INTERPRETATION AND DISCUSSION

Findings of the present research have been interpreted and discussed under three major sections. First section of discussion focuses on major findings of the present investigation. The magnitude and direction of relationship among time stress, time management, future orientation and health status of medical professionals have been interpreted first, then the results of step–wise multiple regression analysis (SMRA) have been discussed to interpret the contributing roles of future orientation and time management in time stress and health. Lastly, the interpretation of ANOVA results has been done to determine the impact of future orientation, type of hospital and job category on time stress and health status of medical professionals. Second section of the chapter deals with the empirical and theoretical validation of findings of the present investigation. Finally, implications of present research and suggestions for further researches have been reported in third section of this chapter.

Major Findings of Present study

I. Interpretation of Correlational Analysis

In order to get insight into the linkage between time stress, future orientation, time management and health correlational analysis was done. Correlation results are interpreted in following section:
(i) **Relationship between Time Stress and Health (Illness):**

Correlation results (Table 3.1) evinced that time stress was found to be positively linked with physical Illness as well as psychological illness.

(ii) **Relationship between Future Orientation, Time Stress and Health.**

Future orientation was found to be negatively correlated with time stress as well as, physical illness and psychological illness (Table 3.2).

(iii) **Relationship between Future Orientation and Time Management.**

Future orientation was found to be positively correlated with time management and its strategies (Table 3.3). More specifically, future orientation was also found positively linked with time budgeting, goal clarity, prioritizing, co-ordination check against misuse, focusing and overall time management.

(iv) **Relationship between Time Stress and Time Management:**

Results (Table 3.4) evinced that time stress was found to be negatively correlated with time management and its strategies i.e. time budgeting, Goal clarity, Prioritizing, Coordination, Check against misuse and focusing.

(v) **Relationship between Time Management and Health (Illness):**

Correlation results (Table 3.5) reveal that time management was found inversely related with physical and psychological illness. More
specifically, time budgeting was found negatively related with physical and psychological illness. Similarly, goal clarity was also found to be negatively linked with physical and psychological illness. Prioritizing was also found to be inversely correlated with physical and psychological illness. Furthermore, Coordination was found to be negatively correlated with physical illness and psychological illness. Check against misuse was also found to be inversely linked with physical and psychological illness. Likewise, Focusing was found negatively related with physical and psychological illness. Time management as a whole was also found negatively correlated with physical illness and psychological illness.

II. Interpretation of Step-Wise Multiple Regression Analysis (SMRA)

A close perusal of correlation results suggest to go for regression analysis for determining the contributing role of predictors in criterion variables. Results are interpreted briefly.

(i) Prediction of Time Stress by Time Management, Future Orientation etc.

Regression results (Table 3.6) indicate that time stress was predicted by four factors. Overall time management contributed maximum negatively. Followed by salary and time budgeting which explained positively. However, future orientation predicted negatively.
(ii) Prediction of Physical Health (Illness) by Time Management strategies.

Regression results (Table 3.7) denote that physical health (Illness) was predicted by three factors. Time Budgeting explained maximum negatively followed by goal clarity and check against misuse.

(iii) Prediction of Psychological Health (Illness) by Time Management (overall) and its strategies.

Results indicated (Table 3.8) that psychological health was predicted by four factors. Overall time management explained maximum negatively followed by, check against misuse and focusing. However, goal clarity explained positively.

III. Interpretation of Univariate Analysis

In order to determine the effect of future orientation, type of hospital and job category, 2x2x2 factorial ANOVA was done for time stress and health (physical & psychological) scores. Results are interpreted in following section:

(i) Influence of Type of Hospital, Job Category and Level of Future Orientation on Time Stress

ANOVA results, (Table 3.10) indicate that different group of respondents differed significantly on the level of time stress. Significant main effect of type of hospital revealed that time stress was found greater in medical professionals belonging to private hospitals as compared to
medical professionals of government hospitals. Similarly, significant main effect of job category indicated that time stress was found greater in paramedical professionals as compared to doctors. Likewise, the level of time stress also varied significantly in professionals having high and low future oriented outlook. Significant main effect of future orientation evinced that time stress was found higher in low future oriented (L.F.O.) group as compared to high future oriented (H.F.O.) counterparts.

