DISCUSSION

The primary aim of the present investigation was to study Interpersonal Forgiveness in relation to Personality, Religiosity, Spiritual Well Being, Positive and Negative Emotions, Health and Well Being measures viz Mental Health, Perceived Health Status, Psychological Well Being and Subjective Well Being. For this purpose, 400 students (200 males and 200 females) in the age range of 16-20 years were taken. Male and female groups were compared on the measures of Enright Forgiveness Inventory (State Forgiveness), Heartland Forgiveness Scale (Trait Forgiveness), Religiosity, Spiritual Well Being, Eysenck’s Personality Dimensions, Positive Mental States viz Optimism, Gratitude, Happiness and Hope, Negative Mental States viz Anger Experienced and Anger Expression Styles, Well Being measures viz Psychological Well Being and Subjective Well Being and Health measures viz Mental Health and Perceived Health Status.

For measuring Forgiveness, two scales were used. Enright Forgiveness Inventory devised by Enright and Human Development Group (1998), was used to assess State Forgiveness and its dimensions viz Affect, Behavior and Cognition. Heartland Forgiveness scale devised by Thompson et al. (2003) was used to measure Trait Forgiveness and its dimensions viz Forgiveness of Self, Forgiveness of Others and Forgiveness of Situations.

Religiosity was assessed by using Religious Commitment Inventory devised by Worthington et al. (2003).

Spiritual Well Being scale devised by Ellison (1983) was used to assess Spiritual Well Being and its dimensions viz Religious Well Being and Existential Well Being.

For measuring Personality, Eysenck’s Personality Questionnaire–Revised (1985) was used to get scores on Extraversion/Introversion, Psychoticism, Neuroticism and Social Desirability.
Measures of **Positive Mental States** included in the study were Optimism, Happiness, Hope and Gratitude. Optimism was measured using Life orientation test by Scheier and Carver (1985). To measure happiness, Oxford Happiness Inventory devised by Argyle (1989) was used. To measure Hope, the Adult Trait Hope Scale by Snyder et al. (1991) was used which yields two dimensions viz. Pathways and Agency. Gratitude Questionnaire devised by McCullough et al. (2002), was used to assess the Grateful disposition of the adolescents.

Only one measure of **Negative Mental States** was included – Spielberger’s (1988) State Trait Anger Expression Inventory was used to measure Anger Experienced viz State Anger, Trait Anger and Anger Expression Styles viz Anger In, Anger Out and Anger Control.

For measuring Well Being, two scales were used. **Psychological Well Being scale** devised by Ryff and Keyes (1995) was used to measure Psychological well Being, which has six dimensions of Wellness viz Autonomy, Environmental Mastery, Personal Growth, Positive Relations With Others, Purpose In Life and Self Acceptance. The other measure was **Subjective Well Being. It has three components viz Positive Affect, Negative Affect and Satisfaction with Life. Positive Affect and Negative Affect were measured by using Positive and Negative Affect Schedule (PANAS) developed by Watson et al. (1988).** Satisfaction with Life was measured by using **Satisfaction with Life Scale** developed by Diener et al. (1985).

For measuring **Mental Health**, the WHO measure of Mental Health adapted for use in India by Wig (1999) was used to measure Mental Health which has three dimensions viz Being Comfortable with Self, Being Comfortable with Others and Perceived Ability to Meet Life’s Demands. **Perceived Health Status** was measured by using rating scale devised by Blaxter (1995).

The sample comprised of 400 students (200 males and 200 females) from various schools and colleges in the tricity viz. Chandigarh, Panchkula.
and Mohali. The age range of the subjects was 16-20 years. Most of them belonged to middle or upper middle income groups. All the subjects were explained about the nature and aim of the study and their role in the study, and informed consent was obtained before they were enlisted as subjects.

The raw scores consisted of scores on all the above mentioned 50 variables: Forgiveness, Religiosity, Spirituality, Personality, Optimism, Happiness, Hope, Gratitude, Anger, Psychological Well Being, Subjective Well Being, Mental Health and Perceived Health Status.

The raw scores were analyzed using appropriate statistical analysis viz. Descriptive statistics, Discriminant Functional Analysis, Inter-correlations and Regression analysis.

Table 1 shows means, standard deviations of the total sample, Table 2 shows means, standard deviations of the male adolescents, Table 3 shows means, standard deviations of the female adolescents. Table 4 shows means, standard deviations and t-ratios comparing male and female adolescents. Table 5 shows the stepwise discriminant functional analysis for male and female adolescents. Tables 6-8 show the inter-correlation matrix for total sample, male adolescents and female adolescents respectively. Table 9 shows regression analysis for the total sample, Table 10 shows regression analysis for male adolescents and Table 11 shows regression analysis for the female adolescents with Enright Forgiveness (State Measure of Forgiveness) as the criterion. Table 12 shows regression analysis for the total sample, Table 13 shows regression analysis for the male adolescents, Table 14 shows regression analysis for the female adolescents with Heartland Forgiveness (Trait Measure of Forgiveness) as the criterion.

A. Interpersonal Forgiveness, Spiritual Well Being and Religiosity

It was hypothesized that both State and Trait Forgiveness measures and their components were expected to be positively related with Religious Commitment, Religious Well Being, Existential Well Being and Spiritual Well Being among both male and female adolescents.
a) State Forgiveness and Spiritual Well Being

A glance at the intercorrelation matrix for the total sample (Table 6) revealed that State Forgiveness was not related with Spiritual Well Being and its dimensions.

A further perusal of the intercorrelation matrix for the total sample (Table 6) revealed that the components of State Forgiveness were also not related with Spiritual Well Being and its dimensions.

A glance at the intercorrelation matrix for male adolescents (Table 7) revealed that State Forgiveness was positively and significantly related with Spiritual Well Being ($r = .16$).

A further perusal of the intercorrelation matrix for male adolescents (Table 7) revealed that Affective component of State Forgiveness was positively and significantly related with Religious Well Being ($r = .15$) and Spiritual Well Being ($r = .15$). Behavioral component of State Forgiveness was positively and significantly related with Spiritual Well Being ($r = .14$). Cognitive component of State Forgiveness was positively and significantly related with Existential Well Being ($r = .16$) and Spiritual Well Being ($r = .16$).

A glance at the intercorrelation matrix for female adolescents (Table 8) revealed that State Forgiveness was not related with Spiritual Well Being and its dimensions.

A further perusal of the intercorrelation matrix for female adolescents (Table 8) revealed that the components of State Forgiveness were also not related with Spiritual Well Being and its dimensions.

A perusal of Stepwise Multiple Regression Equation for the total sample (Table 9) male adolescents (Table 10) and female adolescents (Table 11) revealed that none of the dimensions of Spiritual Well Being emerged as significant predictors of State Forgiveness.

Hence the above results clearly show that the hypothesis regarding State Forgiveness and Religious Well Being, Existential Well Being and Spiritual Well Being was not upheld in most groups.
b) Trait Forgiveness and Spiritual Well Being

A glance at the intercorrelation matrix for the total sample (Table 6) revealed that Trait Forgiveness was positively and significantly related with Religious Well Being ($r = .12$), Existential Well Being ($r = .23$) and Spiritual Well Being ($r = .21$).

A further pursuit of intercorrelation matrix for the total sample (Table 6) revealed that Forgiveness of Self was positively and significantly related with Religious Well Being ($r = .16$), Existential Well Being ($r = .17$) and Spiritual Well Being ($r = .19$). Forgiveness of Situations was positively and significantly related with Existential Well Being ($r = .24$) and Spiritual Well Being ($r = .20$).

A glance at the intercorrelation matrix for male adolescents (Table 7) revealed that Trait Forgiveness was positively and significantly related with Religious Well Being ($r = .18$), Existential Well Being ($r = .31$) and Spiritual Well Being ($r = .30$).

A further pursuit of intercorrelation matrix for male adolescents (Table 7) revealed that Forgiveness of Others was positively and significantly related with Existential Well Being ($r = .27$) and Spiritual Well Being ($r = .21$). Forgiveness of Situations was positively and significantly related with Religious Well Being ($r = .23$), Existential Well Being ($r = .29$) and Spiritual Well Being ($r = .32$).

A glance at the intercorrelation matrix for female adolescents (Table 8) revealed that Trait Forgiveness was positively and significantly related with Existential Well Being ($r = .16$).

A further perusal of intercorrelation matrix for female adolescents (Table 8) revealed that Forgiveness of Self was positively related with Religious Well Being ($r = .25$), Existential Well Being ($r = .24$) and Spiritual Well Being ($r = .29$). Forgiveness of Situations was positively and significantly related with Existential Well Being ($r = .19$).
A perusal of Stepwise Multiple Regression Equation for the total sample (Table 12) male adolescents (Table 13) and female adolescents (Table 14) revealed that none of the dimensions of Spiritual Well Being emerged as significant predictor of Trait Forgiveness.

Hence the above results clearly show that the hypothesis regarding Trait Forgiveness and Religious Well Being, Existential Well Being and Spiritual Well Being was upheld in most groups.

c) State Forgiveness and Religious Commitment

A glance at the intercorrelation matrix for the total sample (Table 6), male adolescents (Table 7) and female adolescents (Table 8) revealed that State Forgiveness and its components were not related with Religious Commitment.

A perusal of Stepwise Multiple Regression Equation for the total sample (Table 9) male adolescents (Table 10) and female adolescents (Table 11) revealed that Religious Commitment did not emerge as a significant predictor of State Forgiveness.

Hence the above results clearly show that the hypothesis regarding State Forgiveness and Religious Commitment was rejected in all the groups.

d) Trait Forgiveness and Religious Commitment

A glance at the intercorrelation matrix for the total sample (Table 6), male adolescents (Table 7) and female adolescents (Table 8) revealed that revealed that Trait Forgiveness and its subscales (Self Forgiveness, Forgiveness of Others and Forgiveness of Situations) were not related with Religious Commitment.

A perusal of Stepwise Multiple Regression Equation for the total sample (Table 12) male adolescents (Table 13) and female adolescents (Table 14) revealed that Religious Commitment did not emerge as a significant predictor of Trait Forgiveness.
Hence the above results clearly show that the hypothesis regarding Trait Forgiveness and Religious Commitment was rejected in all the groups.

Most research in forgiveness has been conducted in American or European cultural settings, where Christianity is the dominant religion. These studies have shown a positive relationship between forgiveness and religion, suggesting that people who considered themselves more religious or spiritual rated themselves as more forgiving and valued forgiveness more (McCullough and Worthington, 1999). There have been very few studies about willingness to forgive in non western samples (Park and Enright, 1997; Wolf et al., 1999 and Kadima et al., 2001).

Religious variables such as frequency of church attendance, self-rated religiousness, intrinsic religious orientation, importance of religion, feeling close to God, and measures of personal prayer, have been positively linked to people's self-reported values, attitudes, and behaviors regarding forgiveness (Poloma and Gallup, 1991; Edwards et al., 2002).

Enright et al. (1989) found that individuals with stronger religious beliefs tended to reason in a more sophisticated way about forgiveness than those individuals with weaker religious beliefs.

Mauger et al. (1996) found that a forgiving disposition was related to the use of spiritual coping resources in both clinical and non clinical samples. These studies suggest that highly religious people tend to report themselves as being especially forgiving.

It is interesting to note that only two studies in the literature addressing relationship between religiosity and forgiveness (Gorsuch and Hao, 1993, and Mullet et al., 1998) explicitly addressed the actual practice of forgiveness. The other studies done have either addressed forgiveness as a value (Rokeach’s, 1969) or related to different types of reasoning about forgiveness (Enright et al., 1989).

Gorsuch and Hao (1993) used a self-report questionnaire of practices regarding forgiveness. On a national area probability sample, they
found that highly religious people showed a stronger motivation to forgive, more frequently evoked religious responses, and worked harder to forgive others than nonreligious people did. However, it was also found that people who were more religiously conforming were not necessarily more forgiving.

In studies by Mullet and his associates (Mullet et al. 1998; Kadiangandu et al., 2001; Mullet et al., 2003), religious involvement was measured by one's belief in God, regular church attendance, or having taken a religious vow.

All these studies found a positive link between religious involvement and people's willingness to forgive. Regular church attendees were less inclined to report seeking revenge than were non-believers and non-church goers (Mullet et al., 1998; Kadiangandu et al., 2001).

Given the historical links between religion and forgiveness, it would be unsurprising to find that people higher in religious involvement tend to be more forgiving than people lower in religious involvement. After all, if the great world religions emphasize the value of forgiveness, then people who have internalized the beliefs and rituals of those religions would probably be more forgiving. The available data on the association of religion and forgiveness, however, tells a more complex story. (McCullough and Worthington, 1999) Firstly, the measures of religious variables and forgiveness, however, differ from study to study. Studies such as those of (Rokeach, 1973; Shoemaker and Bolt, 1979; Poloma and Gallup, 1991) mainly investigated forgiveness as a value. Religious variables were measured in terms of church membership, frequency of church attendance, participants' self-rated religiousness or motivation for religious involvement. It was found that people who were regular church attendees, high in self-rated religiousness, intrinsically religious or pro-religious gave forgiveness a higher ranking compared with other values (Rokeach, 1973). Highly religious people also considered that they should be forgiving (Shoemaker and Bolt, 1979; Poloma and Gallup, 1991).
As McCullough and Worthington (1999) pointed out, it is not surprising to find a robust relationship between religious involvement and forgiveness, specifically when forgiveness is measured as attitudes, values or beliefs one holds. As forgiveness is an essential value in Judeo-Christian culture, an individual's beliefs about one's willingness to forgive or the importance one gives to this value reflect to a certain extent the teaching of one's religion. Hence, it is likely that people who are high in religious involvement are likely to have internalized and to endorse such a value. At the same time, they contended that an element of social desirability could also be present (Hui et al., 2006).

In contrast, studies using transgression-specific measures of forgiveness have found few associations between religiousness and forgiveness (McCullough and Worthington, 1999).

Subkoviak et al. (1995) reported a weak correlation between self-reported religiousness and a measure of transgression-specific forgiveness.

Similarly, Rackley (1993) found no significant relationship between religiousness and self-reported forgiveness of one's spouse for a specific transgression.

DiBlasio and Benda (1991) examined the relative and cumulative effect of religiosity on forgiveness. Religiosity explained less than 5% of the variance with respect to identified forgiveness factors including attitudes and techniques. The authors concluded that religiosity was related to forgiveness attitudes and techniques of practitioners, but explained a small amount of the variance.

DiBlasio and Proctor (1993) surveyed 128 practitioners to explore the use of forgiveness techniques in clinical practice. Their findings indicated that practitioners were more likely to develop techniques related to forgiveness if they were older, and if they reported openness to assessing and working with clients' religious belief systems. Counselors' levels of religiosity were not related to the development and use of forgiveness techniques.
DiBlasio (1993) assessed attitudes toward forgiving as well as use of clinical techniques related to forgiveness in 30 social workers. An additional focus of this study was the comparison of highly religious and less religious practitioners. Although highly religious social workers were more likely to express favorable attitudes towards forgiveness relative to less religious practitioners, their more positive attitudes did not translate to a greater emphasis on forgiveness in practice.

