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The Role of the Vocational Counselling Centre/Department/Office in Laying the Foundations for Working with Children and Youth with Disabilities in Zagreb after World War II: a Historical and Psychological Perspective^{***}

IZVLEČEK

VLOGA CENTRA/ODDELKA/URADA ZA POKLICNO SVETOVANJE
PRI POSTAVLJANJU TEMELJEV DELA Z INVALIDNIMI OTROKI
IN MLADOSTNIKI V ZAGREBU PO 2. SVETOVNI VOJNI:
ZGODOVINSKA IN PSIHOLOŠKA PERSPEKTIVA^{****}

Center/Oddlek/Urad za poklicno svetovanje je začel delovati leta 1932 kot psiho-loško-medicinski odziv na gospodarske potrebe tistega časa: pomanjkanje kvalificirane delovne sile v medvojnem obdobju na Hrvaškem in odsotnost ustanove za izobraževalno

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in poklicno usmerjanje mladih. To je bila prva ustanova na Hrvaškem (in širše), katere strokovno svetovalno delo je temeljilo na zdravstvenem in psihološkem ocenjevanju. Svoje poslanstvo je opravljala zelo predano. Center/Urada je že od začetka delovanja ocenjeval in izobraževalno/poklicno usmerjal invalidne otroke in mladostnike. Delo s to populacijo se je še okrepilo od sredine leta 1945 do leta 1948, ko je Center/Urada prenehal delovati. Pri delu Centra/Urada z otroki in mladostniki s posebnimi potrebami se je socialna občutljivost za to populacijo kazala v sistematičnem ocenjevanju in s tem povezanim svetovanju, razvoju populaciji prilagojenih psihodiagnostičnih orodij ter sodelovanju z ustreznimi zdravstvenimi in izobraževalnimi ustanovami. S psihološkega, strokovnega in akademskega vidika je Center/Urada upošteval svetovne standarde na tem področju (svetovanje na podlagi širokih kognitivnih in specifičnih psihomotoričnih sposobnosti). Psihologi Centra/Urada so prevajali in prilagajali sodobna psihodiagnostična orodja ter ustvarjali svoja, vključno s tistimi za invalidne otroke in mladostnike. Pri predstavitvi psihološkega dela dejavnosti Centra/Urada, namenjenih invalidnim otrokom in mladostnikom (rezultati za približno 200 invalidnih otrok in mladostnikov), je bil uporabljen fond HR-DAZG-239 Državnega arhiva v Zagrebu. S strokovnim znanjem, trdno akademsko osnovo in organizacijskimi zmogljivostmi je delo Centra/Urada predstavljalo začetek strokovne oskrbe invalidnih otrok in mladostnikov na Hrvaškem z vidika družbenih ved.

Ključne besede: poklicno svetovanje, hrvaška socialna zgodovina, otroci in mladostniki, invalidnost, psihološki testi

ABSTRACT

The Vocational Counselling Centre/Department/Office started operating in 1932 as a psychological-medical reaction to the economic needs of the time: the lack of qualified labour in interwar Croatia and an institution for youth educational and vocational guidance. It was the first institution in Croatia (and beyond) that based professional advice on health and psychological assessments and performed its mission with unprecedented dedication. From the very beginning of its work, the Centre/Office conducted assessments and educational/vocational guidance of children and youth with disabilities (CYD). However, the work with this population intensified from the middle of 1945 and lasted until the Centre/Office stopped operating in 1948. In the Centre/Office's dealings with CYD, the social sensitivity for this population manifested itself in systematic assessments and related counselling and the development of population-adapted psychodiagnostic instruments in cooperation with the relevant health and educational institutions. From the psychological, professional, and academic viewpoint, the Centre/Office followed the world standards in the discipline (counselling based on broad cognitive and specific psychomotor abilities). The Centre/Office's psychologists translated and adapted the contemporaneous psychodiagnostic instruments and created their own, including those for CYD. The HR-DAZG-239 fonds of the State Archives in Zagreb was used to present the psychological part of the Centre/Office's work

with CYD (containing findings regarding approximately 200 CYD). With its expertise, strong academic foundations, and organisational capacities, the work of the Centre/Office represented the beginning of professional care for children and youth with disabilities in Croatia from the perspective of social sciences.

