation is validated by the findings obtained by Singh (1987), Agarwal (1988), Kulkarni (2000) and Gupta (2010) who have demonstrated that adjusted teachers are effective in teaching in comparison to maladjusted teachers. Secondly emotional maturity promotes sound mental health (Kedarnath, 2001; Cartier, 2011; Singh & Todkar, 2011) that is a state of full and harmonious functioning of the total personality and it reflects a maximum of success, satisfaction and excellence and allows one to flourish and fully enjoy life. Teachers’ mental health plays an important role in teaching learning process. It results in good teaching and proper guidance to the students. Pradhan et al. (2009) revealed that mental health had a significant and positive effect on teaching effectiveness of secondary school teachers. Thirdly emotional maturity caters the development of individual’s self conceptions (Campbell et al, 2003) and higher self confidence in individuals (Agnihotri, 1987; Jha, 2002; Pasty & Jayalaxmi, 2006) which is vital for developing better self perception and self esteem of a person that helps in developing a sound confident personality which is of prime importance in delivering effective instruction and to teach well. The connection between Emotional Stability and job performance has also been established (Barrick, Mount, & Judge, 2001). Individuals who are low in Emotional Stability are more likely to be irritable, depressed, or anxious, and these traits inhibit the completion of workplace tasks (Barrick & Mount, 1991). Emotional
maturity is considered as a significant predictor of the level of success which includes general level of happiness, self-confidence, success in relationships, and the level of well-being in terms of emotional, mental and physical health. In this way emotional maturity relates to personal and interpersonal domain of a teacher which enables him to strike mutually healthy balance between his own needs and the needs of the students which is the demand of effective teaching learning process.

The first finding of the present research may also be explained in terms of Emotional Intelligence. Numerous researchers have defined emotional maturity in terms of emotional intelligence (Landau in Behenke & Greenan, 2011, p.65; Ashkanasy, Hartel & Zerbe, 2000; Spear, 2010) thereby suggesting a close relationship between the two. Moreover Dalip Singh (2002) considered Emotional maturity as one of the important component of Emotional intelligence. It was quoted by M Beard (2012) in his blog that emotional maturity is the appropriate application of emotional intelligence indicating that emotionally mature person is also emotionally intelligent. Emotional intelligence comprises specific skills, behaviours and attitudes that can be learned, applied and modelled by individuals to improve personal satisfaction and career effectiveness (Nelson & Low, 2003). Thus emotionally mature teachers in turn are emotionally intelligent teachers who have the ability to understand students’ feelings in learning and to recognise what emotions they display in teaching in order to identify students’ learning effectiveness. Numerous researchers have proved that emotional intelligence is positively related to teaching effectiveness (Dash & Behera, 2004; Fei-Fei, 2007; David & Roy, 2010) suggesting that emotionally maturity is also positively related to teaching effectiveness thereby again supporting and explaining the first finding of our study.

Another potential explanation for our first finding may be found by taking into consideration the Emotion Regulation Ability (ERA). Emotion regulation is the ability to control the experience and expression of emotion (Gross, 2002) and it is particularly important in school setting where the social rules are levied that teachers should express only the positive emotions in the class and so the teacher has to find appropriate ways of regulating his/her negative emotions of anger, disgust, frustration and sadness etc. Referring to Bernard’s criteria (1984) of evaluating the emotionally mature persons, it can be said that an emotionally mature person has the
ability to control and manage his/her emotions in a proper and constructive way i.e.
emotionally mature individuals generally evaluate, handle, control and use emotions quickly and thus have high emotion regulation ability. It has been demonstrated by researchers that individuals with higher emotion regulation ability are better able to forecast their feelings for future events (Dunn, Brackett, Ashton-James, Schneidermen & Salovey, 2007) and has been associated with both self- and peer ratings of interpersonal sensitivity, social support, and prosocial behaviour, as well as job satisfaction among college students and business professionals (Lopes et al., 2004, 2005). Teaching is an emotional process in which teachers manage, monitor and regulate their emotions to achieve teaching effectiveness and to create positive learning environment (Boyer, 1987; Gates, 2000). Therefore emotionally mature teachers with higher emotion regulation ability may be better able to predict which circumstances led to negative emotion related situations and as such can take suitable precautionary measures prior to that and thus may be able to create positive and pleasant teaching learning environment in the class and may be better in interacting more positively with the students and colleagues. Brackett et al. (2010) has demonstrated that there is an association between emotion regulation ability with personal accomplishment and job satisfaction in teachers. In this way emotional maturity may also help teachers in emotional labour to handle his or her negative feelings in an authentic, real and healthy way while interacting with students and thus promotes positive affect which is associated with greater job satisfaction (Weiss & Weiss, 1999) and less burnout (Rudow, 1999) ultimately improving teaching performance of the teachers. Indeed teachers believe that the ability to regulate emotions help them to be more effective in achieving academic goals, building quality social relationship, and maintaining good classroom management and discipline practices (Sutton, 2004).

