CHAPTER - II

REVIEW OF LITERATURE

The main aim of the present study is to analyse participation in physical activity and its effect on body image and personality of working and non-working women. For the purpose of this study, the review of related literature has been collected. The same are presented below in chronological order.

Schultz (1961) in his study analysed the relationship between body image and physical performance in adolescent girls. He found that the high school girls with high physical fitness exhibited more positive body image than less fit girls.

Cremer and Hukill (1969) used 77 undergraduate students from a basic physical education programme to investigate the effect of "idealised" body weight on perceptions of body contours. The results of the study indicated that the greater the deviation in weight from that considered "desirable" in terms of height and age, the greater the difference between perceived body contour lines and real ones.

Jett (1971) investigated blood serum personality trait profile of habitual exercisers. He found that habitual exercisers were less anxious than non-exercisers. This study investigated the hypothesis that physical exercise is beneficial to behavioural function as determined by tests of cognition and mental health.

Harris (1973) in his study concluded that men who had been habitually active throughout their lives had generally more positive self concepts and tended to be confident of their physical abilities and
movement patterns. It was also found that participation in physical activity encourages a positive body image.

**Kreitler (1973)** studied body image in relation to ageing and physical movements. He found that reduction in movement not only leads to muscle degeneration but also has many psychological effects. He concluded that people who do not engage in exercise tend to have a more distorted body image, estimating themselves to be wider than they really are.

**Snyder and Kivlin (1975)** investigated measures of psychological well-being and body image between women athletes and non-athletes, gymnasts and basketball players. Their results showed that women athletes had higher scores than non-athletes on both measures of psychological well-being and body image. Whilst the gymnasts had higher scores on the psychological well-being items than the basketball players, the measures on body image between the two sports were inconclusive.

**Bedard et al. (1978)** in their study did not find any evidence of a more positive body image among female physical education students. There was, however, a significant correlation between the degree of definition of individual students' body images and the number of hours each week those students devoted to physical activities.

**Young (1979)** investigated the effect of regular exercise on cognitive functioning and personality in 32 subjects representing 4 discrete groups based on sex and age. Before and after a 10 week exercise programme of jogging, calisthenics, and recreational activities,
improvement was observed on several physiological parameters. ANOVA revealed significant sex and age differences on Digit Symbol and Block Design and age differences on Trail-Making, Crossing-Off, Associate Learning, and anxiety. Regardless of sex and age, significant improvement in performance was observed from pre to post-test on Digit Symbol, Block Design, Trail-Making, Crossing-Off, and on Associate Learning. In addition, an increase on health status rating and decrease in anxiety were observed from pre to post-test. These data illustrate beneficial effects of exercise on certain measures of cognitive functioning and personality.

Drought (1980) used a questionnaire to investigate male and female undergraduates’ concepts of body image. His findings indicated that males tended to be more content with their actual height and weight, and associated involvement in sport with a "good looking" body. Women, on the other hand, were inclined to regard themselves as overweight.

Bonniwell’s (1981) assessed the effects of participation in physical development clinic on the body image of neuro musically disorganised children. The children were then involved in individual physical development programmes. After the programmes there was a significant relationship between improved confidence, classroom achievement and body image.

Strober (1981) explored the relationship between Minnesota Multiphasic Personality Inventory (MMPI) factors and two separate measures of body image-estimation of body size and subjective report of distorted bodily experiences-was investigated using multivariate analyses.
in adolescent females with anorexia nervosa. A canonical correlational analysis of these data indicated the presence of two orthogonal dimensions defining the relation between personality and body image scores. In the first canonical variate, size overestimation and subjective body image distortion were both associated with MMPI scales reflecting somatization, anxiety, and atypical thinking; in the second variate, size overestimation alone was found to be associated with introversion and depression, while subjective body image distortion aligned with somatization and atypical thinking. The results suggest that different measures of body image disturbance are associated with different personality characteristics.