Azar et al. (1999) and Azar and Mullet (2001) are the two research studies conducted in the Middle East and both these studies reported that the only social factor showing an effect on willingness to forgive was the educational factor. Better educated people have declared themselves more prone to forgive than less educated people and secondly, the religion of the offender was not an important factor i.e the participants expressed practically equivalent willingness to forgive whether the offender was a Muslim or a Christian (Azar and Mullet, 2002).

McCullough and Hoyt (2002) reported that people's self-reports of how much they have forgiven a specific transgressor contain fairly little dispositional variance.

Wade and Worthington (2003) explored potential predictors of unforgiveness and forgiveness for a specific offense in 91 undergraduates who volunteered for a psycho educational intervention to promote forgiveness for a transgression that they wanted to forgive. They were measured on Forgiveness, Unforgiveness, Religious Commitment, Empathy and other variables. In neither case did religious commitment predict the criterion variable (i.e., unforgiveness or forgiveness). Some clients who were religiously committed valued forgiveness only if an offender apologizes and seeks forgiveness (Dorff, 1998).

Fu et al. (2004) while examining the Chinese conception of forgiveness presented the results of three studies that investigated the nature of forgiveness, its measurement, and personality correlates in the People’s Republic of China (PRC). Their research findings did not support
the associations between forgiveness and the individually oriented personality variables like religiosity, found in previous research in individualistic Western culture (McCullough, 2001).

Lawler et al. (2006) explored the definition of forgiveness in a group of 270 young adults, and the underlying dimensions of their definitions compared with those of philosophers, theologians and psychological researchers. They found no significant correlations between frequency of religious involvement and state forgiveness. They further contended that while religious factors may emphasize the importance of forgiveness, they were related neither to the dimensions employed in defining forgiveness nor to the degree of forgiveness offered.

Many Psychologists have explained the reasons behind this religion-forgiveness discrepancy, notably, state forgiveness or self-reported forgiveness for specific transgressions.

One possibility that should be given serious consideration is that religious people really are not more forgiving than other people, even if they greatly aspire to be highly forgiving as a way of living out their values, religion does not actually provide resources for helping people to forgive in real-life circumstances. For religious people, forgiving can be "socially desirable." The spirit is willing, but the flesh is weak (McCullough and Worthington, 1999).

Another possible reason why dispositional measures of religious involvement might not correlate well with self-reported forgiveness for specific transgressions is that the influence of religious involvement on real-life instances of forgiveness might be very far back in the causal chain. A variety of studies now demonstrate that people's forgiveness of a specific person for a specific transgression is under the control of a variety of social and social-cognitive factors (McCullough and Worthington, 1999).

World events and psychological research often fail to support a relationship between religion and forgiveness. It was suggested that the gap between general religious support of forgiveness and actual forgiveness by
religious individuals (the religion- forgiveness discrepancy) described by McCullough and Worthington (1999) may be partly due to methodological shortcomings (Tsang et al., 2005).

Tsang et al. (2005) offered two distinct accounts for the religion-forgiveness discrepancy: a psychometric explanation, and a rationalization explanation.

McCullough and Worthington (1999) pointed out that it is important to distinguish among the levels of specificity with which forgiveness can be measured. At the least specific level, forgiveness could be assessed as people’s attitudes, values, or beliefs about their own “forgivingness” (Roberts, 1995). Such measurements would refer to a general personality disposition, trait, or response tendency. At a more specific level, forgiveness could be assessed as a general response tendency within a given relationship (e.g., within one’s marriage or romantic relationship). The data suggest that religious involvement seems related to people’s scores on measurements that assess forgiveness at a general, abstract level, but is not as strongly related to forgiveness in specific, real-life circumstances (McCullough and Worthington, 1999).

Second, McCullough and Worthington (1999) pointed out that methods used to assess transgression-related forgiveness might introduce recall or encoding biases, again obscuring the potential relationship between religiousness and forgiveness. Transgression-specific forgiveness is usually measured by having participants freely recall a past transgression, and then complete a questionnaire about the transgression event. These free recall procedures may introduce error. If we assume that forgiven offenses are more difficult to recall than unforgiven offenses, then a more forgiving individual might have a difficult time recalling a transgression during a forgiveness study. In contrast, a less forgiving individual would more easily recall a salient transgression. Yet, both individuals may end up recalling situations that have been forgiven to approximately equal extents, making it seem like they are equally forgiving people, when, in fact, they are
not. Errors such as these might attenuate the extent to which participants' reports of their forgiveness for specific transgressions might correlate with other variables, including religiousness. If, for instance, the more forgiving individual in the above example was also more religious, recall bias would make it seem as if the religious individual and the nonreligious individual were equally skilled at forgiving, even if they were not.

In summary, a psychometric explanation for the religion-forgiveness discrepancy claims that the null relationship between religiousness and forgiveness in transgression-specific studies is in part due to a lack of aggregation in measures of reported behaviors, as well as the presence of encoding and recall biases. These measurement weaknesses may obscure a relationship between religion and transgression-specific forgiveness.

The rationalization explanation for the religion-forgiveness discrepancy suggests that the discrepancy may occur because religion as a meaning system may be abstract enough to provide people with justification for both vengeful and forgiving behaviors (Tsang et al., 2005). Religious individuals who are highly motivated not to forgive might use religion to rationalize their unforgiving actions, just as religious individuals who are motivated to forgive can find ample justification for forgiveness. This could account for circumstances in which religion does not promote forgiveness, and it might also explain why the empirical relationship between religion and forgiveness is not as strongly positive as religious doctrines would prescribe (Tsang et al., 2005).

Tsang et al. (2005) proposed that many religions teach that God is infinitely forgiving, but the same religions can also promote belief in the existence of a just world in which God's justice insures that people get what they deserve (Lerner, 1965; Lerner and Simmons, 1966). Themes of retributive justice coexist with themes of forgiveness in the major world religions. The Buddhist and Hindu ideas of karma and dharma also contain indirect elements of retributive justice: all of our actions, both good and bad, have consequences for us in this life or the next. Whereas doctrines of
Discussion

Compassion in these religions could lead religious individuals toward forgiveness, doctrines of retribution in these same religions might encourage revenge. For instance, in the epic of Mahabharata, when the Kaurava princes dishonor the queen Draupadi in a royal court and exult about it, she does not forgive them and Kauravas take revenge from her (Rye et al., 2001).

Furthermore, the multitude of stubborn religious conflicts around the world speak to a different relationship between religion and forgiveness. In many places, individuals who consider themselves to be devout followers of their religions actively work to maintain centuries-old stances of bitterness and hate toward their enemies. The long-standing conflicts between Palestinians and Israelis (Bar-Tal, 1990; Rouhana and Bar-Tal, 1998), Irish Catholics and Protestants (O'Donoghue and O'Donoghue, 1981) and the Azerbaijanis and Armenians (Fraser et al., 1990) are just a few examples of religion's failed influence on compassion and forgiveness. In these, as well as other, more mundane cases, rather than promoting forgiveness, religion appears to fuel resentment and revenge (Tsang et al., 2005).

Despite religious prescriptions of forgiveness and compassion a look at the world around us demonstrates that people often have difficulty forgiving, despite their religious backgrounds (Ayoub, 1997; Dorff, 1998). For example, the conflict in the Middle East between Israel, a Jewish state, and the Palestinian people, who are predominantly Muslim, continues to escalate (Rouhana and Bar-Tal, 1998), and discord in Northern Ireland between Irish Catholics and Protestants still remains (O'Donoghue and O'Donoghue, 1981; Stringer et al., 2000). Following the 2001 terrorist attacks in the United States and with ongoing terror attacks against U.S. soldiers in Iraq and other locations abroad, many Americans have begun to grapple more intensely with issues such as forgiveness, compassion and vengeance (Higgins, 2001; Rice, 2001/2002) and the relationship of these concepts to religion. It may be relatively easy to endorse religious teachings on forgiveness in the abstract, but when, for example, one's life is
transformed by a terrorist attack, forgiveness may be harder to implement (Tsang et al., 2005).

Rather than recommending to unforgiving people that they forgive or be more tolerant, a possibility may be considered that non forgiveness may be religiously justified, and perhaps even healthy on certain levels, for certain individuals (McCullough and Worthington, 1999).

Therefore, an inconsistency is seen in the existing research on forgiveness. Religious people report themselves to be more forgiving in the abstract, but not more forgiving of specific interpersonal transgressions. The existence of this religion forgiveness discrepancy is especially disturbing because religious doctrines purport to encourage compassion and forgiveness. Though religion may cause its adherents to report that they value forgiveness more, this would be of limited social value unless religious individuals also behaved in a more forgiving manner in specific transgression situations.

Though improved methodology seems to establish a positive relationship between religion and self-reported forgiveness for specific transgressions, this relationship is small in magnitude (Cohen, 1988). Tsang et al. (2005) reported that religion accounted for only about 4% of the variance in self-reported forgiveness, even when using restrictive recall and aggregated measures.

Suwartono et al. (2007) explored the factorial structure of forgivingness in an Indonesian sample (329 undergraduate students at the University of Indonesia), compared Indonesian and French students' forgivingness scores and assessed the relationship between forgivingness and emotional regulation among Indonesian participants. They found that religious tradition or religious involvement was not significantly associated with willingness to forgive and it was consistent with the findings by Mullet et al. (2003) showing that among young participants, the effect of religious involvement on forgiveness tend to be very low.
Macaskill (2006) examined the effect of Christian religious belief on forgiveness with a British sample which included Christian clergy, general population samples of Christians and a group with No Religious Affiliation and reported that clergy scored higher on total forgiveness, forgiveness of self, others, and situations; rate forgiveness as being more important than the Christian and no religious affiliation samples in the general population. This greater valuing of forgiveness is accompanied by significantly higher scores on forgiveness of others, situations, and self for the most religiously committed group, the clergy, but not for the Christians in the general population. It seems that a high level of religious commitment is required for an effect to be observed (Macaskill, 2006).

Hui et al. (2006) investigated the relationship between religion and forgiveness in a sample of Hong Kong Chinese teachers and students. No significant difference in forgiveness between believers and non-believers in real life situations was reported. Also, compared with the teacher sample, the effects of religion were less dominant among the student sample, specifically on their conceptualization of forgiveness. There was no significant difference in actual forgiveness. This finding further suggests that the understanding of forgiveness is developmental, and younger people's conceptualization of forgiveness is less stable than that of adults.

Toussaint et al. (2001) examined age differences in the association between forgiveness, religiousness/ spirituality, and respondent reported of mental and physical health, by using national probability data. Results showed age differences in the levels of forgiveness of others and feeling forgiven by God. In both cases, middle and old age adults showed higher levels of these forms of forgiveness than young adults. For service attendance, religiosity and self-rated spirituality, lower scores were observed in the young adult group as compared to middle and old age adults.

In the present investigation, adolescents were taken as a sample and the mean of their scores for religious commitment was 24.35 and 26.03 for males and females respectively, which is average and not
high. This can be one of the reasons that no significant relationship emerged between religious commitment and forgiveness as the literature points out that adolescents are far from practicing forgiveness at an unconditional level and that the concept of forgiveness among adolescents is less stable and as Macaskill (2006) has pointed out that a high level of religious commitment is required for an effect to be observed.

However, various studies, overseas, have shown robust relationships of Forgiveness with Spiritual Well Being and its dimensions.

Forgiveness is closely related to religiousness and spirituality (Kaplan, 1992; Koenig, 1994; Subkoviak et al., 1995) and has been proposed as a mediator of the religiousness/spirituality and health relationship.

Rye et al. (2001) while examining the psychometric properties of two forgiveness scales - Forgiveness Scale (i.e., Absence of Negative, Presence of Positive) and the Forgiveness Likelihood Scale administered a number of tests on the participants enrolled at a Midwestern Catholic university (N = 328) and reported that that both subscales of the Forgiveness Scale and Forgiveness likelihood scale were significantly correlated in the expected direction with measures of religiousness, religious well-being and existential well being. Perhaps individuals' sense of religious well-being is enhanced when their willingness to forgive across situations is consonant with their religious beliefs (Rye et al., 2001).

Leach and Lark (2004) sought to determine whether spirituality accounted for a significant portion of the variance beyond that of personality in the study of dispositional forgiveness. Results using multiple regression models indicated that spirituality contributed a significant amount of additional explained variance beyond the personality domains only for FO (forgiveness of others), but the majority of it was accounted for by existential well-being (EWB) subscale. Correlations of spirituality and the forgiveness subscales showed that both spiritual well-being (SPWB) factors i.e Religious well-being (RWB) and existential well-being (EWB), were significantly
associated with forgiveness of others, whereas only the EWB factor was significantly associated with self-forgiveness. The Spiritual Transcendence subscales (STS) showed that all three of the STS factors (Universality, Prayer fulfillment and Connectedness) were positively associated with forgiveness of others.

**Lawler et al. (2005)** studied the relationship of forgiveness, both state and trait, to health by taking 81 community adults who completed a packet of questionnaires and participated in a laboratory interview about a time of hurt or betrayal and they reported that among the mediators, both state and trait forgiveness showed a significant positive correlation with religious well being and existential well being.

**Luskin et al. (2005)** did a randomized controlled study which evaluated the efficacy of a combination of rational-emotive group therapy with the emotional refocusing techniques in 55 students who had identified an unresolved interpersonal hurt volunteered to be randomly assigned to an intervention or wait list condition. Participants in the intervention group showed significant improvement in their tendency to forgive, willingness to forgive the transgressor and spiritual growth along with other variables.

**Lawler and Piferi (2006)** assessed relationships among dispositional forgiveness, potential mediating factors and health outcome variables in 425 adults (50–95 years of age) and found that trait forgiveness was higher in individuals older than 60, and in those who frequently attended church services. Also, they reported that trait forgiveness was significantly associated with religious well being, existential well being and spiritual well being along with other variables. Existential well-being subscale of spiritual well being was most highly related to all the health measures and was the largest single contributor to all the mediation models. Thus, finding meaning and purpose in life is critical to well-being and is a significant carrier of the effect of forgiveness on health.

**Sutton et al. (2007)** examined the relationship of gender, forgiveness, and spirituality to restoration attitudes expressed toward
married pastors who committed a transgression through two studies and in both the studies, and reported that Spirituality (Religious faith) was strongly related to a general willingness to forgive in the first sample while it was not significantly related to dispositional forgiveness in the second sample.

B. Interpersonal Forgiveness and Positive Mental States

It was hypothesized that both State and Trait Forgiveness measures and their components were expected to be positively related with Happiness, Optimism, Gratitude, Hope and its components viz Pathways and Agency among both male and female adolescents.

a) State Forgiveness and Positive Mental States

A glance at the intercorrelation matrix for the total sample (Table 6) revealed that State Forgiveness was positively and significantly correlated with Gratitude (r=.15) and Happiness (r=.10).