The second finding of our research revealed that hardy teachers shows higher teaching effectiveness than non hardy teachers. This finding is in line with the findings obtained by Sansone, Wiebe and Morgan (1999), Wiebe and Williams (1992) who have reported that hardiness increase an individual’s task effectiveness. Rush, Schoel and Barnard (1995), Maddi et al. (2006), McCalister, Dolbier, Webster, Mallon and Steinhardt (2006), pointed out that hardiness was expected to have direct
relationships with outcomes such as satisfaction and performance. Also the finding directly draws support from Maddi’s (2004, p.295) article in which he concludes that there is a positive relationship between hardiness and performance criteria such as consulting and teaching effectiveness, leadership, and academic excellence. The hardiness theory asserts that individuals possess higher levels of hardiness sense greater feelings of involvement and control in their work (Maddi & Kobasa, 1984) thus helping in eliciting productive performance. Since more impressive evidences are available to the effect that hardiness contributes in work involvement and task effectiveness, the finding of our research strongly strengthens further these evidences. Hardiness may contribute to one’s performance in a variety of domains (Maddi, Harvey, Khoshaba, Lu, Persico & Brow, 2006). The performance benefits of hardiness may be particularly pronounced when performing tasks in stressful situations, such as at work and at school.

Hardiness is closely related to Resilience and emerged as a pattern of attitudes and skills that, together, facilitate resilience under pressure by turning stressful circumstances from potential disasters into opportunities to grow in wisdom and performance (Kobasa, Maddi, & Kahn, 1982; Maddi & Kobasa, 1984) and hence may be considered as an important factor of resilient teachers. Malcolm Thorburn (2011) through a series of 10 semi-structured interviews in examining the life history of one veteran male teacher of physical education in Scotland who has taught for nearly four decades in the same school revealed that “Jack’s” resilience, solace in subject teaching and sense of vocational identity were helpful in coping with lack of promotion and a deteriorating school and community environment. The resilience or hardiness perspective focuses more on what factors lead to greater levels of teacher engagement and a host of other positive workplace outcomes (Howard & Johnson, 2004). On the other hand loss of hardiness may result in teachers being more susceptible to the environmental stressors of their job where research has shown that negative attitudes towards the amount of challenge in the job, commitment to the job, and the amount of control over ones job predicts higher levels of stress (Chang, 2003). These contentions are in agreement with our second finding of the research.

Hardiness manifests itself in feelings and behaviours characterised as commitment, control and challenge. Commitment reflects a dedication to oneself and to one’s work. Control is the extent to which an individual influences life events to
ensure a particular outcome. Challenge refers to life events and one’s response to those events. Thus hardy teachers are fully involved and committed towards their profession; can safely manage their environments and resolve stressful conditions in the classroom and at school; are flexible, open minded and considers changes as incentives to grow. These attitudes of hardy teachers contribute to their enhanced performance thereby increasing their teaching effectiveness.

