## Pathways of Personality Development: Following Lev Vygotsky's Guidelines

### Dmitry Leontiev, Anna Lebedeva, Vasily Kostenko

#### Received in April 2017

#### **Dmitry Leontiev**

Ph D., Dr. Sc., Professor, Head of International Laboratory of Positive Psychology of Personality and Motivation, National Research University Higher School of Economics. E-mail: <u>dmleont@gmail.com</u> **Anna Lebedeva** 

Ph D., Senior Research Fellow, International Laboratory of Positive Psychology of Personality and Motivation, National Research University Higher School of Economics. E-mail: <u>anna.alex.lebedeva</u> @gmail.com

#### Vasily Kostenko

Research Fellow, International Laboratory of Positive Psychology of Personality and Motivation, National Research University Higher School of Economics. E-mail: <u>vasily.kostenko@gmail.com</u>

Address: 20 Myasnitskaya St, 101000 Moscow, Russian Federation.

**Abstract.** The paper presents a theoretical reconstruction of Lev Vygotsky's project on theory of personality development and highlights Vygotsky's relevance and heuristic value for the personality psychology of our days, especially positive psychology. The authors focus on several aspects of Vygotsky's heritage. 1. The general concept of personality within a non-classical framework. 2. The idea of self-mastery as the central explanatory concept and its relation to the modern concept of agency. 3. The role of self-reflective awareness

in personality development. 4. Personality development pathways in challenging conditions. In Vygotsky's works personality was implicitly constructed as the most integral higher mental function, while self-mastery or self-regulation was its central feature. Vygotsky's principle of mediation states that the structure of human activity is mediated by physical or mental tools that break the S-R links and make it possible to master one's own behavior and mental processes. By utilizing speech as a system of signs that enables the process of mastering the psychosocial reality, self-reflection makes a new basis for more complicated forms of higher mental processes that possesses more degrees of freedom as compared with the lower ones. The law of compensation is discussed in the context of aggravated conditions of personality development, where personality answers to social boundaries, and thus achieves alternative trajectories of development. The sociocultural paradigm is thus consistent with modern thought on positive and personality psychology.

**Keywords:** sociocultural psychology, higher mental functions, self-regulation, personality development, self-mastery, compensation, aggravated development, positive psychology.

**DOI:** 10.17323/1814-9545-2017-2-98-112

Introduction Lev Vygotsky is nowadays acknowledged as one of the cornerstone psychologists of the 20th century who played the critical role in introducing a sociocultural dimension into modern psychology. He is mostly known for being a developmental psychologist with a focus on the development of cognitive functions. However, in the context of child development issues, Vygotsky stressed that "only radical transcending the methodological limits of traditional child psychology can direct us to the study of development of the highest psychological synthesis than can be called with full reason the child's personality. The history of cultural development of the child leads us to the history of personality development" [Vygotsky 1983a: 44]. In the final years of his very short life he paid more attention to the issues of personality and personality development, though failed to elaborate a comprehensive theory. His fragmented ideas on personality have mostly been published posthumously; no wonder that his contribution to this field seems to be underestimated or even not read at all.

> The aim of this paper is to reconstruct Vygotsky's project on personality theory. It is less of a personality theory; however, it still maintains great heuristic value for the personality psychology of today.

> We focus on several aspects of Vygotsky's heritage: 1. The general concept of personality within a non-classical framework. 2. The idea of self-mastery as the central explanatory concept and its relation to the modern concept of agency. 3. The role of self-reflective awareness in personality development. 4. Personality development pathways in challenged conditions. All of these highlight the relevance of Vygotsky's approach to the positive psychology of the 21st century.

**Personality and** The starting point of Vygotsky's theory was the idea of the social nahigher mental ture of the human mind; in other words, the idea of the principal differfunctions ence between animal and human psychological functioning. While an animal lives in the world of nature, all its functions, including psychological functions, are subject to natural laws alone. In the human being, the natural evolutionary process is not abolished but rather complemented with a developmental process of some other kind. Qualitatively different social laws govern the process of the development of consciousness in the course of social interaction. This idea was not new at that time, although it was not widely accepted. Its sources were both the French sociological school, especially the works of Pierre Janet, on the one hand, and the philosophical works of Marx and Engels, on the other. Being very enthusiastic about Marxism, as the methodological foundation for the new post-crisis psychology, Vygotsky shared Marx's idea that the human essence lies in social relations, "brought inside and transformed into personality functions, representing the dynamic parts of its structure" [Vygotsky 1984a: 224].

