

Life and work of the psychologist Bluma Zeigarnik (1901-1988)

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ABSTRACT

Bluma Zeigarnik is one of the most important figures in Soviet psychology. She was initially linked to Kurt Lewin's Gestalt psychology in Berlin in the 1920s, and described the famous "Zeigarnik effect" with respect to interrupted tasks. After returning to the USSR in 1931, she was in contact with members of the cultural-historical school of psychology and worked in the field of pathopsychology, a discipline at the intersection between psychology and psychiatry, but belonging to the first. During the Second World War, she worked in the neuropsychological rehabilitation of patients with head trauma, and showed interest in lobotomy in the post-war years. A Jew, and stigmatised for having lived in Germany, she suffered Stanilist persecution in both her personal and her scientific life. Rehabilitated after the death of the dictator, she gained international recognition in the final years of her long life, during which she maintained her scientific and academic activity.

KEYWORDS

Bluma Zeigarnik, psychopathology, "Zeigarnik effect," Stalinism, Kurt Lewin, Susanna Rubinshtein

Introduction

In the context of the Russian/Soviet neurosciences, the cultural-historical school of psychology occupies a central position, led by Lev Vygotsky and other relevant scientific figures including his two "Troika" colleagues Aleksandr Luria, founder of modern neuropsychology, and Aleksei Leontiev, with the support of a distinguished group of followers. Another personality of unquestionable relevance is the pathopsychologist Bluma Zeigarnik, who enjoyed less international recognition.

The term "Zeigarnik effect" is popular in such diverse fields as psychology, education, literature, film, advertising, and business. However, little is known about the author, Bluma Zeigarnik, whose scientific work is not limited to this discovery; she also focused on experimental pathopsychology, whose study in the USSR was mainly promoted by her and Susanna Rubinshtein.

This work aims to raise awareness of this figure, both in terms of her personal life and her scientific and professional activity.

Material and methods

I reviewed the international literature on the life and work of Bluma Zeigarnik, and consulted some relevant works published in Russian, her native language.

Development

The early years: Berlin

Bluma Vulfovna Zeigarnik (Блюма Вульфовна Зейгарник), née Gershtein (Figure 1), was born in 1901 in Prenai, Lithuania. The transliteration of her Cyrillic name is "Bliuma," but "Bluma" is generalised in the international literature, and is used in this text to avoid confusion. She was the only child born to a family of

secular Jewish merchants who enjoyed a comfortable financial situation. She studied at a girls' gymnasium in Minsk, although she missed four years due to a case of meningitis; she recovered with no sequelae, and graduated with distinction in 1918. While preparing to enter university (ultimately without success), she met her husband Albert Zeigarnik, whom she married in 1919 (Figure 2), despite her parents' opposition. They finally accepted her marriage to Albert and sent the couple to study in Berlin in 1922, Bluma to the Department of Philosophy and Albert to the Polytechnic Institute. There she attended lectures by famous mathematicians, philosophers, and psychologists of the day, and showed particular interest in the teachings of the Gestalt psychologists, especially Wolfgang Köhler, Max Wertheimer, Kurt Koffka, and Kurt Lewin. In the 1920s, Zeigarnik collaborated intensely with the young psychologist Kurt Lewin (who was only ten years older than his students), who was interested in the experimental study of personality. Lewin encouraged intellectual exchanges and debate among his students. He promoted scientific research and the verification of hypotheses by experimentation.^{1,2}

Kurt Lewin (1890-1947), the father of modern social psychology, proposed the force-field analysis model, which has served as a baseline for research into group dynamics.

Individual or group behaviour is a process of change from an initial situation to a different one. According to the force-field analysis model, the events developing during this process of change occur within a dynamic field or vital space, in which the state of each part affects every other. People are not passive agents reacting to stimuli, but act according to their perception of how they interact with the environment. All parts of this force field affect one another, and to understand human behaviour we should consider all the variables intervening in the actions of individuals and groups in real time.^{3,4}

Zeigarnik collaborated with Lewin in several experiments to confirm his force-field analysis theory. One of these projects, performed between 1924 and 1926 and whose results were published in 1927, led to her international recognition: "Über das Behalten erledigter und un-erledigter Handlungen" (On finished and unfinished tasks). This project initially included 164 subjects (children, students, and teachers) and later included more reduced groups, who were asked



