This chapter attempts to discuss the concept of Internal-External locus of control in the context of Social learning theory. It reviews studies relating to the relationship between the locus of control, and attempts to control the environment, achievement motivation, resistance to subtle suggestion, and sex typed behaviour. On the basis of the review of various studies pertaining to the relationship between locus of control and different patterns of behaviour, pertinent research questions were raised and hypotheses suggested.

Social learning theory (Rotter, 1954; 1955; 1960) posits that a reinforcement acts to strengthen an expectancy that a particular behaviour or event will be followed by the reinforcement in the future. When the reinforcement is seen as not contingent upon the subjects own behavior, its occurrence will not increase an expectancy as much as when it is as contingent. Conversely, its non occurrence will not reduce an expectancy so much as when it is seen as contingent. Rotter contends that depending upon the individual's history of reinforcement, individuals would differ in
the degree to which they attributed reinforcements to their own actions. He further states that expectancies generalize from a specific situation to a series of situations which are perceived as related or similar. As a consequence, a generalized expectancy for a class of related events has functional properties and makes up one of the important classes of variables in personality description.

Accordingly, generalized attitude, belief, or expectancy regarding the nature of the causal relationship between one's own behavior and its consequences might affect a variety of behavioral choices in a broad band of life situations. Such generalized expectancy is in combination with specific expectancies are presumed to act to determine choice behavior along with the value of potential reinforcements. These generalized expectancies are expected to result in characteristic differences in behavior in a situation culturally categorized as chance determined versus skill determined, and also they may act to produce individual differences within a specific condition.

Generalized expectancies may be regarded as important personality characteristics construing Internal-External locus of control on the part of the individual.
I-E locus of control is reported to have similarity to the concept of competence (White, 1959) and autonomy (Angyal, 1941).

**INTERNAL-EXTERNAL LOCUS OF CONTROL AND ATTEMPTS TO CONTROL THE ENVIRONMENT**

Internal-External locus of control seems to determine attempts of an individual to control the environment. It has been hypothesized in a study that the internals knew more about their own conditions and attempt to exercise control over it (Seeman and Evans, 1962). These expectations are borne out in the case of the behavior of the patients in a tuberculosis hospital. That the internals knew more about their conditions has been borne out in another study of reformatory inmates (Seeman, 1963). The students who are highly internal are reported to be found more among the signatories of commitments to the Civil Rights Movement (Gore and Rotter, 1963). Membership in unions versus non membership, activity within the union and general knowledge of political affairs are reported to be significantly related to internality (Seeman, 1964).

The finding that internals are found more among activists receives support in another study (Strickland, 1965). Internals are reported to be more successful
in changing attitudes of others than the externals (Phares, 1965). Findings contradicting the finding of the above studies are also found in literature. Rotter (1966) reports two studies which fail to predict petition signing with reference to Internal-External locus of control.

That the feeling that one can control himself is related to I-E locus of control, has been substantiated in studies on smoking (Strait and Sechrest, 1963; James, et al., 1965).

A study has explored the relationship between motive to avoid success and locus of control. Among female undergraduates a high level of motive to avoid success is found to be associated with higher external control scores, and also the lower levels of motives to avoid success are found to be associated with low external control scores. The finding suggests that subjects with high external control scores feel more victimized by circumstance and less able to act positively on their environments than subjects who received lower scores on Internal-External scale. High scoring subjects also seem to be less autonomous and less likely to penetrate the social barriers that serve to abstract successful feminine achievement (Midgley and Abrams, 1974). Studies report unionized workers tend to be more
internal than non unionized workers, perhaps because the unionized workers learn that they have greater control over what happens to them. This is found to be true among tribals as well (Natarajan and Ganesan., 1979; Natarajan, 1984).

INTERNAL-EXTERNAL LOCUS OF CONTROL AND ACHIEVEMENT MOTIVATION

The work on Achievement motive suggests that children and adults who are high on the need for achievement have belief in their own ability or skilled to determine outcomes of their efforts (Mc Clelland et al., 1953; Atkinson, 1958; Crandall, 1963).

