Survey of the related literature is an important pre-requisite to actual planning and the execution of any research project. Best & Kahn (1986) writes, "the search for reference material is a time consuming but fruitful phase. A familiarity with the literature of any problem area helps the student to discover what is already known, what others have attempted to find out, what methods of attack have been promising or disappointing and what problems remain to be solved". In the present chapter, an attempt has been made to examine the existing literature relating to the present problem.

There is a paucity of research in adult education. A glance over the research studies on adult education reveals that a number of researches in certain areas are quite substantial, while in some it is rather meager. There are a few areas which have not attracted the attention of researchers at all, one of which is the effect of adult education on productivity. The present chapter contains the review of related literature on adult education with a view to derive some of the guiding hypotheses. So, it states the effectiveness of adult education programme in terms of achievement in Literacy, Awareness, Attitude, Working Skills and Productivity. For the sake of convenience, the present chapter is organised under different sections namely:
A. Adult education programme and attainment of literacy skills and awareness;
B. Adult education programme and change of attitude; and
C. Adult education programme and improvement of working skills and productivity.

A. Adult Education Training and Attainment of Literacy Skills and Awareness.

Studies relating to Literacy, Reading, Writing, Numeracy, Awareness, Functional Literacy and Knowledge of agricultural practices have been used as dependent variables by the researcher which depend upon the independent variables of Adult education training, Adult education programme, Functional literacy programme, Farmers training programme, National adult education programme, Literacy project, Adult education project and Press. The following discussion would justify the above statement.

Khan (1958) studied the problems of literacy for which experiments were conducted on illiterate farmers and workers of a factory. The author concluded that in order to make learning usable, it is essential to devote at least 125 hours followed by self education through follow-up programme. Factories were suggested to send their workers to attend literacy classes for one hour everyday during working hours. Dutta & Kempfer (1960) evaluated the social education in Delhi to assess the effect of different programmes carried out by three social education agencies in Delhi. The findings indicated that literacy was the most important activity of
each centre as perceived by participants and those who attended classes claimed competence in reading and writing. Craft was popular among women whereas sewing and cutting was the most useful as felt by learners. Recreational and cultural activities were emerging as interesting aspects of the programme. Kakkar (1967) examined the contribution of worker's education scheme towards educational proficiency of workers for which descriptive method was employed. The main findings were: The syllabus was general in nature and not so useful for the workers. There were less audio-visual aids along with more interferences of government over the scheme. Women's education was not encouraged in the scheme. Majority of the workers believed that by attending classes, their consciousness would develop and help them to tackle the labour management problems more effectively. Prasad (1967) made a survey of literacy in a village of Varanasi district and found that percentage of literacy among men was forty eight and among women was only eleven. He also reported that there was a great enthusiasm among adults for literacy classes. Rasid (1967) published a report on experimental adult schools for illiterates. The experiment was carried out five different places (i.e. Delhi, Bombay, Coimbatore, Lucknow and Mysore). Experimental-cum-descriptive method was employed and data were collected by using different test. The main findings were: the highest average of daily attendance is 67 percent, and the lowest is 63 percent. 77 percent of the adult students have passed the public examination at the
end of grade-IV and have progressed significantly in skills of reading and writing from one grade to another. NCERT (1967) made an evaluative study of literacy project in four villages of rural Delhi and found that only one-fifth of the participants achieved desirable standards of functional literacy. Bikaner Adult Education Association (1973) conducted a study to collect data about the press in rural areas and to assess the learner's achievement in 3 Rs'. The descriptive method was employed for this study. It was found that achievement in 3 Rs' of women was better than men. 65 percent to 80 percent of learners acquired necessary skills in 3 Rs'. The majority of learners were from agriculture than industries. Directorate of Adult Education, Lucknow (1973) carried out a project which was designed to provide feedback for extending the programme, and to test different methods for an expanded evaluation programme to analyse pedagogic and socio-economic impact. The experimental method was employed. Literacy attainment tests and an interview schedule were used for data collection. The results indicated that literacy effects were quite satisfactory. Only 9 percent were unable to read, 80 percent could write an average speed of 287 words per minute, 28 percent could fill-up a form planning very well. 23 percent were unable to solve any arithmetical exercise, and only 12 percent had solved all arithmetical exercises correctly. Increase in agricultural knowledge about wheat was significantly higher in experimental group than control group. The same was true in case of awareness,
interest, trial and adoption of high yielding varieties of seeds. Mathur (1975-76) evaluated two projects launched by Bikaner Adult Education Association: (i) Animal husbandry-based functional literacy project, and (ii) house-hold industries training project. In the first project, 82 percent centres worked regularly for the whole session of nine months and enrollment on the whole was 20 against 30 learners, because the project was started during the period when the learners were busy in harvesting. Literacy attainment had little relationship with the age of learners. Positive changes were observed in their manner, behaviour and personal-hygiene. The second project showed that 21.5 percent of the trained women had established their own workshops and 9.1 percent were on the verge of doing so. Fifty two percent trainees were from lower-middle and lower socio-economic classes and out of these 31 percent belong to scheduled castes and backward classes. Communication and social behaviour of the trainees had improved because of the training. Venkataiah (1977) conducted a study to find out the impact of farmers' functional literacy programme on the participants in Andhra Pradesh. The assessment of impact was made in terms of the following selected objectives of the farmers' literacy programme: (i) attainment of literacy skills, (ii) attainment of agricultural knowledge, and (iii) attainment towards improvement of agricultural practices and adult literacy. For this study, different tools such as reading test, writing test, arithmetic test,
agricultural knowledge test and attitude scale on adult literacy were developed. A pre-test and post-test experimental design with a treatment period of one year was used for this investigation. The experimental group consisted of 540 adults, particularly attending the farmers' functional literacy classes in 1974-75. The control group consisted of 270 illiterate adult farmers who were not participating in the programme. Stratified random sampling was employed for the selection of workers while finding out the impact of farmers functional literacy programme. Certain variables such as age, caste, farm size and socio-economic status of participants were taken into consideration. The t-test and chi-square techniques were employed for the analysis of data and it was found that there exist a significant difference in the achievement of literacy skills between the experimental group and the control group. But there was no significant difference between the adult participants and third standard school children with regard to the achievement of arithmetic skills. The experimental group had significantly higher knowledge in modern agricultural practices. Age and literacy skills were positively related to each other. The mean literacy achievement scores increased significantly with the increase in size of land holding of the participants. There was a significant increase in the literacy achievement and acquisition of modern agricultural knowledge with the increase in the socio-economic status of the participants. From this study, it can be concluded that
not only adult education programme but age, socio-economic status, land-holding power of workers were positively related with literacy achievement.