A further perusal of the intercorrelation matrix for the total sample (Table 6) revealed that Affective component of State Forgiveness was positively and significantly correlated with Gratitude (r=.11). Behavioral component of State Forgiveness was positively and significantly correlated with Gratitude (r=.15) and Happiness (r=.13). Cognitive component of State Forgiveness was positively and significantly correlated with Gratitude (r=.16) and Happiness (r=.10).

A glance at the intercorrelation matrix for male adolescents (Table 7) revealed that State Forgiveness was positively and significantly correlated with Gratitude (r=.18) and Happiness (r=.14).

A further perusal of the intercorrelation matrix male adolescents (Table 7) revealed that Behavioral component of State Forgiveness was positively and significantly correlated with Gratitude (r=.19) and Happiness (r=.16). Cognitive component of State Forgiveness was positively and significantly correlated with Gratitude (r=.19) and Happiness (r=.15).

A glance at the intercorrelation matrix for female adolescents (Table 8) revealed that State Forgiveness was not correlated with any of the
Positive Mental States. A further pursual of intercorrelation matrix for female adolescents (Table 8) revealed that the components of State Forgiveness were also not correlated with any of the Positive Mental States.

A perusal of **Stepwise Multiple Regression Equation** for the total sample (Table 9) revealed that Gratitude ($\beta=.10$) emerged as a significant predictor of State Forgiveness.

A perusal of **Stepwise Multiple Regression Equation** for the male adolescents (Table 10) and female adolescents (Table 11) revealed that none of the Positive Mental States emerged as significant predictor of State Forgiveness.

Hence the above results clearly show that the hypothesis regarding State Forgiveness and Positive Mental States viz Happiness and Gratitude was upheld in most groups, whereas hypothesis regarding State Forgiveness and Positive Mental States viz Pathways, Agency, Hope and Optimism was rejected in most groups.

b) **Trait Forgiveness and Positive Mental States**

A glance at the intercorrelation matrix for the total sample (Table 6) revealed that Trait Forgiveness was positively and significantly correlated with Pathways ($r=.23$), Agency ($r=.21$), Hope ($r=.26$), Optimism ($R=.28$), Happiness ($r=.38$) and Gratitude ($r=.31$).

A further pursual of intercorrelation matrix for the total sample (Table 6) revealed that Forgiveness of Self was positively and significantly correlated with Pathways ($r=.14$), Agency ($r=.22$), Hope ($r=.21$), Optimism ($R=.22$), Happiness ($r=.31$) and Gratitude ($r=.18$). Forgiveness of Others was positively and significantly correlated with Pathways ($r=.14$), Agency ($r=.10$), Hope ($r=.14$), Optimism ($R=.13$), Happiness ($r=.18$) and Gratitude ($r=.19$). Forgiveness of Situations was positively and significantly correlated with Pathways ($r=.19$), Agency ($r=.13$), Hope ($r=.19$), Optimism ($R=.25$), Happiness ($r=.31$) and Gratitude ($r=.26$).
A glance at the intercorrelation matrix for male adolescents (Table 7) revealed that Trait Forgiveness was positively and significantly correlated with Pathways ($r = .27$), Agency ($r = .24$), Hope ($r = .30$), Optimism ($R = .31$), Happiness ($r = .39$) and Gratitude ($r = .43$).

A further pursuit of intercorrelation matrix for male adolescents (Table 7) revealed that Forgiveness of Self was positively and significantly correlated with Pathways ($r = .15$), Agency ($r = .20$), Hope ($r = .21$), Optimism ($R = .21$), Happiness ($r = .30$) and Gratitude ($r = .23$). Forgiveness of Others was positively and significantly correlated with Pathways ($r = .18$), Agency ($r = .20$), Hope ($r = .23$), Optimism ($R = .20$), Happiness ($r = .24$) and Gratitude ($r = .29$). Forgiveness of Situations was positively and significantly correlated with Pathways ($r = .24$), Hope ($r = .20$), Optimism ($R = .24$), Happiness ($r = .29$) and Gratitude ($r = .39$).

A glance at the intercorrelation matrix for female adolescents (Table 8) revealed that Trait Forgiveness was positively and significantly correlated with Pathways ($r = .19$), Agency ($r = .19$), Hope ($r = .23$), Optimism ($R = .25$), Happiness ($r = .36$) and Gratitude ($r = .16$).

A further pursuit of intercorrelation matrix for female adolescents (Table 8) revealed that Forgiveness of Self was positively and significantly correlated with Agency ($r = .25$), Hope ($r = .22$), Optimism ($R = .22$), Happiness ($r = .33$) and Gratitude ($r = .15$). Forgiveness of Situations was positively and significantly correlated with Pathways ($r = .17$), Agency ($r = .19$), Hope ($r = .21$), Optimism ($R = .26$), Happiness ($r = .32$) and Gratitude ($r = .22$).

A perusal of **Stepwise Multiple Regression Equation** for the total sample (Table 12) revealed that Gratitude ($\beta = .18$) and Happiness ($\beta = .38$) emerged as significant predictors of Trait Forgiveness.

A perusal of **Stepwise Multiple Regression Equation** for male adolescents (Table 13) revealed that Gratitude ($\beta = .43$) emerged as a significant predictor of Trait Forgiveness.
A perusal of Stepwise Multiple Regression Equation for female adolescents (Table 14) revealed that Happiness ($\beta = .32$) emerged as a significant predictor of Trait Forgiveness.

Hence the above results clearly show that the hypothesis regarding Trait Forgiveness and Positive Mental States was upheld in most groups.

These findings are consistent with the Positive Psychology theoretical approach emphasizing forgiveness as a human strength that has a modest relationship with many positive emotions like happiness, hope, optimism and gratitude. There are few Forgiveness based intervention studies that have shown to increase positive emotions.

Al- Mabuk et al. (1995) conducted two studies with male and female college students, who judged themselves to be parently love deprived, engaged in a randomized, experimental and control group design focused on forgiving the parents. Study 1 was a 4 day workshop educating the adolescents on commitment to forgive. They reported that commitment to forgive seems to make one more hopeful and more optimistic towards the future.

Freedman and Enright (1996) designed an intervention, with forgiveness toward their abuser as the goal and implemented with 12 female incest survivors. The women, from a mid western city, were 24 to 54 years old and were randomly assigned to an experimental group or a waiting-list control group. After the intervention, the experimental group gained more than the control group in forgiveness and hope and decreased significantly more than the control group in anxiety and depression. They further contended that the greater sense of hope that the participants experienced after the intervention is additional evidence that, when there is a change in forgiveness, there is improvement in psychological health. Optimism may be a variable that has significant implications for determining how an individual's life view changes after going through the forgiveness process.
Forgiveness shows individuals that there are alternatives to living one's life with anger, bitterness and hatred.

Luskin and Thoresen (1998) investigated a brief psychosocial treatment for engendering forgiveness as a response to an interpersonal hurt in fifty-five Stanford University students who were recruited to participate in a study. The students had to have an unresolved interpersonal hurt with someone with whom they were in relationship. Participants were randomly selected to be either in the Control or one of two Treatment groups. The treatment groups met weekly for six weeks and received a one-hour training session each week. The treatment group achieved a significant increase in hopefulness at Post-test that was maintained at Follow-up.

McCullough and Emmons (2001) while examining the correlates of the disposition toward gratitude in 238 undergraduates Psychology students (174 women, 57 men, 7 unrecorded) reported that gratitude was found to have positive and moderately significant relationship with forgiveness.

Rye et al. (2001) examined the psychometric properties of two forgiveness scales - Forgiveness Scale (i.e., Absence of Negative, Presence of Positive) and the Forgiveness Likelihood Scale on the participants enrolled at a Midwestern Catholic university (N = 328) and reported that that both subscales of the Forgiveness Scale and Forgiveness likelihood scale were significantly correlated in the expected direction with hope and other measures.

Rye and Pargament (2002) evaluated the effects of two versions of a six-week group forgiveness intervention for college women who had been wronged in a romantic relationship. Participants (N= 58) were randomly assigned to a secular, religiously integrated, or no-intervention comparison condition. Participants completed a variety of forgiveness and mental health measures at one-week pretest, one-week posttest, and six-week follow-up. Results revealed that participants in both intervention conditions improved significantly more than did those in the comparison condition on two
measures of forgiveness and a measure of hope along with other measures as compared to participants in the comparison condition.

Witvliet et al. (2002) assessed transgressors’ subjective emotions and physiological responses in a within-subjects imagery study involving 20 male and 20 female participants. Two imagery conditions focused on the transgressor’s actions: participants (1) ruminated about a real-life transgression and (2) imagined seeking forgiveness from the victim and it was reported that transgressors felt more positive emotion, control, gratitude, hope, empathy, and forgiveness from the victim when they imagined receiving forgiveness or reconciling with the victim.

The intervention group showed a significant decrease in the angry reaction in the post-test assessment and this decrease remained significant in the follow-up assessment, however, it had no impact on the angry temperament. The intervention had a positive effect on this hope-related measure and perceived self-efficacy in handling interpersonal hurt and managing emotional reactions at post-test assessment, that was maintained at follow up. The intervention also had a significant impact on the both the personal growth / compassion and embracing life’s fullness, as the intervention group showed significant improvement from pre-test to follow-up assessment (personal growth /compassion: embracing life’s fullness.

Witvliet et al. (2003) assessed the psychophysiological effects of justice and forgiveness. Participants (27 male and 30 female college students) imagined a scenario in which they were victim of a home burglary. Granting forgiveness also was associated with significantly lower heart rate and corrugator EMG level. For forgiveness, they reported that granting forgiveness to the perpetrator yielded self-reports of more positive feelings, perceived control, gratitude, and empathy, and less fear, anger, and arousal than did not granting forgiveness.

Maltby et al. (2005) examined the relationship between forgiveness and happiness using a two-dimensional model of happiness (hedonic and eudaimonic happiness). 224 United Kingdom students were administered
the Enright Forgiveness Inventory, The Depression–Happiness Scale and the Oxford Happiness Questionnaire – Short-form. Findings suggested that forgiveness accounts for statistically significant variance, in both hedonic and eudaimonic happiness and the relationships may vary depending on which aspect of happiness is being considered.

Thompson et al. (2005) examined the utility of Heartland Forgiveness scale as a predictor of people’s listening behavior when given a choice of listening to forgiving or unforgiving statements on an audiotape, in a sample of 55 college students (25 men, 27 women), who completed a set of questionnaires and the results showed that Heartland Forgiveness total score was found to have a significant positive correlation with Hope.

Harris et al. (2006) attempted a forgiveness intervention with 259 adults and compared effects of a 6 session (90 minutes each) manual-based cognitive behavioral intervention with assessment control group on various variables and it was observed that the treatment group increased their levels of optimism significantly more than the control group with a post-test ES of 0.27.

Miley and Spinella (2006) examined the relationship between self rated executive functions and three positive personality attributes (satisfaction with life, gratitude and forgiveness). After controlling for age, sex and formal education, forgiveness was measured by using Heartland forgiveness of others subscale and it was positively correlated with gratitude and satisfaction with life.

In a meta-analysis of forgiveness intervention research, Worthington et al. (2000) found a strong relationship between intervention effect sizes and the amount of time spent in trying to promote forgiveness. Most forgiveness interventions not only attempt to suppress negative rumination, they also promote empathy, gratitude for past forgiveness of one’s own transgressions, and other efforts, which we might call “forgiving rumination,” that support the kinds of positive emotional replacement described by Worthington and Wade (1999).
C. Interpersonal Forgiveness, Subjective Well Being and Psychological Well Being

1. It was hypothesized that both State and Trait Forgiveness measures and their components were expected to be positively correlated with Subjective Well Being and its components viz Positive Affect and Satisfaction with Life and negatively correlated with Negative Affect among both male and female adolescents.

2. It was hypothesized that both State and Trait Forgiveness measures and their components were expected to be positively correlated with Psychological Well Being and its components viz Autonomy, Personal Relations with Others, Self-Acceptance, Environmental Mastery, Purpose in Life and Personal Growth among both male and female adolescents.

a) State Forgiveness and Subjective Well Being

A glance at the intercorrelation matrix for the total sample (Table 6) revealed that State Forgiveness was positively and significantly correlated with Positive Affect \( (r=.12) \), Satisfaction with Life \( (r=.11) \), Subjective Well Being \( (r=.17) \) and negatively and significantly correlated with Negative Affect \( (r=-.11) \).

A further perusal of the intercorrelation matrix for the total sample (Table 6) revealed that Affective component of State Forgiveness was positively and significantly correlated with Satisfaction with Life \( (r=.10) \), Subjective Well Being \( (r=.17) \) and negatively and significantly correlated with Negative Affect \( (r=.12) \). Behavioral component of State Forgiveness was positively and significantly correlated with Positive Affect \( (r=.13) \), Satisfaction with Life \( (r=.10) \) and Subjective Well Being \( (r=.16) \). Cognitive component of State Forgiveness was positively and significantly correlated with Positive Affect \( (r=.10) \), Satisfaction with Life \( (r=.11) \) and Subjective Well Being \( (r=.15) \).

A glance at the intercorrelation matrix for the male adolescents (Table 7) revealed that State Forgiveness was positively and significantly
correlated with Positive Affect ($r=.21$) and Subjective Well Being ($r=.24$) and negatively and significantly correlated with Negative Affect ($r=-.15$).

A further perusal of the intercorrelation matrix for male adolescents (Table 7) revealed that Affective component of State Forgiveness was positively and significantly correlated with Positive Affect ($r=.17$) and Subjective Well Being ($r=.18$). Behavioral component of State Forgiveness was positively and significantly correlated with Positive Affect ($r=.21$), Satisfaction with Life ($r=.16$) and Subjective Well Being ($r=.26$) and negatively and significantly correlated with Negative Affect ($r=-.16$). Cognitive component of State Forgiveness was positively and significantly correlated with Positive Affect ($r=.21$), Subjective Well Being ($r=.24$) and negatively and significantly correlated with Negative Affect ($r=-.14$).

A glance at the intercorrelation matrix for female adolescents (Table 8) revealed that State Forgiveness was not correlated with Subjective Well Being and its components viz Positive Affect, Negative Affect and Satisfaction with Life. A further pursuit of intercorrelation matrix for female adolescents (Table 8) revealed that the components of State Forgiveness were also not correlated with Subjective Well Being and its components viz Positive Affect, Negative Affect and Satisfaction with Life.

A perusal of Stepwise Multiple Regression Equation for the total sample (Table 9) male adolescents (Table 10) and female adolescents (Table 11) revealed that none of the dimensions of Subjective Well Being emerged as significant predictor of State Forgiveness.

