

## SUCCESSFUL AGING: A MODEL OF PERSON- ENVIRONMENT COMPATIBILITY

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### **Abstract**

The process of successful aging is differentially understood by researchers as well as by individuals of old age and by individuals who are directly and indirectly related to the care of the aged population. The theories of aging range from analyzing the psycho-physiological processes of the aged to understanding and arranging an age friendly environment. The explanatory status of these theories differs as no theory give equal importance to person and environmental processes. Successful aging is contingent upon an interaction between the person and the environmental characteristics. The person and environment interaction varies from minimum utility interaction to maximum utility interaction. And the maximum utility interaction is consequent to the compatibility between person and environmental characteristics. The model of successful aging suggested attempts to explain how compatibility achieved between person and environmental characteristics contribute to successful aging. A one-to-one compatibility between individual's socio-psychological and physiological processes and the characteristics endowed with the environment is to result in successful aging whereas other forms of interaction result in unsuccessful aging. The compatibility between individual and environmental characteristics is further influenced by the primary and secondary control processes exercised by the individual.

Aging is a natural process but unlike other natural progressions, this process is involuntarily made into one of agonizing, fearful and punishing by many. Even though no one can reverse the process of aging, one can have better control and dominion over this drifting activity of the nature or the inevitable end of human lives. It is in this context of controlling and

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ameliorating the ill-effects associated with aging, one thinks of the science of aging or the psychology of aging. Aging has always been associated with negative stereotypes of frailty, senility, incompetency, dependency, depressive, lonely and dirty (Cheng and Heller, 2009). But the advances made in the science of aging have gone a long way in disproving these notions which is a legacy of the unscientific and ephemeral approach to old age of human lives. While population characteristics remain unchanged or uncontrollable (or with moderate improvements), a scientific study of the aging process can mitigate the negative effects associated with biological, psychological and social mechanisms.

### THE DEFINITION OF SUCCESSFUL AGING

The term successful aging has been increasingly used since the 1950's to pinpoint the conditions and processes leading to a healthy and contented old-age life (Franklin and Tate, 2009). It was in opposition to the usual focus on the "four Ds"(disease, disability, dementia and death) that the concept of successful aging was introduced by Rowe and Kahn and thereby separating the effects of disease from the aging process itself (Strawbridge, et al, 1996). Rowe and Kahn (1987; 1998) made a popular distinction between usual and successful aging as non-pathological states while keeping diseased aging also as a process observed in the population frequently. Thus there is the need to study the aging process and the identification of the factors responsible for these different phenomena would shed light on the process of aging.

Researchers divide studies on successful aging into two divisions of clinical and psychosocial (Tate, et al, 2003). Clinical studies go by the biological standards of functioning whereas psycho-social researchers explore the pattern of adjustment the old makes in interpersonal and social settings.

However, researchers still maintain some confusion in the definition of Successful aging as it cannot be one of absolute rather than relative. It means that in the broader term of normality, the diseased aging can also be included as aging is very much entwined with diseases. With the advances in studies and life, researchers began to divide the population into normal aging and diseased aging (Schulz and Heckhausen, 1996) and researchers further differentiated normal into usual with non-pathologic age-associated changes and successful with no loss in function relative to their young counterparts (Schulz and Heckhausen, 1996).

Schulz and Heckhausen (1996) have suggested three different types of standards to assess performance of aged in a domain of choice. Accordingly an absolute standard can be set that defines the upper limit of performance, an inter-individual relative standard based on a membership in a reference group (for example athletes) and an intra-individual relative standard based on the performance history of the individual. It means that performance standards can be set for specific functions at the biological (clinical) and socio-psychological levels. Moreover a summary measure may indicate the overall performance/satisfaction/wellness of the individual. For example a summary measure of biological and psycho-social processes may be arrived at using the equation:

$$\frac{\text{Psycho-social processes} + \text{biological processes}}{100}$$

100

which may put the individual with a score between 0 to 1.

