**Vygotsky’s View on the Defect and Compensation**

**Introcudtion**

Lev Semenovich Vygotsky (1896-1934) is key role in establishing the discipline of abnormal child psychology in the USSR. His text appeared in Russian in 1983 under the title, *The Fundamentals of Defectology.* The term “decfectology” has no real parallel in the English language and sounds rather degrading. As once noted by an American scholar (McCagg, 1989, p. 40), this term would not survive for three minutes in a discussion of the "handicapped" in the Western world today because it carries too much negative connotation towards the "disabled". In fact, the word "defectologia" (or "defectology" in the English transliteration) literally means "study of defect". In Russia, for more than a century, this term has referred to the study of the children with disabilities and the methods of their evaluation, education, and upbringing (Gindis, 1999). This is the current Soviet term for the discipline which studies the handicapped, their development, teacher training and methods (Gindis, 1999).

About defectology, a part of Vygotsky's general theory is a notion of the social nature of the physical and mental disability. He mentions that the dual role of a physical disability, first in the developmental process and then in the formation of the child’s personality, is a fundamental fact with which we must deal when development is complicated by a defect (Rieber and Carton 1993, p. 32). A “primary” defect is an organic impairment due to biological factors. A “secondary” defect refers to distortions of higher psychological functions due to social factors. An organic impairment prevents a child with disability from mastering some or most social skills and acquiring knowledge at a proper rate and in an acceptable form, but it is the child's social milieu that modifies his/her course of development and leads to distortions and delays. However, he also mentioned that On the one hand, the defect “stimulates a heightened, intensified advancement, precisely because it creates difficulties. Therefore, defectologists cannot limit their dynamic study of a handicapped child to determining the degree and severity of the deficiency. Without fail, they must take into account the compensatory processes in a child's development and behavior, which substitute for, supersede, and overarch the defect.” (Rieber and Carton 1993, p. 32) In the essay “Defect and Compensation”, Vygotsky discussed this very notion in details.

**Defect and Compensation**

In the essay “Defect and Compensation”, Vygotsky names higher psychological functions as the major compensatory devices for mental and sensory deficits. The focus of compensation should be the intensification of cultural enlightenment, strengthening of the higher psychological functions, the quantity and quality of communication, and social relationship with a “collective” (an organized group of peers). The main goal of special education, therefore, is to compensate for primary defects through facilitating and strengthening intact psychological functions and to prevent, correct, and rehabilitate secondary defects by psychological and pedagogical means.

**The concept and function of overcompensation**

 Vygotsky advocates that “if these [learning disabilities] do not cause the child to lose his zeal or do not force him to flee from them, but activate them, then they will lead to a roundabout path of development.” (Rieber and Carton 1993, p. 131) Overcompensation is the idea about strength arises from weakness and ability from deficiencies. In order to demonstrate this concept, Vygotsky drew a number of examples: vaccine that transforms a child’s sickness into superior health; white blood cells which rushed to the infected area in greater quantity than is needed to combat the infection; the organ (a lung, a kidney) that takes over the function of another organ (an impeded/damaged lung/kidney) and develops into full function of both in a compensatory manner and etc. He relates the overcompensation of health to of defect, “overcompensation leads to the consciousness of superior health in a diseased organism, to the transformation of an inferiority complex into a superior complex, a defect into giftedness and ability.” (Rieber and Carton 1993, p. 53) He mentioned that the feeling or consciousness of one’s inferiority, caused by an individual’s defect becomes the primary driving force behind this psychological development. (Rieber and Carton 1993, p. 53) He cited the examples of Demosthenes, L. von Beethoven, A.S. Suvorov, K. Demulen and Helen Keller, as examples of deficient individuals who over-compensated their defects.