Another plausible explanation of the finding under discussion may be found in buffering role of hardiness on stress-illness and stress-burnout relationships. Research studies with a variety of occupational groups have found that hardiness functions as a significant moderator or buffer in the stress – health relation (Contrada, 1989; Kobasa, Maddi & Kahn, 1982; Maddi & Kobasa, 1984; Roth, Wiebe, Fillingim & Shay, 1989; Wiebe, 1991). According to Funk (1992) hardy individuals are able to remain healthy under stress by possessing commitment, control and challenge characteristics and hardiness has been linked to resistance to illness by Kobasa et al. (1982, 1985), Kobasa and Puccettii (1983). It is therefore inferred that hardy persons remain healthy both physically and mentally under stressful conditions and hardiness has been considered as the most important indicators of psychological health in business executives (Kobasa, 1979; Kobasa, Maddi & Puccetti, 1982; Kobasa & Puccetti, 1983; Kobasa, Maddi, Puccetti & Zola, 1985), lawyers (Kobasa, 1982), bus drivers (Bartone, 1989), and college students (Manganelli, 1998). Hardy individuals suffer from fewer illnesses because they are able to transform life events cognitively to make them less stressful (Kobasa et al., 1981, 1982a, 1982b). Hardiness is expected to be positively associated with active coping and negatively associated with regressive coping (Kobasa, 1982; Kobasa & Puccetti, 1983; Gentry & Kobasa, 1984). Active, or transformational coping means transforming high stress environments into benign experiences, such as engaging in problem-focus coping. On the other hand, regressive coping strategies include cognitive and behavioural withdrawal and denial, such as avoiding or ignoring the stressor, blaming others, and emotion-focused coping. High hardy individuals engage in approach or problem-focused coping strategies whereas low hardy persons engage in avoidance or emotion-focused coping strategies (Williams, Wiebe & Smith, 1992; Florian et al., 1995; Judkins, 2001). Therefore hardy teachers face the problems and try to resolve them by transforming them into meaningful conditions on the other hand non hardy teachers indulge in avoiding the
situation and problem that would lead to maladjustment in the school which in turn hampers their teaching effectiveness.

Thus hardy teachers remain healthy and do not fall ill in stressful circumstances which in turn reduce the burnout in teachers. The concept of burnout originated in the writings of the psychologist H. J. Freudenberger (1974) who coined the term ‘burnout’ to characterise a malady experienced by human service professionals who appeared to wear out or reach a stage at which they were no longer able to perform their tasks effectively, and sometimes even to care about their clients. Teacher burnout has a deleterious effect on the teacher, student, and the institution (Farber, 1991). When teachers experience burnout, they become less effective and often leave the profession (Bevis, 2008). Teachers with high scores in this personal characteristic i.e. hardiness have been shown to be less vulnerable to burnout (Holt et al., 1987; Rich & Rich, 1987; Pierce & Molloy, 1990; Nowack, 1991; Berwick, 1992; Duquette et al., 1995; Moreno, Garrosa, & González, 2000; Maslach et al., 2001; Chan, 2003; Moreno, Arcenillas, Morante, & Garrosa, 2005) and as a result they are more involved in their job and have the ability to deal with the multifarious problems of students and other type of problems effectively and efficiently that will improve teachers’ performance.

This fact has been validated by several researchers who reported that burnout has a negative relationship with teaching effectiveness. For instance Suneel Kumar (2001) reported that high school low burnout and average burnout teachers were more effective than those who were high burnout. Recently Goyal and Duggal (2012), Gupta (2012), Thakur (2012) have also proved that decrease in burnout leads to increase in teacher effectiveness and vice versa. Similar results were obtained by Rama (1975). These findings therefore leads to infer that hardiness increases teaching effectiveness by reducing teacher burnout and making them mentally and physically healthy through its stress buffering effects on mental health (Kobasa et al., 1982; Rhodewalt & Zone, 1989; Campbell, Swank & Vincent, 1991; Lawler & Schmied, 1992; Pengilly & Dowd, 2000; Waysman, Schwarzwald & Solomon, 2001; Williams & Lawler, 2001). Besides there are researchers who proved that hardiness has direct effect independently from stress on physical symptoms, depression, burnout and job satisfaction (Kobasa, 1979; Kobasa et al., 1981; Kobasa et al., 1982; Kobasa et al., 1983; Kobasa et al., 1985; Wiebe & McCallum, 1986; Nakano, 1990; Hills &
Norvell, 1991). On totality teachers’ hardiness at times may act as buffer to counter the stressful circumstances in the classroom and at school through healthy life practices and active coping strategies and also has a potential to have a direct effect on teacher’ illness independent of its effects on stress that will enhance their productivity by making teachers more resilient, flexible and strong.