Figure 1. Bluma Zeigarnik as a student in Minsk

to perform between 18 and 22 successive tasks; half of these were interrupted before they were completed, with no sequence recognisable to the participants. The study demonstrated that incomplete or interrupted tasks were better remembered by adults (90%) than completed tasks, and that children in general only remembered interrupted tasks.⁵ This phenomenon is known as the "Zeigarnik effect." She analysed this circumstance after Kurt Lewin realised in a restaurant that a waiter could recall with no difficulty all the orders in progress, but once the task was finished and the bill settled, he could not remember them. Presumably, incomplete tasks remain in the working memory, whereas those already finished, unless they have been incorporated into the



Figure 2. Bluma and Albert Zeigarnik in Kovno, modern Kaunas (1919-1920)¹

long-term memory, are evanescent and disappear with time. An incomplete task is accompanied by a state of psychological tension (“quasi-necessity”), which is only released when the task is finished. The motivation caused by this tension is what makes us better remember unfinished tasks.^{2,5,6}

Zeigarnik graduated from the University of Berlin in 1925, and in 1927 she earned a doctoral degree after publishing her study on interrupted tasks. She continued researching part time until 1931, when she emigrated to the USSR with her husband, who had been offered a position in the Foreign Business Commission.¹

Return to the USSR

Once in Moscow, she worked at the Institute of Higher Nervous Activity, which in 1932 was reorganised as a division of the All-Union Institute of Experimental Medicine (VIEM, for its Russian acronym).^{1,7}

There she worked with Lev Vygotsky (1896-1934), who influenced her as much as did Kurt Lewin. Zeigarnik empathised deeply with both men and believed that this would be reciprocated. She was able to introduce them in 1933, during Lewin’s two-week stay in Moscow after

a trip to Japan. She tried to persuade him to stay in the Soviet Union but Lewin, a socialist Jew fleeing the Nazis, preferred to settle in the United States. In Moscow, Lewin presented a film and gave several lectures, which Vygotsky attended. Together with Aleksandr Luria (1902-1977), a close friend and colleague of Zeigarnik’s with whom she coincided in Berlin and who also knew Lewin, she organised for her German master to visit Vygotsky at his home, where they would have long conversations. Lewin was very upset by the news of Vygotsky’s death¹; the latter, who had advanced pulmonary tuberculosis, presented an episode of hemoptysis in May 1934. After his general wellbeing worsened, his wife Roza Noievna and Bluma Zeigarnik took turns caring for him, until he died in the early hours of 11 June.⁸ Vygotsky’s death was a tragedy for Zeigarnik, who suspected that he had deliberately rejected anti-tuberculous therapy. From then on, she displayed a portrait of Vygotsky on a shelf at her house (Figure 3).¹

During her time at VIEM, Zeigarnik became interested in a form of clinical psychology known as pathopsychology, which became her main area of work. She had previously shown an interest in clinical psychology after visiting Kurt Goldstein’s clinic at the Lazarett Hospital in Berlin

in the previous decade. In 1935, she earned the degree of Candidate of Biological Sciences, as her German Doctor of Philosophy degree was not valid in the USSR and she feared being accused of disseminating bourgeois ideas.¹ The decree “On Paedological Perversions in the Narkompros System” by the Central Committee of the Communist Party, issued in the summer of 1936, dealt a heavy blow to Soviet experimental psychology,⁹ interrupting the work of many researchers, including Bluma Zeigarnik, who in 1940 published a single work addressing post-traumatic dementia, which she had started at the beginning of the previous decade. In 1938, the psychiatry clinic at the VIEM was reorganised to become part of the Institute of Psychiatry of the Ministry of Health of the Russian Soviet Federative Socialist Republic, where Zeigarnik started to work as psychologist and neurologist.¹

The difficult years of the Great Patriotic War and the post-war period

In 1940, the Soviets invaded Lithuania and Zeigarnik travelled to Prienai to meet her mother, whom she had not seen in 20 years. In the summer of the same year, her husband was arrested under accusation of being a German spy and, after being held for months at the Lubyanka prison, he was sentenced to ten years of incarceration at the Gulag, from where he never returned. Zeigarnik was left alone with her two children, one of six years of age and the other less than one year old. This represented the start of a new life, marked by financial difficulties and visits to the Lubyanka to know the fate of her husband. Rather than turn their backs on her, her friends helped her in everything they could. Aleksandr Luria and the psychologist Susanna Rubinshtein (1911-1990) were particularly kind; the latter even took the risk of going to the Lubyanka to enquire about the prisoner. These events marked Zeigarnik for the rest of her life, and the constant fear drove her to self-censorship. She stopped talking about her experiences and acquaintances made abroad. Externally, she professed a Marxist worldview and maintained this attitude of extreme reserve, even in the 1980s, leaving no autobiographical documents or personal archives for posterity.¹