**Overcompensation and Pedagogy**

Vygotsky suggests that this doctrine is intrinsically tied to pedagogy in theory and practise (Rieber and Carton 1993, p. 54). With Respect of this, he endorsed Adler’s future oriented individual psychological pedagogy and criticized the “conservative, backward-looking teachings of Freud and Kretschmer” (Rieber and Carton 1993, p. 55). Vygotsky stated that pedagogy occupies the same place that medicine does for biological science, engineering for psychic etc, which is the highest category of truth that can be proved by application. Hence, this psychological movement helps to understand that child development and child rearing (the unsocialized and unadapted state of childhood) lay the very seed of compensation. He suggests that “a guarantee of superiority is given only in the presence of inferiority” (Rieber and Carton 1993, p. 55). The doctrine of overcompensation is important to serve as a psychological basis for the theory and practice of educating deficient children. Therefore, it is important for the teachers to have known this, which the pedagogue should view defect as a plus, not only a minus (Rieber and Carton 1993, p. 56). This fundamental law had been formulated with scientific accuracy then that is children try to do things that they are not able to physically, in consequent they emerged exemplary in an overcompensation manner. Hence, Vygotsky advocates “the concept of exemplary human personality which includes an understanding of its organic unity must serve as the basis for educating an abnormal child” (Rieber and Carton 1993, p. 56). As to examine the structure of personality in great depth, he quoted W. Stern, “We have no right to conclude that a person with an established abnormality has a propensity for abnormality” (Rieber and Carton 1993, p. 56). He suggested that this law should be applied to somatic and psychology, to medicine and pedagogy. If this law is applied to education, then it will be necessary to reject both the concept and the term “defective (handicapped) children” (Rieber and Carton 1993, p. 56).

**Goal and Overcompensation**

Vygotsky quoted to T. Lipp in the light of relation between goal and compensation: “When there appear some obstacles, any purposeful activity will necessarily be channeled through some previous aimless, automatic event…… The goal, which is impossible to reach by a direct path, is attained thanks to an overflow of force channeled by one such detour.” (Rieber and Carton 1993, p. 57) The goal of any mental process can be attained only with the presence of some difficulties, delays or obstacles. For this reason, a defect and the resultant disruption of the normal functioning of personality become the ultimate developmental goal for all individual mental powers. Hence, Vygotsky advocates that the education and the rearing of handicapped children should take into account that precisely these tendencies emerge in the foreground of a child’s development and must be included in the educational process as his motivating strength (Rieber and Carton 1993, p. 57). This does not mean that the process is able to alleviate the difficulties arise as a result of the defect but instead of focusing on the compensation of the defect, we can focus on the tasks which will bring about the gradual formation of the entire personality from a new standpoint (Rieber and Carton 1993, p. 57). For example, a deaf child can work out ways to overcome the isolation and seclusion caused by his deafness.

Vygotsky criticises the way psychologists viewed defect as a defect, a weakness but strength. On psychological view on blind children, he thinks that “they (psychologists) thought that the development of a blind child centers on his blindness” (Rieber and Carton 1993, p. 57). He blames the failure of the traditional education for blind and deaf children on an inaccurate understanding of the psychology of the handicapped (Rieber and Carton 1993, p. 57). For him, the psychology of defect is essentially the psychology of victory over defect. He claims that it is important that education depends not only on the development of natural strengths but also on the ultimate goal. He cites that full social esteem is the ultimate aim of education as all the processes of overcompensation are directed at achieving social status (Rieber and Carton 1993, p. 57). According to Vygotsky, compensation strives in the direction of the norm and toward an approximation of a certain normal social type. He gives an example of a deaf-mute child who though cut off from the world and excluded from all social contact, has not a decreased desire to communicate but an intensified desire to be included in the social life. Often paradoxical, the child’s psychological capacity for speech is in reverse proportion to his physical ability to produce speech (Rieber and Carton 1993, p. 58).

**The Relation between Overcompensation and other Psychological Theories and Views**

Vygotsky claims that it is necessary to explain more precisely how the ideas of overcompensation relate to other psychological theories and views which are similar in form or spirit.