Prakash (1978) conducted a study to assess the impact of functional literacy programme on farmers' Knowledge about practices of cultivation of high yielding varieties (HYV), their attitude towards HYV, their adoption behaviour and their attainment in 3.r's by experimental method. It was found from the study that the experimental group fared much better in the knowledge test, and particularly, male workers gained higher knowledge than female workers. The programme had made a significant impact on adoption of behavior in the case of 15-35 age group. Young farmers and male had achieved a higher standard in reading and writing skills than the older and male farmers. Khajaper(1978) studied the academic performance of farmers' functional literacy programme participants in relation to some socio-psychological factors. The survey was conducted through seven tools for measuring certain socio-psychological factors and six tools for academic performance. The results revealed that age, caste, per capita income, marital status, family type, etc; were not significantly related to academic performance. News paper reading, participation in formal and non-formal organisations, adoption of improved methods of agriculture and contact with agricultural extension agents were positively related to academic performance, while there was a negative co-relation between academic performance and
conservatism, fatalism and authoritarian tendencies. Shah (1979) reported critical study of the programmes of non-formal education in Baroda city and their impact on the community with the help of case study of eight institutions. The finding showed that the impact of the programmes on the participants in numeracy and literacy was rather low and their knowledge of nutrition was average. The impact is good for leisure activity and activities related to supplementary income. Seetharamu (1980) examined the responsiveness of two rural communities towards developmental programmes. Survey method was employed, and interview schedule was used for collection of data. The findings showed that illiteracy is not the obstacle for the people to participate in developmental programmes though generally educated people participate more in these programmes as compared to illiterates. Jesudasan (1980) tested the efficiency of the non-formal education for child development. It was an experimental action-cum research project which included a functional literacy class, oral instruction-cum-demonstration education and a control village. The main findings were: firstly, the mother child centre service showed gains in knowledge and secondly, nutritional services were encouraged among both women and children. Gugnani (1980) studied functional literacy programme for rural development for which descriptive method was employed and the data were calculated through discussion with adult education functionaries, interviews and observations. It was found that
literacy attainment of learners was satisfactory and rate of progress in this direction was faster, but level of their functional knowledge and social awareness was low. Srivastava (1981) evaluated a five-year literacy project undertaken by Seva Mandir, Udaipur (Rajasthan) in order to promote literacy among small farmers and tribals for the purpose of obtaining feedback of data on the effectiveness of the project through three schedules. The results revealed that learners were in 15-35 age-group. The age of instructors varied from 18 and 53 years, and their educational qualifications from grade VIII to bachelor's degree. The average attendance of learners in 60 percent of literacy centres was from 13 to 15. Only 10 percent instructors tested literacy level attained by the learners. Mariappan & Rama Krishnan (1981) conducted evaluative study of the NAEP in the Union Territory of Pondicherry to assess the quality of adult education programme. The findings showed that during 1979-80, the programme covered 90 percent of the target group of learners with all the physical facilities, but neither much attention was paid to functional upgradation nor to elevate the level of social awareness. The investigator reported a sort of contradiction between the opinion of administrators and learners with regard to the functionality and awareness components of the NAEP. Mariappan (1981) produced an evaluation report regarding adult education programme of the rural unit for health and social affairs at 26 adults education centres. It was found that 66 percent of the
learners are able to acquire literacy skills or to erase their literacy level and only 63 percent of learners are able to raise their literacy level of occupational skills.