Our finding also draws support from Pierce and Molloy’s (1990) study. They studied hardiness in relation to classroom control in a sample of 722 teachers of Australia and found that low hardy teachers viewed themselves as less able to make significant differences in lives of their students and more difficulties to teach students. It is therefore concluded that high hardy teachers find it easier to teach and to control the classroom which is directly proportional to the effectiveness of teachers. In education setting hardiness has been found to be associated with teacher alienation. It was found by Thomson and Wendt (1995) that high hardy teachers have less school alienation than did low hardy teachers. This in turn led to more involvement of teacher in the school and class activities as cited by Azeem (2001). Commitment is the outcome of job involvement that is thought to be influential in improving teacher performance. Hardiness also has one component of commitment and it was reported by Sezgin (2009) that psychological hardiness is positively and significantly related to both identification and internalization components of teacher commitment, whereas it is negatively and significantly correlated to the commitment predicated on compliance. Moreover, it has also been reported that hardiness has a positive effect on job satisfaction (Fisher, 1985; Manning et al., 1988; Judge, et al, 1998; Cash, 2009). This relation was studied in elementary school teachers by Jarvis (1993) who revealed significant but negative relationship between hardiness factors and job satisfaction. However Al-Qarout (2006) found a positive statistical relationship between the Hardiness behaviour and job satisfaction among the Headmasters of Government schools in the Northern districts of the West Bank. Similar results were obtained by Ghamari (2007). More recently Rasouli, et al (2012) found a meaningful relationship between hardiness, job satisfaction and stress among faculty members of Islamic Azad University, Mahabad. Hardiness as cited by many researchers is positively associated with job satisfaction of teachers which is expected to be one of the important factors in increasing teaching effectiveness of school teachers. This is also the third finding of our research.
The *third finding* of the present investigation i.e. job satisfied teachers were found to be more effective in teaching than job dissatisfied teachers is in consonance with the findings of numerous researchers, Mutha (1980), Padmanabhaiah (1986), Singh (1988), Atreya (1989), Shah (1991), Abraham (1994), Reddy (2001), Ololube (2006), Newa (2007), have consistently reported positive relationship between job satisfaction and teaching effectiveness. This finding not only provides empirical support to numerous researchers just mentioned but also helps in understanding the importance of positive affect towards the profession. Ball and Stenlund (1990) revealed that teachers indicate that success in their work was a major reason for being satisfied in their choice of profession.

As contrary to the third finding, the review done by Brayfield and Crockett (1955) found an average correlation of only + .15 from the 26 studies published up until then concluding that the relationship between job satisfaction and job performance is minimal or nonexistent. However this review was limited by the small number of primary studies existent at the time that examined the satisfaction-performance relationship. Later Herzberg *et al.* (1957) in their review expressed confidence in a relationship between the two. But these reviews were lacking theoretical work on satisfaction, performance, and their relationship as pointed out by Locke (1970), Schwab and Cummings (1970). Approximately three decades later, Iaffaldano and Muchinsky (1985) conducted an empirical investigation of the satisfaction-performance relationship and found the true population correlation to be .17. Thus, they concluded that satisfaction and performance are only slightly related. In a recent meta-analysis, Judge *et al.* (2001) estimated a true population correlation of 0.30. They explained that this result is different from the one obtained by Iaffaldano and Muchinsky (1985) because the Iaffaldono & Muchinsky examined satisfaction at the facet rather than global level. Recently Sharma and Tyagi (2010) reported that there is no relation between job satisfaction and teacher effectiveness. The contradictory finding of Sharma and Tyagi (2010) may appeared due to variation of sample size i.e. N= 100 which is very small as compared to the sample size of the present study (N=600). Moreover we used Factorial analysis of variance rather than Correlation coefficients only which clearly showed a significant differential effect of job satisfaction on teacher effectiveness. However, there are ample evidences in support of our third finding as cited above. More recently Anuar Bin Hussin (2011) proved
that job satisfaction dimensions (pay, promotion, work itself, supervision and co-workers) can contribute to 17.8 percent (%) to increase the job performance in the organization. Similarly Ziegler, et al (2012) reported that job satisfaction is a better predictor of job performance (i.e., higher satisfaction related to higher performance). Moreover, Ashton and Webb (1986), Carnegie Forum, (1986) corroborates that satisfaction within teaching is associated with teacher effectiveness, which ultimately affects student achievement. The results of Hayat’s (1998) study are also in agreement with our finding. He reported that College teachers with high scores on job satisfaction performed better in classroom.