Hence the above results clearly show that the hypothesis regarding State Forgiveness, Subjective Well Being and its components viz Positive Affect, Negative Affect and Satisfaction with Life was partially upheld in most groups.

b) Trait Forgiveness and Subjective Well Being

A glance at the intercorrelation matrix for the total sample (Table 6) revealed that Trait Forgiveness was positively and significantly correlated with Positive Affect ($r=.23$), Satisfaction with Life ($r=.27$), Subjective Well
A further pursuit of intercorrelation matrix for the total sample (Table 6) revealed that Forgiveness of Self was positively and significantly correlated with Positive Affect ($r=.16$), Satisfaction with Life ($r=.23$), Subjective Well Being ($r=.25$) and negatively and significantly correlated with Negative Affect ($r=-.13$). Forgiveness of Others was positively and significantly correlated with Positive Affect ($r=.13$), Satisfaction with Life ($r=.13$), Subjective Well Being ($r=.22$) and negatively and significantly correlated with Negative Affect ($r=-.18$). Forgiveness of Situations was positively and significantly correlated with Positive Affect ($r=.19$), Satisfaction with Life ($r=.20$), Subjective Well Being ($r=.29$) and negatively correlated with Negative Affect ($r=-.21$).

A glance at the intercorrelation matrix for male adolescents (Table 7) revealed that Trait Forgiveness was positively and significantly correlated with Positive Affect ($r=.34$), Satisfaction with Life ($r=.29$), Subjective Well Being ($r=.48$) and negatively and significantly correlated with Negative Affect ($r=-.34$).

A further pursuit of intercorrelation matrix for male adolescents (Table 7) revealed that Forgiveness of Self was positively and significantly correlated with Positive Affect ($r=.15$), Satisfaction with Life ($r=.26$), Subjective Well Being ($r=.28$) and negatively and significantly correlated with Negative Affect ($r=-.16$). Forgiveness of Others was positively and significantly correlated with Positive Affect ($r=.29$), Satisfaction with Life ($r=.18$), Subjective Well Being ($r=.36$) and negatively and significantly correlated with Negative Affect ($r=-.26$). Forgiveness of Situations was positively and significantly correlated with Positive Affect ($r=.26$), Satisfaction with Life ($r=.19$), Subjective Well Being ($r=.37$) and negatively and significantly correlated with Negative Affect ($r=-.29$).

A glance at the intercorrelation matrix for female adolescents (Table 8) revealed that Trait Forgiveness was positively and significantly correlated
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with Satisfaction with Life \((r=.25)\) and Subjective Well Being \((r=.26)\) and negatively and significantly correlated with Negative Affect \((r=-.18)\).

A further perusal of intercorrelation matrix for female adolescents (Table 8) revealed that Forgiveness of Self was positively and significantly correlated with Positive Affect \((r=.16)\), Satisfaction with Life \((r=.21)\) and Subjective Well Being \((r=.22)\). Forgiveness of Situations was positively and significantly correlated with Satisfaction with Life \((r=.24)\) and Subjective Well Being \((r=.23)\).

A perusal of Stepwise Multiple Regression Equation for the total sample (Table 12) revealed that Negative Affect \((\beta=-.10)\) emerged as a significant predictor of Trait Forgiveness.

A perusal of Stepwise Multiple Regression Equation for male adolescents (Table 13) and female adolescents (Table 14) revealed that none of the dimensions of Subjective Well Being emerged as significant predictor of Trait Forgiveness.

A perusal of Stepwise Multiple Regression Equation for the male adolescents (Table 14) revealed that none of the dimensions of Subjective Well Being emerged as significant predictor of Trait Forgiveness.

Hence the above results clearly show that the hypothesis regarding Trait Forgiveness, Subjective Well Being and its components viz Positive Affect, Negative Affect and Satisfaction with Life was upheld in most groups.

c) State Forgiveness and Psychological Well Being

A glance at the intercorrelation matrix for the total sample (Table 6) revealed that State Forgiveness was positively and significantly correlated with Personal Growth \((r=.11)\).

A further perusal of the intercorrelation matrix for the total sample (Table 6) revealed that Affective component of State Forgiveness was positively and significantly correlated with Purpose In Life \((r=.12)\). Behavioral component of State Forgiveness was positively and significantly
correlated with Personal Growth ($r=.12$). Cognitive component of State Forgiveness was positively and significantly correlated with Personal Growth ($r=.14$).

A glance at the intercorrelation matrix for male adolescents (Table 7) revealed that State Forgiveness was positively and significantly correlated with Personal Relations with others ($r=.16$), Self Acceptance ($r=.18$), Environmental Mastery ($r=.15$) and Personal Growth ($r=.14$) and Psychological Well Being ($r=.16$).

A further perusal of the intercorrelation matrix for male adolescents (Table 7) revealed that Affective component of State Forgiveness was positively and significantly correlated with Personal Relations with others ($r=.14$). Behavioral component of State Forgiveness was positively and significantly correlated with Personal Relations with others ($r=.15$), Self Acceptance ($r=.18$), Environmental Mastery ($r=.17$), Personal Growth ($r=.17$) and Psychological Well Being ($r=.17$). Cognitive component of State Forgiveness was positively and significantly correlated with Personal Relations with others ($r=.14$), Self Acceptance ($r=.18$), Personal Growth ($r=.17$) and Psychological Well Being ($r=.17$).

A glance at the intercorrelation matrix for female adolescents (Table 8) revealed that State Forgiveness was not correlated with Psychological Well Being and its components viz Autonomy, Personal Relations with Others, Self-Acceptance, Environmental Mastery, Purpose in Life and Personal Growth.

A further perusal of the intercorrelation matrix for female adolescents (Table 8) revealed that Affective component of State Forgiveness was positively and significantly correlated with Purpose In Life ($r=.15$).

A perusal of Stepwise Multiple Regression Equation for male adolescents (Table 10) revealed that Self Acceptance emerged as a significant predictor of State Forgiveness ($\beta=.16$).

A perusal of Stepwise Multiple Regression Equation for the total sample (Table 9) and female adolescents (Table 11) revealed that none of
the dimensions of Psychological Well Being emerged as significant predictor of State Forgiveness.

Hence the above results clearly show that the hypothesis regarding State Forgiveness, Psychological Well Being and its components viz Autonomy, Personal Relations with Others, Self-Acceptance, Environmental Mastery, Purpose in Life and Personal Growth was partially upheld in most groups.

d) Trait Forgiveness and Psychological Well Being

A glance at the intercorrelation matrix for the total sample (Table 6) revealed that Trait Forgiveness was positively and significantly correlated with Autonomy ($r=.14$), Personal Relations with others ($r=.21$), Self Acceptance ($r=.26$), Environmental Mastery ($r=.22$), Personal Growth ($r=.18$) and Psychological Well Being ($r=.30$).

A further perusal of intercorrelation matrix for the total sample (Table 6) revealed that Forgiveness of Self was positively and significantly correlated with Personal Relations with others ($r=.19$), Self Acceptance ($r=.25$), Environmental Mastery ($r=.14$), Personal Growth ($r=.12$) and Psychological Well Being ($r=.27$). Forgiveness of Others was positively and significantly correlated with Personal Relations with others ($r=.11$), Environmental Mastery ($r=.18$), Personal Growth ($r=.12$) and Psychological Well Being ($r=.18$). Forgiveness of Situations was positively and significantly correlated with Autonomy ($r=.12$), Personal Relations with others ($r=.14$), Self Acceptance ($r=.21$), Environmental Mastery ($r=.14$), Personal Growth ($r=.13$) and Psychological Well Being ($r=.18$).

A glance at the intercorrelation matrix for male adolescents (Table 7) revealed that Trait Forgiveness was positively and significantly correlated with Personal Relations with others ($r=.30$), Self Acceptance ($r=.35$), Environmental Mastery ($r=.38$), Personal Growth ($r=.33$) and Psychological Well Being ($r=.42$).

A further perusal of intercorrelation matrix for male adolescents (Table 7) revealed that Forgiveness of Self was positively and significantly
correlated with Personal Relations with others \( (r=0.17) \), Self Acceptance \( (r=0.31) \), Environmental Mastery \( (r=0.15) \) and Psychological Well Being \( (r=0.28) \). Forgiveness of Others was positively and significantly correlated with positively correlated with Personal Relations with others \( (r=0.21) \), Self Acceptance \( (r=0.17) \), Environmental Mastery \( (r=0.33) \), Personal Growth \( (R=0.29) \) and Psychological Well Being \( (r=0.39) \). Forgiveness of Situations was positively and significantly correlated with Autonomy \( (r=0.12) \), Personal Relations with others \( (r=0.27) \), Self Acceptance \( (r=0.29) \), Environmental Mastery \( (r=0.30) \), Personal Growth \( (r=0.26) \) and Psychological Well Being \( (r=0.27) \).

A glance at the intercorrelation matrix for female adolescents (Table 8) revealed that Trait Forgiveness was positively and significantly correlated with Autonomy \( (r=0.21) \), Personal Relations with others \( (r=0.14) \), Self Acceptance \( (r=0.17) \) and Psychological Well Being \( (r=0.18) \).

A further perusal of intercorrelation matrix for female adolescents (Table 8) revealed that Forgiveness of Self was positively and significantly correlated with Personal Relations with others \( (r=0.22) \), Self Acceptance \( (r=0.20) \) and Psychological Well Being \( (r=0.26) \).

A perusal of **Stepwise Multiple Regression Equation** for male adolescents (Table 13) revealed that Environmental Mastery \( (\beta = 0.17) \) emerged as a significant predictor of Trait Forgiveness.

A perusal of **Stepwise Multiple Regression Equation** for the total sample (Table 12) and female adolescents (Table 14) revealed that none of the dimensions of Psychological Well being emerged as significant predictor of Trait Forgiveness.

Hence the above results clearly show that the hypothesis regarding Trait Forgiveness, Psychological Well Being and its components viz Autonomy, Personal Relations with Others, Self-Acceptance, Environmental Mastery, Purpose in Life and Personal Growth was upheld in most groups.
Many findings from the west have earlier reported similar results vis-à-vis Forgiveness, Subjective Well Being and Psychological Well Being.

Poloma and Gallup (1991) found in a nationally representative sample of 1,030 adult men and women, that people who are more forgiving also enjoy greater satisfaction with life, compared to less forgiving people.

In a cross-sectional survey of 30 divorced or permanently separated mothers with children aged 10 to 13, Aschleman (1996) found that mothers who had forgiven the fathers for previous transgressions committed against them were more likely than unforgiving mothers to report a greater sense of self-acceptance and purpose in life, as well as less anxiety and depressive symptoms.

Hargrave and Sells (1997) demonstrated that, in a sample of 35 adult men and women, forgiveness was associated with better life satisfaction.

Toussaint et al. (2001) using national probability data reported that for all age groups, forgiveness variables accounted for more variance in life satisfaction than religiousness/spirituality variables. They found a significant positive association between forgiveness of self and life satisfaction in young adults, positive associations between Forgiveness of Others and Life Satisfaction in middle and old adults and for young adults.

Brown and Phillips (2005) examined the validity of three putative measures of dispositional forgiveness, as well as a measure of trait rumination, with respect to measures of mental health and forgiveness for a specific offense in a sample of 200 undergraduates and results indicated that Tendency to Forgive, Attitudes Toward Forgiveness and the Transgression Narrative Test of Forgivingness was found to have significant positive correlation with life satisfaction and negative correlation with depression and all the dimensions of aggression (physical, verbal, anger and hostility).

Landry et al. (2005) examined the effects of writing as an essential component for expediting the forgiveness process. Forty undergraduate
students were randomly assigned to either write about an interpersonal conflict or about trivial topics. Both groups underwent pretests and posttests measuring positive and negative affect (Positive and Negative Affect Scale), forgiveness (Transgression Related Interpersonal Motivations Inventory), and rumination (Impact of Events Scale). Both groups experienced significant increases in positive affect, decreases in negative affect and rumination.

Karrenmas et al. (2003) conducted three studies which revealed that forgiveness compared to unforgiveness is generally associated with higher levels of a generalized prosocial orientation as, participants in the no-forgiveness condition reported greater levels of negative affect than did participants in the forgiveness condition. Further analyses revealed that participants in the no-forgiveness condition reported significantly lower levels of positive affect than participants in the forgiveness and control conditions.

Thompson et al. (2005) while examining some of the properties of Heartland Forgiveness scale, in a sample of 276 university students, reported that all the three subscales of Heartland Forgiveness scale viz Forgiveness of Self, Forgiveness of Others, Forgiveness of Situations and Total HFS score correlated significantly (positively) with Positive Affect, and (negatively) with Negative Affect.

In another study Thompson et al. (2005) examined the utility of Heartland Forgiveness scale as a predictor of people’s listening behavior when given a choice of listening to forgiving or unforgiving statements on an audiotape, in a sample of 55 college students (25 men, 27 women), who completed a set of questionnaires and the results showed that time listening to forgiving statements, total forgiving statements recalled and Heartland forgiveness total score was significantly positively related with positive affect and negatively related with negative affect of Positive and Negative Affectivity scale.

Furthermore, while demonstrating the construct validity of Heartland Forgiveness scale, Thompson et al. (2005) investigated the extent to which
forgiveness of self, others and situations was predictive of four measures of Psychological Well Being (anger, anxiety, depression and satisfaction with life). Participants were 227 university students and they reported that forgiveness of self and forgiveness of situations contributed significantly to the prediction of satisfaction with life along with depression and anxiety. Bivariate correlations also revealed that forgiveness of self, forgiveness of others, forgiveness of situations and total heartland forgiveness score had a significant positive correlation with satisfaction with life.

Lawler and Piferi (2006) assessed relationships among dispositional forgiveness, potential mediating factors and health outcome variables in 425 adults (50–95 years of age) and reported that trait forgiveness was significantly associated with subjective well-being and psychological well-being. Partial correlations indicated that all mediators played a role in the forgiveness – health relationships; however, forgiveness also made an independent contribution to psychological well-being. Highly forgiving individuals had less depression, less stress, greater subjective well-being and greater psychological well-being. Individuals in the high forgiving group had higher scores on autonomy, environmental mastery positive relations with others, purpose in life, personal growth and self-acceptance. They further contended that finding meaning and purpose in life is critical to well-being and is a significant carrier of the effect of forgiveness on health. (Lawler and Peferi, 2006).

Miley and Spinella (2006) examined the relationship between self rated executive functions and three positive personality attributes (Satisfaction with Life, Gratitude and Forgiveness) after controlling for age, sex and formal education, Forgiveness was measured by using Heartland Forgiveness of Others subscale. It was positively correlated with Satisfaction with life.

D. Interpersonal Forgiveness and Health

It was hypothesized that both State and Trait Forgiveness measures and their components were expected to be positively correlated with
Perceived Health Status, Mental Health and its components viz Being Comfortable with Self, Being Comfortable with Others and Perceived Ability to Meet Life Demands among both male and female adolescents.

**a) State Forgiveness and Health**

A glance at the intercorrelation matrix for the total sample (Table 6) revealed that State Forgiveness was positively and significantly correlated with Being Comfortable with Self (r=.15), Being Comfortable with Others (r=.11) and Total Mental Health (r=.13).