Keywords: vocational counselling, Croatian social history, children and youth, disabilities, psychological tests

The Vocational Counselling Centre from its Foundation until the End of World War II

For 17 years (from 1931 to 1948), the Vocational Counselling Centre was the first such institution where, based on the medical examination and psychological survey, children and youth were counselled on their vocation. The fact that it was founded in 1931, during severe economic depression, was not a coincidence, as J. H. Bentley stated in his work on vocational guidance that “the discovery of youth was one of the byproducts of depression”¹

However, even before the Vocational Counselling Centre was established, various counselling centres had existed in Zagreb, mainly in the domain of medicine and public health, such as public health centres, medical posts/stations, various clinics, etc., where medical staff would provide advisory services to its users. Through social welfare, public health services, and counselling centres, society protected and monitored the specific population group that was considered especially fragile or in need of monitoring. This primarily included children, youth, women, and other marginalised members of society. The synchronisation of social care, public health, and the medical and educational work of Zagreb’s pre-war society during the 1930s was evident as various and, by today’s standards, notably distinct public spheres discovered their common interest.²

As mentioned above, the Zagreb Vocational Counselling Centre reflected the needs of the time when it was founded. The depression underscored the problems of the Croatian interwar economy, including the lack of skilled workers. Therefore, the Centre responded to the need to ensure the economic development of the Croatian region, especially through trades and crafts as activities, which, in the predominantly

1 Jerome H. Bentley, “Vocational Guidance of Youth,” *The Annals of the American Academy of Political and Social Science* 194, No. 1 (1937): 34.

2 Željko Dugac, *Protiv bolesti i neznanja* (Zagreb: Srednja Europa, 2005). Ivana Žebec Šilj and Željko Dugac, “Pravi čovjek na pravom mjestu – socio-ekonomska struktura ispitanika Stanice za savjetovanje pri izboru zvanja,” in Vlatka Vukelić and Mijo Beljo, eds., *Povijesni razvoj primijenjene psihologije u Hrvatskoj tijekom prve polovice XX. stoljeća: Stanica za savjetovanje pri izboru zvanja u Zagrebu (1931. – 1948.)* (Zagreb: Fakultet hrvatskih studija Sveučilišta u Zagrebu, 2020), 81, 82.

agricultural economy such as in Yugoslavia, paradoxically paved the way for modernisation, i.e. industrialisation.³ This was why the Centre was founded as a special service/department of the Office for Trade Improvement of the Chamber of Commerce, Industry and Trade. Furthermore, it received significant support from the *Hrvatski radiša* organisation, a foundation that cared for gifted but underprivileged boys and ensured their crafts and trades apprenticeship. Initially, the Centre's professional staff included the physician Aurel Forenbacher, M.D., who was also the head of the Centre and its counsellor, and Professor Zlatko Pregrad, a psychotechnician (psychologist). Professor Dr Ramiro Bujas provided additional professional and scholarly credibility to the Centre and was actively engaged in its establishment (he co-authored its regulations). As the head of the Institute of Psychology at the Zagreb University, his role as a counsellor/mentor was crucial for the development of the Centre in the following years. After completing his training in Paris (at the *L'Institut national D'orientation professionnelle*), Professor Dr Zoran Bujas, initially a part-time associate, worked as a psychologist at the Centre and would become its head after World War II.⁴

All around the world, different institutions established similar vocational counselling organisations. For example, during the 1930s, the US vocational guidance was organised in elementary and high schools and, to a lesser extent, at private and state employment agencies. In Germany, vocational counselling was obligatory and legally sanctioned, while in Belgium and France, larger industrial companies had their own centres for selecting professions.⁵ Apart from Zagreb, during the 1930s, vocational counselling centres were founded in Belgrade and Ljubljana.⁶ Namely, during the first year of its existence, the Centre was visited by many interested individuals and institutions who wanted to learn more about the institution's organisational and professional activities, among them Engineer Tomo Knez from Ljubljana and students and professors of the Teacher's College (a vocational school), also from Ljubljana.⁷ In his annual report for 1932, the head of the Centre, Dr Aurel Forenbacher, also noted that he had visited the Belgrade Psychotechnical Office and praised this institution highly, remarking that, while it had been founded approximately at the same time as the Zagreb Vocational Counselling Centre, it was much better equipped and supported by the

3 Žebec Šilj and Dugac, "Pravi čovjek na pravom mjestu," 86.

4 Ibidem, 87. Krunoslav Matešić, Sara Pavlović, and Dora Korać, "Razvoj psihodijagnostičkih sredstava u Stanici za savjetovanje pri izboru zvanja (1932. – 1948.)," in Vlatka Vukelić and Mijo Beljo, eds., *Povijesni razvoj primijenjene psihologije u Hrvatskoj tijekom prve polovice XX. stoljeća: Stanica za savjetovanje pri izboru zvanja u Zagrebu (1931. – 1948.)* (Zagreb: Fakultet hrvatskih studija Sveučilišta u Zagrebu, 2020), 55. Ivana Žebec Šilj and Mislav Stjepan Žebec, "Osnivanje i djelovanje Stanice za savjetovanje pri izboru zvanja od 1931. do 1948. godine – početak primijenjene psihologije u Hrvatskoj," *Suvremena psihologija* 1 (2018): 16, accessed on 17 February 2025, <https://doi.org/10.21465/2018-SP-211-01>. Zvonko Šešo, "Počeci djelovanja službe za zapošljavanje u Hrvatskoj," *Revija za socijalnu politiku*, 2 (2000): 179–82, accessed on 17 February 2025, <https://doi.org/10.3935/rsp.v7i2.256>. Dragan Tarbuk, "Stanica za savjetovanje pri izboru zvanja," *Zapošljavanje: delegatski informator samoupravnih interesnih zajednica i Udružene samoupravne interesne zajednice za zapošljavanje Zagreb*, 2 (1982): 11–16.