The finding under discussion may be explained in a number of ways. First job satisfaction provides the motivation to the teachers to perform well (Bishay, 1998; Schonfeld, 1989). Through correlation analysis, teachers’ motivation has been found to be significantly related to teachers’ job satisfaction ($r = 0.38, p<0.01$) by Davis and Wilson (2000). Some past researches proved motivation to be related to job satisfaction (Thomas & Velthouse, 1990; Rosenholtz, 1991; Friedman & Farber, 1992). Mittal (1992) revealed a positive and significant correlation between work motivation and job satisfaction. If employees in an organization are motivated, they will render services to the employer and customers very efficiently and effectively (Mbua, 2003). Therefore job satisfied and motivated teachers are better in accomplishing their tasks and affect the students’ learning positively (Ngimbudzi, 2009). Bess (1977, p. 245) quoted that Strong motivation is “an essential ingredient in the formula for good teaching and depends fundamentally on the strength and quality of the satisfactions that can be derived from the enterprise itself.” This can be better explained by considering Herzberg’s two factor theory which postulates two factors i.e. motivators and the hygiene factors that account for satisfaction and dissatisfaction. Motivators increases satisfaction and Hygiene factors corresponds to dissatisfaction. Drawing support from this theory we can supplement our finding as satisfaction is associated with motivation and in turn promote the ability to perform well. On the other hand dissatisfaction due to hygiene factors leads to severe effects that will deteriorate performance of teachers. Csikzentmihalyi and McCormack, (1986) along with Rosenholtz (1989) indicated that if teachers are dissatisfied with their work lives and lack commitment to their organisations, not only will teachers suffer, but their students will suffer as well. Dissatisfied workers with negative attitudes will
ultimately leave the organisation. Conley, Bacharach and Bauer (1989, p. 59) maintain that “if teacher performance in schools is to be improved, it is necessary to pay attention to the kind of work environment that enhances teachers’ sense of professionalism and decreases their job dissatisfaction.” Wisniewski and Gargiulo (1997) maintain that high attrition rates amongst teachers can be attributed to job dissatisfaction. These contentions clearly provide ample support for higher scores of job satisfied teachers on teacher effectiveness scale as compared to job dissatisfied teachers.

Second, job satisfaction of teachers increases the commitment and dedication in job. Majority of researches showed a positive relationship between satisfaction and commitment (Aranya et al., 1982; Norris & Niebuhr, 1984; Johnston et al., 1990; Kreitner & Kinicki, 1992; Boshoff & Mels, 1995; Knoop, 1995; Morrison, 1997; Ting, 1997; Harrison & Hubbard, 1998). Commitment pertains to dedication and involvement in the job. Researchers (Maehr, 1989; Rosenholtz, 1989) suggest that the personal investment of employees at all levels is necessary for any effective organisation. Later, Bishay (1996) also postulated that if employees are satisfied with their work they will show greater commitment. Job satisfaction and organisational commitment have been found to both be inversely related to such withdrawal behaviours as tardiness, absenteeism and turnover (Yousef, 2000). Moreover, they have also been linked to increased productivity and organisational effectiveness (Buitendach & de Witte, 2005). Using SEM, Landsman (2001) reported that the employees’ job satisfaction significantly predicted the employees’ occupational commitment ($\beta=0.21$, $p<0.001$). Therefore, we assume that teachers’ job satisfaction contributes to teachers’ occupational commitment. Our finding is in agreement of the views of Shann (2001) who opined that teachers’ commitment and effectiveness solely depend on motivation, morale and job satisfaction and as Robbins (1998) had reported organisations with more satisfied workers are more effective than those with less satisfied workers. Therefore satisfied teachers will also strive for increasing the effectiveness of their schools and improving students’ achievement.