> The concept of higher psychological functions, introduced by Vygotsky, expressed this idea in the most articulate form. It was as

sumed that besides natural psychological functions (e.g., perception, memory, attention, etc.) analogous to those existing in animals, there are specifically human twin psychological functions—object perception, voluntary attention, mediated memory, etc.—developing through the mastery of distinctively human instrumental ways of organizing one's own psychological processes. A. R. Luria [1969] best summarized the distinctive features of higher psychological functions, specifically during the course of social interaction, as: (1) social by their origin, (2) mediated by their structure, and (3) voluntary, and deliberate because of their functioning abilities.

The general genetic law of development of the higher psychological functions was articulated by Vygotsky in the following way: "Every function in the cultural development of the child enters the stage twice, on two planes—first the social, then the psychological; at first, as a form of cooperation between persons, as a collective and interpsychological category, then as a means of individual behavior, as an intrapsychological category" [Vygotsky 1984a: 223]. This citation depicts the essence of the process called interiorization, the emergence of an individual psychological function through the internalization of the original function (i.e., its transference into the mental plane), changing from the outer control over this function to the inner control. Vygotsky [1989] stated that "for us to speak about the external process means to speak of the social. Any higher psychological function was external. This means that it was social before becoming a function; it was a social relation between two people. The means of acting upon oneself is originally a means of acting on others and the action of others on one's personality" [Vygotsky 1989: 56].

According to Vygotsky, originally, the human child is not an agent of development, he or she gradually becomes the agent of their own development through the acquisition of social "sign tools". If we consider the mother-child unit, at the first stage of development the mother reacts towards the child, at the second stage the child acquires the idea of communicating their wishes and acts in the corresponding way towards his or her mother, at the third stage the child uses the same strategy to act towards him/herself in an external observable way, and the fourth stage comes when the former child, now grown up, acts towards him/herself in an internal way, unobservable from the outside.

The principle of "interiorization", introduced by Vygotsky, states that human mental functions develop genetically from external processes, which were originally distributed between individuals. Mental attention grows from pointing at something by another person, memory from distant communication, volition by obeying another person's commands, and so on. Once interiorized, a higher psychological function becomes subject to voluntary control. A. Asmolov [1986/87] has stressed that the interiorization process is not merely a transposition of a function inwards, but rather the process of building the inner (mental) structure of consciousness. The word "interiorization" should thus be considered as a metaphor depicting the result rather than the process of development of higher psychological functions.

Lev Vygotsky's thoughts consistently combine an explanation of development as an essentially internal process with the consideration of the social situation of development as one of the leading developmental mechanisms. In his view, the social situation of development is an age-specific system of relations between a child of a certain age and the social reality that "defines strictly lawfully the child's way of living, or his/her social being" [Vygotsky 1984b: 259]. Personality development cannot be isolated from the general mental development, and the latter is, in fact, a psychosocial process, in many respects conditioned by the external social situation. This statement follows the idea that "the human psychological nature is a sum-total of social relations transferred inwards and transformed into personality functions, or dynamic parts of its structure" [Vygotsky 1984a: 224].

# Self-mastery through mediation Mediated structure is the second indication of higher psychological functions. Vygotsky's idea of the voluntary nature of specifically human forms of mental activity is based on the idea of the specific structure of these processes. As derivatives of social activity, higher mental processes maintain the principal features of human intentional activity, first of all, its tool-mediated nature.

This helps to explain the mechanism of voluntary regulation of higher mental functions. The principle of mediation states that the structure of human activity is mediated by tools—be it physical tools or mental signs—that break the S—R link and make it possible to master one's own behavior and mental processes.

Using tools while interacting with nature has been considered an essential characteristic feature of a human being long before Vygotsky. However, according to Vygotsky, human beings actively deal with their own nature in the same way. Higher mental functions are mediated in a similar way by special "mental" tools. Moreover, it is the mediated structure of higher mental functions that causes them to be deliberate, self-controlled, and self-organized. That is especially true for volition as a form of such a relation. "Voluntary action begins only when mastering one's own behavior with the help of symbolic stimuli" [Vygotsky 1984a: 50]. The most comprehensive of such symbolic systems created by human culture (though not the only one) is language. Thus, it is not surprising that various aspects of language functioning, and related issues (the genesis and forms of speech, inner speech and thinking, concept development, meaning and sense, etc.), became Vygotsky's main research interest in the late 1920s, just after the idea of higher mental functions had evolved into a research program (see [Vygotsky 1934/1987]).