Notwithstanding the specific or global measures, researchers still do not agree on a common term for so-called healthy-aging: “healthy aging”, “aging well”, “productive aging” (Strawbridge, 1996), “positive aging”, “happy aging”, “peaceful aging”, etc., are used by researchers umpteen times even though the underlying concept remains the same, that is an aging process with minimum negative effects and maximum positive effects (note the criterion problem again enters the definition).

In order to overcome these definitional problems, it may be pointed out that researchers now generally agree that the success of aging is to be in relation to the environment where the old happens to be or chooses to be. The concept of person-environment fit is becoming very prominent in gerontological theory (Ranzijn, 2002). The dynamic interaction between the individual and the environment becomes the underlying and the most significant variable that influences the success of the aging process or that influences the positive or negative aging of the individual.

Further, the pattern of interaction can be understood by delineating the quality of the environment and the individual’s own psycho-physiological processes. The environmental quality can be rich or poor, an environment that maximally stimulates the person by the objects placed or by the opportunities provided is rich and the environment that minimally stimulates is poor.

The second variable that leads to successful aging is the individual's own psycho-physiological processes and the functioning of these processes can be healthy or unhealthy.

The plotting of these variables yields four groups of old age individuals who age differentially consequent to the person-environment interaction Fig.1.

Healthy <b>Psycho-physiological Processes</b> Unhealthy	Unsuccessful Aging - Environment deprived	Successful Aging
	Diseased Aging	Unsuccessful Aging- Health deprived
	Poor	Rich
	<b>Environmental Quality</b>	

Fig.1. The Differential Aging Process

The confusion that arises in the definition of successful aging and the use of related terms that use different criteria to study the aging process is resolved here as the nature of the aging process can be understood in relation to person-environment interaction.

**THEORITICAL BACKGROUND OF THE STUDY: GENERAL THEORIES AND THEORETICAL PROPOSITIONS OF AGING**

Theories and propositions of aging enunciate the variables that differentially influence the aging process besides deciphering the relations among the variables. As there are different theories that explain and emphasise the different variables, one can have different interpretations not only at the theoretical level but also at the actual level. Thus the theories and propositions enunciate the differential aging process in a differential way.

Positive functioning theory

Ryff (1982) in an integrative view of aging process contends that it can be one marked by positive functioning of the mind. The self-related positive functioning comes to prevail in aging when the individual shows self-acceptance, positive relations with others, autonomy, environmental mastery, meaning and purpose of life and personal growth tendencies. According to this theory, successful aging is possible for individuals who have remarkable resilience and individuals who show extraordinary characteristics in their lives. This theory sidelines the fact that onset of aging is painful that cannot be overcome single-handedly.

#### Personality process and aging

Personality processes differ among individuals and personality type has been found to be a predictor of successful aging. Personality constructs found to be useful in the prediction of successful aging include locus of control, self-efficacy, achievement motivation, and emotional dispositions.

#### Cognitive theory of aging

The predominant variable that determines successful aging is the nature and pattern of cognitive processes. The quality of perception, the way the situations are perceived and the way the self is perceived affects the quality of the aged life (Thomae, 1970). Hans Thomae (1970) states that the aging person's dominant concerns, expectations and motivational systems affect the quality of perception.

#### Disengagement theory

Postulated by Cumming and Henry (1961) this theory suggests disengagement with the world rather than engagement with the world to be happy and satisfying in old age. When one divests oneself from all previously held roles and seeks a life that is detached from the maddening tendencies of the youthful life aging becomes successful.

#### Developmental theory

Schulz and Heckhausen (1996) state that aging process is just a stage in the life-span development of an individual. Unlike other developmental stages, one seldom finds an increased spurt in mental/physical activity and that the criteria used to evaluate the performance are controversial and not above subjective considerations. The relativism that is constantly involved in determining the performance standards are overlooked. In accordance with the developmental life span, individuals are to choose tasks to lead to goal attainment and performance satisfaction.

And individuals who fail in their tasks are to have compensatory activities and the more the compensatory or remediation activities the more chances of successful aging. Further successful aging includes the development and maintenance of primary and secondary controls, the former pertaining to the control over environment and the latter denoting the control over the self. The motivation to engage in primary and secondary control differs among individuals.