Internal subjects prefer intermediate risk while external subjects prefer extreme risk depending upon the nature of the task. On a dice throwing task internals prefer intermediate areas of risk and compared to externals they tend to avoid extremely difficult levels of betting (Liverant and Scodel, 1960). Thus, in the case of the external subjects preference for extreme risk is only evident at the difficult end of the risk taking continuum. In dart throwing skill task, internals prefer intermediate risk (Julian and Katz, 1968). In this case the difference between internals and external
subjects was in the external's choice of safe bets. In another study internal subjects were found to take more extreme risk (Levicki and Katz, 1966). In addition, these investigators manipulating the betting situation itself and produced two contexts; a normal betting sequence in which the subject placed his bet before he rolled the dice, and a fate betting sequence in which the subject placed his bet after rolling the dice. Contrary to the expectations the results show that the generalized expectancy concerning locus of control was most salient for risk taking under the normal sequence. These results show that the relationship between locus of control and risk taking is far from clear.

It may be hypothesized that those at the Internal end of the Internal-External locus of control scale would show more overt striving for achievement than those who felt they have little control over their environment. The potential strength of the hypothesized relationship between Internal-External locus of control and achievement is limited to certain conditions. More male college students and adults seem to be more defensive externals (have arrived at external as defense against failure but who were originally highly
Competitive). Further, Internal-External control attitudes are obviously not generalized across the board. Free play achievement behavior is reported to be associated with internal scores among boys but not among girls (Crandall, et al., 1962). Academic achievement is reported to be related to Internal-External locus of control among boys (Cellura, 1963). Significant relationship between Internal-External scores and fifteen variables such as early attempts to investigate college, intention to go to college, amount of time spent doing homework, and parents interest in doing homework have been reported in a study which attempted to predict seventeen relationships between Internal-External scores and a variety of behavior among high school students (Franklin, 1963).

The relationship between striving for achievement and Internal-External control is substantiated in another study on repression among high school students (Efran, 1963). In another academic situation internals have been found to take longer time to decide on a matching standard under skill conditions than did externals and also took a shorter time under chance conditions. (Rotter and Mulry, 1965). The results also show the great involvement of internals under skill conditions. Internals tend to value reinforcements for skill much
more than chance.

Butterfield (1964) Gold (1966) and Minton and Miller (1970), were unable to demonstrate any differential effect of locus of control on risk taking.

A few studies have related confidence and persistence to locus of control.

(1965) Rotter A Mulry and Feather (1967, 1968) found no significant differences in this variable for internal and external subjects. Feather conducted several detailed studies of confidence, analyzing not only initial statements of confidence, but also changes in confidence over time or experience at a task. Only contradictory evidence that can be offered are the findings of Lao (1970) who utilizes subjects from 10 Negro Colleges. In this study the major instrument for assessing locus of control, the Internal-External locus of control scale, was factor analyzed and reduced to three main factors, one of which was the personal control "the degree to which an individual feels he has control over what happens to him". The data indicated that both confidence in finishing college and obtaining higher grades were positively related to personal contrast although the generalization of these data
must be questioned due to the unorthodox usage of this test.

Rotter (1966) suggests that the relationship between achievement motive and belief in internality is probably not linear. The joint status on need achievement and internality belief is supposed to determine the behavior outcome.

Ducette and Wolk (1972) have studied extreme behavior and its relations to locus of control. Extreme risk taking was measured by two questions (educational and occupational risk-taking) and is defined as the selection of either the most safe or risky level possible. Extreme levels of estimation was measured by two questions and are defined as perceived ability to succeed either 20% or less, or 80% and more. Persistence was defined as options of persisting on the problem solving. Externals subjects were more extreme in their behavior than were internals except on physical estimation.