5 Bentley, "Vocational Guidance of Youth," 34–41. *Izveštaj o radu Stanice za savjetovanje pri izboru zvanja za godinu 1932.* (Zagreb: Trgovinsko-industrijska komora u Zagrebu, 1933), 9.

6 *Izveštaj 1932*, 4.

7 Ibid., 13.

Belgrade municipality.⁸ Though the Belgrade Office was soon abolished (in 1933), the Zagreb Centre kept collaborating with the Psychometric Department of the Central Institute of Hygiene in Belgrade and the psychotechnicians from the abovementioned Office.⁹ The Šola in Dom from Ljubljana and Maribor and the Maribor Adult Education Centre have initiated the establishment of vocational counselling centre in the Drava Banate. In 1933, the Centre hosted Vjenceslav Čopić and Franc Martinc, professors at the Teacher's College in Ljubljana and Maribor, who learned firsthand about the activities of the Zagreb Centre.¹⁰ The Banate's Vocational Counselling Centre was founded five years later, in 1938, when Dr Vlado Schmidt, a psychologist from the Ljubljana Centre, also visited the Zagreb Centre. On that occasion, Dr Forenbacher expressed his intention to maintain close relations with Ljubljana and keep sharing the test materials and data required for psychotechnical activities.¹¹

The Zagreb Centre primarily focused on young adults who were to enter the labour market, especially in crafts and trade, or pursue further academic qualifications. It also offered guidance to disabled youth and "fallen" women.¹² Based on a medical examination and psychological assessment of people's abilities and motivations, the Centre assessed whether an individual was the right candidate for the desired occupation and which occupations would be optimal given their psychological and physiological status. In addition, if necessary, people were referred for additional health examinations and/or treatment. Therefore, the concept of the Vocational Counselling Centre was not only to ensure the rational use of human resources or facilitate vocational selection but also to care for the youth with poor physical or mental health and refer them for further check-ups, thus also enabling their diagnosis and treatment. In its information materials and annual reports, the Centre continuously emphasised the task of preventing individuals from entering professions they were not fit for physically or psychologically, as well as the "responsibility for the individuals' well-being and prosperous society which categorically demands that the right person occupies the right position".¹³

The data collected about the people's medical/health status and during psychological assessments were stated in the Centre's application records and used for its statistical reports. The users received confirmation/certificates stating their capability for their desired occupation, or another occupation was recommended depending on the medical examination and psychological assessment findings. If deemed necessary, the certificate also contained certain remarks, such as whether the individuals should undergo certain routine preventive medical procedures before starting an apprenticeship or employment

8 Ibid., 14.

9 Izveštaj o radu Stanice za savjetovanje o izboru zvanja kod Trgovinsko-industrijske komore u Zagrebu za godinu 1938. (Zagreb: Trgovinska komora u Zagrebu, 1939), 4.

10 Izveštaj o radu Stanice za savjetovanje pri izboru zvanja za godinu 1933. (Zagreb: Trgovinsko-industrijska komora u Zagrebu, 1934), 4, 17.

11 Izveštaj 1938., 4, 15.

12 Izveštaj 1932., 9. Izveštaj 1933., 5.

13 Izveštaj 1938., 4.

or notes to future employers regarding certain (physical or developmental) limitations.¹⁴ Due to the nature of its work, the Centre developed an intensive cooperation with the University Clinic, the State Antituberculosis Institute and Dispensary, and the Mental Hygiene Centre at the Zagreb Foundation Hospital. As stated in the annual report, the Centre “welcomed the founding of the Mental Hygiene Centre, which provided medical and social care for the mentally retarded, for the neurotics, the mentally ill, etc. The establishment of this social-medical institution at the end of November 1935 complemented the activities of the Centre. In cases where such care was needed, the Vocational Counselling Centre readily cooperated with the Mental Hygiene Centre.”¹⁵

In the socio-economic constellations of the 1930s, during the economic depression and later in the atmosphere of the preparations for World War II, the Centre’s counselling service was, according to the number of users, not widely recognised nor made use of. However, this did not deter the professional staff from activities to develop the existing methods or create new tools and instruments to promote and improve the Centre’s services. In that respect, the psychotechnics department and Zoran Bujas, in particular, developed the system of technical ability tests to assess the youth graduating from middle school. Moreover, they developed a special series of tests to collectively assess the general intellectual abilities of the ungifted youth and those who were not proficient in writing and reading.¹⁶ The specific reason for developing the latter series of tests was that since 1933, the Centre observed an increasing number of children and youth with sub-average results while testing their abilities. This also prompted the establishment of special departments in some elementary schools in Zagreb for schoolchildren with intellectual disabilities (1931) and the Institute for the Education and Rehabilitation of Lightly Mentally Retarded Children (1939) in Velika Gorica.¹⁷

During World War II, one would expect that the Centre’s activities would diminish due to the wartime circumstances. However, on the contrary, the number of users in the early 1940s increased compared to the prior decade. Namely, medical and psychological assessments became obligatory for various trades and crafts training. During this period, the Centre was renamed the Vocational Counselling Department. At the end of the war, the number of assessed youth with intellectual/developmental disabilities increased. Although this group had already been present among the Centre’s/Department’s users during the 1930s, as of the 1940s, the Centre/Department focused on these children and young adults even more.