(ii) Impact of Type of Hospital, Job Category and Level of Future Orientation on Physical Health (Illness)

ANOVA results shown in Table 3.12 indicate that respondents differed significantly on physical health status. The main effect of type of hospital was found to be significant, which revealed that physical illness was found greater in medical professionals working at private hospitals than medical professionals in government hospitals. The main effect of job category was also found to be significant which indicated that physical illness was found greater in paramedical staffs than doctors.

(iii) Effect of Type of Hospital, Job category and Level of Future orientation on Psychological Illness

ANOVA results (Table 3.18) indicate that respondents differed significantly on psychological health status. Significant main effect of type of hospital indicates that psychological illness was found greater in medical professionals working at private hospitals than their counterparts.
working at government hospitals. Similarly, the significant main effect of job category indicated that psychological illness was found greater in paramedical professionals in comparison of doctors. Likewise, the significant main effect of future orientation was also found to be significant which revealed that psychological illness was found maximum in low future oriented (L.F.O.) medical professionals as compared to high future oriented (H.F.O.) counterparts.

**Interpretation of Interaction Effect:**

Certain interaction effects were also found to be significant; therefore, need further interpretation.

(i) **Interpretation of Interaction Effect on Time Stress**

Significant type of hospital x job category interaction effect (Table 3.10 & Figure 3.5) evinced that, paramedical professionals working at private hospitals have shown greater time stress than those working at government hospitals; however, this difference was found at moderate level. Despite this, doctors working at government hospitals have shown low level of time stress than those working at private hospitals and difference level between both groups was found significantly high.

(ii) **Interpretation of Interaction Effect on Physical Illness**

On physical illness, significant types of hospital x job category interaction effect (Table 3.12 & Figure 3.9) evinced that both the factors
exerted joint influence on physical illness. Results (Fig 3.9) denoted that paramedical professionals working at private hospitals have shown high level of physical illness than those working at government hospitals. Though, this difference was found at moderate level. Despite this, doctors working at government hospitals have reported less illness than those working at private hospitals and difference level between both groups was low.

Therefore, ANOVA results have clearly proved the pervasive impact of future orientation, type of hospital and job category on time stress and health status of medical professionals.

On the basis of findings of this research, certain issues have been raised:

(i) At what extent the link between time stress, future orientation, time management and health are confirmed?

(ii) How and at what extent, future orientation and time management exerted mediating role in time stress – health relationships?

(iii) Why and at what extent type of hospital, job category and future orientation have exercised impact on time stress and health?

(iv) Finally, how far, these results are in close consonance with the other research findings?
An effort was made to discuss above issues in the light of findings of this research as well as on the basis of other empirical and theoretical evidences.

Empirical and Theoretical Validation of Findings of Present Research:

Results of the present investigation have evinced strong contribution of future orientation in managing time stress – health relationship. Further, effect of type of hospital and job category and future orientation have also been proved. These findings have been discussed in the context of other empirical and theoretical evidences.

1. Time Stress – Health Relationship

Findings of present study evinced a direct positive link between time stress and illness. More specifically, time stress was found positively related with physical and psychological illness. This finding suggests that with increasing stress related to time, illness also increased in medical professionals.

Present result is supported by numerable number of researches (Cartwright & Cooper, 1994; Pandey & Srivastava, 2004; Srivastava, 2002). Earlier, Pandey and Srivastava (2004) reported a positive relationship between work stress and illness in career oriented females. In another study, they also found that job category, family type and job tenure exercised influence on work stress, coping and illness. Shukla
(2010) evinced that work stress was found positively linked with physical and psychological illness. In a recent study, Pandey and Pandey (2013) investigated time stress and health status in medical professionals and found that time stress is positively linked with illness. Menzies (2005) documented that many people feel as if there are not enough hours in the day and that people perceive that they are working longer and harder than ever before. These feelings of stress and overwork are important, as the idea that psychological stress is consequential for numerous outcomes is well established (e.g., Gupta & Beehr, 1979; Hendrix, Ovalle, & Troxler, 1985; Kristensen, 1996; Latack, 1986).