#### Activity theory

In activity theory Lemon, et al, (1972) proposes that an activity-filled old age is critical to a contented and happy one. It is the activity rather than the passivity that rules the game. Engaging the old age with activities bring in vibrancy and variety to an otherwise monotonous life.

#### The reversal-process theory

Successful aging involves reversing the gradual deterioration of the physiological and psychological functions that are very much characteristic of old age. Even though reversal is suggested as the key to successful aging, mechanisms of reversal are costly, difficult, time consuming and it requires large social and environmental support.

#### Renewable theory of aging

Similar to the reversal-process theory, renewable theory advocates reinvigoration and reactivation of the decaying psycho-physiological processes of the individual. In contrast to the reversal-process theory, it does not boast of a total reversal of the decaying process. In other words this theory states that use and greater use rather than disuse prevents early or sudden decay of the psycho-physiological processes. What is renewable is not limited to the psycho-physiological processes, but the theory states that even renewal of socio-cultural relations is a great antidote to unsuccessful aging.

#### Life-style theory of successful aging

In the version of this theory, it is the enactment of adaptive and adjustive patterns of life styles that result in a successful aging. Individuals who follow maladaptive life styles all throughout their lives tend to use the same style and may encounter insurmountable problems in their old age. An individual with a rich repertoire of adaptive and adjustive skills show greater variability and is in a position to lead a satisfying life in complex and unfriendly environments.

#### Gerotranscendence

According to Tornstam (1989) age-related transcendence takes place at three levels of ontological change:(1) cosmic level (perception of time, space and objects, inducing mystery into life and search for the supernatural), (2) rediscovery of self-related processes that transcends the mundane, (3) social and individual relations (transcendence of casual and surface relations, deepening self-awareness and an increased need for solitude and reflection).

The theories outlined above can be greatly understood in terms of its emphasis on psycho-physiological processes and/or the importance it gives to environmental processes in the explanation of successful aging. That is theories *moving towards* the individual processes of psychological and physiological nature and *moving away* from the same processes. Alternatively theories *moving towards* the environmental processes and *moving away* from the environmental processes in the explanation of successful aging. These mutually exclusive approaches do not explain the entire gerodynamic processes. Instead a better explanation of successful aging rests with mutual inclusiveness where the individual processes and environmental processes are given equal importance. The explanatory status of these theories can be found in the Fig.2.

High  Emphasis on Psycho- physiologi- cal Processes	About 50%	Above 75%
	Below 25%	About 50%
Low	Low Engagement with the environment High	

Fig.2. The Explanatory Status of Different Theories

### A MODEL OF SUCCESSFUL AGING

The significance and application of person-environment fit is increasingly becoming prominent and noteworthy in the theory and practice of gerontology (Ranzijn, 2002). The discipline of environmental gerontology in its multi-disciplinary conceptualization focuses

attention on the relation between older persons and their environment and it underscores the fact that the different attributes and demands of the environment have a significant influence on the quality of life of the aged (Lui, et al, 2009; Lawton, 1991). As older persons are quite vulnerable to the environmental processes (Cheng and Heller, 2009), the person-environment fit model is to elaborate on the nature of interaction between person and the environment. The dynamic interaction between the individual and the environment can be interpreted in relation to the variables of environmental richness or the quality of the environment and the behavioral processes.

The interaction between the environment and the individual can be explained in terms of the input received/given, that is the amount of input received/given determines the nature of interaction. Accordingly four levels of interaction may be identified: the input received is above 75%, above 50%, above 25%, and below 25%. The amount of input received is to be determined in relation to the output generated. For example if the old aged wants help from others to move from one place to another, it can be said that the input received from the environment is above 75%. The consideration of inputs-outputs explains the nature or the pattern of interaction that takes place between the person and the environment.