Firstly, suspicions might have aroused due to the fact that the ideas of overcompensation are spawned by the unscientific optimism. Can every defect be viewed as blessing? Vygotsky argues that overcompensation is only one extreme of two opposite outcomes, namely victory over defect and total failure to compensate (Rieber and Carton 1993, p. 58). Between these two extremes, every possible degree of compensation from minimal to maximum can be found.

Secondly, these ideas are easily confused with the past Christian mystical notion of weakness and suffering. Vygotsky sets a clear boundary between these two by saying that the overcompensation doctrine “places a high value not on suffering itself but on overcoming it; not on the humble acceptance of a defect but on mutiny against it” (Rieber and Carton 1993, p. 58).

Thirdly, Vygotsky felt that it was necessary to distinguish the doctrine of defect-overcompensation from the old, naïve biological theory of organic compensation or the theory of the substitution of sensory organs (Rieber and Carton 1993, p. 59). He gives an example of dealing with a blind child, “in a blind child we are dealing not with the possibilities of sight being automatically replaced but with the difficulties arising from its absence. These difficulties are resolved by the development of a psychological superstructure” That is why some blinds possess heightened memory, intensified attention, and enhanced verbal skills (Rieber and Carton 1993, p. 59).

Fourthly, Vygotsky ascertains the true implication of Adler’s doctrine judging by their formed therapeutic social pedagogy based on the data of reflex psychology. He states that their doctrine of conditional reflexes offers a new basis for constructing a mechanism for the educational process, the doctrine of overcompensation offers a new mechanism for understanding the very process of child development (Rieber and Carton 1993, p. 59).

A conclusion was drawn from the analysis of the deaf and blind children from the conditional reflexes point of view. That is there is no fundamental difference between the education of a seeing and a blind child. New conditional connections are found identically from any input. Hence, Vygotsky claims that the effect of organized external influences is a determining factor in education (Rieber and Carton 1993, p. 59). From the pedagogical point of view, a blind or deaf child may, in principle, be equated with a normal child, but the deaf or blind child achieves the goals of a noamal child by different means and by different paths. Vygotsky mentions that it is also very important for the educator to know precisely the uniqueness of the path on which he must lead the child (Rieber and Carton 1993, p. 60).

**Goal-oriented Refex and Compensation**

Pavlov discovered a unique goal oriented reflex among innate reflexes (Rieber and Carton 1993, p. 60). Vygotsky quoted Pavlov saying that all life is the realization of one goal that is the preservation of life. Pavlov: “All of life’s advancements, all its culture, are achieved by means of this goal-directed reflex and is achieved only by those people striving to attain a specific goal which they themselves have set” (Rieber and Carton 1993, p. 60). Pavlov formulated this significance of this reflex for education. Vygotsky thinks that Pavlov’s ideas coincide with the theory of compensation and the main condition for achieving a goal is the existence of obstacles (Rieber and Carton 1993, p. 60). According to Vygotsky, experimental research about reflexes has found that the potential for overcompensation is greater in the handicapped (Rieber and Carton 1993, p. 61). With respect of this finding, I. A. Sokolianskii predicted paradoxically that the education of normal children is the hardest to teach compared to the other handicapped children, according to the complexity and difficulty of the pedagogical process (Rieber and Carton 1993, p. 60). Some may ask how such presuppositions benefit pedagogy. Vygotsky asserts that it is beneficial to compare on the basis of the degree of difficulty and complexity only when we have in mind equal pedagogical goals under various conditions (Rieber and Carton 1993, p. 61). He claims that it is easier to teach a blind-deaf child because the level of his development, the aspiration for his development and the educational goals to be met are minimal and the same expectation will not go to the normal children (Rieber and Carton 1993, p. 61). However, these conclusions would only be useful if the mechanics of education are examined with taking into consideration the course of development of child himself and his perspectives (Rieber and Carton 1993, p. 62).