When one is making some effort traditionally described as volition or, in newer terms, when one feels self-determined, autonomous, and

authentic, in no way is one a self-sufficient entity. On the contrary, one needs some external point of support in order to transform the external reality, according to the well-known idea by Archimedes: give me the point of support, and I will turn the Earth upside down. This is the best symbol of the idea that it is mediation that givesus self-determination and self-control. "It is impossible to relate directly to oneself; however, indirectly it is possible" [Vygotsky 1989: 61]. Any effort must be a mediated effort in order to be effective; mediation multiplies effort in human action, as in mechanics and technology.

For Vygotsky, self-mastery or self-regulation was the key feature of personality. Though Vygotsky never tried to give a strict definition of personality or a systematic analysis of this problem, he pointed out that the concept of personality, historical as it is, "covers the totality of behavior, specified by the attribute of mastery" [Vygotsky 1983a: 315]. "Only when we see the mastery over one's own behavior,"—wrote Vygotsky elsewhere, —"can we speak of the shaping of personality" [Vygotsky 1984: 225]. In the above citations, as well as in many other places, Vygotsky treated personality analogously to higher mental functions, applying both concepts to the same scheme of a genetic explanation. "Mastery," with respect to personality, essentially meant for him the same as deliberate control over one's mental processes. It seems as if Vygotsky considered personality to be the most integral "higher mental function".

Vygotsky's idea of mastering one's own behavior, as the distinctive feature of personality, was not original. However, it was in no way speculative, like most other theorizing in this field. What makes this idea really important in Vygotsky's case is its solid experimental basis. Psychological mechanisms of mastering one's behavior represented the subject matter of the 12th chapter of his "History of development of higher mental functions" [1983a: 83]. Vygotsky started with the traditional notion of human choice, considering it to be the key issue for the problem of mastering one's behavior. The most crucial point related to human choice is the situation of the 'Buridan's ass', which represents the choice between several equally attractive alternatives. According to the medieval tale, the animal died unable to choose between two equal bales of hay lying at the same distance from each other. Vygotsky stated that a human being would solve this problem by making a choice, or drawing the solution from a hat. In Vygotsky's experiments, children had to solve similar problems by "choosing" between different motives, with different options available. Based on these experiments, Vygotsky listed several conditions allowing the children to make their own choices. In these cases, a child masters his/her behavior by creating additional mediational stimuli. Vygotsky himself evaluated his experiments described above as proof of the possibility to solve purely philosophical problems, and to empirically trace the genesis of human free will during experimental psychological investigations.

Self-reflection and inner dialogue One of the most influential mediating instances of human conduct is conscious awareness, or self-reflection. Vygotsky analyzed this important issue in his final lecture on adolescent pedology [Vygotsky 1984a: 220–242], referring to the publications of his contemporary, German educational psychologist Adolph Busemann, that are all but forgotten these days [Busemann 1925; 1926]; however, Vygotsky found some very inspiring points in them. "What is used to be called the self is nothing but self-awareness (...) a new behavior of the person becomes behavior-for-oneself, the person becomes aware of oneself as a definite unity" [Vygotsky 1984a: 227].

> Vygotsky considered Busemann's great merit to be his overcoming the nature-nurture convergence paradigm by William Stern and introducing a new agentic factor—the adolescent's person. An important point is the differentiation between the acting person and the reflecting person. "If we look at the significance of self-reflection for mental life at large, we shall see a profound difference between a nonreflective, naïve personality structure, on the one side, and a reflective one, on the other" [Vygotsky 1984a: 238].

> The general genetic law of development mentioned above, the law of interiorization, suggests that reflective self-awareness also develops the same way. Here Vygotsky also refers to Busemann who described six directions of the development of self-reflection, starting from external acting upon the parts of one's body that can be found even in lower animals [Ibid.: 228]. However, with social relations, human communication plays a more important role in the development of self-awareness, this is why Vygotsky, following Busemann, defined self-awareness as social awareness, transposed inwards [Ibid.: 239]. By utilizing speech as a system of signs that enables the process of mastering the psychosocial reality, self-reflection makes a new basis for more complicated forms of higher mental processes that possesses more degrees of freedom as compared with the lower ones.