Council for Social Development (1982) conducted researches to study the functional literacy programme of integrated child development service (ICDS) in Meghalaya and Bihar. It was found in Meghalaya that among the illiterate group, 45 percent workers scored zero in reading ability, 62 percent could not write and 41 percent could not identify numerals. On the positive side, 18.5 percent of the illiterates could read correctly, 27 percent could write the names of common objects and only 2 percent obtained maximum in arithmetic. Knowledge about health, hygiene and child care was achieved satisfactory. In Bihar, attainment of literacy and numeracy was poor, three fourth were unable to identify alphabets and 90 percent could not identify any numeral.

Council for Social Development (1982) conducted a study of the function literacy programme of ICDS scheme, Kathura (Haryana) in two phases. The findings showed that in first phase (May, 1978-July, 1978), 59 percent of the participants were in the 15-35 years age-group and nearly 90 percent participants were illiterate. Attendance of participants was 50 percent and the primer used was the same as used for class I of primary schools in Haryana. The information level of participants on items of general knowledge was pretty good. In phase II of the study, the participants attained better in literacy skills and in the areas of family planning. The
objective of promoting better awareness among women and modern methods of health and hygiene could not be adequately achieved. The material supplied to the Functional Literacy centres was not only unsuitable for the adult women, but also insufficient. Lakshmi Narayan (1982) assessed the problems of adult education in the tribal areas of Visakhapatnam district (Andhra Pradesh) and the impact of NAEP in terms of the achievement of participants in 3 Rs' as well as the functionality of the programme. The data which were collected through self-prepared schedules and individual as well as group interviews indicated that 46 percent participants attended classes in 61 percent of the working days and 16 percent had attended 41 percent to 60 percent of the working days of the centres. 73 percent had no previous schooling and the remaining studied from 1st to 6th standard. The test also revealed that a majority of participants had attained better environmental knowledge, speaking, reading and copy writing skills and about one-fourth participants achieved arithmetic skills, but none in functional arithmetic. Umayaparvathi (1982) studied relationship of achievement motivation and intelligence with literacy attainment of urban and rural women, backward and scheduled caste, literates and illiterate families. Descriptive survey method was employed and TAT Language Test and interview schedule were used for collecting the data. The main findings were: there is a significant difference in literacy attainment between those who have high and how achievement motivation, between high and low
intelligence groups, and between backward and scheduled castes, and also between literate and illiterate families. But there is no significant difference observed in achievement motivation between backward and scheduled castes and nuclear and joint families in all the three dimensions. Shankar (1983) made a study of the Literacy House Adult Education Project at Lucknow. Learners were evaluated in terms of literacy achievement at three stages: before the beginning of programme, after completing the primer and at the end of the programme. After completion of Primer, 1485 learners were evaluated out of which 961 were categorised as illiterates, 508 as semi-literates and 16 illiterates. After the programme was over, only 60 learners approached for taking the literacy test. Rao (1983) studied National Adult Education Programme in Vishakhapatnam with reference to variations in implementing agencies, background of learners, socio-economic background and educational experience of instructors. It was found that only 16 percent of the illiterates on roll attained proficiency in 3 Rs'. The level of awareness was very high on social issues, moderately high on health and family planning, and average in politics. Yadav (1987) in his study found literacy scores of workers ranged from 43-65 percent after their exposure to adult education programme. In case of numeracy, the scores ranged from 47 to 60 percent. There was a significant difference between pre-test and post-test awareness scores of workers which reveals that the workers show significant improvement in their level of awareness at post-test stage.
Sunner (1987) studied the reasons for attrition and dropping out of an adult literacy programme located in South-Western Pennsylvania. Fifty adult basic education students who discontinued attendance were interviewed. It was found that more male than female joined the programme. Many of them joined to help children to do home work, to attend a training programme and to improve reading, writing and mathematic skills. Major reasons for dropping out were job obligations, family obligations, illness and personal reasons. In convenient locations and hours, child-care problems, making no progress and impatient teachers were some other reasons. Among many suggestions to prevent dropout and enhance attendance, a few were needed for programmes that lead to better jobs, providing a better location, furnishing more interesting books and materials etc.

Platt (1989) undertook a study to develop a conceptual model of adult learning facilitation process from the perspectives of adult learner and facilitator. It was found that in general, both learners and teachers described by authenticity, warmth, friendliness, closeness, a sense of belongingness by genuine and personally meaningful dialogue; by reciprocal dependence and shared controls by self acceptance and openness to experience. Adult Learners want to be viewed as resources in the class-room learning process. By their own admissions, adult learners gain the most personally and professionally when class room learning expectations and the quality of relationships they share with the instructors,
are congruent and consistent with a positive self-concept which implicitly is acknowledged as worthy of respect and value. Literacy Mission (1991) reported the impact of literacy awareness programmes in tribal people of Nilgiris district in Tamil Nadu. With the attainment of literacy and awareness, the tribal people who had been deprived of their land, recently took up the land issue in a very united and forceful way. It is an example of people getting their own liberation through literacy dialogue and action.