A further perusal of the intercorrelation matrix for the total sample (Table 6) revealed that Affective component of State Forgiveness was positively and significantly correlated with Being Comfortable with Self (r=.13), Being Comfortable with Others (r=.12) and Total Mental Health (r=.14). Behavioral component of State Forgiveness was positively and significantly correlated with Being Comfortable with Self (r=.15) and Total Mental Health (r=.10). Cognitive component of State Forgiveness was positively and significantly correlated with Being Comfortable with Self (r=.14), Being Comfortable with Others (r=.11) and Total Mental Health (r=.13).

A glance at the intercorrelation matrix for male adolescents (Table 7) revealed that State Forgiveness was positively and significantly correlated with Being Comfortable with Self (r=.14), Being Comfortable with Others (r=.20) and Total Mental Health (r=.18).

A further perusal of the intercorrelation matrix for male adolescents (Table 7) revealed that Affective component of State Forgiveness was positively and significantly correlated with Being Comfortable with Self (r=.14), Being Comfortable with Others (r=.18) and Total Mental Health (r=.16). Behavioral component of State Forgiveness was positively and significantly correlated with Being Comfortable with Self (r=.15), Being Comfortable with Others (r=.15) and Total Mental Health (r=.15). Cognitive component of State Forgiveness was positively and significantly correlated with Being Comfortable with Others (r=.22) and Total Mental Health (r=.18).
A glance at the intercorrelation matrix for female adolescents (Table 8) revealed that State Forgiveness was not correlated with Total Mental Health and its components viz Being Comfortable with Self, Being Comfortable with Others and Perceived Ability to Meet Life Demands.

A further perusal of the intercorrelation matrix for female adolescents (Table 8) revealed that Cognitive component of State Forgiveness was positively and significantly correlated with Being Comfortable with Self (r=.14).

A perusal of **Stepwise Multiple Regression Equation** for the total sample (Table 9) male adolescents (Table 10) and female adolescents (Table 11) revealed that none of the components of Mental Health emerged as significant predictor of State Forgiveness.

A perusal of **Stepwise Multiple Regression Equation** for the total sample (Table 9) male adolescents (Table 10) and female adolescents (Table 11) revealed that Perceived Health Status did not emerge as a significant predictor of State Forgiveness.

Hence the above results clearly show that the hypothesis regarding State Forgiveness, Perceived Health Status, Mental Health and its components viz Being Comfortable with Self, Being Comfortable with Others and Perceived Ability to Meet Life Demands was partially upheld in few groups.

**b) Trait Forgiveness and Health**

A glance at the intercorrelation matrix for the total sample (Table 6) revealed that Trait Forgiveness was positively and significantly correlated with Being Comfortable with Self (r=.25), Being Comfortable with Others (r=.21), Perceived ability to meet life demands (r=.15) and Total Mental Health (r=.28).

A further perusal of intercorrelation matrix for the total sample (Table 6) revealed that Forgiveness of Self was positively and significantly correlated with Being Comfortable with Self (r=.17), Perceived ability to
meet life demands ($r=.11$) and Total Mental Health ($r=.17$). Forgiveness of Others was positively and significantly correlated with Being Comfortable with Self ($r=.14$), Being Comfortable with Others ($r=.17$) and Total Mental Health ($r=.16$). Forgiveness of Situations was positively and significantly correlated with Being Comfortable with Self ($r=.21$), Being Comfortable with Others ($r=.17$), Perceived ability to meet life demands ($r=.15$) and Total Mental Health ($r=.25$).

A glance at the intercorrelation matrix for male adolescents (Table 7) revealed that Trait Forgiveness was positively and significantly correlated with Being Comfortable with Self ($r=.31$), Being Comfortable with Others ($r=.35$), Perceived ability to meet life demands ($r=.24$) and Total Mental Health ($r=.39$).

A further perusal of intercorrelation matrix for male adolescents (Table 7) revealed that Forgiveness of Self was positively and significantly correlated with Being Comfortable with Self ($r=.16$), Being Comfortable with Others ($r=.15$), Perceived ability to meet life demands ($r=.16$) and Total Mental Health ($r=.21$). Forgiveness of Others was positively and significantly correlated with Being Comfortable with Self ($r=.26$), Being Comfortable with Others ($r=.30$), Perceived ability to meet life demands ($r=.18$) and Total Mental Health ($r=.33$). Forgiveness of Situations was positively and significantly correlated with Being Comfortable with Self ($r=.22$), Being Comfortable with Others ($r=.27$), Perceived ability to meet life demands ($r=.16$) and Total Mental Health ($r=.28$).

A glance at the intercorrelation matrix for female adolescents (Table 8) revealed that Trait Forgiveness was positively and significantly correlated with Being Comfortable with Self ($r=.31$), Being Comfortable with Others ($r=.35$), Perceived ability to meet life demands ($r=.24$) and Total Mental Health ($r=.39$).

A further perusal of intercorrelation matrix for female adolescents (Table 8) revealed that Forgiveness of Self was positively and significantly correlated with Being Comfortable with Self ($r=.19$) and Total Mental Health.
 Forgiveness of Situations was positively and significantly correlated with Being Comfortable with Self ($r=.19$), Perceived ability to meet life demands ($r=.17$) and Total Mental Health ($r=.22$).

A perusal of **Stepwise Multiple Regression Equation** for the total sample (Table 12) revealed that Being Comfortable with Others ($β=.13$) emerged as a significant predictor of Trait Forgiveness.

A perusal of **Stepwise Multiple Regression Equation** for male adolescents (Table 13) revealed that Being Comfortable with Others ($β=.22$) emerged as a significant predictor of Trait Forgiveness.

A perusal of **Stepwise Multiple Regression Equation** for female adolescents (Table 14) revealed that none of the components of Mental Health emerged as a significant predictor of Trait Forgiveness.

A perusal of **Stepwise Multiple Regression Equation** for the total sample (Table 12) male adolescents (Table 13) and female adolescents (Table 14) revealed that Perceived Health Status did not emerge as a significant predictor of Trait Forgiveness.

Hence the above results clearly show that the hypothesis regarding Trait Forgiveness, Perceived Health Status and Mental Health and its components viz Being Comfortable with Self, Being Comfortable with Others and Perceived Ability to Meet Life Demands was partially upheld in few groups.

Several studies have shown that forgiveness is associated with mental and physical health. Kaplan et al. (1994) has suggested that forgiveness can be integrated within the literature on stress, coping and health. He proposed that religion in general, and forgiveness in particular, may be thought of as a way of coping with stress that could have beneficial effects on health. There are number of mechanisms that could underlie such an association between forgiveness and health: lifestyle behaviors, social support, cognitive factors, and physiological reactivity (Levin, 2001).
There are number of empirical studies that support this assertion. However, the direct examination of the association of forgiveness with physical health, and the study of potential mechanisms whereby it may convey any benefits, is in its infancy. No controlled studies have demonstrated that forgiveness affects physical health outcomes (Thoresen et al., 2000), and even correlational studies examining levels of forgiveness and health are scarce (Berry and Worthington, 2001; Seybold et al., 2001). Some research suggests a link between forgiveness and mental health (Freedman and Enright, 1996). Yet little research has explicitly tested the link between forgiveness and physical health outcomes and most of these measure health physiologically.

In a study of 25 women above the age of 65, Hebl and Enright (1993) showed that forgiveness was correlated to higher self-esteem, as well as, lower depression, state-anxiety, and trait-anxiety.

Mauger et al. (1992) examined the association between forgiveness and mental health measures from the Minnesota Multiphasic Personality Inventory in a sample of 237 counseling outpatients. For these individuals, problems forgiving oneself were moderately associated with depression, anxiety, anger/distrust, and negative self-esteem.

Pingleton (1989) has reviewed research that suggests forgiveness may have a role in recovery from cancer, and Kaplan (1992) has argued that forgiveness might be a protective of coronary heart disease.

Hebl and Enright (1993) implemented a psychotherapeutic intervention with forgiveness as the goal with 24 elderly females. Following the eight week intervention, both groups significantly decreased from pretest to posttest on psychological depression and trait anxiety. The posttest correlation between the Psychological Profile of forgiveness and the psychological variables of lowered depression, anxiety and higher self-esteem is indirect evidence of the important relationship between forgiving those who have inflicted deep hurts and positive psychological health.
Williams and Williams (1994) have incorporated forgiveness as one feature in their prescription for improving cardiovascular health, and forgiveness has been embedded in multimodal intervention programs for both heart disease and cancer (Friedman et al., 1986; Kaplan, 1992).

Al-Mabuk et al. (1995) conducted two studies with male and female college students, who judged themselves to be parently love deprived, engaged in a randomized, experimental and control group design focused on forgiving the parents. Study 1 was a 4 day workshop educating the adolescents on commitment to forgive. The amount of forgiveness shown towards the reported love depriving parent was statistically correlated with state and trait anxiety, psychological depression and self esteem. These correlations are consistent with the expectation that a more forgiving response is associated with enhanced mental health. Study 2 was a more complete programme than the first, showed more broadcasting results. Relative to the control group, the experimental group was significantly lower in anxiety, higher in actual forgiveness towards parents, hope and self esteem. It appears that forgiveness education did have a general and positive effect on the college students’ well being and psychological health (Al-Mabuk et al., 1995).

Freedman and Enright (1996) designed an intervention, with forgiveness toward their abuser as the goal and implemented with 12 female incest survivors. After the intervention, the experimental group gained more than the control group in forgiveness and hope and decreased significantly more than the control group in anxiety and depression. The greater sense of hope that the participants experienced after the intervention is additional evidence that, when there is a change in forgiveness, there is improvement in psychological health.

Lawler et al.(2000) monitored physiological reactions in 40 interviews with people who had been emotionally hurt in a close relationship. One half of the participants had forgiven the transgressor and one half had not. Compared with those who had not forgiven, forgiving participants had lower
physiological reactivity during the interview (e.g., diastolic blood pressure, mean arterial pressure, and forehead EMG activity). Forgiving participants scored higher on trait forgiveness, expression of positive emotions, and provision of social support to others. They scored lower on expression of negative emotions. In addition, when the transgressor was not the parent, forgiving participants reported fewer physical symptoms.

Huang and Enright (2000) used blood pressure to determine the degree to which 44 children or adolescents might have forgiven a transgressor. They found that people who forgave due to "unconditional love" had lower blood pressure (both systolic and diastolic) when recalling the transgression. Other unobtrusive behavioral measures such as masking smiles and lowering the eyes showed parallel findings.

Berry and Worthington (2001) classified 39 participants (19 male, 20 female) as either happy (n = 19) or unhappy (n = 20) with a relationship and the participants imagined (for a 5-min duration) scenes typical of their relationship, and reported that dispositional forgivingness using the Trait Unforgiveness-Forgiveness was related to mental health status and when Forgiving Personality factor, was included, it increased the prediction of physical health status (both the Forgiving Personality factor and the Loving Relationship factor provided significant increases in the prediction of mental health status.

Maltby et al. (2001) examined the relationship between forgiveness of self, forgiveness of others, and personality and general health measures by taking 324 undergraduate students (100 males, 224 females) and reported that failure to forgive oneself is accompanied by personality and general health scores that reflect individual psycho-pathology, with men and women scoring higher on neuroticism, depression and anxiety.

Seybold et al. (2001) conducted a correlational study of forgivingness disposition and physical markers in 68 patients at a Veteran's Administration Medical Center. They reported that higher levels of forgiveness correlates with better health habits (e.g., less smoking), lower
anxiety, lower anger, lower depression, and more task coping. Dispositional forgivingness was correlated negatively with blood viscosity and positively with toxicity-preventive activity. Forgiving the self was positively correlated with the T-helper-to-T-cytotoxic ratio.

Toussaint et al. (2001) examined age differences in the association between forgiveness, religiousness/spirituality and respondent reports of mental and physical health, by using national probability data. For young adults, forgiveness variables again explained a higher proportion of variance in self-rated health than religiousness/spirituality variables, Forgiveness of self was significantly positively associated with self-rated health for both young and middle age adults.

Witvliet et al (2001) provided more direct evidence that forgiveness may improve health. They reported the first experimental investigation of the physiological correlates of forgiveness. In their study, 64 participants who were asked to imagine forgiving a real-life offender showed improvements in terms of cardiovascular (heart rate, blood pressure) and sympathetic nervous system functioning (skin conductance levels, corrugator electromyogram), compared to those who were asked to imagine not forgiving a real-life offender. These results give a view of what happens to the body during experiences of unforgiveness and imply that such responses, if chronically exhibited, can seriously erode physical health by influencing susceptibility to and progression of disease. In fact the emotional and physiological effects identified in this study may be mediators of a relationship between forgiveness and health (Thoresen et al., 1999). They further contended that although people cannot undo past offenses, but if they develop patterns of thinking about their offenders in forgiving ways rather than unforgiving ways, they may be able to change their emotions, their physiological responses and health implications, of a past they cannot change.

Lawler et al. (2003) sought to examine the psycho physiological correlates of forgiveness in response to interpersonal conflict among 108
college students (44 males and 64 females) who participated in two interviews about times of interpersonal betrayal, one about a parent and one about a friend/partner. They reported that trait forgiveness was inversely correlated with mean diastolic, systolic, and mean arterial pressure, the strongest association being with diastolic pressure. Thus failing to forgive, especially in those who are less forgiving on a general basis, is associated with a more sustained period of cardiovascular reactivity during the retelling of the conflict experience. They concluded that forgiveness has cardiovascular effects both in the re-experiencing of an interpersonal conflict and in the rate of recovery from such recollection.

In their interview study, Toussaint and Williams (2003) measured blood pressure in a diverse sample of 100 midwestern community residents, across participants, higher levels of total forgiveness (i.e., forgiveness of others and self, and feeling forgiven by God) were associated with lower resting diastolic blood pressure.

Witvliet et al. (2004) assessed mental and physical health correlates of dispositional forgiveness and religious coping responses in 213 help-seeking veterans diagnosed with post traumatic stress disorder. Controlling for age, socioeconomic status, ethnicity, combat exposure, and hostility, the results indicated that difficulty forgiving oneself and negative religious coping were related to depression, anxiety, and post traumatic stress disorder symptom severity. Difficulty forgiving others was associated with depression and post traumatic stress disorder symptom severity, but not anxiety.

Lawler et al. (2005) studied the relationship of forgiveness, both state and trait, to health by taking 81 community adults who completed a packet of questionnaires and participated in a laboratory interview about a time of hurt or betrayal. In addition, four mechanisms or pathways by which forgiveness could lead to fewer physical symptoms were also examined: spirituality, social skills, reduction in negative affect, and reduction in stress.
They reported significant relationship between Trait Forgiveness, State Forgiveness and measures of Health.

While demonstrating the construct validity of Heartland Forgiveness scale, Thompson et al. (2005) investigated the extent to which forgiveness of self, others and situations was predictive of four measures of Psychological Well Being (anger, anxiety, depression and satisfaction with life). Participants were 227 university students and they reported that forgiveness of self and forgiveness of situations contributed significantly to the prediction of depression and anxiety along with satisfaction with life. Bivariate correlations also showed that forgiveness of self, forgiveness of others, forgiveness of situations and Total Heartland forgiveness score had a negative correlation with depression and anxiety along with trait anger.