When the stress is excessive, it overtaxes individual’s resources and leads to breakdown on integrated functioning. Such outcomes include emotional problems, mental illness, physical illness and social deviance. (Rice, 1987). According to Rose (2003), employees have tendency towards high level of stress regarding time, working for longer hours which reduces employees urge for performing better. Other studies have also proved ill consequences of stress on health. These include; increased heart rate and blood pressure, cardiovascular disease, gastrointestinal disturbance, tension headaches, hypertension, fatigue and sleep disturbance etc (Maslach, Schaufeli & Leiter, 2001). Adverse effects of stress may affect not only the individual, but also his/her family life, marriage and social life (McManus, Winder & Gordan, 2002).
A sizeable number of studies evinced that time stress lead to increased depression in medical professionals (Tyssen, Vaglum, Gronvold, & Ekeberg, 2001), decreased job satisfaction (Flanagan & Flanagan, 2002), disrupted personal relationships (Gallegos, Bettinardi-Angres, & Talbott, 1990), psychological distress (Jain, McLaughlin, & Johnson, 1996); and even suicide (Richings, Khara, & McDowell, 1986). Time stress may also harm medical professional effectiveness: It decreases attention (Smith et.al., 1990), reduces concentration (Askenasy & Lewin, 1996), impinges on decision-making skills (Klein, 1996 & Lehner et.al., 1997), and reduces professionals’ abilities to establish strong relationships with patients (Pastore et.al., 1995). Stress due to time pressure may also lead to increased burnout (Spickard, Gabbe, & Christensen, 2002). Hospital staff in particular is subject to stress simply because they are severely challenged by their rapidly changing environment (Al-Aameri, 2003).

In a recent study Josephine (2008) identified the main causes of stress in medical professionals i.e. workload, time pressure, administrative duties, sleep deprivation, no regular meals and threat of malpractice. The organizational structure is also a source of stress, i.e. career structure, career uncertainties, inadequacy of resources and staff, lack of senior support, culture and climate of the organization.

Present finding have some theoretical supports. Rice (1984) has argued that working condition (emergent duties) can have a negative
impact on overall life satisfaction and health by influencing both the environment and the person. Similarly present results denote that emergent duties (time pressure) in medical professionals have caused high level of physical and psychological illness. Findings can also be interpreted on the basis of Behavior Constraint Model of stress. This model of stress suggests that under high stress, people feel reduced behavioural freedom; he may experience psychological reactance which may lead to withdrawal and other mental problems. This finding can also be interpreted in the light of work place related model of stress (Cooper, 1987). This model presents three interrelated stages, viz; sources of stress, symptoms of stress and diseases. Model denotes six major sources of stress. These stressor causes feeling of high stress in individual. The manifestation of stress occurs at individual and organization level. Individual related symptoms include raised blood pressure, depressed mood, drinking (drug), irritability and chest pain, whereas, organization related symptoms are found in the form of high absenteeism, high labor turnover, time pressure, industrial relation difficulties and poor quality control. Hence, present results denote that high time stress in professionals causes physical and psychological illness. Earlier, Rodin (1970) suggested that the presence of high time pressure and large number of objects at work place, poor physical condition, noise, useless infrastructure etc. generate the feeling that the individual`s control over
the situation is reduced. He may try to gain control but high stress feeling may cause helplessness (Burger, Oakman & Bullard, 1983).

An overview of present results and other researches evinced that the high time stress deteriorates the health status of medical professionals as well as effectiveness of medical organization. Researchers have identified certain mediators to buffer stress – health linkage. In present research future orientation and time management have been proved as mediator variables in the time stress – health relationship.