14 HR-DAZG-239 Zavod za fiziologiju i psihologiju rada, sig. 8, Prijavne karte, serijski broj 6809, 2 September 1938.

15 Aurel Forenbacher, “Osvrt na jedanaest godina savjetovanja kod izbora zvanja u Hrvatskoj,” *Vjesnik rada*, 1–8 (1943): 11.

16 *Izveštaj o radu Stanice za savjetovanje o izboru zvanja kod Trgovinsko-industrijske komore u Zagrebu za godinu 1937.* (Zagreb: Trgovinsko-industrijska komora u Zagrebu, 1938), 14. Vladimir Lesjak, *Bibliografija: 1924–1982: profesionalna orijentacija i selekcija: autori i ustanove zagrebačkog i sisačkog-banijskog područja* (Zagreb: Savez društava za profesionalnu orijentaciju SR Hrvatske: Savez samoupravnih interesnih zajednica za zapošljavanje Hrvatske, 1986), 64.

17 *Izveštaj 1933.*, 16, 17. Marko Buljevac, “Institucionalizacija osoba s intelektualnim teškoćama: što nas je naučila povijest?” *Revija za socijalnu politiku* 19, No. 3 (2012): 264, accessed on 17 February 2025, <https://doi.org/10.3935/rsp.v19i3.1066>.

Office for Work Psychology and Physiology after World War II

The Zagreb Vocational Counselling Department was the only one that “survived” World War II. The one in Belgrade, founded in 1931, was closed as soon as 1933, while the other one in Ljubljana, established in 1938, was closed in 1945.¹⁸ After May 1945, under the newly created socio-economic conditions, it was clear that the Zagreb Department had to be thoroughly reorganised in terms of vocational guidance and selection. Namely, the decreasing number of privately owned businesses and the state’s takeover of the once privately owned enterprises were signals for change. In 1946, the Department was organised under the auspices of the Ministry of Work under the scientific supervision of the University Department of Psychology in Zagreb. Therefore, its name was once again changed to the Office for Work Psychology and Physiology at the Ministry of Work of the People’s Republic of Croatia. From 1945 until 1948, the number of users was constantly increasing, and by 1948, when the Office was closed, it had reached 5,000 counselled individuals, which was a record.¹⁹ After the war, the Office employed five psychologists and a physician. The psychologist Zoran Bujas was the head of the Office (employed in the Centre since 1936), assisted by the psychologists Boris Petz, Angelina Borić, Jelena Kajfeš, Milutin Dobrenić, and the physician Sergije Dogan.²⁰

According to archival sources, the Office expanded its activities, especially regarding the surveys of educationally deprived children, mentally disordered children, war orphans, and children without adequate parental care. Most often, the state authorities would refer these children and youth to the Office of the Ministry of Social Welfare, various elementary schools in Zagreb, *Narodna uzdanica* Asylum/orphanage, Marko Orešković orphanage, Jastrebarsko orphanage, Institute for the Education of Deaf and Mute Children, etc. As far as is known, the Office cooperated with the institutions located primarily in Zagreb and its surroundings, though children cared for in these institutions came from different Yugoslav regions.²¹ To understand the constant increase of assessments and counselling of children and youth with developmental disabilities at the Office, it is important to emphasise that in the initial post-war period (1945–1953), the social care services or the state focused on war victims, children, youth, and disabled veterans. Namely, the state was the leading provider of social protection, which the Ministry of Social Welfare operationally managed. Social institutions operating in different areas – for example, the Office for Work Psychology and Physiology – provided social protection services to the most vulnerable members of society.²²

18 *Izveštaj 1933.*, 4. Zoran Bujas, “Neki problemi u vezi sa osnivanjem savjetovališta pri izboru zanimanja,” in *Izbor zanimanja: materijali sa savjetovanja o izboru zanimanja održanog 10. i 11. decembra 1951* (Beograd: Institut rada pri Savjetu za narodno zdravlje i socijalnu politiku Vlade FNRJ, 1952), 7.

19 Bujas, “Neki problemi u vezi sa osnivanjem savjetovališta,” 8–10.

20 Tarbuk, “Stanica za savjetovanje pri izboru zvanja,” 18.

21 HR DAZG-239 Zavod za fiziologiju i psihologiju rada, sig. 8, Prijavne karte 23401-23510, 1946. Sig. 9, Prijavne karte 23511-23600, 1946. Sig. 4, Opći spisi, Izveštaj o području rada Zavoda za savjetovanje pri izboru zvanja, 9 July 1946.