In 1941, after the beginning of the Great Patriotic War (the Soviet term for the Second World War), Zeigarnik was sent to a 400-bed clinic dedicated to nervous diseases: Evacuation Hospital 3120, an old sanatorium in the Ural mountains, on the banks of a lake in Kisegach, close

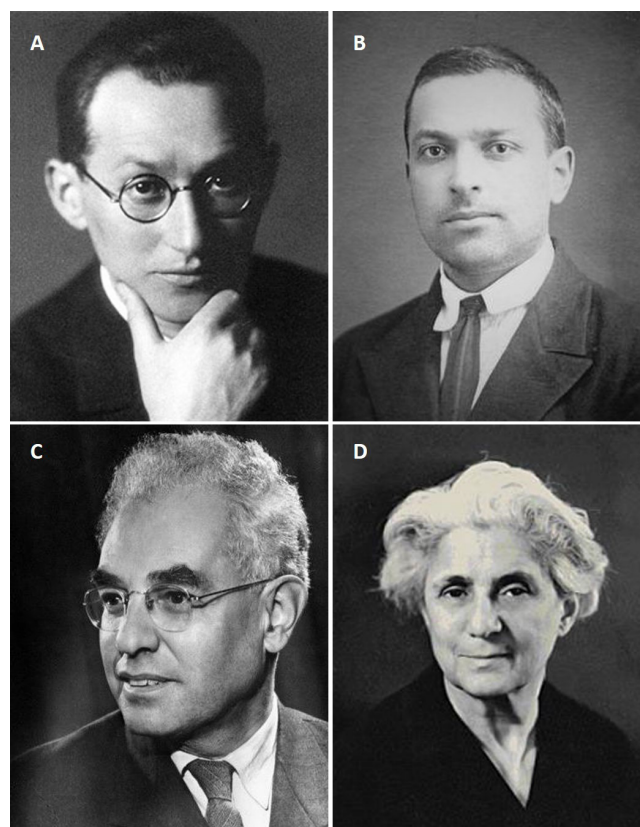


Figure 3. A) Kurt Lewin. B) Lev Vygotsky. C) Aleksandr Luria. D) Susanna Rubinshtein

to Chelyabinsk. At the hospital, directed by Aleksandr Luria, she worked with the neurologist Lev Perel'man in the physical and psychological rehabilitation of patients with brain injury. Based on the study of soldiers with syndrome of deaf-mutism, they together developed the theory that the condition was caused by the patients' personal belief that they were deaf and mute; they treated patients with rational psychotherapy and obtained very positive results. Once they were convinced that the patient's problem was psychological, they started an intensive programme of rational suggestion therapy to destroy the pathological beliefs and promote the patient's conviction that his/her symptoms were not real. They worked with open and concealed forms of suggestion, even using placebo treatments.¹⁰

Upon returning to Moscow in 1943, Zeigarnik discovered that somebody was squatting in her flat and had destroyed part of her library, furniture, and documents.

After a series of difficult administrative processes, she managed to recover her home and resume her everyday life, heading the laboratory of pathopsychology of the Psychiatry Research Institute of the Ministry of Health of the Russian Soviet Federative Socialist Republic. During that time, she also published several studies on head trauma.^{1,7,11}

When the war was over, Zeigarnik prepared a doctoral thesis based on the research conducted during that period; when it was nearing completion, it was stolen by a colleague from the Institute, and she decided to destroy all her drafts, fearing accusation of plagiarism if it was presented by someone else.¹

In the 1940s, lobotomy was used in several countries, including the USSR, as the last therapeutic resort for psychiatric patients with severe conditions refractory to other treatments.¹² The practice sparked great debate in the country and was forbidden in 1950, mainly for political reasons, as part of an antic cosmopolitan campaign against Jewish psychiatrists and other professionals and intellectuals. In 1948, Bluma Zeigarnik defended the procedure, publishing a series of 58 severely affected schizophrenic patients and reporting that, even in the early postoperative period, patients' relationships with their surroundings were surprising as it had been impossible to interact with them before. Lobotomy enabled these patients to acquire a new view of reality that could formally coincide with that of their caregivers, facilitating their reintegration into social life.^{10,13}