> This is the point where Lev Vygotsky's cultural historical account converges with Mikhail Bakhtin's dialogical one. Bakhtin's focus was the dialogical nature of consciousness, in what is sometimes termed autocommunication in contemporary studies. Autocommunication makes the ontological basis of self-awareness as its cognitive side. The term "autocommunication" unites various forms of intrapersonal dialogue. Inner dialogue suggests two or more semantic centers or intentions. During the inner dialogical activity, a person can represent various points of view (e.g., the interviewer and the interviewee, the past Self and the future Self, the judge and the defendant). While Bakhtin [1984] revealed multivoicedness of human consciousness, discussing the heterarchical (democratic or anarchic) polyphony of "inner speakers", a hierarchical view on relating to oneself is also possible [Leontiev, Salikhova 2010], which is more in line with Vygotsky's idea of self-mastery. Present-day empirical studies of self-reflective processes demonstrate their role as the inter-level moderators capa

ble of modifying the structure of relations between different levels of regulation [Karpov 2004].

From a sociocultural viewpoint, inner dialogue is considered as an interiorized external dialogue. It was empirically shown, e.g., that there is a mutual overflow of internal and external dialogues that is especially noticeable in childhood [Kuchinsky 1988]. The possibilities for an adult in the creation of inner dialogue considerably extend owing to the cognitive development and general purposefulness of dialogical activity. At the same time, there are also conflicting forms of inner dialogical activity, which can support and develop the inner conflict [Oleś 2009; Astretsov, Leontiev 2016].

Personality development in aggravated conditions: the bypass pathways The existence of aggravated conditions, i. e. any kind of physical, social, material or other deficit, presents a challenge to personality development. The latter can be notably inhibited due to the fact that searching for and implementing alternative developmental trajectories require bigger time expenses. Personal features resulting from such collisions with the social world emerge despite difficult vital circumstances rather than by virtue of harmonious developmental background. Being connected to a cultural context, the same personality features may become both a sign of mental health, and a form of overcompensation due to some deficiency. Such a situation "does not set borders to developmental opportunities but rather requires investing extra efforts and resources, as compared to situations of regular development" [Leontiev 2014: 98].

If we take into account the development of personality, treating norms as typical and abnormalities as atypical loses its sense. The same developmental conditions can be experienced as facile by one person and as difficult by another one. The criterion of such discrepancies is partly socially determined but also rooted in individual developmental history.

According to Vygotsky, a biological developmental deficit (defect) is only a prerequisite of its secondary manifestation, a social "dislocation". Secondary consequences of biological deficits imply problems with the acquisition of culturally typical higher forms of behavior. At the same time, the developmental delay or impediment plays a role of "damming" and causes an increase in the concentration of psychological energy at the point of deficiency [Vygotsky 1927]. The impediment "is not only the main condition of goal achievement, but also an indispensable condition of the emergence and existence of the goal itself" [Vygotsky 1983b: 158]. In other words, the existence of an impediment generates a condition of need, which in turn acts as an energy source of compensation processes. The latter account for the further complication of higher mental functions, from infancy onwards. "The law of compensation is equally applicable to the normal and complicated development" [Vygotsky 1983b: 10], which in both cases proceeds in the conditions of inevitable collisions with restrictions. These obstacles generate alternative developmental trajectories.

The situation of physical disability itself cannot be considered as strictly determining hindered psychological well-being (see [Leon-tiev, Aleksandrova, Lebedeva 2017]). A. N. Leontiev [1978] pointed out that the same physical features can be differently related to personality proper, and differently built into the structure of activity. It is the person that defines the influence of physical disability on subjective well-being and psychological health.

This statement was confirmed in our studies of students with disabilities [Lebedeva 2012]. Different personality variables in this group did not reveal the same correlations as those in a control group. However, satisfaction with life measures did not differ between the groups. We explained this in terms of Vygotsky's "bypass pathways" of development. The term refers to alternative developmental trajectories and cultural instruments that implement the current tasks of development bypassing disability conditions. According to Vygotsky, difficult life circumstances lead to "radical reorganization of all personality that brings new mental forces to life and directs them" [Vygotsky 1983b: 563]. Moreover, it is not obligatory that favorable conditions will lead to positive consequences, and vice versa. Owing to the fact that the person is capable of manifesting one's autonomy through the responses tochallenging life circumstances, a person achieves an opportunity not to lose but to find the source of creative energy in difficult circumstances, and to reorganize their personality and their life

Conclusion: Cultural-historical roots of positive psychology Vygotsky pointed out the necessity for a "positive" view on psychological development both in aggravated conditions:

"... the new point of view prescribes the consideration of not only the child's negative characteristic, not only his/her "minuses", but also a positive offprint of his/her personality presenting first of all the picture of complicated bypass pathways of development" [Vygotsky 1983b: 173],

and normal ones:

"Empirically based study reveals that the negative content of the development in breaking periods is just the reverse, or shadow side of positive personality changes that make the main and principal meaning of any critical age" [Vygotsky 1984b: 253].