22 Vlado Puljiz, “Socijalna politika i socijalne djelatnosti u Hrvatskoj u razdoblju 1900.-1960. godine,” *Ljetopis socijalnog rada* 13, No. 1 (2006): 15. Zoran Sućur, “Razvoj socijalne pomoći i socijalne skrbi u Hrvatskoj nakon Drugoga

In the early years of its continuous development, the Yugoslav socialist society underwent an excruciating and violent process to reach the current ideal: industrialisation.²³ Industrial workers carried out the transformation of the predominantly agrarian pre-war society to a modern socialist society. Thus, the working class was the leading class of the socialist society.²⁴ It was not a coincidence that the state strived to invest considerable efforts in ensuring workplaces for everyone, even the most vulnerable members of the new socialist society (the mentally, intellectually, or physically disabled), though in accordance with their abilities. This was the niche where the services that the Office provided should have been crucial for the young and vulnerable members of society, as it was the only institution of its kind in the state. Namely, in theory, the socialist-humanist approach to the rehabilitation of disabled persons is manifested in society's commitment to training the disabled for productive work; in the rational approach to these issues (training for the jobs that correspond to one's psychophysical abilities); and in the obligations of the rehabilitated persons towards society.²⁵ However, the state, though formally and for reorganisational reasons, disbanded the Office for Work Psychology and Physiology, thus incapacitating itself at the moment when it was crucial to appropriately address the matter of the professional orientation of disabled children and youth.

According to Zoran Bujas, the head of the Office, the attitude of the communist authorities towards the Office was strongly influenced by the decision of the (Soviet) Central Committee of the All-Union Communist Party (the Bolsheviks) of 4 June 1936, in which psychotechnical methods were condemned as unscientific and anti-Marxist.²⁶ Therefore, as early as 1946, attacks began, first against the psychodiagnostic methods used by the Office (including psychotechnical procedures, besides mental abilities tests) and then against the head of the Office, Zoran Bujas, as well as its research and academic supervisor, Professor Ramiro Bujas. In the column "Cultural Life," published in the newspaper *Vjesnik Narodnog fronta Hrvatske* on 26 August 1946, a review and criticism of the work of the Office for Work Psychology and Physiology was published. The reproaches were aimed especially against the methods of psychological testing, which, according to the author, should evolve "through the development and enrichment of psychological science and adapt to the current forms of social life, which also condition the individuals' political life".²⁷ In other words, the so-called

svjetskog rata," *Revija za socijalnu politiku* 10, No. 1 (2003): 1–22, accessed on 17 February 2025, <https://doi.org/10.3935/rsp.v10i1.137>.

23 For more information about this topic, see Sandra Cvikić, "Vukovar u drugoj polovici 20. stoljeća: društveni uzroci nasilja," (PhD diss., University of Zagreb, 2016), accessed on 17 February 2025, <https://repozitorij.hrstud.unizg.hr/islandora/object/hrstud:940>.

24 Ivana Žebec Šilj and Sandra Cvikić, "Made in Yugoslavia: Goods from the Sunny Side of Communism," *Studia Slavica et Balcanica Petropolitana* 32, No. 2 (2022): 209, accessed on 17 February 2025, <https://doi.org/10.21638/spbu19.2022.214>. Vlado Puljiz, "Oblici i posljedice deagrarizacije u našem selu," *Sociologija i prostor* 40, No. 3/4 (157/158) (2002): 374.

25 Vojislav Kovačević, "Osnovni problemi profesionalnog aspekta rehabilitacije i mentalno retardirane omladine na nivou debiliteta," *Defektologija* 2, No. 3 (1966): 52.

26 Bujas, "Neki problemi u vezi s osnivanjem savjetovališta pri izboru zanimanja," 10.

27 "Problem savjetovanja pri izboru zvanja. Povodom članka 'Svaki na svoje mjesto' objavljenog u Narodnom listu od 18. kolovoza 1946," *Vjesnik Narodnog fronta Hrvatske*, 25 August 1946, 5.

“mechanistic methods of the outdated psychology” that had met the requirements of capitalist production were in no way appropriate for the new socio-political circumstances.²⁸ Even though this attitude could point to a certain gap in the concept of working with children and youth with disabilities between the communist authorities and the previous Centre’s work, we can safely state (although this topic has not yet been thoroughly investigated) that dealing with this population before and after 1945 only varied in terms of the scope and intensity of activities. Namely, from its founding until 1945, the Centre was primarily driven by the demands of the real economic sector, and therefore tested and counselled children and youth with disabilities mostly within regular procedures, together with other applicants/visitors of the Centre, i.e. as one (minor) part of its predominantly economically driven mission. On the other hand, between 1945 and 1948, the communist regime pushed the Centre’s activities primarily or exclusively towards the social welfare sector.

Although the Office was abruptly disbanded, during the work of the professional staff at the Office, much knowledge and experience had been accumulated that would be significant or even crucial in the future for formatting the applied and scientific work in psychology, education and rehabilitation sciences, pedagogy, and occupational health. The work with disabled children and youth was what the abovementioned psychologist Angelina Borić excelled in.