Eide, R. (1982) explored the relationship between body image, self-image and physical activity. Correlation studies, investigations of the effect of physical training programmes, and comparisons between physically active and passive groups suggest that physical activity can give the individual a more positive attitude to his own body and his own self-image, although not all investigations have given uniform results.

Gwyon (1985) investigated the effect of ballet training on the postural body image of adolescent females. She compared two groups of adolescent females aged between sixteen and eighteen years; one group were full-time dance students and the other matched group were sixth-formers. The dance students had a significantly more positive body image than the non-dancers. The dancers also showed less distortion among the four body sites than the non-dancers.
Skrinar et al. (1986) assessed the effects of intensive endurance training on body consciousness. Participants engaged in an intensive running program for six to eight weeks in addition to other types of moderate sport-related exercise an average of 3.5 hours per day. At the end of the training program, body competence (i.e., effective body functioning) and private body consciousness (i.e., focus on internal bodily sensations) significantly increased, while public body consciousness (i.e., tendency to be concerned about external appearance of the body) did not markedly change.

Prakasa and Overman (1986) investigated psychological wellbeing and body image between black women athletes and non-athletes attending a State University. The investigators used 32 body image descriptions in questionnaires, and used psychological well-being as a dependent variable. The collected data were analysed using a stepwise multiple regression and it was revealed that women athletes expressed a more positive body image on 13 items than did non-athletes. The researchers’ conclusions were that there is a significant relationship between body image and athletic participation.

Ward and McKeown (1988) investigated the effect of a ten week aerobic dance exercise programme on body cathexis. The subjects were 41 college-aged females who responded to a 28-item Body Cathexis scale. The anthropometrical variables were height, weight, six separate site skinfold measurements and measurements of the appropriate muscle circumferences (for example, biceps and calf). The total group were subsequently divided into subjects with negative or positive body cathexis scores and analysed for significant cathexis or anthropometrical
differences. The results indicated that an aerobic dance exercise programme operating on two days a week will have a minimal effect on body cathexis.

Quinn, G. (1989) investigated the relationship between personality and body image, ascertained the effect of exercise on measures of personality, body image and somatotype. The subjects were 50 adult women in the age range 18-37 years who were assigned to either an exercising or non-exercising group at random. Body image was measured using the Slade Body Image Estimation Apparatus and an Abacus. Personality was assessed by means of the Eysenck Personality Inventory and the Cattell Sixteen Personality Questionnaire. The subjects were also somatotyped by the Heath-Carter Method. Physical fitness scores, obtained for each individual before and after the conditioning programme, were based on the criterion of Ismail (1965). The pre- and post-conditioning programme results obtained were analysed by repeated measures of analysis of variance, principal components analysis and discriminate function analysis. The main findings were - (a) Two significant relationships between personality and body image existed in the study groups. These were an association between overall inaccuracy in body image estimation and Eysenck's neuroticism/extraversion, and correlation between accuracy in estimation of the Face and dominance and aggressiveness. (b) Changes in personality through participation in exercise were found to be much less marked than hitherto suggested, with only Cattell's 16PF Q4 varying significantly, and some evidence for reduction in the EPI neuroticism factor. (c) Repeated measures of analysis of variance showed a significant effect of exercise on body weight,
percentage body fat, Ismail Fitness Score and on the Endomorphy component of the Heath-Carter somatotype. (d) No significant changes in body image estimation could be demonstrated in the exercising group; there was nevertheless an association between fitness levels and body image.

**Tucker and Maxwell (1992)** investigated the effects of weight-training on body image of females participating in a 15-week, 2-days-per-week weight-training program, compared with a non-exercising control group. With pretest scores controlled, the weight-training group had significantly higher posttest scores than controls in both general well-being and body cathexis, defined as the degree of satisfaction a person feels about various parts and processes of the body (Secord & Jurard, 1993). They concluded that strength training enhances both body image and overall feelings of well-being. Characteristics of women who experienced the greatest improvements included those who were heavier, shorter, and who were not involved in any other regular physical activity during the program. The researchers surmise that heavier, previously inactive participants were less fit, and therefore had more potential for improvement.