In Bronfenbrenner's (1989) conceptualization, the environment implies the immediate physical surroundings, social environment (family, friends and acquaintances and the wider community of interaction), the political environment, the economic and legal environment and the local and the global cultural contexts. The modern changing environment is further characterized by technology, irreligious practices and developments in educational and knowledge areas.

The environmental attributes may be further characterized in terms of the extent of its influence on the behavior that is molar attributes and molecular attributes. Molar attributes of the environment like the political system of the country exercise a broad and general influence whereas molecular attributes directly influence the behavior of the individual like the increased cost of living.

The physical environment is to be characterized by space, furnishing, decoration, easeness of movements, facilities, arrangements, artistic appeal, hygiene aspects and quality of



land, air, water and space, outdoor space, transportation and communication facilities, natural settings and mobility (Lui, et al, 2009).

The components of social environment include family members and relatives, neighborhood, community life, religious practices and festivals, exposure to media, cultural and other social activities, participation in social functions and group meetings. In other words exposure to people and their behavior constitute the social environment.

Similarly other aspects of the environment like political processes, legal processes, technological processes, educational processes and cultural processes also exert its respective influence in direct and indirect ways. Culture has significance in as much as it entails the attitude of the society towards elderly, belief in life after death, the theological and philosophical views of God and life and the consumption pattern of the society.

Behavior, that is overt and covert, is a function of the interaction between the person and the environment. A person never behaves in a vacuum. The observable and the unobservable behavior is always an output of the interaction that takes place between the situation and the person, that is the situational attributes and the person processes produce the behavior which is in response to an internal and external stimuli (Ranzijn, 2002).

The nature of the interaction between the person and the environment can be further understood by plotting the person and the environment variable as shown in the Figure 3. Following the dichotomous classification scheme of the variable, the nature of the environment can be classified as either favourable or unfavourable and the nature of the person can be indicated as “negative” or “positive”. A favorable environment is one that fits the aged person in such a manner that facilitates a happy, adaptive and high quality life. An unfavorable environment is one that does not fit the requirements of the person or that it does not have adequate facilities to lead a happy old age life.

A negative person (personality) is characterized by negative dispositions, low adaptation and adjustment with the environment. On the other hand a positive person (personality) is characterized by positive dispositions, high adaptation, and adjustment with the environment.

Favourable  <b>Nature of the Environment</b>	Person-directed Negative Interaction	Maximum Utility Interaction
	Minimum Utility Interaction	Person-directed Positive Interaction
Unfavourable		
<b>Negative</b>		<b>Positive</b>
<b>Person Processes</b>		

Fig.3. Person-Environment Interaction

As the figure, Figure 3 indicates four forms of interaction can be identified: Maximum utility interaction, Person-directed positive interaction, Minimum utility interaction, and Person-directed negative interaction. And the extent of successful aging differs across the four forms of interaction depending upon the environmental attributes and the person orientation.

In maximum utility interaction the individuals come to experience successful aging as the environment is highly conducive to a positive living with rich features and the individual has a high positive, optimistic orientation to life. The interaction that ensues turns out to be a highly utilitarian one and there is the highest degree of fit between the individual characteristics and the environmental processes.

In the moderate utility person-directed positive interaction, there exists the second level of successful aging as the deprived environment is compensated by the positive orientation of the individual. As it is well-known, one of the yardsticks of the measurement of successful aging is the subjective experiences of the individual and in this form of interaction much of the inadequacies of the environment are done away with by the positive view that the individual exercises. As observed by Ranzijn (2002) the fitness of the environment is dependent upon the

perception of the individual. In this form of interaction the deprivation of the environment is glossed over so as to minimize the friction consequent to the negative environmental factors.

The third level of successful aging in the interaction between the environment and the person is moderate utility person-directed negative interaction. What makes it the third level of successful aging is the favourableness embedded in the environment. The positive qualities of the environment add charm to old age even when the person thinks otherwise. The negative characteristic of the individual make old age living somewhat less appealing because within the individual there always take place negative evaluations.