The literature relating persistence in task to locus of control is even more scanty than the one available on relationship between locus of control and other variables. The early literature (Phares, 1957; James and Rotter, 1958; Rotter, Liverant and
Crowne, 1961) was primarily concerned with the chance-skill dimension of the task schedules of reinforcement (full or partly) without utilizing an independent assessment of locus of control. The researches summarised in early literature report that the situational control has differing influences on persistence. Rotter and Mulry (1965), in a more recent study, offer some indirect evidences to link persistence and locus of control. Using decision time as the dependent variable, they found that internals do take longer time to arrive at a decision than externals under a similar condition, while externals value longer time to the task when it is defined as chance related.

Externality and sex are found to be associated with religiosity (Helode and Barlinge, 1984).

Approval motive and locus of control are reported to interact significantly and influence perceptual dependence (Tirpathi and Tirpathi, 1984).

Rao and Vinodha (1984) reports that though sex differences exists in locus of control scores, the relationship of locus of control to the other psychological variable remains the same in both sexes. Externals, in
contrast to internals are relatively anxious, more psychologically morbid, and neurotic; with low need for achievement, more conservative in their attitudes, with low level of academic achievement.

A SET OF STUDIES INTERNAL-EXTERNAL CONTROL AND RESISTANCE TO SUBTLE SUGGESTION:

Typical pattern of relationships between Internal-External control and resistance to subtle suggestion are reported in literature. Significant relationship between locus of control and independence of judgement (Baron, 1953) has been reported in a study (Odell, 1959). Externals in this study showed a greater tendency to conform. The finding just cited receives further support in other studies (Hjelle, 1970; Riechie and Phares, 1969).

Though there has been no overall relationship between conditionability and Internal-External scores, significant differences have been found between those who were aware and did not condition and those who were aware and did condition. The former were considerably more internal than the later (Strickland, 1962). In another study the latent conditioners (subjects who showed no significant evidence of conditioning during
the training trials, but during extinction no reinforce-
ment was given, showed a significant rise in the
reinforced response) were significantly more internal
than those who did not show such latent conditioning
among nonconditioners or who conditioned during the
training trails. (Getter, 1962). Further evidence
shows that internals are more sensitive than externals to
the environmental conditions is found in another
study (Vide and Vogler, 1969).

Another study which required subjects write
stories in response to TAT cards has shown that only
under subtle suggestion the internals produced
significantly shorter stories, suggesting negativistic
reaction to subtle suggestion. The results shows that
when an internal given the conscious choice is not
resistive, but when becomes aware that an attempt is
made to subtly manipulate him, he does become resistive
(Gore, 1962).

That an internal would resist conformity pressures
only when such conformity might be clearly to his
disadvantage has been shown in a study (Crowne and
Liverant, 1963). Though no difference has been found
between Internal and Externals in the amount of yeilding
in a normal Asch conformity situation, significant difference appeared among betting conditions.

The proposition that an external orientation predisposes one to be more sensitive to the reactions or demands of the outside agents especially, those who are in status position receives some support in a few studies (Mac Donald and Hall, 1969; 1971; Ritchie and Phares, 1969). Among non disabled college student rates physical disabilities have more debilitating to themselves personally and socially than do the internals. (Mac Donald and Hall, 1971). Externals are also reported to yield more to the influence attempt by high than low status sources.

The notion that internals will perceive emotional disorders as more humiliating than physical disorders since the former imply a loss of inner control which the internals are presumed to have to a greater extent than externals has received support in a study (Mac Donald and Hall, 1971). Another study suggests that when the acquisition of rewards is made contingent upon relinquishing personal control the internals would rather keep control (Julian and Katz, 1966). In this study in both chance and skill condition, Internals preferred to rely on themselves rather than upon the
relatively more competent other while the externals prefered to rely upon the other person in both condition.

In an experiment, the effect of high and low levels of influence on Internal-External locus of control has been studied using rating of grading procedure (Biondo and Mac Donald, 1971). The results show that externals conform under both levels of influence and the internals seem to be negatively influenced only under high influence. Internals are reported to manifest reactance to low or subtle influence.