In 1949, Zeigarnik started to teach at Lomonosov Moscow State University, giving courses on pathopsychology and advanced training for specialists in this new interdisciplinary field of knowledge, which she greatly helped to create.^{7,11}

In the late 1940s, her work was affected by the prevailing climate of antisemitism and the consequences of the "Pavlovian session" of 1950, which triggered a very strained work atmosphere.⁹ Zeigarnik lost her position as head of the laboratory in 1950 and in 1953 lost her job at the Institute, in spite of the protection provided by its director, professor Melekhov. During that time, she suffered severe financial difficulties, which she was able to circumvent with the unconditional support of her friends, especially Luria and Rubinshtein. The antisemitic campaign remitted in 1953 after Stalin's death, but Zeigarnik did not regain her position as head of the laboratory of pathopsychology of the Psychiatry

Research Institute until 1957. She remained in the post until 1967, combining this work with her activity at the Lomonosov Moscow State University.¹

The close cooperation between Bluma Zeigarnik and Susanna Rubinshtein, which they themselves also acknowledged, occasionally makes it difficult to determine the true author of some of their texts, or the separate authorial positions in their joint work.¹⁴

Pathopsychology

Bluma Zeigarnik developed an original conception of clinical psychology, named pathopsychology, in response to the requirements of the healthcare model and the needs of clinical practice in the Soviet Union. In this context, she dedicated considerable effort to establishing psychological services in psychiatric centres, considering pathopsychology a discipline situated at the intersection of psychology and psychiatry, despite belonging to the field of psychology.^{11,15}

Pathopsychology studies the laws governing the break-up of psychic activity and the properties of personality, comparing these with the laws of formation and development of psychic processes within normality.¹⁶ It analyses the alteration of psychic processes during diseases using the concepts, categories, and terminology of the psychological sciences, enabling explanation of the mechanisms by which these disorders form and develop.¹⁷

Zeigarnik coincides with Vygotsky and Leontiev in the idea that the psyche is the result of the education and assimilation of human experience, and develops under the influence of social factors.¹⁶ Pathopsychology plays a role in determining the structure of several forms of psychic activity, especially the motivational component in the structure of cognitive activity.¹⁸

Pathopsychological research involves many practical tasks. Above all, the data obtained in a psychological experiment may be used for the purposes of differential diagnosis or as complementary material supporting diagnosis.¹⁶ Thus, research shows several forms of alterations in patients with chronic alcoholism, epilepsy, schizophrenia, neuroses, frontal lesions, or anorexia. By studying the altered structure of psychic activity in many diseases, we may also gain insight into this structure in healthy subjects.¹⁸



Figure 4. Bluma Zeigarnik working at home

Psychological experimentation may aim to analyse the structure and determine the degree of a patient's psychic alterations and intellectual degradation, regardless of their diagnosis, for example when analysing the quality of remission due to pharmacological or psychotherapeutic treatment effectiveness.¹⁶

Experimental pathopsychological methods are not only used in psychoneurological practice. Understanding modifications in patients' psychic state, the alterations in their working capacity, and their personality is essential also in medical and surgical clinics and in the area of professional hygiene; it takes on a special value in questions of professional, judicial, and military forensic psychiatric assessments. This is also useful in the clinical fields of psychotherapy and child psychiatry, as it can be used to analyse the prognosis of the child's learning process and the treatment of alterations in his/her overall status.¹⁶

For supporters of this discipline, pathopsychology and psychiatry, working with the same material, each have their own subject of study and use different means, undertaking common clinical tasks and other practical and theoretical tasks specific to each one.¹⁸ Pathopsychology differs from psychopathology in that the former is the psychological analysis of altered psychic processes with qualitative means, whereas the

latter is the essential substrate of psychiatry and studies the semiotic and nosological characterisation of psychic alterations.¹⁹

Soviet psychiatry and psychology, including Bluma Zeigarnik's pathopsychology, were influential in Latin America, especially in Cuba, where pathopsychological research flourished beginning in the 1980s.¹⁷⁻¹⁹

Post-Stalinist period. Rehabilitation and international recognition

In 1958, Zeigarnik prepared a third doctoral thesis, after the one she prepared at the University of Berlin and the one stolen in the 1940s; this time, she was awarded the degree of Doctor in Paedagogical Sciences. Her life gradually became more stable, and in 1965 she was appointed professor of psychology at the Lomonosov Moscow State University Faculty of Psychology, becoming chair in 1967.¹ From 1960, she directed the All-Russian Seminars in Pathopsychology and became an honorary and Presidium member of the Union of Psychologists of the USSR and president of the medical psychology section (Figure 4).⁷