And the last form of successful aging is the minimum utility interaction. The high deprivation of the environment and the person makes the aging process the least successful one within this framework. The negative environment and the negative orientation of the individual enter into a state where the old age becomes unsuccessful. It can be characterized by a self-perpetuating cycle that negative personality orientation feeds on unfavourable environment and the same contributes to the activation of negative personality.

The general model of aging as shown in Fig.4 implies the match required between the person and the environment for successful aging. The well-known equation of behavior states that behavior is a function of the person and the environment. The pattern of stimulus-response mechanisms result in the generation of behavioral systems constituted by overt and covert processes. Aging process becomes successful or unsuccessful depending upon the compatibility or incompatibility. A compatible person-environment relation results in successful aging and an incompatible person-environment relation results in unsuccessful aging.

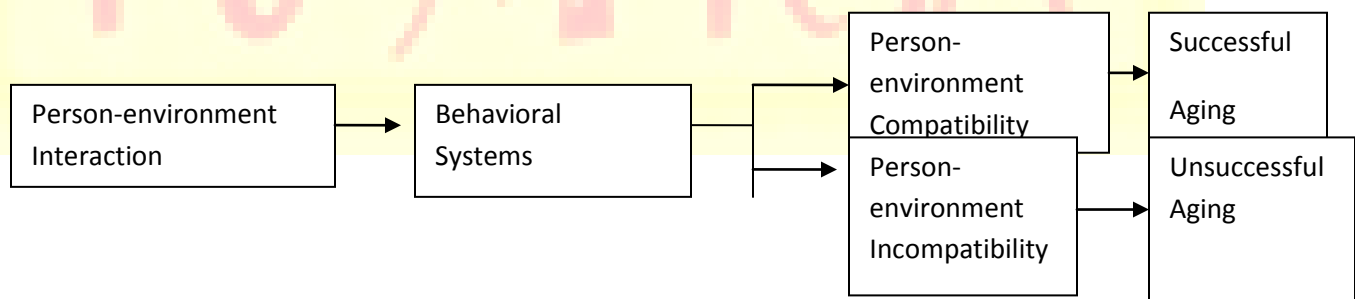


Fig.4. Person-Environment Compatibility and the Aging Process

Person-environment compatibility can be considered at general and specific levels. General compatibility can be considered as one of a general personality make-up and a general environmental arrangement. In comparison to the person-environment interaction explained above, the difference is that compatibility is a given here, whether it is at the general or specific level. Person-environment interaction is to be considered as a process whereas compatibility is a passive state of being.

Further, compatibility is to be explained at different person and environmental characteristics. As differentiated above generalized compatibility pertains to an overall fit whereas specific compatibility implies matching components at different levels which are explained below.

**Physical compatibility:** It is the compatibility that exists at physical level of space, mobility, facilities, arrangements, clean and spacious rooms, outdoor spaces, transportation facilities and facilities for entertainment and playing. An individual who desires to have these arrangements and when provided with these come to enjoy his old age life.

**Social compatibility:** It implies that the social needs of the individual are to be matched by an environment that fulfills those same needs. An extroverted individual prefers talking to others and he/ she wants to get afflicted with social groups and social gatherings. And when the environment offers such opportunities, there exists social compatibility.

**Emotional compatibility:** Individuals differ in their emotional needs such that the need for affection, gregariousness, belongingness and self-recognition are predominant in some. Emotional needs can be either at the relational level or at the personal growth level. The predominance of these needs and their activation results in behaviors that seek to derive satisfactions. The environment that provides satisfaction of these emotional needs can be said to be emotionally compatible.

**Intellectual compatibility:** The intellectual level of the old age individuals is to be matched by an environment that offers stimulating and enriching experiences. The individual differences observed are to be reflected in the environment and that environment can be characterized as intellectually rich or poor. For individuals with superior intelligence, the

environment must have enriching facilities like reading materials, audio-visual programmes and also there must be opportunities for dialogues and discussions.

**Religious and spiritual compatibility:** Old age is the period individuals start seriously thinking about life after death and religious and spiritual teachings of enlightened individuals is a source of solace for them. If individuals are provided with an environment that is incompatible with their religion and spiritual views it is going to be a success factor of aging. On the other hand, an environment that is incompatible with their religion may lead to conflict and confusion.