**Tucker and Mortell (1994)** assessed the effect of walking and weight training program on body image. They found that middle-aged women who engaged in a home strength training program three times per week for 12 weeks markedly improved body cathexis more than women participating in a walking program of the same frequency and duration.
Koff and Bauman (1997) investigated the effects of wellness, fitness, and sport skills programs on body image and lifestyle behaviors. They found that females who participated in step aerobics, weight-training, or running twice per week for six weeks significantly improved appearance evaluation, fitness evaluation, fitness orientation, and body satisfaction as opposed to the control (non-exercise) group.

Tiggemann, M. et al. (2000) investigated the relationship between amount of exercise and psychological well-being in a broadly based sample. A questionnaire assessing amount of exercise, reasons for exercise, body satisfaction, and self-esteem was completed by 252 participants between the ages of 16 and 60 years. Significant negative relationships between amount of exercise and body satisfaction and self-esteem were found for young women, and positive relationships for the remainder of the sample. Women exercised more for reasons of weight control, tone, and mood enhancement than men. For the whole sample, the first two of these reasons were associated with lower body satisfaction, while exercising for health and fitness reasons was associated with increased self-esteem. It was concluded that reasons for exercising did not provide an adequate explanation for the obtained difference in correlations across gender and age.

Van den Buick (2000) studied the impact of television on body image of adolescent. He reported that among adolescents, the degree of watching television correlated negatively with ideal body image; frequent viewers preferred a thinner ideal body than less frequent television viewers.
Williams and Cash (2001) investigated the effects of a six-week circuit weight-training program on college students. Their results showed that even a relatively brief program reduced social physique anxiety and improved appearance evaluation and body dissatisfaction among both males and females. Despite the exclusive use of strength training in this study, the circuit training method they employed may have had aerobic benefits.

Emslie et al. (2001) investigated perception of body image among working men and women. Postal questionnaires were sent to employees working full time within a British bank in clerical, supervisory and management jobs and to full time clerical, technical and academic employees in a British university. Respondents were asked to report their height and weight so that body mass index (kg/m.) could be calculated. They were also asked to indicate whether they thought they were “about the right weight”, “too heavy” or “too light” for their height. Self esteem was measured using the Rosenberg self esteem scale. It was found that women were more than three times more likely than men to think they were too heavy, while in the bank, women were 10 times more likely than men to perceive this.

Zabinski et al. (2001) examined the secondary effects of this intervention on body image concerns among college-aged men and women. Three hundred thirty-eight undergraduates were studied. Body image concerns were assessed at pre- and post treatment using 2 subscales of the Eating Disorder Inventory: Drive for Thinness and Body Dissatisfaction. Because the latter concentrates on body parts typically associated with female concerns (e.g., thighs, hips, buttocks), a parallel
scale was developed to target body parts that may be of more concern to men (e.g., legs, shoulders, arms, stomach). Results indicated that compared to the control group, women in the intervention showed a significant increase in drive for thinness without any changes in body dissatisfaction. For men, there were no significant changes in drive for thinness or body dissatisfaction. These results suggest that physical activity interventions may have some negative consequences of increasing concerns about thinness in women. This negative effect occurred despite intervention content designed to prevent concern over eating, dieting, and the importance of weight.

Ahmed et al. (2002) investigated the effects of weight-training on body image in female university students. After 12 weeks of strength training, participants experienced significantly more strength and improved body image despite a slight increase in percent body fat. They also reported improved health and physical fitness.

Perry et al. (2002) analysed the effects of an exercise physiology program on physical fitness variables, body satisfaction, and physiology knowledge and found that high school students participating in a six-month course involving 40-45 minutes per week of vigorous aerobic exercise and 20-30 minutes per week of resistance training did improve in body satisfaction.