She published various monographs, including *Thought disorder in the mentally ill* (1958), *Pathology of thinking* (1962), *Introduction to pathopsychology* (1969), *Personality and pathology of activity* (1971), *Foundations*



Figure 5. Bluma Zeigarnik in 1980

of psychopathology (1973), and *Pathopsychology* (1976); some of these works were translated into different languages, including Spanish.^{1,7,16,20}

According to a psychologist exiled from the USSR, Bluma Zeigarnik occupied a very special place on the horizon of Soviet psychologists in the 1960s, since she was the only psychologist with a Western education and exposure to Western culture. This was surprising, since many Soviet psychologists were purged when science became politicised. The informant thought Zeigarnik survived because she studied mental illness and the punitive agencies considered her a physician.²¹

In 1966, Zeigarnik participated in the 18th International Congress of Psychology, held in Moscow, and in 1969 she travelled abroad for the first time in years to attend the next congress, held in London; she organised and was co-president of the pathopsychology sections in both events. Many foreign scientists then discovered that she was still active and that her interests had little to do with Gestalt theory and the study of interrupted tasks, for which she was known internationally.^{1,7,21}

In 1978, she was awarded the Lomonosov Prize for a collection of works published between 1962 and 1976 on the psychological manifestations of various mental disorders and their rehabilitation.⁷

In 1980, she attended the 22nd International Congress of Psychology in Leipzig, where she met the children of her German masters. In 1983, she was awarded the Lewin Memorial Award by the American Psychological Association for her social and scientific commitment. The USSR pressured her to join the Communist Party if she wanted to accept the award in person, but she rejected this requirement and was not permitted to travel abroad (Figure 5).^{2,7,21}

Zeigarnik continued working in the 1980s as chair of Lomonosov Moscow State University Faculty of Psychology, where she lectured on pathopsychology, pathology of thinking, and foreign theories of personality. During that time, she published *The theory of personality of K. Lewin* (1981) and *Theories of personality in foreign psychology* (1982).^{1,2}

In her later years, she developed severe chronic anaemia requiring frequent blood transfusions; she eventually died in 1988. She was a tiny, fragile-looking woman who loved to receive guests at her flat and was especially considerate with those who asked her professional questions. She created a school that included many pathopsychology students, including Yuri Polyakov (1927-2002), Valentina Nikolaeva (1937), and Boris Bratus (1945); the school remains active in today's Russia (Figure 6).^{1,14,15,19} Many data on Bluma Zeigarnik's life come from a biographical text written by her grandson, the chemist Andrey V. Zeigarnik.¹

Conclusions

In contact with the members of the cultural-historical psychology school of her master Vygotsky and his colleagues Luria and Leontiev, Bluma Zeigarnik focused on the psychological study of mental illness, a discipline named pathopsychology in the USSR, to which she made her largest scientific and professional contribution. This discipline lies at the intersection between psychology and psychiatry, although it belongs to the former.

However, internationally, she is known for her previous link with the Gestalt psychology of Kurt Lewin, under whose direction she discovered that interrupted tasks are

better remembered than completed tasks, a phenomenon that became known as the “Zeigarnik effect.”

As many intellectuals of her time, Zeigarnik suffered the arbitrary injustices of the Stalinist regime, aggravated by the fact of her Jewish origin and having lived in Germany, where she completed her higher education, which she was unable to do in Russia. After the vicissitudes of her husband’s detention in 1940 and her own persecution during the anticosmopolitan campaign, her personal and academic life became more stable in the 1950s, and she gained international recognition in the 1970s and 1980s. She founded a fruitful school of psychology, and her intellectual energy faded only with her death in 1988.

Conflicts of interest

The author has no conflicts of interest to declare.