2. **Future Orientation in managing Time Stress – Health Relationship**

Findings of present study further evinced that time stress was found inversely related with future orientation. Regression results report that future orientation was found strong predictor in time stress health linkage. ANOVA results also evinced that professionals belonging to high future oriented (H.F.O.) group expressed less time stress and better health status as compared to low future oriented (L.F.O.) group. Since high future oriented people have a tendency to pay more attention towards information having future utility, planning, goal settings and optimism therefore, they tended to acquire such information which included planning, setting goals etc, which in turn worked as buffer to control health problems. Poor health status in L.F.O. group is quite possible because they were found unaware, ignorant and did not showed tendency to manage time and effort to improve health status.
A number of studies have proved the positive role of future orientation in person’s health behaviour and well being (Pandey & Singh, 2004; Singh, 2002; Tiwari & Agarwal, 1988). Earlier studies evinced that future orientation enhances health knowledge, behavior and health status (Mahadevan, 1984; Pandey, 2001, 2012). Other researchers have also identified impact of future orientation on stress which in turn influences judgmental process, achievement motivation, delay of gratification and reproductive health (Agarwal & Tiwari, 1988; Geis & Gerrard, 1984; Pandey, 2001, 2012; Singh, 2002; Tiwari & Agarwal, 1989). In a recent study, Pandey & Yadav (2013) found that high future oriented females expressed more knowledge and reproductive health behaviour as compared to low future oriented females and a compatible relationship was found between knowledge, attitude and health behaviour in H.F.O. group of females. Since high future oriented people tended to pay more attention to message which had utility to better health and expressed better knowledge about health issues and also exercised more adoption and health behaviour as compared to low future oriented people who differed in personality disposition of future orientation. Thus, findings of present study as well as other researches denote that persons having future oriented outlook tend to give more importance to messages/information which are linked with future planning or utility for future. Dispositional characteristics are considered as the inner most traits or structures, which organize a person’s behaviour into a basic pattern.
and are relatively stable throughout the individual’s lifetime (Gjesme, 1983; Murray, 1938). Thus, findings of present investigation proved that future orientation has exercised strong mediating role in minimizing time stress and illness in medical professionals. Shukla (2010) reported that teachers having high future oriented outlook showed less work related stress and less health problems as compared to low future oriented teachers. Many other researchers have focused the importance to future oriented thinking in several types of stress. Results of this research also revealed that future orientation exercised significantly positive role in physical and psychological health status of respondents.

Another finding of this investigation indicates that professionals belonging to high future oriented (H.F.O.) group expressed better time management and future planning which exerted positive role in promoting physical and psychological health status of professionals. Contrary to this, poor health status in L.F.O. group is quite possible because they were found in time pressure due to mismanagement of time and did not showed tendency to pay attention towards information having future utility, planning and effort to improve health status. There are many young people whose lifestyle includes health-damaging behaviours, such as smoking and drinking. Therefore, it is important to understand how person’s health behaviour is connected to their future orientation. Geis and Gerrard (1984) have also suggested that future orientation can influence family planning behaviour and reproductive health. Other
researches have also identified contributing roles of future orientation and attitude in adoption behaviour and reproductive health (Mahadevan, 1984; Pandey, 2001, 2012; Pandey & Yadav, 2013).

Why do future orientated people were found conscious towards time and reported better health status? Certain explanations are given. Since, future-oriented thinking – our plans, goals, daydreams, aspirations, hopes, worries, predictions, expectations, and the various scenarios through which these potential outcomes may or may not be realized – is the stuff of mental life (Austin & Vancouver, 1996; Johnson & Sherman, 1990; Klinger, 1994; Oettingen, 1996; Olson, Roese, & Zanna, 1996; Taylor & Schneider, 1989). Researchers have identified reliable individual differences in expectations about future outcomes and their attainment (e.g., dispositional optimism, Scheier & Carver, 1985, and hope, Snyder, 1994), and in the proportion of cognitive activity devoted to past, present, and future outcomes (e.g., temporal orientation, Zimbardo & Boyd, 1999). Individuals are found to differ on the value they place on future vs. current outcomes (Strathman, Gleicher, Boninger, & Edwards, 1994) and in their ability to forgo short-term rewards in favor of long-term benefits (Mischel et al., 1989). Many of these beliefs and skills have been shown to have robust prospective links to important achievement, health, and other outcomes in a wide variety of populations and settings.

Several researches also evinced the direct link of future orientation with positive mood and affect. Positive affect seems to promote problem-
solving and self regulatory skills that may be useful in making future plans and in coping more generally (Ashby et al., 1999; Aspinwall, 1998), leading to the initiation of coping efforts that may serve to preserve or even to increase favorable feelings and expectations (Aspinwall & Taylor, 1997; Aspinwall et al., 2001; Fredrickson & Joiner, 2002). Gervey et al.(2006) reported that people who are in a good mood are more willing than those in a neutral mood to seek out and read information about their own weaknesses. In this context, a positive mood may be one of the positive aspects of current reality that provides the psychological resources necessary for the management of negative events and information (Aspinwall, 1998; Trope & Pomerantz, 1998).