Dionne and Davis (2004) analysed the effect of body size, body composition feedback, and the moderating influence of neuroticism on three measures of body dissatisfaction in young women. In Study One, normal-sized subjects who were given false feedback indicating that they were either fatter or leaner than average showed heightened body
dissatisfaction compared to groups who received either accurate or no feedback about body size. There was no evidence of a moderating effect of neuroticism. In Study Two, thinner-than-average subjects who received accurate body-size feedback showed greater satisfaction than a control group receiving no information. For heavier than average subjects, feedback only increased body dissatisfaction for those low on neuroticism.

Lane et al. (2005) investigated the influence of personality on exercise-induced mood changes. It was hypothesised that (a) exercise would be associated with significant mood enhancement across all personality types, (b) extroversion would be associated with positive mood and neuroticism with negative mood both pre- and post-exercise, and (c) personality measures would interact with exercise-induced mood changes. Participants were 90 female exercisers who completed the Eysenck Personality Inventory (EPI) once and the Brunel Mood Scale before and after a 60-minute exercise session. Median splits were used to group participants into four personality types: stable introverts, stable extroverts, neurotic introverts, and neurotic extroverts. Repeated measures MANOVA showed significant mood enhancement following exercise across all personality types. Neuroticism was associated with negative mood scores pre- and post-exercise but the effect of extroversion on reported mood was relatively weak. There was no significant interaction effect between exercise-induced mood enhancement and personality. In conclusion, findings lend support to the notion that exercise is associated with improved mood. However, findings show that
personality did not influence this effect, although neuroticism was associated with negative mood.

Nurmela, K. (2006) assessed the relationship between self esteem, personality characteristics, and body image. There were 90 female participants. Materials were the Rosenberg Self Esteem Scale, the Body Esteem Scale, the Big Five Inventory, and the Body Shape Questionnaire. Self esteem and the personality factors were significantly related to body esteem. The personality factors alone were also significantly related to body esteem. Body image dissatisfaction was connected with the personal characteristics, but not when controlled for self esteem.

Cruickshank, S.E. (2006) examined the relationship between personality type and eating behaviors with the moderating variable of body image. To conduct this study, the researchers surveyed female students in social work classes at a southwestern university and used a statistical analysis computer program to determine the preliminary results. The results indicated negative correlations between certain personality characteristics and negative body and self image, positive correlations between negative body image and problematic eating behaviors, and negative correlations between certain personality characteristics and problematic eating behaviors.

Hausenblas, H.A. (2006) applied meta-analytic procedures to integrate research findings examining the impact of exercise on body image. They performed extensive literature searching strategies and located 121 published and unpublished studies that examined the impact of exercise on body image. Primary study results were coded, and meta-analytic procedures were conducted. Studies were grouped into
intervention (i.e., exercise vs nonexercise group post-exercise intervention body-image scores), single group (i.e., pre vs post exercise intervention body-image scores), and correlational (i.e., exercisers vs nonexercisers body-image scores) effect sizes. Small effect sizes (that were weighted by sample size), that were significantly different from zero, indicated that: (a) exercisers had a more positive body image than nonexercisers; (b) exercise intervention participants reported a more positive body image post intervention compared to the nonexercising control participants; and (c) exercisers had a significant improvement in body image scores following an exercise intervention. They concluded that exercise was associated with improved body image.

**De Moor et al. (2006)** examined whether regular exercise is associated with anxiety, depression and personality as a function of gender and age. The sample consisted of adolescent and adult twins and their families who participated in the study on lifestyle and health from The Netherlands Twin Registry (1991–2002). Exercise participation, anxiety, depression and personality were assessed with self report questionnaires. Results showed that the exercisers were on average less anxious, depressed and neurotic, more extraverted and were higher in dimensions of sensation seeking than non-exercisers. These differences were modest in size, but very consistent across gender and age. It was concluded that regular exercise is cross-sectionally associated with lower neuroticism, anxiety and depression and higher extraversion and sensation seeking.

