



Human Eco-systems in relation to Cognition based Self Determination in Individuals with Intellectual Disability

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Abstract

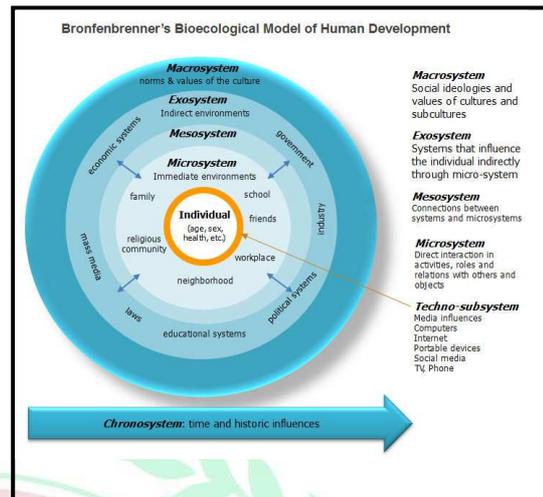
Intelligence and intellect as explained by Gilbert Ryle (1995) has adjectives like –clever, sensible, careful, methodical, inventive, prudent, acute, logical, witty, observant, critical, experimental, quick-witted, cunning, wise, judicious and scrupulous. With retardation or disability to this effect or ability of a person is described as deficiency or efficiency in intelligence. This deficiency entails an individual to be described as stupid or else by more determinate epithets such as dull, silly, careless, rash, dense, illogical, humour-less, slow, simple, unwise and injudicious. Both, philosopher and laymen tend to treat intellectual operations as the core mental conduct, that is to say, they tend to define all other mental conduct concepts in terms of concepts of cognition. They suppose that the primary exercise of mind consists of finding answers to questions and that their other occupations are merely operations of considered truths or even regrettable distractions from their consideration. On exercising intelligence, it is explained further that, while considering one's abilities and propensities on which his performance is actualized, the concept of practice comes to rescue as his performance was pre disposed to his capacity for rigorous practice that lay the superiority of men over animals. How the systems of human ecological conditions affect this phenomenon of cognizance development in individuals for determining their "self" is assessed in this article. Special consideration is paid on cognition development and factors leading to intellectual disability vis-a-vis mental retardation as discussed in the light of important findings of stalwarts in the field.

Key Words: *Self determination; Human ecosystem; Intellectual disability; Cognition.*

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Intelligence:

Speaking about one's mental activity of knowing how and knowing that, Ryle (1965) explained that when a person is described by one or other of the intelligence epithets such as shrewd or silly, prudent or imprudent, the description imputes to him not the knowledge, or ignorance of this or that truth, but the ability or inability to do certain sorts of things may be learning or reading. On intelligent capacities versus habits, it is explained that the ability to apply rules is the product of practice.

It is therefore tempting to argue that competence and skills are just habits. Habits are one sort not the only sort of second nature. In doing by habit one does it without having to mind what he is doing. He does not exercise care, vigilance or criticism. One built up habits by drill, but he build up intelligent capacities by training. Drill (conditioning) consists of imposition or repetition.

Intellectual Disability:

Intellectual disability (ID), consciously denoting mental retardation (MR) in its diagnosis reflects the social characteristics of the disability to reduce the reliance upon

Intelligence Quotient (IQ) scores and decrease the number of false positives (Herber 1959). It is also a skill deficit trait that denote adoptive behavioral, conceptual, social and practical functioning of individual i.e. limitations in functioning of skill and intelligence as measured by IQ, a primary criterion for diagnosing MR. The assessment of intellectual functioning (diagnosis) for cognitive challenges and cut off scores denote the dimensions of health, ecology and interrelated conditions within which people live their everyday life, get opportunities and foster well being. Ecology in turn comprise of multi-factorial construct composed of four categories of risk factors i.e. biomedical, social, behavioral and educational, that interacts across time and across generations and indicates the state of affairs with mental concepts and their functioning under the influence of surroundings. Ryle (1965) in his book "The concept of mind" doctined such functioning as "Descartes' myth", of knowing how and knowing that, of will, emotino, dispositions and occurrences. Self knowledge, sensation and observation of this phenomenon form a intricate human ecosystem that affects individuals in terms of skill and intelligence.