Future orientation also varies with personality (Glendinning et al., 1995; Pulkkinen, 1983). Part of healthily behaving youth has a positive future orientation and high self-esteem (Pulkkinen, 1983). According to the same research their plans are well constructed and more realistic, and they are usually satisfied with their choices. Self-efficacy and socially supported life goals seem to be protective factors (Lecci et.al., 2002). Adolescent with positive future orientation are less likely to use alcohol or drugs (Robbins & Bryan, 2004). Negative future orientation is connected to different health-damaging behaviours. It has been found that adolescent smoking and alcohol use has a negative relation to the number of positive expected selves, referring to individual’s expectations, hopes and fears for the future (Aloise-Young, Hennigan & Leong, 2001).
Adolescents who smoke a lot are afraid and dissatisfied with their future (Pulkkinen, 1983). Drug users have low self-esteem (Rees & Wilborn, 1983), and their self-images are negative in educational, social, family and personal dimensions. Delinquent’s future orientation includes more private concerns (Trommsdorff & Lamm, 1980). Adolescents who show behavioural problems report often feelings of helplessness and hopelessness (Koivusilta & Rimpelä, 2000).

It is also clear from present findings and several other studies that future orientation leads to planning and goal orientation. Thus, time management itself is clearly implied in future orientation because it also includes planning and goal clarity. Thus, along with future oriented outlook, time management can work as buffer in mitigating adverse effect of time stress on health (Agarwal & Tiwari, 1988; Pandey & Singh, 2004). Despite empirical evidences, findings have strong theoretical supports.

The finding of present research proved that future orientation worked as a strong mediator in time stress – health relationship. Present findings can be explained on the basis of Nurmi’s model of future orientation. Nurmi (1989) has viewed, future orientation as a multidimensional concept that includes dimensions like; motivation, planning and evaluation. ‘Motivation’ refers to the awareness or motives a person has to do something in future. ‘Planning’ refers to the way how, person plan for his/her future goals and move towards the goal. Third
dimension `evaluation` refers to how a person realizes the expected goals. This model also explained the present results that, H.F.O. professionals were motivated towards their future goals and realizes the expected goal in healthy manner. That’s why they feel less time related stress and less illness (physical and psychological).

Further, this result could be explained on the basis of Gjesme’s theory of Situational and Dispositional Future Time Orientation (F.T.O.). According to Gjesme (1983), high future oriented people pay more attention to information having future utility, planning and goal orientation. In present research high future oriented professionals tended to manage their time in an effective way and thus, they showed better time management and improved health status as compared to professionals having low future oriented outlook.

Later, Ribbon model of future orientation (Katsumata, 1995) indicates that the future time perspective is the individual’s group’s and/or society’s views of the psychological future including the events and conditions in the future. The concept of the future time perspective can be conceived as the reciprocal relation of the orientation toward the future, the extension to the future, the degree of details of the future, the degree of importance of the future, the degree of possibilities of the future and the feeling tone of the future. This model has also supported findings of present research.
3. The role of Time Management in the Time Stress – Health Relationship

It is clear from present research that time management was found inversely related with time stress (Table 3.4). Similarly, time management was found negatively related with physical and psychological illness (Table 3.5). Stepwise multiple regression analysis (SMRA) results also confirmed the strong role of time management in mitigating time stress – health relationship.

These findings are in close consonance with other research findings. Drucker (1967) found that managers reported 25% controllable time while 75% time is uncontrollable. They were found in high time pressure and were prone to illness. In such situations, time management strategies play significant role in mitigating ill consequences of time stress in health status of managers. People having future oriented outlook show better planning and prioritizing capacity and therefore, may effectively control the ill consequences of time stress on health and wellbeing. Time management has been shown to be related to college grades (Britton & Tesser, 1991), academic performance (Burt & Kemp, 1994), and study habits (Bond & Feather, 1988). Students perceived poor time management as a reason of examination failure (Ling, Heffernan, & Muncer, 2003).

Perceived control of time is also found linked with time stress-related outcomes, such as grade point average (Britton & Tesser,
Further, time management behavior negatively related to job-induced and somatic tension, was mediated by perceived control of time (Claessens, Van Eerde, Rutte, & Roe, 2007). Since, perceived control of time is associated in a similar way to time management disposition. Besides, not only perceived control of time contributes to lessen stress but also setting goals and priorities and mechanics of time management. Claessens et al. (2007) have found that setting goals and priorities lead to more control and therefore less strain, more satisfaction and feeling more productive were identified in employees. Additionally, mechanics of time management is negatively related to self-punishment behavior and distress (Griffiths, 2003).