Angelina Borić had been employed at the Office since 1946. Prior to her engagement in the Office, she was a professor at the Teacher’s College (a vocational school). It could be indicative that Zlatko Pregrad, a former Vocational Counseling Centre’s psychotechnician, was also employed at the Teacher’s College between 1937 and 1946, suggesting a possibility that their career paths might have intersected, and he introduced her to the Office. However, adequate arguments for such a conclusion have still not been established. During her pedagogy, psychology, and philosophy studies, Angelina Borić came into contact with Professor Ramiro Bujas and his assistant Dr Adela Ostojčić at the University Department of Psychology, who worked closely with the pre-war Vocational Counselling Centre.²⁹ Later, Angelina Borić’s career was closely related to scientific and practical work with children with mental disorders. Boris Petz wrote in his memoir: “Zoran Bujas gladly left me to conduct examinations and interviews independently but also encouraged me to carry out research based on the collected data”.³⁰ Therefore, it is highly probable that at the Office, Borić assessed children and youth with disabilities and used the collected data to research this issue. After the Office for Work Psychology and Physiology was suddenly shut down in the second half of 1948 due to political reasons, Borić was directed to work on establishing the Mental Retardation Studies at the existing Defectology Department (founded in

28 Ibid.

29 HR-DAZG-239 Zavod za fiziologiju i psihologiju rada, sig. 4, Opći spisi, Borić Angelina preuzimanje, 1 October 1946.

30 Boris Petz, “Zoran Bujas u mojim sjećanjima na neka razdoblja našeg zajedničkog rada,” in Branko Sokač, ed., *Zoran Bujas 1910–2004, Hrvatska akademija znanosti i umjetnosti, Spomenica preminulim akademikima, svezak 129* (Zagreb: Hrvatska akademija znanosti i umjetnosti, 2005), 45.

1947) of the College of Pedagogy (the precursor of the Faculty of Teacher Education), where she was elected professor and became the head of the Defectology Department in 1949.³¹ Based on her previous research, she published the book *Mental Insufficient Development* in 1960, peer reviewed by her colleague from the Office, Boris Petz, whom she thanked in the “Foreword” for his constructive suggestions and expertise.³² According to articles in professional journals and newspapers, the book was the first such work written on this topic in Croatian, and it aroused considerable interest from the scientific and professional community, leading to the culmination of her career.³³ In 1962, the College of Pedagogy reform also resulted in the founding of the College of Defectology, an independent higher education institution in Zagreb. Angelina Borić, the head of the Department of Defectology, and Zoran Bujas, the former head of the Office for Work Psychology and Physiology, were involved in the establishment of the College. Borić collaborated with Bujas, Professor Dr Petar Šimleša, Professor Dr Petar Guberina, and the members of the Student Club of the Defectology Department on drawing up the concept of the College of Defectology as a higher education institution, its curriculum, and staff structure. In the years after the Office was disbanded, Borić obviously kept collaborating with her colleagues. Moreover, her experience at the Office strongly influenced her scientific efforts at the College of Defectology. On the occasion of the 300th Anniversary of the University of Zagreb, among other activities at the College of Defectology, it was proudly stated that the two projects Borić led as the principal researcher were accepted for collaboration with the US Ministry of Health, Education and Social Care – Department for Professional Rehabilitation. One of them was carried out in collaboration with Michigan State University. Thematically, all three projects – “Some Factors that Determine the Success of Mentally Retarded Persons in Industry” (*Neki faktori koji određuju uspjeh mentalno ratardiranih osoba u industriji*), “The Relationship between Education in a Special School and the Success of Employment of Mentally Retarded Students in Industry” (*Odnos obrazovanja u specijalnoj školi prema uspješnosti zapošljavanja mentalno retardiranih učenika u industriji*), and “Cross Cultural Attitudes Toward Education and Rehabilitation of Handicapped” (*Međukulturalni stavovi prema obrazovanju i rehabilitaciji hendikepiranih osoba*) – had a strong professional orientation component.³⁴ In that regard, it could be stated that Borić’s work experience in the Office for Work Psychology and Physiology strongly influenced her subsequent scientific interest. In May 1965, when the College of Defectology became a constituent unit of the University of Zagreb, Borić was elected dean. She served until 1970. From 1971 until her retirement in 1979, she was the head of the Mental Retardation Centre in Zagreb.³⁵

31 Milan Berkeš, “Profesor Angelina Borić dekan Visoke defektološke škole,” *Pregled problema mentalno nedovoljno razvijenih osoba* 2, No. 6 (1966): 316, 317.

32 Angelina Borić, *Mentalna nedovoljna razvijenost, Predgovor* (Zagreb: Društvo za pomoć mentalno nedovoljno razvijenim osobama, 1960), II.