A few studies indicate that the external locus of control subject is lacking insight, self-confidence, and social approval and that internals have a tendency to assume control, while externals take on a more passive role (Joe, 1971; Debolt, et al., 1973). It has been shown that the locus of control of subjects affects the quality and quantity of their performance on tasks depending on whether the task is perceived as skilled-determined or chance-determined (Names, 1957; Cohen, 1960; Liverant and Scodel, 1960). Internal locus of control subjects working individually perform better on open-ended or ambiguous tasks and utilize information-processing strategies better than external locus of control subjects.
Another study has shown that the internals were able to perform at a higher level on the convergent tasks than were externals. Externals seem to be more active seekers and users of information on divergent tasks than internals, and males seem to be more flexible than females whether they are working individually or in dyads. (Bolen and Torrance, 1978).

In one study subjects were presented with a series of stories in which the principal characters either acted autonomously or were subjected to varying degrees of coercion (Dechams et al., 1965). The results indicated that as external coercion increased, perceived control has decreased (i.e., the subjects perceived the character less as the 'Origin' of their behavior). Internal subjects generally viewed the characters in the stories as being more internal than did the external subjects. The findings suggest that the internal person who expects his own intentions to have effective relevance to the world around him may assume that this is true of others' intentions as well; and that a more external individual who expects that his intentions will not necessarily influence the situation may make a similar assumption about others' intentions.
In another study subjects were asked to write strong, forceful essay or equivocally in favor of the police side of a student 'riot'. The subject was told that he would be paid the sum of 150, 100, 10, 50 $ if he would be willing to write the essay. The results reveal that the involved students attitude toward the police was consistently perceived as more favourable by subjects with increasing internality of locus of control. It was found that while all three locus of control groups show the expected V-shaped relationship between judged attitude and monetary incentive, internal subjects attributed stronger attitudes to the student described in the essay than intermediate or external subjects. In addition, internal subjects evidenced smaller differences between their control conditions estimates and their estimates across all monetary levels than either of the two Internal-External groups. The results also reveal a relative deemphasis of money as a determining factor by internal subjects (Borden and Handrick, 1974).

One study reports two experiments that tested hypotheses about the relationship between locus of control and perceived choice in decision making. Internals are reported to have perceived much greater choice when the options were positive in valence than
when they were negative but that externals exhibited this tendency to a much lesser degree. Internals would perceive more choice than externals only when the options were positive in valence; when the options were negative, externals perceived more choice than internals. The study further reveals that when asked to choose between options which were either similar, dissimilar, or virtually identical in attractiveness, internals perceived much greater choice when the options were similar in attractiveness than when they were either dissimilar or virtually identical; but the externals exhibited this tendency to a lesser degree. Thus internals are found to perceive greater choice than externals irrespective of similarity in attractiveness (Harvey, et al., 1974).

A positive correlation exists between perceived choice in making a decision and expectancy about feelings of internal control in the situation that would result from the decision, (Haverey and Harres, 1973).

Internals attributions are more affected than externals by whether or not target persons had freedom of choice in taking attitudinally relevant actions (Jones, et al., 1971).
An intervention programme designed to facilitate psychological growth in middle aged women by helping them explore all their options and make a satisfying decision, whether to remain at home or enter the market place has been conducted by an investigator (Mc Vicar and Al Herman, 1983). The findings reveal significant changes in the increase of assertive responses, decrease in discomfort in assertive situations and positive growth in self-actualization. However, no significant changes in internal external locus of control were found in the participants at the end of the programme. The investigator cautions that because of the self selection for the programme, the results cannot necessarily be generalized to all groups of women.

Another study has found that risk taking behaviour varied significantly as a function of situational elements and locus of control (Singh, 1984). Group discussion with or without consensus is reported to produce substantial shifts towards greater risk taking in the 'externals' than 'internals', while consensus without discussion is said to yield an averaging effect.