Therefore, this result can be theoretically interpreted on the basis of Seaward’s Principle of Time management (Seaward, 1999). He suggested three techniques of time management i.e.; prioritizing, scheduling and implementing. Prioritizing refers to identifying long term and short term goals; maintain balance among the various aspects of life. Scheduling is time allocation for prioritized responsibilities with a designated time period in which to accomplish it. Implementing is the last technique in which real challenge lies. To avoid problems in implementing the plans, one should exercise such techniques as; assign time goals, avoid procrastination, focus on efforts, creating pleasant environment, exercise and deep relaxation, take small breaks and reward our accomplishments.
Managing time for healthy life may need to simplify and organize time within the context of perceptual overload and rush.

Findings of present study evinced that time management was found as buffer in time stress – health relationship. If person is using time efficiently he/she may feel less stress related to time. It is not hard to imagine that medical professional having very efficient time use or very good in time management, would experience less time stress. Because a person with good time management skills, may act accordingly. These time-saving actions have the potential impact on reducing time pressures. For instance, professionals with good time management skills organize and prioritize things well without crashing with other things and they can arrange time for finishing tasks within time. Therefore, they experience less time pressure. Thus, professionals, who were able to manage time in an effective manner, were also less stressed related to time and were found healthy.

4. Influence of Organizational Factors on Time Stress and Health

In order to determine the influence of organizational factors (viz. type of hospital & job category) on time stress and health status of medical professionals, ANOVA analysis was done. Present findings evinced significant impact of organizational factors on time stress and health. These findings are interpreted here in the light of empirical evidences.
(i) **Influence of Type of Hospital on Time Stress and Health:**

Results revealed that the level of time stress varied across different group of medical professionals in accordance with type of hospital. Time stress was found higher in professionals working at private hospitals than professionals of government hospitals. Despite this, physical as well as psychological illness were found higher in professionals working at private hospitals than those professionals working at government hospitals. Reasons behind this is that in government hospitals the major benefits of professionals are monetary benefits, job Security, job Satisfaction, less time pressure, more exposure and more experience. Thus, professionals working at government hospitals feel less time stress and less health problems. Contrary to this, professionals working at private hospitals, get lesser salary comparatively government hospital professionals. Moreover, their exposure to cases is limited due to limited strength of patients. General perception holds that working in the private sector consume longer hours and heavier workload, therefore leading to greater stress level. Present findings have been support by number of studies (Shukla, 2010; Rai, 2014; Violanti, 2010).

Vijay and Vazirani (2012) compared between the main stressors of nurses in 5 private and 5 public hospitals in India. Salary and other incentives, job security ranked the highest stressors in the private hospitals while in the public hospitals: unstable time scheduling, long working hours in addition to the formal relations with seniors were the
major nurses’ stressors. Several research evinced that privatized healthcare institutions also possess stronger resource support in term of available skilled-art facilities and equipments, in contrast to government funded hospitals. Additionally, it is also a noticeable trend that many health senior professionals (especially doctors) have chosen to work in the private sectors after completing their compulsory government service, thus facilitating patient management compared to the majority of younger, inexperienced workers handling sheer number of cases in government hospitals, inevitably leading to work pressure. Essentially, occupational workload is in reality much higher in these institutions. As previously outlined, perceived occupational stress has been associated with young age and low workplace support (Shen, Cheng, Tsai, Lee & Guo, 2005). Studies all around the world have also repeatedly shown that role/work overload consistently represents one of the main job stressors in the healthcare sector (Gaither et. al., 2008). Because employee workload has been identified as one of the precursors to burnout syndrome among healthcare workers, administrators should be attentive to its early signs in order to promote morale and productivity (Wood & Killion, 2007).

Earlier, Jasmine (1987) conducted study to compare the level of job stress and its impact on health among public and private sector blue collar employees. Results revealed that incumbents of public sector organizations experienced significantly more stress and poor health than
those of public sector organization. Despite this, Ahmad, Bharadwaj and Narula (1985) conducted a study of stress among public and private sector executives. It was found that there was no major difference. Jha and Bharadawaj (1989) found that private sector managers scored more than public sector managers on achievement need and motivation factors. In a recent study Rai (2014) found that government school teachers showed high organizational citizenship behavior than private school teacher. Further, Shukla (2010) explored that work stress and health problems were reported higher by private school teachers than government school teachers. Sekher (1996) found that type of hospitals differentially affected job stress and job burnout experiences.