**Recreational compatibility:** Individuals show wide variations in their recreational or entertainment preferences. Recreation is a source of joy and time pass and individuals of old age choose their mode of recreation based on their past records, taste and preferences. Unfamiliar modes of entertainment do not provide any source of satisfaction and individuals show resistance to it. As recreation is a simple and easy way of making old age happy, compatibility is to be ensured at all costs.

**Health compatibility:** Biological processes and capabilities are to significantly influence the joy and peace of old age people. Relative good physical health is a blessing in old age and in keeping with the state of health, environment is to be modified and arranged. Individuals with relatively poor health must have an environment that has good medical and caring facilities.

The predictive capacity of the model is derived from the profiling of the individual's psycho-physiological processes and the environmental characteristics. The active individual processes are to be compatible with the attributes of the environment in its operational processes. In other words there should be a one-to one correspondence between the individual processes and the environmental attributes. For example an individual with high social need should live in an environment where there are enough opportunities for meeting those needs. And an individual with weak psycho-physiological processes should live in an environment where there are very good health-care facilities.

The extent of successful aging is thus dependent on the extent of compatibility achieved on different dimensions of individual processes and environmental attributes. Above 75% compatibility in core dimensions leads to above 75% level of successful aging and below 25% compatibility leads to low level of successful aging. This is shown in the Figure 5 a & b

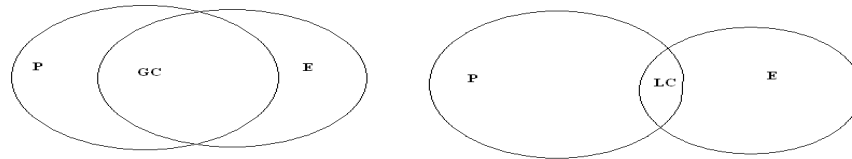


Fig.5a & 5b. Differential Compatibility between Person and Environment.  
P=Person, E=Environment, GC=Greater Compatibility, LC= Lesser Compatibility.

## PRIMARY AND SECONDARY CONTROL PROCESSES AND SUCCESSFUL AGING

The general model of successful aging suggested portrays the general variables that are operative in influencing the aging process in the context of person-environment compatibility. In accordance with the model successful aging is contingent on the compatibility that is to exist between the person and the environmental characteristics.

Over and above the direct influence of the person-environment compatibility, researchers have identified specific individual mechanisms that are responsible for productive and happy aging.

Control, according to Weisz (1986) is causing something, an intended event, real, that is control is exercising a behavior so as to cause an event real. In the definition of Burger (1989) control is the perceived ability to cause or change events and here control is conceptualized as an internal process ability.

The control theory approaches behavior in a flexible and non-mechanical manner so much so that it tracks the internal processes of the individual (Lords and Hanges, 1987) and the feedback theory of control does just that. According to this theory individuals act to control the behavior that is not in sync with certain reference values. Carver and Scheier (1990) in their exposition of the feedback control model based on the views of Powers (1973, cited by Carver and Scheier, 1990) brings forward its utility in the explanation of behavioral processes. Upon

perception of the quality of the behavior, which is termed the input in the feedback-control model, individuals initiate behavior to correct the discrepancies when compared to the reference standards and this is termed the output function. Carver and Scheier (1990) speak of a hierarchical organization of the three levels of control which further explains the derivation and modification of reference values. At the highest level is the idealized self or the idealized sense of a relationship or the idealized sense of a society. In the next level of principles, the reference values take shape that guide the behavior of the individuals. In the next lower level of organization, called programs and sequences, behaviors take shape and the discrepancies noted are sent as feedback to the first level. In control terms, individuals have the potentiality to adjust their behavior when it differs from their conscious/unconscious standards. This is one aspect of the control potential that differs among individuals.