Sivaswami (1991) reported the key reasons for fair degree of success of the Tanzanian literacy campaign and also the interesting developments by its success on the basis of interview with Dr. Yusuf Kassaur, Director of programmes, International Council of Adult Education in Toronto, Canada. The reasons for success were: (a) The nature of government policy and development ideology - political commitment of the party in power under the leadership of Julious Nyerere; (b) mass upsurge among the people who had attained independence after long years of colonial domination; (c) mass mobilization and community participation; (d) training of adult educators at different level; and all primary schools were made to operate as adult education centers. The success led to several interesting developments. The neo-literate adults started demanding proper schooling facilities for their children. Consequently, the party and the government decided to achieve universal primary education by 1974 which was 12 years ahead of the original schedule. There was
remarkable improvement in women's education. There was greater participation of the people in developmental activities. The status of Tanzania in the eyes of neighbouring African nations and in Asia rose and every Tanzanian could take pride about their literacy achievement. Rai (1991) in a study conducted to examine the "Burdwan Experiment" for achieving total literacy in August, 1991 which focused on the factors that helped in achieving the targets of total literacy, effects of the total literacy achieved and deficiencies in the implementation of the campaign. Ten lakh illiterate people were made functionally literate in six months time raising the literacy rate from 42.43 percent in 1981 to over 90 percent now in Burdwan district of West Bengal. The factors that were mainly significant in achieving the targets are political will, administrative drive and enthusiastic local participation. There were many deterrents for this campaign like poor light system, meagre supply of kerosene oil for lanterns, absence of boards, posters, hoardings for environment building etc. In many centers, there were more children below the age of 9 or between 10-15 years than adults, who should have gone to the schools. Muslim women’s participation was not coming up. These factors could be taken care of in total literacy campaign to be undertaken in other areas. The effects of literacy achievement were quite evident. (i) At many places, literacy became a unifying factor among various communities minimising the communal tensions and the centers became
forums to forget these; (ii) enrollment in primary schools went up from earlier average of 80,000 per year to 1.20 lakh and the drop-out rate have been reduced to half i.e. 25 percent, (iii) immunization has increased and more men came up for sterilization; (iv) neo-literates were demanding more books and guidance to become self-reliant.

"Literacy Mission" (1991) reported a critical analysis of the literacy movement in Thailand in the year 1989. It brought in to light the following issues that had been identified as crucial in planning future effort: (a) Literacy promotion is a continuous learning process. Literacy targets can, indeed, be set and achieved but they should be regarded as milestones towards increasingly and complex, more functional and more meaningful levels of literacy which evolves in tune with the changes in society; (b) universal primary education, literacy education and efforts to enrich learning opportunities in the environment should be planned in integration so that they can adequately and timely complement and reinforce each other; (c) national commitment and support are essential conditions for any significant literacy effort; (d) strategies for literacy promotion efforts must be diverse and adaptive; and (e) teaching and learning strategies for literacy promotion efforts should be diverse and responsible to the needs and conditions of the illiterate population who are motivated differently. Literacy Mission (1991) reported that a total of 3,05,374 persons out of which 1,22,351 males and 1,83,023 females were benefited.
from the different programmes organised by the Shramik Vidyapeeths in the country during 1989-90.

Sharma (1991) evaluated adult education programme and concluded that 71% learners in the university system and 60% in the state projects have obtained more than 50% marks in reading test. On the average, 49 to 55% of learners have acquired proficiency in writing skills. The majority of learners are not in a position to make functional use of their writing skills to write letter or even write money orders and bank forms. It was observed that about 80% learners have acquired more than 50% scores. The learners have not been able to acquire a good level of social awareness. In the university system, about 48% and in state projects, about 35% have scored above 50% on social awareness. The functionality of the learners was measured in terms of knowledge of the learners regarding occupation, agriculture, banking facilities and developmental schemes. The study reveals that only 50% centers in the university system and 20% in the state provided occupational informations to the learners. The provision for skill development was made in only 25% centers of the university system. The knowledge of the learners on modern methods of agriculture and productivity was found satisfactory. It is also found that the successful learners are mostly from joint families who have not dropped out on account of domestic pressures of work. Literacy Mission (1992) reported that 250 women workers of 15-35 age group of the Chandak Beedi Factory in
Yedapalli Village of Andhra pradesh became literate by a literacy drive called "Akshara Kiranam". Literacy Mission (1992) reported that Bharat Heavy Electrical Ltd. (BHEL), a leading public sector undertaking, has been actively promoting literacy in all its manufacturing divisions and service units spreaded all over the country. BHEL made literate nearly 850 learners from 430 villages.