Thus, on the basis of present results and other studies, it is proved that type of hospital (Government & Private) exerts significant impact on time stress and illness.

(ii) Influence of Type of Job Category on Time Stress and Health:

ANOVA results revealed that the level of time stress varied across different group of medical professionals in accordance with their job category. Time stress was found higher in paramedical staffs as compared to doctors. Moreover, paramedical professionals reported higher level of time stress than doctors. Likewise, physical and psychological illness was identified more in paramedical professionals than doctors. Since, paramedical professionals have to do multiple jobs and repetitive tasks which create boredom and they were also low paid worker especially in
private hospitals than doctors. Thus, repetitive tasks, complex and monotonous job creates high level of stress that results in poor health status in paramedical professionals

Many researches support the influence of job category on stress and health. In a recent study, Singh and Pandey (2013) explored that constables and non gazetted officers reported high level of work stress than gazetted officers. Deb et. al. (2006) pointed out that, constables feel greater stress than officers. Other studies also showed that non gazetted officers expressed high stress than gazetted officers (Singh, 2007; Singhvi & Mathur, 1997). Cooper (1987) evinced that blue collar workers tended to be high on boredom while professionals tended to be low on boredom.

Several studies in medical organization evinced that in junior doctors low autonomy predicted psychological morbidity while work demands were most predictive in older doctors (Kapur, Borrill & Stride, 1998). In relation to medical specialties for instance, work-related stress and specifically, “low task – role clarity” predicted later depression in emergency medicine residents, further, routine work administration, job demands, interference with family and interruptions with work, predicted their negative mental well-being (Revicki, Whitley, Gallery & Allison, 1993). In most discussions of this issue three terms seem to be used interchangeably; boredom, monotony and repetition. It may be more accurate to say that repetitive and low complex jobs are perceived as monotonous and lead to psychological state of boredom. In this way, the
characteristics of job are kept distinct from subjective feelings of employee. Boredom seems to have some but side effects. Monotonous jobs appear to be associated with low self-esteem, job satisfaction, and also have low satisfaction with life in general. In a related study Thackray (1981) showed that boredom and monotony in job conditions that seldom change are highly repetitive. Lack of change produces a desire for change or variety in the employee. Therefore, such jobs causes stress feelings. Nevertheless, results of this study evinced that paramedical staff who perform repetitive and less complex duties expressed more stress related to time as compared to doctors.

Numerous studies evinced the effect of organizational factors on health. Work culture and nature of job differ at some extant from one organization to another organization and exercise significant impact on employees health and wellbeing. (Pandey & Srivastava, 2004; Tiwari & Mishra; 2008). In a previous study Pandey and Srivastava (2000) found that due to time pressure railway clerks expressed high work related stress than bank employees. Further, Pandey and Srivastava (2000) found that railway clerks who expressed higher level of mental disengagement (maladaptive coping style), scored high on work stress and illness as compared to bank employees and teachers. Barnes (1992) conducted a study among different categories of railway personnel, namely, motormen and guards. However, guards manifested greater anxiety and lower health status than motormen. Shukla (2010) found that different groups
(primary, intermediate & degree level) of teachers differed on work stress and health status. Another study conducted by Pesto njee (1995) revealed that junior doctors were more consistent in their feelings of satisfaction in comparison to senior doctors. Pillai (1987) pointed out the symptoms of stress varied with age and job category of police personnel. Singhvi and Mathur (1997) reported significant differences between gazetted and non-gazetted officers on role stress. Mishra (1995) found positive relationship of job stress with depressed mood at work among male teachers of higher educational institutions. In another study, Pareek and Mehta (1997) compared three groups; gazetted officers, bank employees and school teachers. They found that school teachers were found to be lower on role stress in comparison to both gazetted officers and bank employees. It is clear on the basis of findings of present research as well as other researches that job category moderates stress (time) health relationship.

**Implications of the Present Research**

The present research was endeavored to investigate the role of future orientation in managing time stress – health relationship. Findings of present research evinced the significant role of future orientation in managing time stress – health relationship. More specifically, a close positive link between time stress and illness was found. Contrary to this, future orientation and time management were found negatively linked with time stress and illness. Further, future orientation and time management were identified strong predictors of time stress and health.
Apart from this, organizational factors i.e. type of hospital and job category exerted significant influence on time stress and illness in medical professionals. This research has certain implications.