**Swami et al. (2008)** investigated the personality and individual difference correlates of positive body image. 101 women and 106 men
from a community sample of British adults completed the Body Appreciation Scale (BAS), along with a battery of individual difference measures and demographics. Contrary to previous findings, there were no sex differences in BAS scores, either before or after controlling for individual differences in other measures. The results also showed that, moderating for participants' sex, self-assessed attractiveness, educational qualifications, neuroticism, extraversion, and BMI were all significant predictors of body appreciation. In addition, higher media consumption and higher (male-stereotypic) instrumentality were associated with, but did not predict, higher body appreciation.

Guszkowska and Sionek (2009) investigated changes in mood and chosen personality traits in women participating in a 12-week exercise program; explored relationships between mood and personality traits as well to find personality factors predicting mood changes. Subjects included 39 healthy female volunteers, aged 18-43, participating in a 12-week aerobic exercise program. The results showed that (1) subjects' mood improved following the 12-week aerobic exercise program - tense arousal decreased, whereas hedonic tone and energetic arousal increased; (2) personality traits changed toward better personal adjustment: trait anxiety decreased, self-efficacy and optimism increased; (3) there were no significant relationships between changes in positive mood dimensions (hedonic tone and energetic arousal) and the negative one (tense arousal); (4) there were no correlations between mood changes and personality changes, but mood correlated with trait anxiety, self-efficacy and optimism in both measurements. It was concluded that mood of healthy
adult women improves significantly following a three-month aerobic exercise program, irrespective of positive changes in personality traits.

Campbell, A. et al. (2009) in a meta-analysis examined the impact of exercise interventions on body image; and participant, intervention, and design features associated with larger effects. They identified 57 interventions (with pre-and post-data for the exercise and control groups) examining the effects of exercise on body image. A small random effect indicated that exercise intervention conditions had improved body image compared to control conditions; and that participant (age), design (year of publication), and intervention (exercise frequency and specificity) features moderated the effect size.

Borkoles et al. (2010) investigated the prevalence of Type-D personality in men of different exercise status, the association between Type-D and body image perceptions, and the moderating effect of exercise status. Participants were 564 British males subjects classified as sedentary, active and as weight trainers. Participants completed the DS14 and Multidimensional Body-Self Relations Questionnaire. Results showed that more individuals were classified as Type-D in the sedentary group (45%) than the two active groups, and in the weight training (24.5%) than the active (14.2%) group. Both Type-D and a sedentary lifestyle were associated with a significantly poorer body image. However, exercise mode was not associated with body image differences. Sedentary Type-D men scored significantly lower in Body Areas Satisfaction and higher in Self-Classified Weight than both active groups. It was concluded that regular exercise might provide a pathway for Type-D men to develop a more positive body image.
Tan Zhao Yin and Yim Hip Seng (2010) conducted a study with an objective to determine the weight status, body image perception and physical activity as well as the relationship between weight status and body image dissatisfaction, weight status and physical activity, and body image dissatisfaction and physical activity among housewives in Kampung Chengkau Ulu, Negeri Sembilan. The anthropometric measurements collected were Body Mass Index (BMI), waist and hip circumferences. Figure rating scale and International Physical Activity Questionnaire (IPAQ) were used to assess the body image dissatisfaction and physical activity patterns, respectively amongst the housewives. A total of 119 housewives aged between 20 to 50 years old completed the questionnaire. Results reveal that body image dissatisfaction was significantly correlated with BMI.