Third, job satisfaction is one of the determining factors of teacher retention in the job. According to Neuman, Reichel and Saad (1988), job satisfaction among teachers can be expressed as their willingness and preparedness to stay in the teaching profession irrespective of the discomfort and the desire to leave teaching for a better
job. In recent years, the teaching profession has experienced a low retention rate, with new teachers dropping out of the profession at a rate of 50% by the end of their first five years (Hope, 1999; Coeyman, Jonsson, Teicher, & Wiltenburg, 2001; Bobek, 2002; National Commission on Teaching and America’s Future, 2003). However, highly satisfied teachers are less likely to change schools or to leave the teaching profession altogether than those who are dissatisfied with many areas of their work life (Choy et al., 1993). Ruhland (2001) found teacher retention to be influenced by five factors: a pleasant working condition, a positive teaching experience, a sense they are doing a good job, positive interactions with students, and adequate time to complete job responsibilities. Michael Argyle in Ruut Veenhoven (1989) shows modestly positive correlations of job satisfaction with productivity, absenteeism and labour turnover. Job satisfaction is correlated to enhanced job performance, positive work values, high levels of employee motivation, and lower rates of absenteeism, turnover and burnout (Begley & Czajka, 1993; Chiu, 2000; Tharenou, 1993). On the other hand teacher dissatisfaction appears to be a main factor in teachers leaving the profession in many countries (Huberman, 1993; Woods et al., 1997). Thus job satisfaction leads to teacher retention in the job which in turn contributes to the increased commitment and it is expected that job security and commitment help a teacher to enjoy the job and work to the fullest so as to attain the maximum achievement of his/her students and thereby increasing his/her own teaching effectiveness.

Fourth, Job satisfaction is also correlated with other kinds of desirable behaviour at work - there is less sabotage, stealing, doing work badly on purpose, and spreading rumours or gossip to cause trouble (Mangoine & Quinn, 1975). Karugu (1980) confirmed that job satisfaction and dissatisfaction among elementary teachers and head teachers in Nairobi, Kenya had some relationship with high morale, quality input, reduction in absenteeism and turnover. Among Albanian teachers, job satisfaction was associated with job security and respect accorded teachers (Kloep & Tarifa, 1994). Also Farber, (1991); Troman and Woods, (2000) opined that declining job satisfaction, reduced ability to meet students’ needs, significant incidences of psychological disorders leading to increased absenteeism, and high levels of claims for stress-related disability. Mwamwenda (1995) found that a lack of job satisfaction resulted in frequent teacher absenteeism from school, aggressive behaviour towards
colleagues and learners, early exits from the teaching profession, and psychological withdrawal from the work.

Fifth, there are evidences that job satisfaction is vital in decreasing burnout. Lee and Ashforth (1996) found that job satisfaction correlates comparatively highly with all the three burnout dimensions but most highly with depersonalization (27% shared variance), followed by exhaustion and reduced personal accomplishment (20% and 16% shared variance). Researchers such as Borg and Riding (1991), Carr (1993), Decker and Borgen (1993) have noted a correlation between burnout and job satisfaction. Moreover, evidences are also found for the hypothesis that job satisfaction will show whether individuals are attached to an organisation; will only comply with the directives; or will quit the organisation (Hirchman, 1970; Randall, Fedor & Longenecker, 1990). Therefore job satisfaction of teachers will help them in getting more attached with the job thereby decreasing the chances of burnout.

Sixth, Job satisfaction is an extent to which employee feels positively or negatively about different aspects of job e.g. job conditions, timing, structure, compensation, tasks, and relationship with co-workers and responsibilities (Omme, et al, 2009; Spector, 1997; Williams, 2004) and it has been reported by many researchers that teaching profession needs improvement with respect to inadequacies in working conditions, resources and support, limited decision-making latitude and restricted opportunities (Darling-Hammond, 1984; Carnegie Forum, 1986; Rosenholtz ,1989; Sergiovanni & Moore ,1989). Employee’s satisfaction results in pleasant environment in an organization (Khan et al., 2011). In this way Job satisfaction is also found to be associated with the attitude towards work. Kumar and Patnaik (2004) reported that job satisfaction and attitude towards work are highly correlated. Attitude towards work is relative to the productivity on the part of teachers and is found to be a contributing factor of teaching effectiveness. DeBruyne (2001) reported that teacher attitudes have a significant impact on the job performance of teachers and also the academic performance of their students. It also linked job satisfaction to job performance and indicated that administrators have a significant impact on the school environment, and the type of environment that they create is highly predictive of the level of job satisfaction for the teaching staff.