Kundu (1993) observed from a workshop on folk media in adult education that the messages, e.g. the importance of education, immunisation, mother and child care, equality of men and women in family or in society, the ill-effects of the population explosion, eradication of superstitions etc. were understood and appreciated by the audience. DAE (1993) in its external evaluation report of TLC Bilaspur (M.P.) mentioned the achievement of total literacy mission in following manner: (i) 74 % of the sample learners reached the NLM literacy norms in Bilaspur total literacy campaign; (ii) among the SC sub-projects, Masturi showed the highest result (91%) whereas Seepat showed the lowest (54%); (iii) among the tribal sub-projects, Belghana showed the highest result (85%) and Hardibazar, the lowest (56%); (iv) among the general sub-projects, Ratanpur showed the highest result (74%) where as Bilha showed the lowest (60%).

From the above mentioned review of related studies, it may be summarised that adult education Programme/Functional Literacy Programme has positive impact upon reading and writing skills as supported by Dutta & Kempfer (1960), Rasid
(1967), DAE, Lucknow (1973), Prakash (1978), Laxminarayan (1982), and Yadav (1987). It was also found that adult education Programme has not achieved the expected level of reading and writing skills as revealed by CSD, Meghalaya (1982). There is an impact of adult literacy programme upon numeracy skill as supported by DAE, Lucknow (1973) and Yadav (1987). However, studies like Shah (1978), CSD, Meghalaya (1982) and Laxminarayan (1982) did not support this view. There is also a positive effect of this programme upon literacy skills as a whole which are supported by DAE, Bikaner (1973), DAE, Lucknow (1973), Venkataiah (1973), Khajapeer (1978), Gugnani (1980), Mariappan (1981), Mariappan & Rama Krishnan (1981), CSD, Haryana (1982), and Yadav (1987). However, this is not supported by NCERT (1967), Shah (1978), CSD, Meghalaya and Bihar (1982), Shankar (1983) and Rao (1983). However, a newly developed concept “total Literacy Programme” has also positive influence upon attainment of literacy skills as supported by Literacy Mission (1991a, 1991b), Rai (1991), Sharma (1991), Literacy Mission (1992a, 1992b), DAE (1993), and Kundu (1993).

Attainment of literacy is also linked with other variables such as, sex, which have been supported by Dutta & Kempfer (1960), DAE, Bikaner (1973), and Prakash (1978), Age group supported by Vankataiah (1973), Prakash (1978), Srivastava (1981), CSD, Haryana (1982), Socio-economic status and land holding power supported by Venkataiah (1973); Intelligence and achievement motivation supported by Umay Parvati (1982); and conservatism, fatalism and authoritative by Khajapeer (1978).

There are some constraints of adult education programme like general nature of syllabus, less use of audio-visual aids and Govt. interferences which have been supported by kakkar (1967) and CSD, Haryana (1982).

B. Adult Education Programme and Change of Attitude

Studies relating to adult education programme, workers' education schemes, social education programme, agricultural extension programme, functional literacy programme, non-formal education, television-serial have been covered in this following sub-sections. These variables are regarded as independent variables which are related with dependent variables of attitude, opinion, and behavioral changes.

David (1962) conducted a study to know the attitudes and behavior of adults of Yugoslavia towards adult education. He found that 50 percent of the adults were not clear about the concept of adult education. Singh (1965) conducted a study to examine the organisation and administration of workers' education schemes with a view to find out how far
this education helps in creating a healthy climate in industrial concerns which leads to higher productivity. The industrial city of Kanpur was selected for the study in order to collect information regarding the worker’s attitude, industrial climate and productivity by the help of interviews. The results indicated that most of the workers (72%) had favourable attitude towards workers’ education scheme, one half of these being literate and the other half illiterate which ultimately showed that education does not seem to influence workers’ attitude towards workers’ education scheme. Workers were of the opinion that the scheme was not properly implemented in addition to improper selection of teachers, inadequate financial motivation and theory-oriented teaching which contributed towards its slow progress. Trivedi (1966) in his critical analysis of ‘social education programme reported that each social education programme contained literacy, social, cultural, scientific, aesthetic and agricultural activities of youth and women. The impact of the programme was seen in the changed adult behavior. It was also found that women did not seem to take advantage of formal literacy classes. Prasad (1967) reported in his survey that there was great enthusiasm among adults for literacy classes. Kaul (1970) studied the attitude of the undergraduate students of Panjab agricultural university towards agricultural extension work. The study revealed that age and academic achievements of students had no correlation with their attitude while socio-economic status and mutual
friendship relations are related with attitude. There was a positive correlation between attitude and communication network in the initial stages, but it tends to be negative in later stages. Pal (1970) made a comparison between institutional and non-institutional farmers' training and education programmes in relation to knowledge, attitude and change in their behaviour and found that the farmers who participated in the institutionalised and non-institutionalised programmes differed significantly with regard to change in the knowledge related to package practices. He also reported that caste was a significant correlate in changing attitude towards farmers' training and education programmes where as it was not found to be significantly correlated with the changes in behaviour component of the farmers of treatment group. On the other hand, it is negatively related to adoption of package practices. Sahni (1971) studied farmers' awareness towards agricultural extension programme which contains knowledge and practice of new agricultural method as well as attitudinal changes toward new methods. The main findings were: most of the farmers know the use of chemical manures, but only 50 percent were able to use these and majority did not use new machines like tractor in the field. 75 percent were unaware of magazine and news papers, and 92 percent were listening to radio. The reasons for non-adoption of new methods, as reported by 50 percent of farmers, were lack of supply of inputs, irrigation facilities and technical guidance along
with undesirable dealings of extension workers. DAE (1973) in its project found that farmers' training and functional literacy brought about significant changes in attitude of adults towards literacy, material comfort, contact with extension personnel and use of radio by the experimental group. Botsman (1975) analysed the continuing education interest, attitude and need of 565 blue collar factory workers studied from 16 of 22 largest farms in five country regions of central New York by administering questionnaire. The results revealed that workers were not a single homogeneous mass which could be summarily dismissed as non-participant and forgotten. They had individual needs and many of these needs were not being met by existing provisions of adult and continuing education. Chalman (1975) conducted a case study to examine the attitude of villagers towards education from village of Andhra Pradesh. The principal objectives kept in view in this study were as follows: a) to understand the attitude of the villagers towards education and their changing structure, b) to find out the interest of villagers in continuing education or adult education.