Rothbaum, et al (1982) conceived control as a two process construct. “Attempts to change the world so that it fits the self’s needs” is the exercise of primary control and “attempts to fit in with the world and to “flow with the current” is the exercise of secondary control (Rothbaum, et al (1982). In the life span theory of development, researchers differentiate between primary control and secondary control. According to Schulz and Heckhausen (1996), primary control implies “engaging and impact(ing) the environments and secondary control involves “attempts to achieve changes directly within the individual”. The construct of secondary control has been differentially studied, understood and operationalised (Morling and Evereed, 2006) such that there is no unanimity among researchers as to its nature and dynamics. Morling and Evereed (2006) in an extensive review and revision of the construct state that secondary control is studied in four different ways: in the service of person-environment fit, in the service of a motivation to control the environment, secondary control as a disposition and as a coping strategy.

However, for the purpose of this study, it is reasonable to go by the definitions of Schulz and Heckhausen (1996) and in the light of recent refinements, primary control is to be studied as the process in which self as the agent exerts efforts on the external environment so as to have what Rothbaum et al (1982) call objective control and secondary control is to be understood as the process in which self as the source and agent exerts efforts on the internal processes of the individual so as to have cognitive, emotional, motivational and dispositional control over the

internal environment of the person. These control processes aim at correcting the discrepancies in comparison to the reference standards established by the individual. The primary control reference standards are with reference to the external environment and secondary control standards are with reference to the internal processes of the individual. Primary and secondary control becomes operational in relation to person-environment interaction and more specifically in relation to attaining compatibility between the person- environment characteristics. Primary control “enables individuals to explore and shape their environment to fit their particular needs and optimize their developmental potential”(Schulz and Heckhausen,1996) which is in relation to bringing about behavioral- outcome contingencies and outcome-outcome contingencies whereas secondary control is directed towards sensitizing and activating the processes that give the individual control over the internal processes of cognition, motivation, emotion and personality (Baltes and Baltes,1990;Brandtstaedter et al, 1993; Skinner and Wellborn, 1994, all cited by Skinner, 1996). Further secondary control constructs have also been conceived to be an alternative route to traditional general control processes of behavior.

A number of control constructs and control-related constructs are freely used by researchers (e.g. Skinner, 1996) in their explanation, prediction and control of general and old-age behavior. The goal setting processes, self-efficacy, locus of control and cognitive control are the related primary and secondary control constructs used in the study.