Ciampo et al. (2010) analyzed the relationship between body image, body weight and physical activity among young adults in the city of Ribeirão Preto (SP). Results related with classification of body awareness revealed that 81.6% of women overestimated their body weight and 78.2% of men underestimated. In groups of individuals who considered the appropriate weight or overestimated, 48.3% and 51.2%, respectively, were classified as active or very active. It was concluded that body mass index and physical activity have contributed to better evaluation of their own weight, whereas female gender and higher educational level had a direct relationship with the distortion of perception, with a tendency to overestimate their own weight.

Goswami et al. (2012) determined body image satisfaction among newly entrant women students in a professional institution. A cross-
sectional study using body image satisfaction described in words was undertaken, which also explored relationship with body mass index (BMI) and other selected co-variables such as socio-demographic details, overall satisfaction in life, and particularly in academic/professional life, current health status using 5-item based Likert scale. It was found that out of 96 study samples, 16.66%, 51.04%, and 32.29% girl students perceived their body image as fair, good and excellent, respectively while overall 13.54% were dissatisfied with their body image. The body image satisfaction had significant relationship with image perception, current general health status and self weight assessment. Students with low weight had a significantly higher prevalence of body image satisfaction while overweight students had a significantly higher prevalence of dissatisfaction.

Strelan, Mehaffey, and Tiggemann (2012) explored motivates for exercise and its impact on body image among young women. They found that exercise motive was a mediating factor in body image. Individuals who exercised for weight control or to improve body tone and attractiveness did not improve over time in body image or self- esteem. However, exercising for health, fitness, mood, and enjoyment resulted in a positive effect on their body satisfaction and self- esteem. Exercising for appearance was negatively related to body satisfaction, whereas exercising for health fitness reasons or enjoyment/mood was correlated positively with body satisfaction.

Dudhatra and Jogsan (2012) investigated to find out the mean difference between working and non-working women in mental health and depression. Mental health was measured by Dr. D.J. Bhatt and Gita
R. Geeda (1992) while the tool Beck depression test was used to assess depression. Results showed that mental health in non-working women was significantly better as compared to working women. Results also revealed that depression is more markedly present in working women as compared to non-working women.

**Wasylkiw et al. (2012)** examined the relationships between self-compassion and women’s body image. In Study 1, female undergraduates completed three measures of body image and measures of self-esteem and self-compassion. Results showed that high self-compassion predicted fewer body concerns independently of self-esteem. Moreover, when both self-compassion and self-esteem were included as predictors, self-compassion accounted for unique variance in body preoccupation and weight concerns whereas self-esteem did not. In Study 2, this finding was partially replicated with one component (self-judgment) of self-compassion uniquely predicting body preoccupation in undergraduate women. High scores on self-compassion also predicted less eating guilt independent of self-esteem. Additionally, self-compassion was shown to partially mediate the relationship between body preoccupation and depressive symptoms.

**Costa and Oliva (2012)** examined the relation between personality traits, based on the five factor model, and exercise dependence symptomatology. There were 423 voluntary participants (216 male and 201 female) who exercised regularly over a year selected for this study. By using Eating Disorder Inventory–2 questionnaire, participants who scored in the at-risk range were excluded from analysis. All athletes completed the Exercise Dependence Scale and the Big Five Questionnaire.
The results seem to confirm the relation between exercise dependence and certain personality characteristics suggesting that extraversion, neuroticism, and agreeableness may potentially be underlying factors in exercise dependence symptomatology.

**Newton et al. (2012)** examined the amount of daily physical activities performed by African American women and their perceptions of their body image, obesity status, physical fitness, and satisfaction with their physical appearance. A total of 51 African American women completed the International Physical Activity Questionnaire (IPAQ) to gather data on their physical activity participation. Another questionnaire developed by the researchers examined respondents' perceived body image and current knowledge of physical activity and its benefits. The study found that the average Body Mass Index (BMI) value for the respondents was 29.9, indicating that over 82% were either overweight or obese. Moreover, almost 55% perceived themselves to be overweight. Findings also indicated 58.8% of respondents were dissatisfied with their physical appearance. Respondents reported engaging an average of 69 minutes of moderate and vigorous recreational activity over a seven day period. This was considerably lower than the recommended amount of moderate and vigorous physical activities.