References

1. Zeigarnik AV. Bluma Zeigarnik: a memoir. *Gestalt theory*. 2007;29:256-68.
2. Sokolova ET. El fenómeno de la personalidad de B.V. Zeigarnik (en el 100 aniversario de su nacimiento) [accessed 18 Jan 2019]. Available from: <http://hr-portal.ru/article/phenomen-lichnosti-bv-zeigarnik>. Russian.
3. Zeigarnik BV. Kurt Lewin and soviet psychology. *Journal of Social Issues*. 1984;40:181-92.
4. Psicología y mente [Internet]. [s.l.]: Psicología y Mente; c2019 [accessed 18 Jan 2019]. Torres A. Kurt Lewin y la teoría del campo: el nacimiento de la psicología social. Available from: <https://psicologiaymente.com/social/kurt-lewin-teoria-del-campo>
5. Zeigarnik B. Über das Behalten erledigter und unerledigter Handlungen. *Psychologische Forschung*. 1927;9:1-85.
6. O’Mara S. Why do I forget jobs I have completed? Bluma Zeigarnik, the Zeigarnik effect and memories from the Great Terror. [accessed 18 Jan 2019]. Available from: <https://shaneomara.com/2013/10/24/why-do-i-forget-jobs-i-have-completed-bluma-zeigarnik-the-zeigarnik-effect-and-memories-from-the-great-terror/>
7. Zeigarnik Bluma Vulfovna. Universidad Estatal de Moscú M.V. Lomonosov. Facultad de Psicología. [accessed 18 Jan 2019]. Available from: <http://www.psy.msu.ru/people/zeigarnik.html>. Russian.
8. Blanck G. Prefacio. Para leer psicología pedagógica de Vigotski. In: Vigotski LS. *Psicología pedagógica: un curso breve*. Buenos Aires: Aique; 2001. p.16-60.
9. Marco Igual M. La larga noche de las neurociencias soviéticas durante el estalinismo. In: Simón Lorda D, Gómez Rodríguez C, Cibeira Vázquez A, Villasante O, eds. *Razón, locura y sociedad. Una mirada a la historia desde el siglo XXI*. Madrid: Asociación Española de Neuropsiquiatría; 2013.
10. Zajicek B. *Scientific psychiatry in Stalin’s Sovietic Union: the politics of modern medicine and the struggle to define ‘pavlovian’ psychiatry, 1939-1953*. Chicago: University of Chicago; 2009.
11. Kostyanaya M. Spotlight. Bluma Wulfovna Zeigarnik (1901-1988). *The Neuropsychotherapist* [Internet]. 31 Mar 2014 [accessed 18 Jan 2019]. Available from: <http://www.neuropsychotherapist.com/bluma-wulfovna-zeigarnik/>
12. Balcells M. Historia de la leucotomía. *Neurosci and Hist*. 2014;3:130-5.
13. Zajicek B. Banning the soviet lobotomy: psychiatry, ethics, and professional politics during late stalinism. *Bull Hist Med*. 2017;91:33-61.
14. O’Mara S. Guest Post: memories of soviet neuropsychology during the Great Terror - Susanna Blumenshtein and Bluma Zeigarnik. [accessed 18 Jan 2019]. Available from: <https://shaneomara.com/2013/11/05/guest-post-memories-of-soviet-neuropsychology-during-the-great-terror-susanna-blumenshtein-and-bluma-zeigarnik/>
15. Nikolaeva VV. B.W. Zeigarnik and pathopsychology.



Figure 6. Standing, left to right: Susanna Rubinshtein and Yuri Polyakov; seated, left to right: Valentina Nikolaeva, Bluma Zeigarnik, and Tatyana Tepenitsyna¹¹

- Psychology in Russia: State of the Art. 2011;4:176-91.
16. Zeigarnik BV. Psicopatología. Madrid: Akal; 1981.
 17. Knapp Rodríguez E, Grau Ábalo JA. La neuropsicología y la patopsicología como nuevas áreas de trabajo del psicólogo clínico en Cuba. *Revista Cubana de Psicología*. 1986;3:83-7.
 18. Grau Ábalo JA, Knapp Rodríguez E. La investigación patopsicológica contemporánea: su significación teórica y práctica. In: *Patopsicología. Compilación de artículos*. Santa Clara (CU): UCLV; 1988. p.54-68.
 19. Grau Ábalo JA, Hernández Meléndez E. Psicología de la salud: aspectos históricos y conceptuales. In: Hernández E, Grau JA. *Psicología de la salud: fundamentos y aplicaciones*. Guadalajara (MX): Centro Universitario en Ciencias de la Salud; 2005. p.33-84.
 20. Bibliography of Bluma Zeigarnik. [accessed 15 Mar 2019]. Available from: <https://psyhistorik.livejournal.com/65804.html>
 21. Tapp JL. Kurt Lewin Memorial Address: B. V. Zeigarnik. *Journal of Social Issues*. 1984;40:177-9.