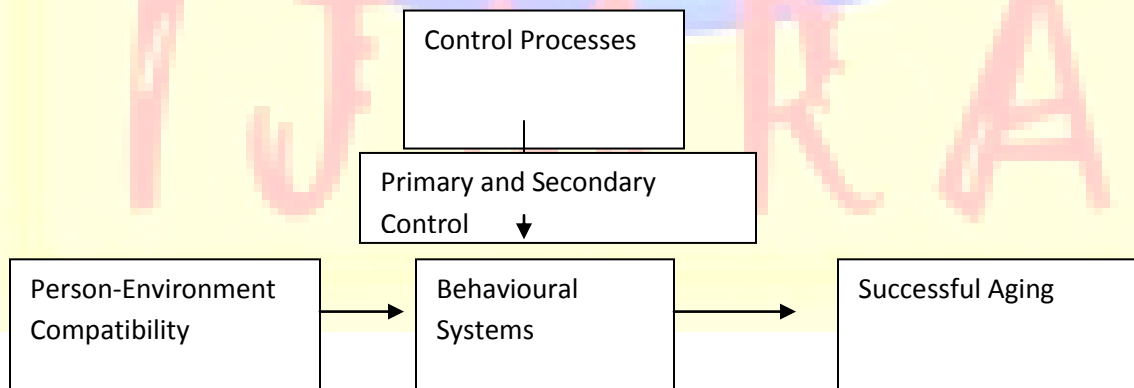


Fig.6. The Control Process Model of Successful Aging



Cognitive control strategies as defined by Burger (1989) involves reinterpreting events in a way that allows them to believe they have more or less control than before and by Averill (1973) it is the way in which an event is interpreted, appraised or incorporated into a cognitive plan. As elaborated by Shultz and Heckhausen (1996), control is understood in terms of cognitive processes localized within the individual. Through the mechanism of secondary control, changes are brought about within the individual so as to reorient the perceptual and cognitive processes. The within-individual- subjective changes in the cognitive arena are to be linked to cognitive processes in accordance with the conceptualization of Schulz and Heckhausen (1996) and an important cognitive construct related with the process of secondary control is cognitive schema. Schemata are cognitive structures representing the “ how-to” and how the environment operates. Schemata are subjective and informal theories about objects, events and happenings (Fiske, 2000). Both self-generated and second-hand schemata (Fiske, 2000) are used by individuals in their interactions with the environment. The presence of these structures which are abstractions derived from instances make life easier and smooth compared to the state where there is no schema. The operation of schema enables greater control over the environment such that when a person does a task the encoded information and knowledge become easily accessible to the individual and the enactment of the task is better accomplished. Some of the relevant schemata, which are modifications of the schemata carried forward from the adult stage of life are with respect to social life, physical activities, recreation activities, spiritual activities, etc.

The primary and secondary control processes can be better understood in relation to the goal-setting of individuals. Goals are important in life as goals provide directionality to life and that goals are set to satisfy the emotions and desires (Luthans, 1995). Individuals’ goals change as they age (Rapkins and Fischer, 1992) or more specifically at each stage of development the goals keep changing. Goals of different types occur at the physiological, social, and psychological levels. It can be stated that regardless of the nature, old-age specific goals are to be related to the processes of primary and secondary control processes as individuals set goals in relation to the external environment and internal processes. External goals involve accomplishment of specific outcomes like money or status and internal goals involve feelings of mastery or competence.

Locke's theory of goal setting states that goals infuse a directional nature to individual's behavior and the thoughts and actions are guided to one outcome rather than to another (Luthans, 1995). Goal directed behaviors are essentially grounded at the combinatorial function of individual tendencies, feasibility of goal realization indicated by the environment (Mathews, 2008) and the outcome value (Dickinson and Balleine, 1994). Goal setting provides a sort of direction and control to individuals such that individuals continually engage in goal-related behaviors. The core processes of goal setting involve developing a full goal commitment to the task.

Self-efficacy beliefs provide another route to control. It is an individual's belief that he has the capabilities to carry out an action and also it is the belief that by one's action, a desired outcome can be brought about (Hall, et al, 1998). Individuals can be differentiated on the basis of their high self-efficacy and low self-efficacy. Individuals with high self-efficacy show greater control over their behaviors, thereby they are capable of producing many behavioral outcomes. An efficacy expectation points to the capability belief that necessary behaviors can be enacted (Mathews, 2008) and that perceived self-efficacy show enhanced performance attainments (Bandura and Locke, 2003).

Locus of control implies the generalized expectancy of externality and internality. External locus of control individuals attributes the behavioral outcomes to unstable factors like chance, luck, etc. and individuals with internal locus of control attribute the behavioral outcomes to internal stable factors of ability and effort. Individuals with internal locus of control exercise a greater sense of control over their behavioral outcomes.

Primary and secondary control processes thus influence the person-compatibility processes from the external perspective and from the internal perspective. In the external perspective, the individual initiates action to bring about desired changes in accordance with the standard established and in the internal perspective the self is adjusted at the cognitive, motivational and personality processes so as to be compatible with the environment.

### Conclusions

The extent of successful aging is contingent upon the compatibility between person and environmental characteristics which otherwise implies that incompatible person and environment interaction results in painful and tearful aging. One should not think that compatibility is a rather

mechanistic process. Instead compatibility is to be a vibrant, organic and creative process. Person- environment compatibility does not mean a mechanical arrangement of environment in accordance with the person characteristics. In the creative conceptualization of person-environment compatibility, the basic and fundamental processes of the individual are carried forward and that is addressed to in the developmental process of aging. The complex, linear and non-linear interaction in a compatible person-environment setting is to be the underlying theme of successful aging. It is in this context that successful aging is addressed to and treated with.

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