Similarly, they examined the utility of Heartland forgiveness scale as a predictor of people’s listening behavior when given a choice of listening to forgiving or unforgiving statements on an audiotape, in a sample of 55 college students and reported that depression had a negative correlation with time listening to forgiving statements and Heartland forgiveness total score and positive correlation with total unforgiving statements recalled.

Some indirect evidences, that highlights the pathways or mechanisms through which forgiveness can have a relationship with physical/mental health, have also been provided by some investigators.

Berry and Worthington (2001) have found that unforgiving romantic relationships were characterized by hostility. Berry et al. (2001) have shown dispositional forgivingness is negatively correlated with trait hostility. Thoresen et al. (2000) have described hostility as a core component of unforgiveness. Hostility has been directly related to numerous health problems. Hostility has its most deleterious effects on the cardiovascular system (Kaplan, 1992; Williams and Williams, 1993).

Miller et al. (1996) supported the notion that hostility is an independent and robust risk factor for coronary heart disease (CHD). Smith's first model, the psycho physiological reactivity model, suggests that
hostility is linked to disease via its association with cardiovascular and neuroendocrine hyperactivity. From a forgiveness perspective, less forgiving individuals might experience increases in blood pressure, heart rate, and stress-related hormones seen in hostile people, leading to a susceptibility to disease (Seybold et al., 2001).

Lawler and Piferi (2006) provided some insight into why forgivingness of others might be related to health in a study of 425 participants aged 50 to 95 years. Mediation analyses were conducted to determine mediators between forgivingness and health. The connection between forgivingness and depression was mediated by healthy behaviors, social support, existential, and religious well-being. Forgivingness and stress were mediated by sex, age, healthy behaviors, existential, and religious well-being.

Forgiveness could also affect health by boosting the immune system. Specifically, forgiveness could reduce HPA reactivity and reduce secreted cortisol. Over-production of cortisol has been shown to have deleterious health effects on the cardiovascular and immune systems and on cognitive and brain functioning (Sapolsky, 1994; McEwen, 2002).

More forgiving people might have larger or more emotionally supportive networks. Forgiveness can promote reconciliation (Worthington and Drinkard, 2000), which suggests that highly forgiving people might repair relationships more than less forgiving people. Quality and quantity of social support networks have been related to physical health as well (Brownley et al., 1996). One physical mechanism through which better quality social support might affect health involves release of "bonding" neuropeptides such as oxytocin and prolactin. In animal models, injected oxytocin has lowered blood pressure, heart rate, and cortisol levels in rats (Petersson et al., 1996). In humans, contact and warmth stimulate oxytocin (Moberg, 1998). Prolactin might also produce physiological effects of positive human interaction (Curtis and Wang, 2003). Forgiveness through its link with social support may enhance health.
Discussion

Worthington and Scherer (2004) have suggested that forgiving might contribute to more social support through relational repair. However, people with more robust social networks might just as reasonably be more confident and less easily threatened, and thus they might be less likely to develop unforgiveness or, if it develops, they are more willing to forgive.

In terms of social support, there is a large body of literature that demonstrated the value of social support. Social support has been shown to reduce cardiovascular risks, promote faster recovery and increased survival rates from several types of cancer. Therefore, forgiveness, since it improved interpersonal functioning, might mediate these better health outcomes through the ability of people to have increased social support (Worthington and Scherer 2004).

Most studies of forgiveness investigate its role in psychological processes such as personality, development, emotion, interpersonal relationships, etc, the impact of forgiveness on disease and physical health however, remains largely unexplored, and the development of theoretical models examining the linkage between forgiveness and physical health has yet to occur (Thoresen et al., 2000).

Together, this combined set of findings on peripheral physiology suggests that chronic unforgiving responses could contribute to adverse health by perpetuating stress beyond the duration of the original stressor, heightening cardiovascular reactivity during recall, imagery, and conversations about the hurt, and impairing cardiovascular recovery even when people try to focus on something else. By contrast, forgiving responses may buffer health both by quelling these unforgiving responses and by nurturing positive emotional responses in their place (Worthington et al., 2007).

E. Interpersonal Forgiveness and Personality

It was hypothesized that both State and Trait Forgiveness measures and their components were expected to be positively related with Extraversion and negatively related with Psychoticism and Neuroticism among both male and female adolescents.
a) State Forgiveness and Personality

A glance at the intercorrelation matrix for the total sample (Table 6) revealed that State Forgiveness was positively and significantly related with Extraversion ($r = .12$) and negatively and significantly related with Psychoticism ($r = -.11$) and Neuroticism ($r = -.18$).

A further perusal of the intercorrelation matrix for the total sample (Table 6) revealed that Affective component of State Forgiveness was negatively and significantly related with Psychoticism ($r = -.24$) and Neuroticism ($r = -.19$). Behavioral component of State Forgiveness was negatively and significantly correlated with Psychoticism ($r = -.29$) and Neuroticism ($r = -.20$). Cognitive component of State Forgiveness was also negatively and significantly correlated with Psychoticism ($r = -.26$) and Neuroticism ($r = -.23$).

A glance at the intercorrelation matrix for male adolescents (Table 7) revealed that State Forgiveness was negatively and significantly correlated with Psychoticism ($r = -.28$) and Neuroticism ($r = -.22$).

A further perusal of the intercorrelation matrix for male adolescents (Table 7) revealed that Affective component of State Forgiveness was negatively and significantly correlated with Psychoticism ($r = -.24$) and Neuroticism ($r = -.19$). Behavioral component of State Forgiveness was negatively and significantly correlated with Psychoticism ($r = -.29$) and Neuroticism ($r = -.20$). Cognitive component of State Forgiveness was also negatively and significantly correlated with Psychoticism ($r = -.26$) and Neuroticism ($r = -.23$).

A glance at the intercorrelation matrix for female adolescents (Table 8) revealed that State Forgiveness was positively and significantly correlated with Extraversion ($r = .15$).

A further perusal of the intercorrelation Matrix for female adolescents (Table 8) revealed that Cognitive component of State Forgiveness was positively and significantly correlated with Extraversion ($r = .17$).
A perusal of **Stepwise Multiple Regression Equation** for the total sample (Table 9) revealed that Extraversion ($\beta = .13$) emerged as a significant predictor of State Forgiveness.

A perusal of **Stepwise Multiple Regression Equation** for the male adolescents (Table 10) revealed that Psychoticism ($\beta = -.28$) and Social Desirability ($\beta = -.14$) emerged as significant predictors of State Forgiveness.

A perusal of **Stepwise Multiple Regression Equation** for the female adolescents (Table 11) revealed that Extraversion ($\beta = .16$) emerged as a significant predictor of State Forgiveness.

**Hence the above results clearly show that the hypothesis regarding State Forgiveness and Extraversion, Psychoticism and Neuroticism was upheld in most groups.**

**b) Trait Forgiveness and Personality**

A glance at the intercorrelation matrix for the total sample (Table 6) revealed that Trait Forgiveness was positively and significantly correlated with Extraversion ($r = .17$) and Social Desirability ($r = .15$) and negatively and significantly correlated with Psychoticism ($r = -.25$) and Neuroticism ($r = -.38$).

A further pursual of intercorrelation matrix for the total sample (Table 6) revealed that Forgiveness of Self was positively and significantly correlated with Extraversion ($r = .16$) and negatively and significantly correlated with Psychoticism ($r = -.11$) and Neuroticism ($r = -.27$). Forgiveness of Others was positively and significantly correlated with Social Desirability ($r = .14$) and negatively correlated with Psychoticism ($r = -.18$) and Neuroticism ($r = -.17$). Forgiveness of Situations was positively and significantly correlated with Extraversion ($r = .14$) and Social Desirability ($r = .15$) and negatively and significantly correlated with Psychoticism ($r = -.22$) and Neuroticism ($r = -.36$).

A glance at the intercorrelation matrix for male adolescents (Table 7) revealed that Trait Forgiveness was positively and significantly correlated
with Extraversion ($r = .23$) and Social Desirability ($r=.22$) and negatively and significantly correlated with Psychoticism ($r=-.32$) and Neuroticism ($r = -.40$).

A further pursuit of intercorrelation matrix for male adolescents (Table 7) revealed that Forgiveness of Self was positively and significantly correlated with Extraversion ($r=.22$) and negatively and significantly correlated with Neuroticism ($r=-.33$). Forgiveness of Others was negatively and significantly correlated with Psychoticism ($r=-.29$) and Neuroticism ($r=-.21$). Forgiveness of Situations was positively and significantly correlated with Extraversion ($r=1.15$) and Social Desirability ($r=.24$) and negatively and significantly correlated with Psychoticism ($r=-.28$) and Neuroticism ($r=-.33$).

A glance at the intercorrelation matrix for female adolescents (Table 8) revealed that Trait Forgiveness was negatively and significantly correlated with Psychoticism ($r=-.20$) and Neuroticism ($r = -.34$).

A further pursuit of intercorrelation matrix for female adolescents (Table 8) revealed that Forgiveness of Self was negatively and significantly correlated with Neuroticism ($r=-.21$). Forgiveness of Others was positively correlated with Social Desirability ($r=.14$). Forgiveness of Situations was negatively and significantly correlated with Psychoticism ($r=-.21$) and Neuroticism ($r=-.38$).

A perusal of **Stepwise Multiple Regression Equation** for the total sample (Table 12) revealed that Neuroticism ($\beta = -.19$) emerged as a significant predictor of Trait Forgiveness.

A perusal of **Stepwise Multiple Regression Equation** for the male adolescents (Table 13) revealed that Neuroticism ($\beta = -.32$) emerged as a significant predictor of Trait Forgiveness.

A perusal of **Stepwise Multiple Regression Equation** for female adolescents (Table 14) revealed that none of the personality dimensions emerged as significant predictor of State Forgiveness.

**Hence the above results clearly show that the hypothesis regarding Trait Forgiveness and Extraversion, Psychoticism and Neuroticism was upheld in most groups.**

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Similar results have been reported by many western psychologists with regard to Forgiveness and Personality dimensions.

Mauger et al. (1992) reported that failure to forgive oneself, or others, results in greater psychopathology. A failure to forgive oneself is significantly positively correlated with depression, anxiety, distrust, self-esteem, and social introversion, while failure to forgive others is significantly positively correlated to schizophrenia traits, self-alienation, and persecutory ideas. He also found that the failure to forgive oneself and others are both significantly negatively correlated with social desirability. They further suggested that failure to forgive oneself is ‘intro-punitive’ as failure to forgive oneself is significantly related to aspects of psychological well-being, such as higher depression and higher anxiety. Similarly, the authors argued that failure to forgive others is ‘extra-punitive’, and that this is demonstrated by higher scores on the failure to forgive others, being accompanied by higher scores on measures of social alienation and social introversion.

McCullough et al. (2001a) tried to theorize about the nature of vengefulness and reported that it was negatively associated with agreeableness and positively associated with Neuroticism. Measures of the Big Five personality factors explained 30% of the variance in vengefulness.

Maltby et al. (2001) examined the relationship between forgiveness of self, forgiveness of others, personality and general health measures by taking 324 undergraduate students (100 males, 224 females) and reported that, failure to forgive oneself is accompanied by personality and general health scores that reflect individual psycho-pathology, with men and women scoring higher on neuroticism, depression and anxiety. A failure to forgive others is accompanied by personality and general health scores that reflect social introversion among men (low extraversion scores) and social-pathology among women (social dysfunction, psychoticism). The results suggested that the concept of forgiveness is clearly related to personality and psychological well-being variables and has implications for individual and social psychopathology.
Rye et al. (2001) while examining the psychometric properties of two forgiveness scales - Forgiveness Scale (Absence of Negative, Presence of Positive) and the Forgiveness Likelihood Scale administered a number of tests on the participants enrolled at a Midwestern Catholic university ($N = 328$) and reported that that both subscales of the Forgiveness Scale and Forgiveness likelihood scale were significantly correlated in the expected direction with social desirability. Specifically, the Presence of Positive subscale and Absence of Negative subscale were positively correlated with social desirability and the Forgiveness Likelihood Scale was positively correlated with social desirability. Whereas, in an earlier study, Subkoviak et al. (1995) found no significant correlation between the Enright Forgiveness Inventory (State measure of Forgiveness) and social desirability. Similar finding has emerged in the present investigation which corroborates the western results.

This points to the fact that individuals who are likely to report a willingness to forgive across a variety of situations are also more likely to present themselves in a positive light in a variety of situations but in actual forgiving situation, social desirability perhaps plays a little role. Suchday (2006) rightly pointed out the fact that in a collectivistic society like India, people tend to pay greater emphasis on relationships and in conforming to societal norms, which is evident in the present study.

Thompson et al. (2005) presented six studies regarding forgiveness while developing a dispositional scale of forgiveness i.e Heartland Forgiveness scale. In one of these studies, while examining some of the properties of Heartland Forgiveness scale, in a sample of 276 university students, reported that all the three subscales of Heartland Forgiveness scale viz Forgiveness of Self, Forgiveness of Others, Forgiveness of Situations and Total Heartland Forgiveness score correlated significantly (positively) with Social Desirability.

Although much is now understood about the personality and individual difference correlates of interpersonal forgiveness, relatively little is
known about their relationship to self-forgiveness, and even less about their relationship to forgiveness of situations.

Walker and Gorsuch (2002) examined the relationships of five and 16 factors of personality to four dimensions of dispositional forgiveness - forgiveness of others, receiving others' forgiveness, forgiveness of self, and receiving God's forgiveness in students from religious and public universities. The results found that forgiveness of others was significantly correlated with Neuroticism as well as with each of the primary neuroticism factors i.e positive relation with emotion stability whereas negative relation with anxiety, emotionality and distrust. In addition, people scoring highly in Neuroticism were significantly less receiving of God's forgiveness. Three of the underlying Neuroticism factors also significantly predicted forgiveness of self. Forgiveness of self also significantly correlated with friendliness and assertiveness (facets of extraversion).

Bellah et al. (2003) conducted two studies examining relationship between vengefulness and personality with Eysenck’s three factor model and big five factor model respectively. Vengeance has been theorized to represent the inverse of forgiveness (Finkel et al., 2002). In the PEN system of Personality, psychoticism was the best predictor of vengefulness, accounting for 14% of the unique variance in vengeance scores. Results also indicated that neuroticism explaining 11% of the variance in vengeance scores. Overall, results of Study 1 indicated that psychoticism and neuroticism combined to explain 25% of variability in vengeance scores which implies that individuals who are high in vengefulness are relatively high in psychoticism and neuroticism compared to those who were more inclined to be forgiving. Vengeful individuals may be more prone to seek revenge for interpersonal injuries than their forgiving counterparts. In the NEO Personality system, apart from agreeableness, a facet of neuroticism i.e vulnerability to stress accounted for 3% of the variance in vengefulness. Psychoticism was the best predictor of vengefulness when viewed through the PEN system. Additionally, the factor Neuroticism played a secondary
role in predicting and explaining vengefulness in both the three and five factor models (Bellah et al., 2003).