Seventh plausible explanation of the third finding of our research lies in the role of job satisfaction in perception of stress. Job satisfaction enables teacher to perceive
less stress in the job and it was reported by Adam (2000), Brewer and Lander (2003), Ghali (2004), Haberman (2005) and Bindu (2007) that job satisfaction and occupational stress have negative relationship with each other. As a result highly satisfied teachers experience less stress and thereby feel healthy. Teacher satisfaction is attached to the freedom to try new ideas, intrinsic work elements and responsible levels and thus is related to professional adjustment.

Finally, third finding may be explained in terms of our second finding. As cited previously hardiness and job satisfaction are positively correlated, as a result job satisfaction provides teachers with the resilience that helps them to face the challenges of job consider themselves as influential on events and be fully involved with their jobs. Thus job satisfied teachers are hardy teachers who can perform well even under unfavourable conditions of job.

Moving towards the interactional effects it was found from the present research that the first interactional effect of emotional maturity and hardiness is statistically insignificant. However it is only slightly insignificant. Therefore the finding revealed that though emotional maturity - emotional immaturity and hardiness – non hardiness variations of personality influence teaching effectiveness significantly when considered separately, but when both variables are combined, their interaction becomes slightly insignificant.

The second interactional effect i.e. interaction between emotional maturity and job satisfaction variations on teaching effectiveness of school teachers was also found be to statistically insignificant. It therefore suggests that the teaching effectiveness of school teachers of emotionally mature and emotionally immature school teachers is independent of their levels of hardiness. It means that when these variables are combined, their interaction becomes insignificant however emotional maturity-emotional immaturity and job satisfaction-job dissatisfaction variations of personality influences teaching effectiveness of school teachers significantly.

The remaining third interactional effect between hardiness and job satisfaction variation was also found to be statistically insignificant. This insignificant interactional effect may also be explained in the same way as we have explained the second insignificant interactional effect.

However the three way interaction between emotional maturity, hardiness and job satisfaction on teaching effectiveness of school teachers was found to be
statistically significant. It suggests that the teaching effectiveness scores of emotionally mature and emotionally immature teachers are not independent of the levels of hardiness and job satisfaction rather teaching effectiveness scores are the product of emotional maturity, hardiness and job satisfaction. In other words neither emotional maturity, nor hardiness nor job satisfaction alone influences the teaching effectiveness of school teachers. This can be explained on the basis of some moderating variables which are common outcomes (adjustment, increased commitment and decreased burnout of all the three independent variables) as discussed above. It may be therefore inferred that the significant interaction among emotional maturity, hardiness and job satisfaction can be attributed on account of their similar outcomes.

Results obtained from *multiple regression* analysis are also in agreement of the results obtained from factorial ANOVA which are discussed above in detail. Overall our model comprising of three independent variables emerged significant at .01 level in predicting the teaching effectiveness of school teachers that validated the significant three way interactional effect of EM × H × JS. In combination these three variables accounted for 51.5 % of variance in teaching effectiveness of school teachers. However regression results revealed that emotional maturity has the strongest predictive power (30.1 %) on teaching effectiveness followed by job satisfaction (20.1 %) and hardiness (12.6 %).

In considering the *demographic variables*, it was found that teachers do not differ in their teaching effectiveness with respect to gender i.e. overall gender has no influence on teaching effectiveness of school teachers. This is the *eighth finding* of the present research which has been corroborated by many reports. For instance findings obtained by Subbarayan (1985), Prakasham (1986), Singh (1987), Bhasin (1988), Gupta (1988), Indira (1997), Jayaramana, (2001), Malik (2005), Pradhan, Senapathy and Sahoo (2009), Kagathala (2002), Islahi (2010), Khatoon (2010), Sodhi (2010), Rao (2011) are in support of our eighth finding. However there are many studies which revealed gender to be a significant predictor of teaching effectiveness, some reporting female teachers more effective (Sofat, 1977; Singh, 1988; Biswas & De, 1995; Yadagiri, 2000; Agarwal, 2003; Vijaylakshmi & Mythill, 2004; Amandeep & Gurpreet, 2005; Arokiodoss, 2005) while some reporting males to be more effective than their female counterparts (Kulkarni, 2000). The variation of results
indicated that there is a need of more in depth studies to clarify the role of gender on teaching effectiveness of school teachers.