- Findings of this research evinced that time stress was found to be positively related with illness. High time stress (pressure) and more illness in medical professionals are quite damaging and can adversely affect their efficiency to confront with stressful situations, demanding multiple roles and expectations. Thus, medical organization should be made aware of such consequences. Despite this, medical professionals should be provided proper opportunity favorable work environment and facilities to reduce time stress and its consequences on health.

- Findings of this study reported that medical professionals differed on time stress and illness in accordance with their dispositional characteristics of future orientation. High future oriented professionals tended to pay more attention towards the message which included future planning, vision and foresight as compared to low future oriented professionals. Apart from this, future orientation contributed significantly in minimizing time stress and lessening health problems in medical professionals. Thus, future orientation should be inculcated in L.F.O. group to cope with stressful episodes and enhance health behavior.

- Time management was also identified a strong buffer in time stress – illness link. Time management has contributed inversely in this link.
Therefore, medical professionals should understand and implement the techniques and principles of time management, which would be beneficial to cope with stress related to time.

- Findings of this study suggest a strong positive relation between future orientation and time management. Therefore, medical professionals should be made aware of time management strategies like; time budgeting, goal clarity, prioritizing, coordination, check against misuse and focusing which may be helpful in developing future oriented outlook.

- Results further evinced that, private hospital professionals reported high level of time stress as well as physical and psychological illness as compared to government hospital professionals. Therefore, authorities of private hospitals should pay attention to create stress free work environment through favorable work setting, less time pressure, maximizing better opportunity of interpersonal relationship with superiors and co – workers and improving the quality of work place, by providing innovations and stimulation in job, coordination between their work and working hours and better opportunity of personal growth and/or promotion, which would minimize stress and enhance health status of medical professionals.

- Another important finding of the study is that stress and illness were found higher in paramedical staffs than doctors. Thus, it is suggested that doctors can work as motivator to paramedical group and teach them how
to exercise time management strategies and to develop high future oriented outlook in managing time related stress.

- Since, lots of job demands in limited time, time pressure and work culture in medical organization are very much challenging and risky therefore, high feeling of stress related to time is very natural. Therefore, it is essential to provide a platform for the medical professionals to share their problems with higher authority, frankly and openly which will be one of the outlets of releasing stress.

**Suggestions for Further Researches**

Present research provided a valuable data which focus on some of the neglected and unexplored issues related to health organization. The role of future orientation in managing time stress – health relationship was investigated. However, variety of research questions has directly stemmed from this piece of research.

This research endeavored to establish linkage between time stress and health (illness). An effort was also made to find out the mediating role of future orientation in managing time stress– health relationship. Furthermore, an effort was made to investigate the influence of type of hospital and job category on time stress, physical and psychological health (illness) in medical professionals. The major findings of this research have already been reported, interpreted and discussed in preceding sections. However, on the basis of findings of this research
many questions are still unanswered and provide base for further researches:

• This study is correlational in nature. Correlations between time stress, future orientation, time management and health (illness) were computed and linkages were established. Yet, direct causal explanation could not be made between these variables. The correlational analysis employed in the present study limits the scope of interpretation of results to determine causal relationship among variables. However, stepwise multiple regression analysis (SMRA) has been done to determine the contributing roles of future orientation and time management in time stress – health relationship. Moreover, ANOVA analysis was done to determine causative role of future orientation, type of hospital and job category in time stress and illness. Despite this, other fine analyses should be done in further researches.

• Findings of present study as well as several other researches denote that contextual and demographic variables play significant role in time stress – health relationship. Therefore, certain contextual factors (viz; organizational structure, work environment, job tenure) and demographic factors should be included in further study and their significance on the time stress – health relationship should be determined.
• The level of time stress, future orientation, time management and health can also be compared between medical professionals of diverse setting and work culture.

• Family factors can also serve as sources of stress due to role conflict, home – work interface, hazards in family structure, poor family environment and poor interpersonal relationship. Thus, time stress and illness (health) in medical professionals should be studied in relation to different family structure, life style and work environment.

• The role of future orientation and time management in time stress – health relationship was measured and quantitative analysis (univariate and multivariate) was done. Despite this, appropriate qualitative analysis should also be done to get more comprehensive explanation of findings of the present piece of research.