**Rote et al. (2013)** in a cross-sectional study examined the relationships between lifestyle physical activity and body image in undergraduate women. One week of lifestyle physical activity was measured objectively and subjectively (7-Day Physical Activity Recall Questionnaire). Attitudinal dimensions of body image were assessed using the Multidimensional Body-Self Relations Questionnaire. Physical
activity was unrelated to appearance-related dimensions of women’s body image. Objectively-measured vigorous physical activity was positively related to investment in fitness and health, while moderate physical activity was related to investment in fitness. Light physical activity was unrelated to women’s body image. A greater amount of self-reported vigorous physical activity was related to greater investment in fitness. Results suggested that unlike structured exercise, lifestyle physical activity was generally unrelated to women’s body image.

Izydorczyk, B. (2013) aimed at diagnosing specific psychological (personality) traits and body image characteristics in a population of selected females suffering from binge eating disorder (BED). The methods applied in this research included an inventory (i.e. a Polish version of the Eating Disorder Inventory (EDI) devised by David Garner, Marion P. Olmsted, and Janet Polivy, adapted by Cezary Żechowski; and the Socio-cultural Attitudes towards the Body and Appearance Questionnaire, constructed by the author of this study, based on the results of factor analysis and subject literature), as well as projective techniques such as Thompson’s Silhouette Test and a thematic drawing: “body image”. The inventories and projective techniques applied in the research procedures aimed at diagnosing the level of selected psychological traits in the examined females. Statistical analysis of the data obtained as a result of this research revealed that the examined females suffering from psychogenic overeating were overweight. Analysis of the study data concerning the subject’s evaluation of their body image pointed to a substantial discrepancy between the individuals’ perception of their current body shape, which they clearly did not approve of, and the ideal
thin body that the females desired. The study data obtained as a result of the EDI inventory, aimed at diagnosing the level of selected psychological (personality) traits exhibited by the examined females, revealed that the subjects received the highest (inappropriate) score in the scale describing the individuals’ preoccupation with pursuit of thinness. It was also discovered that the study participants had a high level of internalization of socio-cultural norms about the ideal female body, promoting the “cult of thinness”, and they exhibited the feeling of insecurity and personal worthlessness, as well as a low level of interpersonal trust. It was also found out that the research subjects experienced considerable difficulties in establishing interpersonal bonds, and exhibited inappropriately low level of interoceptive awareness of body sensations, as well as increased perfectionism.

**Symons et al. (2013)** examined the relationship between educational year level, regional differences in adolescent girls' body image perceptions, body mass index (BMI), physical activity (PA) level, self-reported health, and dietary behaviour. Also, the role of PA behavioural regulation on body image was examined. Novel outcomes from this study revealed year level and region differences in girls' body image perceptions, BMI, and health behaviours. Body dissatisfaction was associated with poorer perceived health, and health behaviours, such as low PA levels and dieting and external PA motivational orientation.

**Koran et al. (2013)** examined health perceptions, self and body image, physical exercise and nutrition among undergraduate students. A structured, self-reported questionnaire was administered to more than 1500 students at a large academic institute in Israel. High correlations
between health perceptions, appropriate nutrition, and positive self and body image were found. Engagement in physical exercise contributed to positive body image and positive health perceptions more than engagement in healthy nutrition. Nutrition students reported higher frequencies of positive health perceptions, positive self and body image and higher engagement in physical exercise in comparison to all other students in the sample.

In the light of the review of literature pertaining to the body image of woman it becomes obvious that the variables such as physical activity, personality and working status (working and non-working) have not yet been studied in relation to body image of women particularly under Indian cultural set up, so it was decided to examine that whether or not these factors can generate variance upon body image of women.