Bortz (1975) compared the educational interest and attitude towards adult learning and family life. The study revealed that in compared to a child, it is more difficult for an adult to learn which was supported by 62 percent of parents. Grutter (1977) conducted a study to identify differences in the attitude among professors of adult education towards three adult age groups, viz; 18-35, 36-54,
Main findings were that the professors of adult education have significantly different attitude towards three referent age groups. The respondents viewed that 18-35 age group are most effective among three groups. The 36-54 referent age-group was most independent while 18-35 referent age-group was least independent. Respondents considered the 36-54 referent age-group as most personally acceptable while 55 and over referent age-group as least personally acceptable. Oliver (1977) studied the descriptive characteristics and attitude towards adult education of Arizona Secondary School principals in order to observe if any relationship exists among personal, educational and occupational characteristics and their attitudes towards adult education in Arizona. The main findings were: the principals agreed that adult education classes should be held in schools, non-profit organisations should be allowed to use school facilities on a rented basis, state should provide funds, and vocational facilities should be used in adult education programme. It was also found that attitude is significantly affected by age, highest degree, present educational goals, annual salary and student population. Venkataiah (1977) in his experimental study revealed that farmers' functional literacy programme had a significant impact in respect of attitude towards modern agricultural practices and adult literacy in all the age groups, caste groups, hand holding groups, and socio-economic status categories of the participants in experimental group. Prakash (1978) stated
that the functional literacy programme had changed the attitude of farmers of both sexes towards high yielding varieties in all age groups except the 35 age-group of male population. Punwar (1978) conducted a study with the main objectives to see the overall impact of training on the farmers' life, particularly, gain in their functional knowledge and the change in their attitude. The findings of the study pointed out that five days training course resulted in significant change of attitude towards high yielding variety of seeds, use of fertilizers and plant projection. Whitehorn (1978) determined attitude and practices of larger manufacturers in the United States towards continuing education and any significant differences between industries in those attitude. A systematic sample of 30 was selected from each of the 20 manufacturing industrial units as defined in the standard industrial classification Manual. Manufacturing industries in general had favourable attitude towards each of the broad categories, but they were indecisive about employees' participation in continuing education activities during working hours. Wilson & Readdy (1979) conducted a study to know the attitude of teacher-volunteers towards farmers' Functional Literacy Programme. It was found that teacher-volunteers showed favourable attitude towards farmers' functional literacy programme and recommended to implement the same effectively.

Hargopal & Sudarsan (1978) conducted a study to elicit information about the attitude of adult members towards adult
literacy. They had drawn a sample of 200 adult illiterate members from three different Villages of Warangal District in Adhra pradesh. It was found that majority of adult illiterates were not hostile towards learning. The enthusiasm for learning was poor in the middle aged women and middle income group. Gomathimani (1980) assessed the attitude of rural adult learners towards adult education and also marked participants perception on utility of adult education, reasons for their dropping-out from adult education centres and expectations regarding the animator. The sample of this study included 150 rural adults from adult education centres that was running by the Department of Adult and Continuing Education, University of Madras. The author found that 53 percent of the adults expected economic improvement through adult education, 23.3 percent felt that it was relevant and necessary for successful life, 12 percent thought it difficult to learn because of age and 12.7 percent did not find any use of the programme. Patel (1980) studied the attitude of teacher educators toward the programme of non-formal education that leads to life-long education in the state of Gujarat. The findings were; the attitude of teacher-educator of urban areas were more favourable than those of the semi-urban areas towards the component of need and importance, teacher-educators of North Gujarat region had more favourable attitude than those of South Gujarat region. Female teacher-educators had better attitude than male teacher-educators, post-graduate teacher-educators had more
favourable attitude than graduate teacher educators and the attitude of teacher-educators who visited a foreign country was more favourable than those who had not visited. Nair (1981) prepared a training programme for non-formal education-workers to bring about desirable attitudinal changes and better performances. The experimental method was employed and different tools like personal data sheet, rating scale, self evaluation schedule and a observation schedule were used to study the impact of the programme. The main finding was that the programme was successful in terms of planning, preparation and execution. The trained instructors through the new programmes were found superior to others in knowledge, ability and skills.