Human Eco-systems:

Human eco-system comprise of a life, involving human activities that determines the life conditions and behavioral outcome in social or cultural environment. It constitutes various actions which a human being is supposed to adopt in-order to meet life demands for shelter, food, growth, generation and protection against enemies and competitors. This process involves a complex phenomenon which starts functioning even before birth and go on becoming more complex soon after the birth under the paradox of surroundings that affect his mental actions accordingly and constitute in him a cognitive level as well as determination of self in him for deciding the course of his life (Tagart *et al.* 2011). The selective sensitization thus achieved triggers stimulus factors in relation to his personal, social, environmental and health issues. During this course, he develops a feeling to achieve a degree of cognizance to make ideas about persons and things in his surroundings (Krache Davis, 1962).

Cognition development in individuals as their ideas about persons and things in their surroundings involve a process wherein some objects among all other enter in to

individual's conception of the external world. Characteristics of these objects may be distorted to fit his psychological requirements. The selective organization of cognition is thus determined by : (1) Stimulus factors which are derived from the nature of the stimulus object and (2) Personal factors that derived from characteristics of the perceiving individuals eg. wants, emotions and mental sets as he strives to construct a meaningful world and sensitization for the objects. Both factors are interacting sets of other factors in the ecosystem or the environment. The truism is thus described as the responses of the individual to things and persons which are shaped by the way they look to him and his cognitive world. Determinants of this effect are : (1) his physical and social environment (2) his psychological structure (3) his wants and goals (4) his past experiences. His action is thus characterized by integration and goal directedness. This eco-centric world of the little ones undergo inter personal behavioral event which is the beginning of the arousal of wants and goals upon his emotions, thoughts and perceptions. It reflects the integrated influence of the individual's action in the event that tends in the direction of goal achievement.

Self Determination:

On self determination aspect Schalock, *et al.* (2002) forwarded the finding that SD refers to the ability to consider options and make appropriate choices in the home, at school, at work place and during leisure time. Philosophical and legal base over here supports full participation of persons with ID in natural settings in the community. Empirical studies in this respect document the abilities of persons with sever and multiple disabilities to learn and to make choice. Follow up measures thus assume significance in order to enhance successful transition from school to life as an adult in the community because of the reasons associated with lack of decision making skills. With respect to choice making, the ability to select from wide range of responses and options, reactions to specific choice situations depended on one's choice status and skill applicable to that choice situation and the community support offered to such problem. Krache Devis (1962) forwarded explanation to SD that enables the individual to deter, i.e., take cognizance of, pay attention to what he see or hear, decide cognitions and construct an act

as per the man in himself. In addition, forming deeds, decisions towards betterment, discourage misdeeds and cleansing his understanding for his roles, help decide do's and don'ts while moving or growing in the society for the intentions he puts forward. Commenting on perspectives in development of self in an individual, Field et al. (1998) explained SD constituents which are needed to be engaged in goal directed behaviors based on understanding of one's strength, limitations and self i.e. self awareness, advocacy, independent performance, self-evaluation and choice making.

Cognition as ultimate mental process:

Individuals in their cognitive phase may lay in various state of mind and express according to surrounding conditions (Ryle, 1965). Individual when see an object or look at a purpose, recognizes it as a meaningful object in varying degrees of IQ levels and develops a conscious of it. In addition to it, among the objects in his physical environment, only certain ones enter into his cognitions and characteristics of it are perceived by him in favours of his self in a varying degree (Davis Krache 1962). In addition, how the individual conceives the world depend first of all, upon the nature of the physical and social environments in which he is immersed. What a person sees among the things that are "out there" to be seen and how he sees them are in part determined by his physiological structure. Individual differences in sensory capacity and in intellectual abilities reflects physiological differences. Cognitions of the dull person are less complex and less integrated than the cognitions of the bright person. Ryle (1965) describing psychological aspects of cognition development explained logical behavior as a set of concepts employed by individuals to any happening in the surrounding. It may normally comprise of hearing, practicing, trying, heeling, pretending, seeing and being perturbed. Every individual has to learn and does learn how to use them. The deviations in this pattern of mental phenomenon may give rise to abnormal behavioral traits. One of the strongest forces making for belief in this doctrine indicates that there must exist the 'cognitive acts' and cognitive processes which these actions and reactions speak for one's behavior. Healey, Kathryn and Master Pasqua (1992) working on interpersonal cognitive problem solving skills among children with mild MR, reported that irrespective of age or