33 M[ilos?], Đurašević, “Angelina Borić: Mentalna nedovoljna razvijenost,” *Telegram*, 7 October 1960, 10.

34 Angelina Borić and Vladimir Stančić, “Visoka defektološka škola u Zagrebu,” in Jaroslav Šidak, ed., *Spomenica u povodu proslave 300-godišnjice Sveučilišta u Zagrebu*, II. (Zagreb: Izdavački zavod JAZU, 1970), 403, 406.

35 “Povijest,” Sveučilište u Zagrebu Edukacijsko-rehabilitacijski fakultet, accessed on 17 February 2025, https://www.erf.unizg.hr/o_fakultetu/povijest.

Psychological Academic Background and Psychodiagnostic Expertise in Grounding Work of Vocational Counselling Centre/Department with Children and Youth with Disabilities

The description of how the groundwork of the Vocational Counselling Centre/Office for Work Psychology and Physiology (Centre/Office) with schoolchildren and youth with disabilities looked like from the perspective of psychological expertise calls for the elaboration on at least three topics:

1. The academic psychological background of psychologists employed at the Centre/Office
2. Psychological instruments applied when working with children and youth with disabilities at the Centre/Office
3. The properties and examples of psychological diagnostics and occupational counselling of schoolchildren and youth with disabilities at the Centre/Office

The following sections aim to elaborate on these topics within the constraints of this scientific article.

The academic psychological background of psychologists employed at the Centre/Office

Given that the structure of the economic activities and development trends dominantly determine the educational programmes developing the appropriate competencies of the future young employees, the psychologists employed at the Centre/Office were expected to primarily assess the status of the abilities crucial for developing these competencies. Based on this, guidance on the choice of possible occupations was conducted, considering the motivation and wishes of the young people referred to the Centre/Office. The economic activities in Zagreb and in the areas of Croatian economic interest during the 1930s were characterised by the development of crafts and industry, and the founders and predominant users of the Centre/Office tasked the employed psychologists with assessing the intellectual qualities and psychomotor competencies required for craft and industrial occupations.³⁶

The field of psychology (which was still a young discipline globally at the time) focused on applying the relevant scientific knowledge to assess the abilities relevant to certain professions and mostly involved psychotechnics and the psychology of intellectual abilities, more precisely, the psychology of intelligence. Before we briefly explain these two psychology fields relevant to the development of human professional competencies, it is vital to point out a fact particularly relevant to the expertise of the Centre/Office's psychologists. The psychologists employed at the Centre/

³⁶ Žebec Šilj and Žebec, "Osnivanje i djelatnost Stanice za savjetovanje pri izboru zvanja," 5–28.

Office started to develop their knowledge in these two expert fields (psychotechnics and intelligence) based on the academic psychology education that started at the University of Zagreb several years before the establishment of the Centre/Office and was characterised by an exact physiological approach to psychological processes and by experimental methodology.³⁷

Psychotechnics is the original name for applied psychology, devised by W. Stern³⁸ and affirmed by the founder of that psychological field, H. Münsterberg, at the very beginning of the 20th century.³⁹ However, it primarily included the application of scientific psychological knowledge in the field of work and working abilities assessment, industry, career choice, and professional guidance. Psychotechnics is characterised by the exceptional production of psychotechnical instruments simulating the requirements of the most representative industrial machines and is widely used in job selection procedures for measuring psychomotor skills and dexterity. Due to the notable presence of psychotechnics in work psychology at that time (used especially for employee selection), Zoran Bujas, one of the first and most prominent Vocational Counselling Centre employees, completed his doctoral studies in psychology (1933–1936) with H. Piéron, a leading French psychotechnician.⁴⁰ However, due to the insufficient criterion and construct validity of psychotechnical instruments and partly because of the changes in the structure of economic activities in the coming years, this approach to career choice and professional guidance has been gradually abandoned since the mid-1950s.

In contrast to psychotechnics, the psychology of intelligence is an approach to human intellectual abilities that kept developing continuously during the 20th century, in terms of both theoretical models and application.⁴¹ This field of psychology arose from the need of the French educational system at the beginning of the 20th century to identify students with intellectual disabilities, which was successfully answered by A. Binet and T. Simone, who devised the Binet-Simon scale for assessing intellectual status.⁴² This scale for assessing the intellectual status of students was the first instrument for measuring intelligence – the ability of an individual to understand complex ideas, adapt effectively to the environment, learn from experience, and engage in various forms of judgment in order to overcome obstacles with thought.⁴³ From then and until today, numerous intelligence assessment instruments have been systematically developed in all areas of applied psychology (education, work psychology, clinical psychology, professional guidance, and others), and it is significant that the first of

37 Kruno Matešić, *Psihodijagnostička sredstva* (Jastrebarsko: Naklada Slap), 29–31.

38 Kurt Landau, "Psychotechnical aspects in engineering disciplines," *Zeitschrift für Arbeitswissenschaft* 77 (2022): 23–38, accessed on 17 February 2025, <https://doi.org/10.1007/s41449-022-00325-7>.