Kumar (1981) investigated the impact of adult education on social attitude of rural people where social attitude was consisted of religion, marriage, family, women's social status and education. The main findings were: more educated masses favoured co-ordination, women employment, nuclear family, inter-caste and inter-religion marriage. No significant difference was noted in attitude regarding family income, occupation and religion. Anantha (1982) reported a socio-psychological study of family planning in the context of ideas, perception and attitude of rural youth towards planned parenthood. The study revealed that there exists a significant difference between all the variables and the people had better attitude towards planned parent hood. Seth (1984) conducted a study on motivation in adult learners
participating in functional literacy programme in Delhi. In this study, the investigator tried to assess the achievement motivation, attitude towards literacy and level of aspiration. Impact of programme in terms of gains in literacy skills and social awareness relating to environment, civic life and health was also assessed. The major findings of the study showed a significant relationship between the main occupation of the family and attitude of learners towards literacy. There was little awareness created by functional literacy programme. But the significant relationship was found between the gains in literacy skills and continuing participation in the programme. Sharma & Patel (1986) conducted an empirical study on adult education programme in Chandigarh to find out the attitude of both men and women towards the three components of adult education i.e. literacy, functionality and awareness by using 150 male and female respondents. The findings showed that attitude of whole group of adult learners towards adult education programme, and its three components was favourable. Suggestions were made to improve the entire programme by checking the drop-out rates among learners, and by making the curriculum craft-oriented or vocationalised. Yadav (1987) revealed that after adult education programme, the workers had developed positive attitude towards adult education. It was also mentioned that both workers who showed maximum and minimum increase in their productivity in pre-test had shown positive attitude towards adult education programme. Sugumar
(1989) evaluated the attitude of 630 women learners towards adult education with respect of literacy, awareness and functionality in Pondicherry by using attitude scale. In general, positive attitude of workers towards adult education programme was noticed. When the above three aspects were compared numerically and statistically, literacy was ranked first followed by awareness and functionality. In the above study, the investigator emphasised on functionality. Mathur (1989) assessed as to how far the adult education programmes have brought about a change in the outlook of those who attended these programmes. The survey method was employed on 300 respondents from rural and urban areas in three group. The first group was exposed to adult education programme for one year, the second group for three years and the third for five years. The group exposed for the five-year training showed good result by changing their social life in a better way. The investigator suggested uniformity in the adult education programmes at national level.

From the above mentioned review of related studies, it may be summarised that adult education programme including workers' education scheme, agricultural extension programme, social education programme had developed positive attitude among adults towards these programmes as revealed by Singh (1965), Trivedi (1966), DAE (1973), Venkataiah (1973), Prakash (1978), Whitehorn (1978), Readdy (1979), Hargopal & Sudarsan (1978), Sharma & Patel (1986), Yadav (1987) and Sugumar (1989). These programmes also have not developed positive
attitude among workers as found by Sahni (1971), Botsman (1975), and Bortz, Karer (1975). It is also found that attitude of people are related with other variables such as sex (Trivedi, 1966; Patel, 1980) and caste, (Pal, 1970).

**Adult Education Training and Productivity**

Studies relating to industrial productivity, farm productivity, workers' productivity, agricultural productivity and efficiency have been included in this section. These variables have been regarded as dependent Variables which are related to independent variables of workers' education, literacy, formal schooling, training and extension education.