These quotations suggest that Vygotsky's views belonged to predecessors of the theoretical agenda of the 21st century known as positive psychology that stresses that the development of positive processes are the key to psychological sanity and wholeness at all the levels [Seligman 2002]. However, the positive psychology of today departed from positive emotions and positive character traits (strengths and virtues) before it shifted the emphasis to more profound and complicated processes of self-regulation and psychological resilience (see e.g. [Sheldon, Kashdan, Steger 2011]). Vygotsky's emphasis of self-mastery is highly relevant to the latter. Indeed, contemporary views on self-regulation have much in common with the cultural-historical approach. Some of Vygotsky's followers in the USA treat self-regulation through the prism of the concept of higher mental functions [Kinnucan, Kuebli 2013]. The cultural-historical approach states that self-regulated activity initially emerges as an interpsychological process, gradually transforming itself to the reduced intrapsychological regulation. At every stage these processes are mediated primarily by signs.

The specificity of Vygotsky's version of nonclassical positive psychology as the psychology of emerging mastery over oneself and over one's psychological functioning is precisely expressed in his own slogan of height psychology. "Our word in psychology: away from surface psychology—a phenomenon in consciousness is not equal to being. But we oppose ourselves also to the depth psychology. Our psychology is height psychology (it defines person's "heights", rather than "depths")" [Vygotsky 1982: 166]. Interestingly enough, Victor Frankl in 1938 independently of Vygotsky (the above quotation was written in 1933 and not published until 1968) expressed his views in identical terms: "Existential analysis is something opposite to the socalled... depth psychology. Depth psychology forgets that its opposite is height psychology, rather than surface psychology... "Only human heights are human being" (Paracelsus)" [Frankl 1987: 86]. Frankl identified height psychology with his existential analysis, and Vygotsky with his cultural-historical psychology of higher mental functions and deliberate actions. Both viewed the human being in terms of multi-level organization, where the lower levels are fully causally determined by uncontrollable physiological and psychological mechanisms, while through the higher levels the human being may master one's own behavior.

It follows that the person's developing capacity to take control over one's own development and well-being and to invest oneself in these processes should be treated as the central issue of the advanced version of positive psychology. Vygotsky's cultural-historical approach allows us to establish theoretically consistent relationships between the ideas of 80 years ago and the views of the psychology of personality of this century. New developmental challenges allow us to make sense of Vygotsky's heritage in a present-day context and contribute to the integration of diverse theories within a common theoretical field.