Maltby et al. (2004) while examining the relationship between Forgiveness and Mental Health by using an adaptational-continuum model of personality, based on Ferguson’s (2001) Health Psychology model integrating Eysenck Personality factors and coping style reported that, in terms of personality variables, likelihood of forgiveness, forgiveness of self, forgiveness of others and forgiveness-absence of negative cognitions, thoughts and behaviors loaded on a neuroticism-Coping factor (by virtue of neuroticism loading highest on this factor) and the remaining measure of forgiveness (presence of positive forgiveness i.e positive forgiveness cognitions, thoughts and behaviors) loaded on an extraversion-coping factor (E-COPE factor). This finding suggested that these forgiveness measures are part of a wider neuroticism dimension. Moreover it suggested suggest that a person who forgives for positive reasons is out-going, optimistic, seeking to engage and discuss occurrences of stress with other persons, or at least hopeful, that something good may come from embracing forgiveness. Therefore it suggests that for most aspects of forgiveness, those individuals who are not forgiving can be best described as demonstrating anxious, worrying and moody personality traits and are not likely to engage or acknowledge stressful events. Perhaps patterns of thinking consistent with neuroticism (e.g., anxious rumination, feelings of vulnerability) pose obstacles to forgiveness.

Also, the relationship of the neuroticism-coping-forgiveness factor was associated with poorer mental health, suggesting forgiveness is associated with better mental health within the context of this personality-coping factor. Significant positive relationships were found between the extraversion-coping-forgiveness factor and two measures of positive mental health outcomes (positive affect and life satisfaction) suggesting forgiveness is associated with some aspects of mental health within the context of this personality-coping factor.
Maltby et al. (2004) concluded that while forgiveness is related to health, this likely is not due to its own effects, but to its association with neuroticism. Worthington’s (1998) assertion that neuroticism is an inhibitory characteristic of forgiveness has received empirical support (Ashton et al., 1998; Walker and Gorsuch, 2002). Not surprisingly, angry and hostility, an important facet of neuroticism, has been implicated as a consistent barrier to forgiveness (Kaplan, 1992; McCullough et al., 2001a).

Ross et al. (2004) examined the latent structure of a set of forgiveness self-report scales. When these components were examined in the context of the five factor model of personality, the results highlighted that neuroticism negatively predicted self-forgiveness, whereas agreeableness positively predicted forgiveness of others.

Highly similar to Ross et al. (2004), Leach and Lark (2004) found a similar pattern of results when examining self forgiveness and other forgiveness vis-à-vis the factor model of personality. Neuroticism was the best predictor of self-forgiveness, whereas agreeableness was the best predictor of others' forgiveness.

Berry and Worthington (2005) in four studies of 179, 233, 80, and 66 undergraduate students reported that trait forgivingness was negatively correlated with neuroticism and was positively correlated with extraversion. Specifically, the disposition to forgive was positively correlated with several traits linked to positive and pro-social affects (agreeableness, empathic concern, perspective-taking, and extraversion) and was negatively correlated with a variety of variables related to negative affects (neuroticism, trait anger, hostility, depression, and fear).

Similarly, Brose et al. (2005), by using a sample of 275 college students, examined the relationship between forgiveness of others (i.e., situational and dispositional) and the five-factor model of Personality and found that neuroticism was negatively correlated with all three types of forgiveness (Presence of Positive, Absence of Negative), and forgiveness.
Likelihood). Forgiveness (PP) was positively correlated with extraversion. Social desirability also related significantly to all the three forgiveness measures.

Brown and Phillips (2005) examined the validity of three putative measures of dispositional forgiveness, as well as a measure of trait rumination, with respect to measures of mental health and forgiveness for a specific offense in 200 undergraduates and found that tendency to forgive and forgivingness was negatively correlated with neuroticism.

In a study by Mullet et al. (2005), the relationship between forgivingness (enduring resentment, sensitivity to circumstances and overall propensity to forgive or to avenge) and the paranoid personality style was examined. 810 French adolescent and adults (469 females and 341 males, mean = 35.50 years) participated in the study. The hypothesis of (a) a positive correlation between enduring resentment, overall propensity to avenge, and paranoid personality style, and (b) a negative correlation between overall propensity to forgive, and paranoid personality style was supported. This result was consistent with previous studies showing that forgivingness is related with both intra-individual personality traits subsumed under the neuroticism construct and inter-individual personality traits subsumed under the agreeableness construct.

Ross and Hertenstein (2007) examined the generalizability of an orthogonal, 2-component model of forgiveness namely self forgiveness and others forgiveness (previously reported by Ross et al., 2004), in a sample composed of 162 young adults. They examined the relationship of these two components with maladaptive personality characteristics as measured by the Schedule for Nonadaptive and Adaptive Personality (SNAP; Clark, 1993), with an emphasis on Five-factor model markers of personality. Self forgiveness was negatively related to all personality disorder scales representing the anxious cluster i.e avoidant, dependent and obsessive compulsive personality disorder. Self forgiveness and others forgiveness showed significant negative correlation with Borderline, paranoid,
narcissistic and schizotypal personality disorder. Others forgiveness also showed significant negative correlation with Antisocial and Histrionic personality disorder. Indices of neuroticism (e.g., Negative Temperament, low self-esteem, suicide potential, dependency) were more related to self forgiveness compared to other forgiveness.

The above cited studies and the present results confirmed that personality, particularly neuroticism versus emotional stability and extraversion, correlates with many aspects of dispositional forgiveness, and that the use of a greater number of personality factors aids in understanding dispositional forgiveness.

F. Interpersonal Forgiveness and Negative Mental States viz Anger Experience and Anger Expression Styles

It was hypothesized that both State and Trait Forgiveness measures and their components were expected to be negatively related with Anger experienced (State and Trait anger), Anger In and Anger Out dimensions of Anger Expression styles among both male and female adolescents. In view of paucity of research, no definite relationship was proposed between Forgiveness and Anger Control.

a) State Forgiveness and Anger

A glance at the intercorrelation matrix for the total sample (Table 6) revealed that State Forgiveness was positively and significantly correlated with Anger Control (r=.10) and negatively correlated with State Anger (r=-.14), Trait Anger (R=-.22), Anger Out (r=-.15) and Total Anger Expressed (r= -.16).

A further perusal of the intercorrelation matrix for the total sample (Table 6) revealed that Affective component of State Forgiveness was negatively and significantly correlated with State Anger (r=-.15), Trait Anger (R=-.19), Anger Out (r=-.12) and Total Anger Expressed (r= -.14). Behavioral component of State Forgiveness was negatively and significantly correlated with State Anger (r=-.14), Trait Anger (R=-.21), Anger Out (r=-
Cognitive component of State Forgiveness was negatively and significantly correlated with State Anger ($r = -.10$), Trait Anger ($R = -.22$), Anger Out ($r = -.13$) and Total Anger Expressed ($r = -.13$).

A glance at the intercorrelation matrix for male adolescents (Table 7) revealed that State Forgiveness was negatively and significantly correlated with State Anger ($r = -.17$), Trait Anger ($R = -.15$), Anger Out ($r = -.16$) and Total Anger Expressed ($r = -.21$).

A further perusal of the intercorrelation matrix for male adolescents (Table 7) revealed that Affective component of State Forgiveness was negatively and significantly correlated with State Anger ($r = -.17$) and Total Anger Expressed ($r = -.16$). Behavioral component of State Forgiveness was negatively and significantly correlated with State Anger ($r = -.16$), Trait Anger ($R = -.15$), Anger Out ($r = -.19$) and Total Anger Expressed ($r = -.24$). Cognitive component of State Forgiveness was negatively and significantly correlated with State Anger ($r = -.15$), Trait Anger ($R = -.16$), Anger Out ($r = -.16$) and Total Anger Expressed ($r = -.20$).

A glance at the intercorrelation matrix for female adolescents (Table 8) revealed that State Forgiveness was negatively and significantly correlated with Trait Anger ($r = -.28$).

A further perusal of the intercorrelation matrix for female adolescents (Table 8) revealed that Affective component of State Forgiveness was negatively and significantly correlated with Total Anger Expressed ($r = -.26$). Behavioral component of State Forgiveness was negatively and significantly correlated with Trait Anger ($R = -.25$). Cognitive component of State Forgiveness was negatively and significantly correlated with Trait Anger ($R = -.26$).

A perusal of **Stepwise Multiple Regression Equation** for the total sample (Table 9) revealed that Trait Anger ($\beta = -.22$) emerged as a significant predictor of State Forgiveness.
A perusal of **Stepwise Multiple Regression Equation** for the male adolescents (Table 10) revealed that none of the Anger Expressed or Anger Experienced dimension emerged as significant predictor of State Forgiveness.

A perusal of **Stepwise Multiple Regression Equation** for the female adolescents (Table 11) revealed that Trait Anger ($\beta=-.28$) emerged as a significant predictor of State Forgiveness.

Hence the above results clearly show that the hypothesis regarding State Forgiveness, Anger experienced (State and Trait anger), Anger In and Anger Out dimensions of Anger Expression styles was upheld in most groups. A positive correlation was found between State Forgiveness and Anger Control in the total sample.

b) **Trait Forgiveness and Anger**

A glance at the intercorrelation matrix for the total sample (Table 6) revealed that Trait Forgiveness was positively and significantly correlated with Anger Control ($r=.24$) and negatively correlated with State Anger ($r=-.30$), Trait Anger ($r=-.33$), Anger In ($r=-.10$), Anger Out ($r=-.30$) and Total Anger Expressed ($r=-.34$).

A further perusal of intercorrelation matrix for the total sample (Table 6) revealed that Forgiveness of Self was negatively and significantly correlated with State Anger ($r=-.13$), Trait Anger ($r=-.13$) and Total Anger Expressed ($r=-.12$). Forgiveness of Others was positively and significantly correlated with Anger Control ($r=+.26$) and negatively and significantly correlated with State Anger ($r=-.21$), Trait Anger ($r=-.22$), Anger Out ($r=-.26$) and Total Anger Expressed ($r=-.25$). Forgiveness of Situations was positively and significantly correlated with Anger Control ($r=+.24$) and negatively correlated with State Anger ($r=-.26$), Trait Anger ($r=-.32$), Anger In ($r=-.11$), Anger Out ($r=-.28$) and Total Anger Expressed ($r=-.33$).

A glance at the intercorrelation matrix for male adolescents (Table 7) revealed that Trait Forgiveness was positively and significantly correlated
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with Anger Control (r=.27) and negatively and significantly correlated with State Anger (r=-.35), Trait Anger (r=-.29), Anger In (r=-.16), Anger Out (r=-.23) and Total Anger Expressed (r=-.35).

A further perusal of intercorrelation matrix for male adolescents (Table 7) revealed that Forgiveness of Self was negatively and significantly correlated with Anger In (r=-.14). Forgiveness of Others was positively and significantly correlated with Anger Control (r=-.26) and negatively correlated with State Anger (r=-.27), Trait Anger (r=-.19), Anger Out (r=-.24) and Total Anger Expressed (r=-.30). Forgiveness of Situations was positively and significantly correlated with Anger Control (r=.23) and negatively and significantly correlated with State Anger (r=-.35), Trait Anger (r=-.30), Anger In (r=-.17), Anger Out (r=-.19) and Total Anger Expressed (r=-.32).

A glance at the intercorrelation matrix for female adolescents (Table 8) revealed that Trait Forgiveness was positively and significantly correlated with Anger Out (r=-.30) and negatively and significantly correlated with State Anger (r=-.24), Trait Anger (r=-.36), Anger Out (r=-.37) and Total Anger Expressed (r=-.33).

A further perusal of intercorrelation matrix for female adolescents (Table 8) revealed that Forgiveness of Self was negatively and significantly correlated with State Anger (r=-.14). Forgiveness of Others was positively and significantly correlated with Anger Control (r=-.22) and negatively and significantly correlated with State Anger (r=-.16), Trait Anger (r=-.25), Anger Out (r=-.27) and Total Anger Expressed (r=-.21). Forgiveness of Situations was positively and significantly correlated with Anger Control (r=.26) and negatively and significantly correlated with State Anger (r=-.19), Trait Anger (r=-.35), Anger Out (r=-.36) and Total Anger Expressed (r=-.33).

A perusal of Stepwise Multiple Regression Equation for the total sample (Table 12) revealed that Anger Out (β=-.27) and Anger Control (β=.12) emerged as a significant predictors of Trait Forgiveness.
A perusal of **Stepwise Multiple Regression Equation** for the male adolescents (Table 13) revealed that State Anger ($\beta = -.17$) emerged as a significant predictor of Trait Forgiveness.

A perusal of **Stepwise Multiple Regression Equation** for the female adolescents (Table 14) revealed that Anger Out ($\beta = -.37$) emerged as a significant predictor of Trait Forgiveness.

Hence the above results clearly show that the hypothesis regarding Trait Forgiveness, Anger experienced (State and Trait anger), Anger In and Anger Out dimensions of Anger Expression styles was upheld in most groups. A positive correlation was found between Trait Forgiveness and Anger Control in all the groups.

**Tangney et al. (1999)** assessed 285 undergraduates using her Multidimensional Forgiveness Inventory (MFI). They found forgiving others to be negatively correlated with ratings of anger, aggression, and vengeance.

**Huang and Enright (2000)** examined the relationship between forgiveness and anger related emotions in an adult sample in Taiwan. Levels of forgiveness were based on the analyses in **Enright et al. (1989)**. Out of 1427 participants, 30 matched pairs of level 4 (forgiveness as an obligation) and level 6 (forgiveness as moral love) were assessed on variables of anger related emotions via self report, facial expressions, the frequency of casting down the eyes and blood pressure. These measurements were administered during or immediately after the participants recorded an incident of deep, interpersonal hurt against him or her. The frequencies of masking smiles and casting down of eyes showed that level 4 participants (who based forgiveness on obligation) had more residual anger related affect to the hurtful event than did the level 6 participants (who based forgiveness on the moral principle of love).

**Berry and Worthington (2001)** classified 39 participants (19 male, 20 female) as either happy ($n = 19$) or unhappy ($n = 20$) with a relationship and the participants imagined (for a 5-min duration) scenes typical of their
relationship, and reported a strong positive correlation between the two measures of dispositional forgivingness (Transgression Narrative Test of Forgiveness and Trait Unforgiveness-Forgiveness Scale) and both had negative correlations with trait anger.

Rye et al. (2001) administered a number of tests on the participants enrolled at a Midwestern Catholic university (N = 328) and reported that the Presence of Positive subscale and Absence of Negative subscale of a forgiveness scale and Forgiveness Likelihood Scale were negatively correlated with state and trait anger.

Seybold et al. (2001) studied forgiveness in relation to various immunological, psycho physiological and other physiological factors and indices of Mental Health and Coping in 68 community adults. They reported state and trait anger, anger in, angry reaction, angry temperament and total anger expressed were significantly negatively correlated with all three forgiveness scales (forgiveness of others, forgiveness of self and total forgiveness) while anger control was significantly positively related to all the three. The only exception to this trend was the expression of anger outwardly scale which was not correlated with forgiveness.