IQ, adjusted MR children have relevant solutions to common problem due to cognitive interpersonal skills. Whemeyer and Metzler (1995) working on 4500 adults reported that the degree to which most adults with cognitive disability lack opportunities to assume control in their lives. Study also showed that too many people with MR also lack opportunities to control their lives and their destinies. Edward L. Deci (1998) commenting on cognition and cognitive psychology explained that cognitive skills are essential skill that indicate comprehensive ability to listen to instructions, the anxiety and eating disorders, mood and personality traits leading to development of cognizance for listening to instructions, observe things and interact with himself, seek outcomes through family and social association. Their motor skills include value towards work, humanization or social relationship, recognizing functional tasks, job matching, and aspiration for better chance towards meaningful adult life with economic independence, seeking outcomes through family and social help. Working on interpersonal cognitive problem solving skills of individuals with MR, Whemeyer and Kelchner (1994) reported that with less cognitive ability, adults with MR were found to employ limited means to solve social problems. Component elements of self determination and social problem solving skills are inter-related. Social problem solving skills refers to interventions designed to increase cognitive problem solving ability and form essential category of skills. Essential skills in addition to cognition, include advocacy, goal setting, locus control, motor skills, reorganization of functional tasks. Whereas secondary skills comprise of self evaluation, adjustment with environment and surroundings, job matching and value towards work.

Role of Eco-Systems:

Michall L. Wehmeyer and Bolding (1999) working on adults with MR explained eco-system as an environment in which they live, learn, work and play. It makes a system of social life that influences many aspects of their lives including determination of their self. The environments differ in the degree to which they enable people to receive personally designed and individualized support. Autonomy, life choice constituting mental concept of self determination and life style satisfaction in adults matched by level of intelligence, age and gender but, differed in type of residence or working environment

or opportunities for choice making according to settings. Development of distinguishing characteristics to seek share in the social ecosystem or obtain minimum degree of excellence in excelling peers to attain a right of share in the social ecosystem, surrounding or the environment also affected accordingly. Similarly, personality development to be distinguished as an individual in the society capable of sharing outcomes of his efforts also differed. As an individual, the society takes cognizance of his being an individual paying for his characteristics, choice and freedom (Abery and Mc Grew, 1992).

Social ecosystems in relation to self determination in an individual with MR is described to consist of four parts viz. (i) Micro ecosystem to include church, home, school and peer group surroundings. (ii) Meso-ecosystem contained schooling and similar transition environments. (iii) Exo-ecosystem to include surroundings of employment place, market and similar situations that affect cognition development in individuals and (iv). Macro – ecosystem including the surroundings like institutional as well as ideological concept pattern placement affecting overall development of ecosystem for individuals. Sharon and Hoffman (2002) working on quality indicators of school environment that promote the acquisition of knowledge, skill and beliefs in individuals with ID and SD described five components that included traits like knowing thyself, value oneself, plan, act and experience various outcomes while subjecting to eco-systems. Explanation forwarded for these findings reveals that disability is a natural part of human experience and in no way diminishes the right of individuals to live independently, enjoy self determination, make choices, contribute to society, pursue meaningful careers and enjoy full inclusion and integration in the economic, political, social, cultural and educational mainstreams of society broadly termed as social living. Wehmenyer *et al.* (2006) describing the bases of education in human ecosystems explained that ecologically valid and community based education comprised of high quality of education for development of self and skill in MR individuals. Importance of education focused outcomes, person centred planning and active family involvement enhancing mental concept and self formed, important activities in the eco-systems. Mild level of ID had more opportunities for behavioural improvement and determination of self. Implications

of these findings with respect to general education pattern has also been discussed. Interdependent nature of risk factors associated with ID youths aging 11 – 19 years, Tagart *et al.* (2011) explained that individual life events, family and socio-economic factors significantly affect behavioral and emotional problems of these youths suffering from ID. Discussing individual life events, family and socio economic factors associated with young people with intellectual disability and with and without behavioral / emotional problems reported that I, LE, F and S.E. were found to be significantly associated with emotionally behavioural problems.