In considering the marital status, results indicated that marital status had a significant effect on teaching effectiveness of school teachers. The ninth finding of the research is that unmarried teachers were found to be more effective in teaching as compared to married teachers. Similar observations were reported by Agarwal (2003), Islahi (2010). This finding may be explained on the basis of the fact that married teachers in comparison to unmarried teachers have more family responsibilities and they will have to manage and care almost all household chores besides meeting the challenges of their jobs. This trend may be obtained due to the inability of the married teachers involved in the present sample to maintain the balance between job responsibilities and family responsibilities that ultimately affected their performance and decreased their effectiveness scores. However, there are conflicting results regarding the effect of marital status on teaching effectiveness of school teachers. For instance, Reddy (1990) revealed that there is no significant influence of marital status on teaching effectiveness. Likewise in a study, Vijayalakshmi and Mythill (2004) reported married teachers to be more effective than unmarried teachers. these differences may be accounted on the basis of different methodologies. Reddy had conducted his study on adult education instructors while Vijayalakshmi & Mythill’s study was based on college teachers. In contrast, our study was conducted on full time CBSE school teachers.

Tenth finding of the present study is based on the effect of teaching experience on teaching effectiveness of school teachers. The third demographic variable taken for the present research i.e. teaching experience had a significant influence on teaching effectiveness of school teachers revealing that teaching effectiveness increases with the increase in years of their teaching experience. This finding is in consonance with the findings obtained by many researchers. For instance Joyamma (1962), Saxena (1968), Debnath (1971), Sharma (1971), Mehta (1972), Klitgaard and Hill (1974), Reddy (1980), Murnane (1981), Padmanabhaiah (1986), Idrisi (1987), Lopez (1995), O’Conna (1998), Talbott (2005), Sharma (2010) have highlighted the positive relationship between teaching experience and teaching effectiveness. Though Andrew and Schwab (1995) notice that very well prepared beginning teachers can be highly effective, but the finding under consideration draws ample support from the study
conducted by Lopez (1995) in which he emphasized that 6 - 7 years of classroom experience is needed to fully develop the skills and knowledge of the teacher and teacher’s peak in their classroom effectiveness after 18 to 19 years of teaching. This finding may also be explained from the views of Dale (2000) who opined that early experiences influence beliefs and behaviours regarding teaching and learning and that the ability to identify these key events could provide the teachers with insight into his/her philosophical position about education, the pedagogical decisions he/she makes daily in the classroom and in interactions with others in the school environment. Another possible explanation may be offered from the fact that as the experience increases, teachers become more proficient and feels more adjusted with their jobs which in turn may enhance their effectiveness. But there are evidences (Khatoon, 2010) that teaching effectiveness increases up to a certain optimum level for particular years of experience and then a sharp fall was noticed. May be this is due to their inability to cope with recent trends and latest technological innovations. However the teachers in our study were selected from CBSE schools only in which the teachers are provided with the in service assistance in learning the latest trends and innovations in pedagogical skills and teaching methodologies as evident from the introduction of smart classes in these schools. Also it there are evidences reporting that increase in teaching experiences develop leadership qualities in teachers (Chia-Lung Chu, 2006) that will enthuse teachers with high self confidence thereby improving their teaching effectiveness.

Multiple regression analysis also revealed that the three independent variables i.e. emotional maturity, hardiness and job satisfaction emerged as significant predictors of teaching effectiveness irrespective of gender, marital status and teaching experience. It means that these three variables are significant in predicting teaching effectiveness in male and female school teachers; married and unmarried school teachers and also predicted teaching effectiveness significantly in teachers having varied teaching years of teaching experience.