The differences in perceived locus of control among men and women adults and university students in America and Greece have been studied by administering
Levenson's (1974) multidimensional I-E scale on University students and adults (Malikioifi and Ryekman, 1977). The scores were categorized by sex, country and employment status (job holding adults or students) on each of the three dimensions. The finds show that, there is no significant sex main effects for any of the three I-E dimensions.

INTERNAL LOCUS OF CONTROL AND SEX TYPE ORIENTED BEHAVIOUR

A few studies have focused on the differences between male and female with regard to locus of control. The findings of these studies suggest that systematic differences exist between the sexes.

Adolescent sons and daughters of working mothers are found to be significantly more external than adolescent sons and daughters of non working mothers. Sons of working mothers are significantly more external than the daughters of working mothers (Rama Rao, et al., 1983).

Another study reports that boys and girls did not differ on need for approval. The effects of maternal employment and need for approval were significant
on locus of control. Maternal employment in interaction with sex showed significant effect on locus of control (Parvathi, et al., 1985).

That the differences between the sexes are reflected in the developmental trend has been reported in a study. (Staats, et al., 1974). In this investigation Internal-versus External locus of control for three age groups of male and female were studied on Rotter's I-E scale. The Ss were selected from a non-college population. The findings reveal that in 3 age groups 5 - 15, 16 - 25, 46 - 60 years internal locus of control expectations increase with age; and that a trend for male to be more internal in their beliefs than female also exists with regard to locus of control.

That the locus of control is significantly correlated with dependency proneness and test anxiety among boys, not girls has been reported in a study of adolescents (Upadhyay 1984).

In another study locus of control was compared with traditional college students and non traditional college students. The results reveal non traditional
males were significantly more internal than traditional males. Self control factors, did not differ on the social system control factor; females did not differ on any of the factors (Sadowski, et al., 1978).

In a study, adolescent females with non traditional occupational choices were found to have significantly higher self-esteem and career aspiration scores than those with traditional occupational choices. A significant correlation was also found between self esteem scores and locus of control scores. No significant relationships were found among locus of control, role modeling, and non-traditional occupational choice, or locus of control, role modeling and career aspiration scores in the population studied (Wesson, 1983).

Locus of control is also reported to be related to sex orientation among Indian college students (Rao and Murthy, 1984). Individuals with feminine sex role identity are reported to be external and individuals with masculine sex role identity are found to be internal. Androgynous individuals are found to be most internal among the four sex role orientations based on gender and sex. Further, females show more externality than males and sex role orientation has differing effects on locus of control depending on the sex's of the
individuals. Locus of control has not been found to correlate with sex role identity among tribals in another study (Jai Prakash, 1984). The same study reports that tribals are less internally oriented compared to non tribals.

SUMMARY AND CONCLUSION:

This chapter has reviewed the various studies relating to locus of control with reference to certain patterns of behaviour which bear similarity to the conditions of house-wives, career women and women entrepreneurs. The social setting of these groups provides forces that pull or push them to one vocation environment or the other. Career and entrepreneurship require achievement motivation. The vocational choice of individuals are mediated by subtle suggestions received from parents peer groups and society at large. Sex typing seems to play a crucial role that discourage or encourage the individuals to shun or join a particular vocational group. The literature available on the behaviour pattern influenced by the internal External locus of control are suggestive of trends to predict the Internal-External locus of control orientation of housewives, career women and women entrepreneurs. Specific hypotheses have been developed to be tested in this investigation.
RESEARCH QUESTIONS AND HYPOTHESES:

1.1.1. Will there be significant difference between Housewives and career women on I scale of the Internal-External locus of control.

1.1.2. Will there be significant difference between housewives and women entrepreneurs on I scale of the Internal-External locus of control.

1.2.1. Will there be significant difference between housewives and career women on P scale of the Internal-External locus of control.

1.2.2. Will there be significant difference between housewives and women entrepreneurs on P scale of the Internal-External locus of control.