Self Determination as Personal out-come:

Self determination or determination of self refers to acquiring attitudes and abilities required to act as the primary causal agent in one's life and to make choices regarding one's quality of life free from external influence or interference (Wehneyer and Metzler, 1995). Being self determined, involves having control over choices and decisions impacting one's life. This control is not absolute. In order to assume control in one's life, one must have the opportunities to express preferences, indicate choices and make decisions. Realistic self awareness, self confidence, positive self concepts and positive efficacy of outcomes are the primary expectations from the individuals in order to determine his self. Wehmeyer and Beykobein (1991) reported that a self determined person is autonomous, acting according to personal beliefs, values, interests and abilities. Self determination reflects self actualization – the full development of one's unique talents and potentials, self regulation, self controlled mediation of one's behaviour.

Wehmeyer and Metzler (1995) propounded a view that, although there is a growing acknowledgement that individuals with disabilities have the right to individual self determination, people with M.R. have been among the last for whom these issues have been addressed despite calls to do so over the last several years. Whemeyer and Schwartz (1997) reported that there is increased emphasis on self determination in M R individuals as an important outcome if they are to achieve positive goals after they leave school. For promoting SD as an educational outcome a follow up strategy based on promoting their actions prior to their high school exit. Accordingly appropriate measures

need to be initiated at the right stage in the age of ID students (Ward and Kohler, 1996). In this regard Hallor (1993) and Wehmeyer (1993) forwarded a view that self determination has been identified as a critical outcome of the transition process for students with disabilities, hence a thorough strategy is the needed approach in this direction.

Brien and John (1997) on implementing S.D. initiatives recommended seven characterized models that offer solution to problem of SD enhancement in individuals with ID. To start with, the problem be identified along with its solution. Following this, a way be provided on making efforts, presenting itself a practical way to realize values, ambiguity with it and the a leverage provided for real step forward in definite transition plan. Finally, responsibility be delegated on the individual to actually make necessary change and develop the initiative. Core processes in this regard have also been formulated in order to strengthen the initiative. These comprise of the driving forces, the self determination and the support services oriented towards increased satisfaction, realization of values and vision, better use of funds, logic of resources and market places, service capacity, appeal for new ways of support, financial participation, care and awareness to preserve incentives (Brien, 1997).

Stephen *et al.* (2003) working on factors promoting SD described proposing personal characteristics of individuals with ID. Services promotion, behavioural and attitudinal outcomes and core processes outlined in a manner that helps humanitarian criteria for development of self and competencies thereof form a package of practices in a positive direction. Cook and Jonikas (2002) had earlier suggested risk factors in the form of lessons drawn from the past to guide the future course of action in deciding the probable outcomes. On perceptions and behavioral traits of individual for determining self Trainor (2005) outlined student perceptions for SD and efforts required to promote them in school context and opportunities provided at home front. Ways and procedure to make such approach accessible and productive along with their implications for practical work as well as practices has also been explained. Increase in parent and family involvement at all stages has been advocated for enhancing SD. This includes

examination of facilitators and inhibitors, care about mismatching between goal and school curriculum, analysis of costs and benefits towards skills and their contents.

Conclusion:

Discussions presented in this review centres around mental dispositions and occurrences leading to develop distinguishing characteristics in individuals with intellectual disability to seek his share in the social eco-system or obtain minimum degree of qualification, ability, sensibility or excellence in excelling his peers to obtain a right to his share in that social system or culture, social environment or at least in his own surroundings. For this he is expected to take cognizance of happenings and from his cognitions, accordingly develop minimum level of personality traits and skills to be distinguished as an individual in the system, determines his self and become capable of sharing outcomes of his efforts and design a modest quality of life along with needed economic gains. Deliberations of various workers present a sort of model of activities, actions and reactions in order to blend his emotions, will and finally acquire needed skills to become worthy of his share in the society. The contents of different findings indicate towards pre-requisites of these gains in the form of self determination in order to open the gate for reaching to his goal. The sum total amounts to ones fitness. This potency can be enhanced through part increase in ability plus skill plus risk and fitness under the influence and care of social ecosystems.

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