Singh (1965) conducted a study on workers' education schemes with a view to find out how far this education helps in creating a healthy climate and industrial concerns that leads to higher productivity. The industrial city of Kanpur was selected for this study and survey method was employed. The information regarding the workers' attitude, industrial climate and productivity was collected by the help of interviews. Three questionnaires were prepared to collect information on attitude, one for the worker, the second for the employers, and the third for the trade unionists. The results indicated that it is difficult to ascertain the exact relationship between education and productivity. It is however, indicated that education plays a significant role in shaping attitude towards work developing efficiency and inculcating collecting urge for more productivity. John
(1965) conducted a study on the development, application and appraisal of industrial education programme for adults. About 5000 employees of an oil and gas company were surveyed by using questionnaire and interview schedule before and after attending the programme. The findings of the study recommended that general education programmes will be continued by working more closely with the help of University Education Department and industrial training department to enhance adult education and to train industrial workers. Chaturvedi (1969) studied the impact of social education on life and living standard of people in U.P. Descriptive survey method and self-prepared questionnaire followed by interview of seven selected groups of people were used for collecting data. The findings of the study showed that: farmers were mostly using traditional methods of agriculture and they had no knowledge of plant diseases and their control. But social education had greatly influenced life and living standard of people. Heime (1969) analysed the role of adult education in nation building with the help of model designed for which the whole process of nation building was divided into three sequential activities. The study revealed that adult education has played important role and in many cases decisive role, in building and re-building a nation and its influence varied greatly from nation to nation whose effect was not immediate. It had negative effects when it was used to improve certain cultural values at the expenses of others. William (1970) reported a study of skilled workers in two
factories of South India on education, training and productivity. Work productivity was measured with the help of efficiency rating was computed by dividing estimated standard hours for job completion with actual hours of work. The data were collected from interviews with 598 turners, millers and grinder of two large modern farms in Bangalore. The result depicted that education was positively related to workers but its contribution was small and environmental background variables such as socio-economic status, caste and religion were weakly and mildly related to work productivity. Srivastava (1970) revealed that better education could lead to the betterment of their economic conditions. Kudesia (1973) studied the impact of social education on social, political economic cultural and hygienic conditions for people in Madhya Pradesh promoting in them self-confidence, self-sufficiency, co-operation and tolerance. The level of achievement in health and recreational aspects of development was highest in comparison to other areas in which there was no much change. People remained conservative in respect of caste system, untouchability, poverty, and social injustices. Political awareness also remained at a very low level. Agnihotri (1974) investigated and evaluated the adult education programme under pilot plan in Wardha district for which survey method was employed. It was found that there was no improvement in the standard of living of people through adult education. However, 68 percent of women were conscious about cleanliness of their children and People
were mostly conservative and fate-oriented and spent their leisure time praying God than doing any other constructive work. Mahar (1978) studied the role of the worker's education scheme (WES) in creating trade union consciousness. The main findings were: worker's education scheme has speeded up productivity, safety and duty consciousness and motivated worker as well as teachers towards trade union activities. Bovornsiri (1976) developed a model for an adult vocational education programme for urban sector to increase the level of employment as well as to serve the needs of industry and manufacturing in which community and workers participated. The results of the study lead to adoption of measures such as; decentralisation of adult vocational education centers, increasing co-operation between central Govt. industry and business, local community and adult vocational centers, development on concept of open entry and open exit for the programme and development programmes of adult vocational educators. Musingo (1980) conducted an experimental study on schooling, training and worker productivity to examine the relative impact of schooling on productivity of workers in Zaire industries before, during and after training. Five hundred fifty six male workers trained by INPP and employed in low and middle occupational categories of selected industries were chosen as subjects. Questionnaires and structured interviews provided primary data, and multiple regression was the major statistical technique used for analysis. The findings of the study indicated that workers'
productivity may be viewed as a tridimensional construct consisting of training performance, job performance, and job payment. In some occupations, the amount of schooling had a positive effect on productivity, whereas in others, the effect was negligible or counter productivity. Pudasaini (1981) in his study on the contribution of education to agricultural productivity, efficiency, and development in Nepal found that, (i) education and extension have a positive contribution to productivity (marginal) in the technologically dynamic region as well as the relatively static hill region, (ii) educated farmers in both regions are more efficient than the illiterates, (iii) educated farmers of both districts were able to attain higher economic efficiency than illiterates. Mohammed (1981) in his study concluded that educating and increasing employees' job responsibility is one of the important issues to be considered in increasing productivity. Fuller (1983) in his cross sectional study, used production analysis to examine relationship between the education of rice farm managers and farm productivity in north-eastern Bangladesh. The findings of the study support a large body of literature which suggests that formal schooling has a positive effect on agricultural productivity. It was also found that two of non-formal educational activities such as; exposure to agricultural radio broadcasts and participation in out of school literacy classes which were examined are found to be positively associated with productivity. The result also
indicated that both formal schooling and non-formal literacy training seem to enhance productivity because both types of education provide farmers with literacy-related capabilities which are positively associated with farm productivity. However, formal and non-formal education were found to influence farm production independently rather than as substitutes or compliments. Yadav (1987) found that adult education and training has positive effect on workers' productivity. There was significant increase in workers' productivity after adult education and training.

From the review of above motioned related studies on variable of productivity it may be summarised that adult education programme, workers education scheme and social education has been positively related with productivity as revealed by Singh (1965), Mahar (1975), Pudasaini (1981), Mohammed (1982), Fuller (1983) and Yadav (1987). There are some research studies which indirectly support this finding by saying that adult education programme can lead to better living standard (Chaturiveli, 1969; Srivastava, 1970) building a nation (Heime, 1969), achievement in health (Srivastava, 1970), cleanliness (Agnihotri, 1974), duty consciousness Mahar (1975) and co-operation (Bovornsiri, 1976). Musingo (1980) revealed that schooling has both positive and negative effects on productivity. It was also found that socio-economic status, caste, religion are weakly and mildly related to productivity as supported by William (1970).