1.3.1. Will there be significant difference between housewives and career women on 'C' scale of the Internal-External locus of control.
1.3.2. Will there be significant difference between housewives and women entrepreneur on 'C' scale on Internal-External locus of control.

The persistent observation that increments and decrements in expectancies following reinforcement appear to vary systematically, depending on the nature of the situation and also as a consistent characteristic of the particular person who was being reinforced as led to profound the concept of internal versus external control of reinforcement in his social learning theory (Rotter, 1954; 1966; Rotter, Chance and Phares, 1972; further Rotter, 1975). Rotter contends that the nature of the reinforcement itself, whether positive or negative, the past history, sequence, and patterning of such reinforcements, and the value attached to the reinforcement are obviously important and probably more crucial determinants of behaviour.

Rotter defines the concept of Internal-External control as follows:

When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent
upon his action, then, in our culture, it is typically, perceived as the result of luck, chance fate, as under the control of powerful others, or as unpredictable because of the great complexity of the forces surrounding him. When the event is interpreted in this way by an individual, we have labeled this as a belief in external control. If the person perceives that the event is contingent upon his own behaviour or his own relatively permanent characteristics, we have termed this as a belief in internal control (Rotter, 1966, P.1.).

The various studies reviewed in the previous section suggest that internals strive to have control over themselves and the environment, strive for achievement, take moderate risk, resist pressures for conformity under subtle suggestion, seem to have insight, self confidence and take more active role, and are androgynous, to mention only a few of the significant attributes associated with internal locus of control. The house-wives, the career-women and the women entrepreneur have varying degrees of attributes that
are associated with internal locus of control. It could be reasoned that the roles of housewives, the career women and women entrepreneurs may be dispersed on a continuum extending from external to internal locus of control. Housewives might assume a place at the external side of the continuum while the women entrepreneurs might assume position in the other extreme end of the continuum: the career women might occupy a position that is intermediate between the housewives and the women entrepreneurs. This contention receives further support when one analyzes the social milieu and the culture existing in Southern Indian families. In the home little scope is provided for a housewife to take decisions on many of the issues. In the life of a typical Hindu South Indian home father is considered as the head of the family and the tradition has it that the elders, especially the father or the eldest male in the family will have the last say on any matter. When a woman emancipates from the traditional ties of the house maker role and goes far career, a few privileges are conferred on her. The education, the economic independence and the recognition of working class sub-culture provides her an opportunity that reinforces the belief that she can exercise control over events to a large extent. When a woman turns to be an entrepreneur in Southern Indian culture she may be considered
to have divorced herself from the clutches of the tradition and the consequent constraints attached to being a woman. The entrepreneurial success, the social interactions and interactions with other industrialists, Government and other agencies contribute to a belief on the part of the women entrepreneur that she could be the master of the events and she could influence the events to a greater extent. This is especially so with entrepreneurs with personality characteristics that uniquely determine individual characteristics as entrepreneurs. The profile of the three women just described are amply confirmed with review of the studies on housewives, career women and women entrepreneurs in the previous section. In view of the above consideration the following hypotheses are formed with regard to predicting the position of Housewives, Career Women and Women Entrepreneurs on the continuum of Internal-External locus of control as assessed by the Internal-External locus of control scale (Venkatapathy, 1983).

1.1.1. The Housewives will score lower than the Career Women on the I-scale of the Internal-External locus of control inventory.
1.1.2. The Housewives will score lower than the Women Entrepreneurs on the I-scale of the I-E locus of control Inventory.

1.2.1. The House wives will score higher than the Career Women on the 'P' scale of the I-E locus of control inventory.

1.2.2. The House wives will score higher on the than the Women Entrepreneurs/'P' scale of the I-E locus of control inventory.

1.3.1. The House-Wives will score higher than the Career Women on the 'C' scale of the I-E locus of control inventory.

1.3.2. The House-Wives will score higher on the than the Women Entrepreneurs/'C' scale of the I-E locus of control inventory.