Thompson et al. (2003) used three measures of trait forgivingness in studies with over 2800 undergraduates. They found the trait anger to be correlated with the forgiving other (FO) subscales of Heartland Forgiveness Scale (HFS), Tangney’s et al.’s (1999) and Mauger et al.’s (1992) forgiveness scale.

Berry and Worthington (2005) in four different studies of 179, 233, 80, and 66 undergraduate students respectively, trait forgivingness was negatively correlated with trait anger and hostility along with other variables.

Barber et al. (2005) investigated the association of the two dimensions of forgiveness and Sukhodolsky et al.’s. (2001) 4-factor model of anger rumination among 200 university students. Anger memories were found to be the most important aspects in forgiving oneself, and dealing with revenge thoughts were found to be crucial

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when exploring issues around forgiving another person. The results show that anger rumination shares a significant negative correlation with forgiveness of self and forgiveness of others in males and females. Angry memories and thoughts of revenge accounted for unique variance in scores on the self forgiveness measure and forgiveness of others respectively amongst males and females.

Two hundred undergraduates completed the Tendency to Forgive scale, Attitudes Toward Forgiveness scale, the Transgression Narrative Test of Forgivingness, along with other measures and results indicated that Tendency to Forgive, Attitudes Toward Forgiveness and the Transgression Narrative Test of Forgivingness was found to have significant negative correlation with all the dimensions of aggression (physical, verbal, anger and hostility) (Brown and Phillips, 2005)

Carson et al. (2005) contended that clinical observations suggest that many patients with chronic pain have difficulty forgiving persons they perceive as having unjustly offended them in some way. By using a sample of 61 patients with chronic low back pain, they examined the relationship of forgiveness to pain, anger, and psychological distress and results showed that patients who had higher scores on forgiveness-related variables reported lower levels of anger and psychological distress. Additional analyses indicated that state anger largely mediated the association between forgiveness and psychological distress, as well as some of the associations between forgiveness and pain. Significant negative correlations were obtained between current forgiveness and measures of state anger, trait anger, anger-in, and anger-out. Patients who reported higher levels of current forgiveness reported lower levels of momentary and dispositional anger and were much less likely to suppress angry feelings or to engage in frequent expressions of anger. Similarly, analyses of forgiveness self-efficacy demonstrated significant negative associations with state anger, trait anger, anger-in and anger-out. Thus, patients who were confident with regard to their abilities to forgive others likewise were lower in momentary
and dispositional anger and were less likely to either suppress or express angry feelings.

Forgiveness was also related to anger management style. Specifically, patients who reported higher levels of either of the forgiveness variables were less likely to hold angry thoughts and feelings in and less likely to express anger outwardly. These findings suggest that patients who have a greater ability to forgive others also are better able to resolve angry reactions and hence feel less need to suppress or hold in these types of feelings or to engage in aggressive verbal or physical behaviors (Carson et al., 2005). Moreover, theories of pain, such as the gate control and neuromatrix theories, maintain that negative emotions such as anger can increase pain by altering descending and central modulation of neural inputs (Melzack, 1991).

Lawler et al. (2005) studied the relationship of forgiveness, both state and trait, to health by taking 81 community adults who completed a packet of questionnaires and participated in a laboratory interview about a time of hurt or betrayal and found that state and trait forgiveness showed a negative relationship with anger along with tension and stress.

In a sample of 227 university students, Thompson et al. (2005) investigated the extent to which forgiveness of self, others and situations was predictive of four measures of psychological well being (anger, anxiety, depression and satisfaction with life) and reported that Forgiveness of Others and forgiveness of situations contributed significantly to the prediction of trait anger. Bivariate correlations also revealed that forgiveness of self, forgiveness of others, forgiveness of situations and Total Heartland forgiveness score had a negative correlation with trait anger along with depression and anxiety.

Eaton and Struthers (2006) employed an attributional framework to examine the relationship between attributions of responsibility for a transgression, repentance, emotions, forgiveness and psychological
aggression toward three different categories of transgressor: a coworker, a friend, and a romantic partner. One hundred and seven participants were asked to describe a recent transgression with a coworker, a friend, and a romantic partner. Forgiveness was strongly and negatively related to psychological aggression, in that the more forgiving the offended party is, the less psychological aggression he or she will display toward the transgressor. Forgiveness was also found to have a strong negative relation with anger among coworkers, romantic partners and friends.

Hareli and Eisikovits (2006) reported the results of two studies that examined how an injured person's knowledge that an apology was driven by one or more of the social emotions of guilt, shame, and pity affected forgiveness. Findings suggested that the significant negative correlations emerged between forgiveness and anger across all conditions.

A randomized study of 259 adults compared effects of a 6 session (90 minutes each) manual-based cognitive behavioral intervention with assessment control group on perceived stress, state/trait anger, symptoms of stress, self reported health, forgiveness self-efficacy and forgiveness likelihood. Participants completed baseline, posttest after the six week training, and 4 months follow-up assessments. Results revealed that state and trait anger showed significant decreases for Treatment group participants. Positive results were seen in trait anger (long-term) with a post-test ES of 0.48 and state anger (short-term) with ES of 0.40. (Harris et al., 2006)

Lutsi (2006) examined 150 counseling clients at an espoused Christian mental health facility in Northeast Ohio who completed interpersonal transgression(s) survey question and the results of the study revealed that clients' dispositions to forgive interpersonal transgressions were negatively linked to anger and depression.

There are some intervention studies that have demonstrated a negative relationship between forgiveness and anger. Reducing levels of anger and its related emotions is now seen as an important feature of
various recovery programs. Recently, a number of researchers have worked toward developing a new therapeutic approach to anger termed forgiveness therapy (FT; Al-Mabuk et al., 1995; McCullough and Worthington, 1995; Freedman and Enright, 1996; McCullough et al., 1997; Enright and Fitzgibbons, 2000; Ripley and Worthington, 2002).

This therapy posits that resentment and its accompanying anger are often justifiable responses to severe wrongs. However, forgiveness therapy also acknowledges that this anger and resentment can become problematic in terms of daily functioning. Furthermore, many cultures have recognized forgiveness as an important way to resolve anger and restore hope (Enright and Fitzgibbons, 2000).

Coyle and Enright (1997) designed an intervention to foster forgiveness among with postabortion men. Participants were randomly assigned to either the treatment or the control (wait list) condition, which received treatment after a 12-week waiting period. Following treatment, the participants demonstrated a significant gain in forgiveness and significant reductions in anger along with anxiety and grief as compared with controls.

Luskin and Thoresen (1998) investigated a brief psychosocial treatment for engendering forgiveness as a response to an interpersonal hurt in fifty-five Stanford University students who were recruited to participate in a study. The treatment group achieved a significant reduction in trait anger at post-test and again at follow-up compared to the change in the Control group. The treatment group showed a significant decrease in angry reaction at post-test and at follow-up. Significant differences were also found for state anger, or short-term anger, between the two groups over all measurement periods and in follow-up evaluations at Post-test.

Lin et al. (2004) contended that anger and related emotions have been identified as triggers in substance use. (FT) targets anger, anxiety, and depression as foci of treatment. They examined fourteen patients with substance dependence from a local residential treatment facility that were randomly assigned to and completed either 12 approximately twice-weekly
sessions of individual Forgiveness therapy and reported that participants who completed Forgiveness therapy had significantly more improvement in total and trait anger along with other mental states like depression, trait anxiety, self-esteem and vulnerability to drug use than did the alternative treatment group.

Other randomized trials involving the use of forgiveness interventions with a variety of problems have been conducted (Hebl and Enright, 1993; Al-Mabuk et al., 1995; McCullough and Worthington, 1995; McCullough et al., 1997; Osterndorf, 1999; Ripley and Worthington, 2002). Forgiveness therapy has been shown to decrease the frequency and severity of anger, anxiety, and depression rather than simply improving individuals’ ability to cope with these emotions (Lin et al., 2004).

**Gender Differences**

It was hypothesized that Gender Differences were expected to emerge on the measured variables. However, in view of paucity of research, no direction was specified.

A perusal of the t-ratio table (Table 4) revealed that significant differences emerged between male and female adolescents on Religious Commitment (t = 2.17, F>M), Religious Well Being (t = 2.19, F>M), Positive Affect (EFI) (t = 2.20, M>F), Negative Affect (EFI) (t = 3.86, M>F), Total Affect (EFI) (t = 3.26, M>F), Negative Behavior (EFI) (t = 3.59; M>F), Total Behavior (EFI) (t = 2.97, M>F), Negative Cognition (EFI) (t = 2.12, M>F) and Total EFI (t = 2.93, M>F) and Forgiveness of Situation (HFS) (t = 3.07, M>F). Social Desirability (t = 2.46, F>M), Autonomy (t = 2.15, M>F), Being Comfortable With Self (t = 2.05, M>F).

A glance of the Discriminant Functional Analysis table (Table 5) comparing male and female adolescents revealed that variables that emerged to have a significant discriminating power (in descending order) were **Negative Affect** (EFI) \( [\lambda = 0.96 \text{, with mean for male adolescents(40.78)} > \text{mean for female adolescents (36.51)}] \), **Social Desirability** \( [\lambda = 0.95 \text{, with mean for female adolescents(10.91)} > \text{mean for} \)
male adolescents (10.03)], Forgiveness of Situation (HFS) [$\lambda = 0.93$, with mean for male adolescents(26.74)>mean for female adolescents (25.31)], Being Comfortable With Others [$\lambda = 0.91$, with mean for female adolescents(3.97)>mean for male adolescents (3.79)], Religious Well Being [$\lambda = 0.90$, with mean for female adolescents(46.51)>mean for male adolescents (44.60)], and Being Comfortable With Self [$\lambda = 0.89$, with mean for male adolescents(4.42)>mean for female adolescents (4.17)].

Gender effect on forgiveness has also been assessed in the western studies and the usual finding is that gender plays a very limited role (McCullough et al., 1998).

There appears to be no straightforward gender differences in levels of forgiveness and the results have been mixed.

Mullet and Girard (1997) studied the evolution of the propensity to forgive an offense in a sample of 236 people from various age groups. The effect of a number of circumstances connected with the offense was considered: intent to harm, severity of consequences, cancellation of consequences, social proximity to the offender, apologies from the offender, and the attitude of others. It was reported that the attitude of others effect was greater in men than in women. Men were more sensitive to the attitude of others determinant than women, though the effect of gender was negligible and not significant and very few interactions involving a gender effect were detected.

Denton and Martin (1998) also found a gender difference in their assessment of clinicians. Male clinicians were more favorable to a provided definition of forgiveness and to its benefits than female clinicians. In the majority of forgiveness interventions, the first step involves acknowledging the hurt and its attendant negative emotions. To the extent that men are more comfortable acknowledging feelings of anger toward an offender, they may more readily complete the release of such feelings. For women, behaving in an active positive fashion while feelings of anger lie unresolved.
may lead to unconscious conflicts, in which case forgiveness may be less beneficial.

Vinsonneau and Mullet (2001), assessed willingness to forgive depending on circumstances in a sample of 203 adolescents in the age range of 15-16 years, from two different cultures: Western Europe (mainly Christian) and Maghreb (mainly Muslims). They reported that there was no significant difference between males and females in forgiveness rating, the difference was negligible.

Finkel et al. (2002) conducted three studies to test the prediction that commitment motivates forgiveness, using both experimental and non experimental methods. Studies 1 and 2 revealed evidence of gender differences in inclinations toward forgiveness. In study 1, men were less forgiving than women whereas in study 2, men exhibited more forgiving feelings, thoughts and behavioral tendencies than did women (both these opposite findings were not attributable to socially desirable responding).

Walker and Gorsuch (2002) examined the relationships of five and 16 factors of personality to four dimensions of dispositional forgiveness - forgiveness of others, receiving others’ forgiveness, forgiveness of self, and receiving God’s forgiveness in students from religious and public universities. Receiving others’ forgiveness correlated moderately with sex, as men were more receiving of others’ forgiveness.

Lawler et al. (2003) sought to examine the psycho physiological correlates of forgiveness in response to interpersonal conflict. 108 college students (44 males and 64 females) participated in two interviews about times of interpersonal betrayal, one about a parent and one about a friend/partner. Measures of forgiving personality and state forgiveness were collected and it was found that there were no significant gender differences on the trait measure of forgiveness or on the acts of forgiveness for parents. However, males had higher acts of forgiveness for friend/partners than women. This gender difference also reflects the fact that women were less
forgiving of friend/partners than parents while men had comparable scores for forgiveness of parent and friend/partner.

Maltby et al. (2005) reported no significant differences between men and women on Enright forgiveness measure while examining the relationship between forgiveness and happiness using a two-dimensional model of happiness (hedonic and eudaimonic happiness) in a sample of 224 United Kingdom students.

In a study by Mullet et al. (2005), the relationship between forgivingness (enduring resentment, sensitivity to circumstances and overall propensity to forgive or to avenge) and the paranoid personality style was examined among 810 French adolescent and adults. They reported that the strength of the relationships varied as a function of the gender of the participants. It was weaker among women than among men for overall willingness to forgive.

Hui et al. (2006) while investigating the relationship between religion and forgiveness in a sample of Hong Kong Chinese teachers (n=230) and students (n=714) did not find gender a very significant predictor of forgiveness either in real life situations or as a belief, except that the females, whether students or teachers, tended to consider forgiveness as compassion more than did their male counterparts.

Lawler et al. (2006) explored the definition of forgiveness in a group of 270 young adults, and the underlying dimensions of their definitions compared with those of philosophers, theologians and psychological researchers and it was reported that men had greater forgiveness scores than women and men more frequently defined forgiveness as a passive letting go response, while women more frequently defined forgiveness as an active response. Men seem to grant more forgiveness than women, and passive letting go approaches seem to lead to greater forgiveness than efforts to behave in an actively forgiving manner.
Sutton et al. (2007) examined the relationship of gender, forgiveness and spirituality to restoration attitudes expressed toward married pastors who committed a transgression through two studies and in both the studies, they examined the relationship between level of dispositional forgiveness of the participants and their responses to pastor transgressions. They found that the men were more favorable toward restoration than were women in the high-forgiveness group and less favorable than were women toward restoration in the low-forgiveness group.

Similar gender differences viz- a- viz religiosity higher among females, have been reported in many studies.

While exploring gender differences in religiosity among older adults, Levin et al. (1994) reported that females display higher levels of religiosity than do men.

Abdel-Khalek (2006) reported women having a significantly higher religiosity mean score than their men counterparts in a large sample of Muslim Kuwaiti college students.

Ferguson (2006) examined hope and spiritual well-being, with its two dimensions of religious well-being and existential well-being among adolescents with cancer and reported that girls had higher spiritual well-being than boys.

Khalek and Naceur (2007) while exploring associations between religiosity and both positive and negative emotions in a sample of 244 volunteer Muslim college students from Algeria reported that religiosity and satisfaction with life were higher among women than men.