**Road to Overcompensation**

According to Vygotsky, the operation of compensation is determined by two features: 1) by the range and extent of a child’s disability, the degree of divergence in his behaviour, and the social demands made for his education, and 2) by the compensatory reserve and the wealth and diversity of functions (Rieber and Carton 1993, p. 62). However, the reserve is meagre for blind-deaf children for his ineptness is huge, contrary to the paradoxical conclusion of Sokolianskii. Vygotsky states that it is naïve to think that every defect will inevitably have a fortunate outcome taking temperate view and realistic evaluation into consideration. Problems in overcompensating defects like blindness and deafness are enormous. Therefore, it is essential to know the correct path. Traditional instruction of oral speech did not stimulate inner compensatory activity, therefore ineffectual. Vygotsky advocates that the task of education must be summed up as a mastery of a child’s inner developmental strengths. Techniques and perfections help to ensure the success of an oral speech model. For it to be practical success, the psychological need for speech and its primary importance play essential roles (Rieber and Carton 1993, p. 62). The same goes to the blinds. Two characterological features categorize the entire psychological makeup and structure of personality in a blind person: an unusual spatial limitation and a total mastery of speech (Rieber and Carton 1993, p. 62). In order for the blind children to realize their full potential, it is extremely important to discard the constraints limiting the mental outlook which by their nature frame the special development of such a child (Rieber and Carton 1993, p. 63). Hence, it is important that the education aim to realize social potential fully and consider this to be real and define target. Lastly, Vygotsky appeals to the education system that it should not nurture the thought that a blind or any deficient child is doomed to social inferiority (Rieber and Carton 1993, p. 63).

**Conclusion**

Vygotsky provides a very insightful view on pedagogy of defectology that is to compensate for primary defects through facilitating and strengthening intact psychological functions and to prevent, correct, and rehabilitate secondary defects by psychological and pedagogical means. However, this remarkable theory will be futile without practical application. Some modern countries have confronted the problems by establishing special education institutions for special children. However, in many countries, especially poor countries still ignore, not on purpose the importance of defectology due to poverty and impoverishment of resources. Many deficient children in these countries still study in the classroom with normal children, being educated conventionally the same way these normal children do. Future is seemingly doomed for them. It is pitiful that much giftedness in these children has been submerged. Hopefully, the extension of Vygotsky’s study on defectology will be the groundbreaking event in embracing Vygotsky’s ideas in special education in these countries.

Even though Vygotsky did not address the problems of emotionally disturbed children or autistic children directly in the essay but the fundamental basis of educating them are the same. Indeed, many of Vygotsky’s theoretical concepts in the domain of special education have been substained by empirical data accumulated since his death. According to Robin L. Gabriels, Vygotsky’s works on defect and compensation are remarkably consistent with the current thinking of clinicians and researchers in the field of treating children who have autism. (Gabriels 2002, pg 91) Vygotsky advocated for a shift from the hopeless thinking about educating children ‘who were physically handicapped or difficult to educate to an educational approach that tailored the development teaching curricula and techniques to children’s unique strengths in order to provide a means for compensating for their disabilities (Rieber and Carton 1993, p. 3). This is just one of the many examples found.

**Reference**

Gabriels, Robin L. (2002). *Autism: from research to individualized practice*. London, Jessica Kinsley Publisher.

Gindis, B. (1999), Vygotsky's Vision: Reshaping the Practice of Special Education for the 21st Century. *Remedial and Special Education November 1999 20: 333-340*.

McCagg, W.O. (1989). *The Origins of Defectology. In W.O.McCagg & L.Siegelbaum, Eds. The Disabled in the Soviet Union.* Pittsburgh, PA: University of Pittsburgh Press.

Vygotsky, L.S. (1987). *The Collected Works of L. S. Vygotsky. Volume ll: The Fundamentals of Defectology.* Editor of the English translation: R. W. Rieber. New York: Plenum Press.