- **References** Astretsov D. A., Leontiev D. A. (2016) Psychodiagnostic Properties of the Piotr Oleś "Internal Dialogical Activity Scale". *Russian Education & Society*, vol. 58, issue 5–6, pp. 335–354.
  - Asmolov A. G. (1986–87) Basic Principles of a Psychological Analysis in the Theory of Activity. *Soviet Psychology*, vol. 25, no 2, pp. 78–102.
  - Bakhtin M. M. (1984) *Problems of Dostoevsky's Poetics*. Minneapolis: University of Minnesota Press.
  - Busemann A. (1925) Kollektive Selbsterziehung in Kindheit und Jugend. Zeitschrift für pädagogische Psychologie, no 5, ss. 102–123.
  - Busemann A. (1926) Die Jugend im eigenen Urteil. Langensalza: J. Beltz.
  - Frankl V. E. (1987) Logotherapie und Existenzanalyse. München: Piper.
  - Karpov A. V. (2004) Psikhologiya refleksivnykh mekhanizmov deyatelnosti [Psychology of Self-Reflective Mechanisms of Activity]. Moscow: Psychological Institute of Russian Academy of Sciences.
  - Kinnucan C. J., Kuebli J. E. (2013) Understanding Explanatory Talk through Vygotsky's Theory of Self-Regulation. Self-Regulation and Autonomy: Social and Developmental Dimensions of Human Conduct (eds B.W. Sokol, F. Grouzet, U. Muller), New York, NY: Cambridge University Press, pp. 231– 252.
  - Kuchinsky G. M. (1988) *Psihologiya vnutrennego dialoga* [The Psychology of Inner dialogue]. Minsk: Universitetskoe.
  - Lebedeva A. A. (2012) Subyektivnoe blagopoluchie lits s ogranichennymi vozmozhnostyami zdorovya [Subjective Well-Being of Persons with Disabilities] (PhD Thesis), Moscow: Moscow State University. Available at: http://psy. msu.ru/science/autoref/lebedeva.pdf (accessed 10 May 2017).
  - Leontiev A. N. (1978) *Activity, Consciousness, and Personality.* Englewood Cliffs, NJ: Prentice-Hall.
  - Leontiev D. A. (2002) Activity Theory Approach: Vygotsky in the Present. Voices within Vygotsky's Non-Classical Psychology: Past, Present, Future (eds D. Robbins, A. Stetsenko), New York: Nova Science, pp. 45–61.
  - Leontiev D. A. (2014) Razvitie lichnosti v norme i v zatrudnennyh usloviyah [Personality Development in Normal and Complicated Conditions]. *Kulturno-istoricheskaya psihologiya*, vol. 10, no 3, pp. 97–106.
  - Leontiev D. A., Aleksandrova L. A., Lebedeva A. A. (2017) *Razvitie lichnosti I psihologicheskaya podderzhka uchaschihsya s OVZ v usloviyah inklyuzivnogo professionalnogo obrazovaniya* [Personality Development and Psychological Support of Students with Disabilities during Professional Inclusive Education]. Moscow: Smysl.
  - Leontiev D., Salikhova A. (2010) Looking at Oneself as Inner Dialogue. *International Journal for Dialogical Science*, vol. 4, no 2, pp. 95–104.
  - Luria A. R. (1969) Vysshie korkovye funktsii cheloveka l ikh narushenija pri lokalnykh porazhenijakh mozga [Human Higher Cortical Functions and their Disturbance by Local Brain Damages]. Moscow: Moscow University Press.
  - Oleś P. K. (2009) Czygłosyumysłudasię mierzyć? Skala Wewnętrznej Aktywności Dialogowej (SWAD) [Can the Voices of Mind Be Measured? Inner Dialogical Activity Scale]. *Przeglad Psychologiczny*, vol. 52, no 1, pp. 37–51.
  - Seligman M. E.P. (2002) Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment. New York: Free Press.
  - Sheldon K., Kashdan T., Steger M. (eds) (2011) *Designing Positive Psychology: Taking Stock and Moving Forward.* Oxford: Oxford University Press.
  - Vygotsky L. S. (1927) Defekt I sverhkompensatsiya [The Defect and Overcompensation]. Umstvennaya otstalost, slepota I gluhonemota [Mental Retardation, Blindness and Deaf-and-Dumbness], Moscow: Doloy negramotnost, pp. 51–76.

- Vygotsky L. S. (1982) Problema soznaniya [The Problem of Consciousness]. Sobranie sochineniy L. S. Vygotskogo [Collected Works of L. S. Vygotsky], Moscow: Pedagogika, vol. 1, pp. 156–167.
- Vygotsky L. S. (1983a) Istoriya razvitiya vysshikh psikhicheskikh funktsii [History of Development of Higher Mental Functions]. *Sobranie sochineniy L. S. Vygotskogo* [Collected Works of L. S. Vygotsky], Moscow: Pedagogika, vol. 3, pp. 5–328.
- Vygotsky L. S. (1983b) Osnovy defektologii [The Fundamentals of Defectology]. Sobranie sochineniy L. S. Vygotskogo [Collected works of L. S. Vygotsky], Moscow: Pedagogika, vol. 5.
- Vygotsky L. S. (1984a) Pedologiya podrostka [Adolescent Pedology]. Sobranie sochineniy L. S. Vygotskogo [Collected works of L. S. Vygotsky], Moscow: Pedagogika, vol. 4, pp. 5–242).
- Vygotsky L. S. (1984b) Problema vozrasta [The Problem of Age]. Sobranie sochineniy L. S. Vygotskogo [Collected works of L. S. Vygotsky], Moscow: Pedagogika, vol. 4, pp. 244–269.
- Vygotsky L. S. (1934/1987) Thinking and Speech. *The collected works of L. S. Vygotsky*, New York, London: Plenum Press, vol. 1, pp. 37–285.
- Vygotsky L. S. (1989) Concrete Human Psychology. *Soviet Psychology*, vol. 27, no 2, pp. 53–77.