39 Robert R. Hoffman and Kenneth A. Deffenbacher, "A brief history of applied cognitive psychology," *Applied Cognitive Psychology* 6, No. 1 (1992): 1–8, accessed on 17 February 2025, <https://doi.org/10.1002/acp.2350060102>.

40 Matešić, *Psihodijagnostička sredstva*, 39.

41 Ian J. Deary, "Intelligence," *Annual Review of Psychology* 63 (2012): 453–82, accessed on 17 February 2025, <https://doi.org/10.1146/annurev-psych-120710-100353>. Robert J. Sternberg, ed., *Encyclopedia of human intelligence*, Vols. 1 & 2 (New York: Macmillan, 1994).

42 David Hothershall, *Povijest psihologije* (Jastrebarsko: Naklada Slap), 441–44.

43 Ulric Neisser et al., "Intelligence: Knowns and unknowns," *American Psychologist* 51, No. 2 (1996): 77–101, accessed on 17 February 2025, <https://doi.org/10.1037/0003-066X.51.2.77>.

them were soon employed in the work of the Centre/Office. The demand for cultural and social suitability of intelligence tests for Centre/Office users and the need to assess intelligence in specific groups of children and youth led to the development of original Croatian intelligence tests by Z. Bujas and his colleagues at the Centre/Office.⁴⁴ In addition, it led to the dominance of intelligence measurements over psychotechnics in work psychology (the trend existed globally).

Based on the above, we can conclude that the academic psychological foundation for diagnosing the abilities of children and youth referred to the Centre/Office was mostly based on the biological determinants of these abilities. This was one of the key reasons for the conflict with the ruling communist ideology of the time (which strongly advocated people's equality in terms of their abilities and denied the biological determination of human lifespan development) and, consequently, for the state's dissolution of the Centre/Office.⁴⁵

Psychological instruments applied for working with children and youth with disabilities within the Centre/Office

The existing scientific publications on the psychodiagnostic instruments used for the Centre/Office's work do not contain any information on the special psychodiagnostic procedures used for children and youth with developmental disabilities.⁴⁶ On the one hand, this is expected because, to reliably and empirically confirm that a person shows sub-average abilities, this must be determined by an instrument that also tests "average" persons, i.e. people with "normal" abilities. On the other hand, better differentiation of schoolchildren and youth with disabilities requires an instrument adapted to that population.

In this regard, the only available publication that mentions psychodiagnostic instruments for persons with some aspect of intellectual disabilities is the Report of the Zagreb Chamber of Commerce and Industry for the year 1937. Namely, this publication reports on the previously mentioned special series for group examination of the general intellectual abilities of the ungifted youth and those who were not proficient in writing and reading. This instrument was compiled by combining a series of suitable individual tests (according to Yerkes, Rossolim, Hylla-Bobertag, Squier, Porteus, etc.), with certain modifications, into a single whole.⁴⁷ More precisely, this system enables insight into the developmental state of psychological functions characteristic of the general intellectual giftedness of ungifted candidates and those who were not proficient in writing and reading.

44 Matešić, *Psihodiagnostička sredstva*, 34–45.

45 Žebec Šilj and Žebec, "Osnivanje i djelatnost Stanice za savjetovanje pri izboru zvanja," 18, 19. Krešo Novosel, ed., "Borba za idejnu čistoću u nauci. Osvrt na predavanja iz psihologije," *Studentski list: organ Narodne omladine Zagrebačkog sveučilišta*, 8 January 1949, 4, 5.

46 Matešić, *Psihodiagnostička sredstva*. Matešić, Pavlović, and Korać, "Razvoj psihodiagnostičkih sredstava," 51–79.

47 *Izveštaj 1937.*, 14–17.

Due to the lack of published data on the Centre/Office's psychodiagnostic methods employed for children and youth and the repeatedly reported fact that this population was evaluated at the Centre/Office (sporadically in the first period and systematically since 1945),⁴⁸ the only source for determining the applied psychodiagnostic instruments appropriate for that population was the HR-DAZG-239 *Zavod za fiziologiju i psihologiju rada* fond of the State Archives in Zagreb. Therefore, the content of this section is based on the photographs of psychological findings from the preserved application cards for regular examination at the Centre/Office and from group test reports archived in the Centre/Office's Letter Archive of the HR-DAZG-239 *Zavod za fiziologiju i psihologiju rada* fond.

The results of the abovementioned psychological findings for all schoolchildren and youth with developmental disabilities, tested at the Centre/Office in 1946, indicate that these subjects were evaluated primarily with the following tests of general intellectual development: Binet-Simon scale (in some revisions), B.O.B. series, N-series and Z-series (for respondents from 15 years of age). On some of the completed application forms, the testing results were labelled "B". To date, we could not establish whether that indicated the use of some of the Centre/Office's less frequently used tests (which have still not been described in the relevant literature). Alternatively, "B" might be a label for the abovementioned testing procedure developed in 1937 for the group examination of the general intellectual ability of ungifted youth and those who were not proficient in writing and reading.

In the previous section, we mentioned the Binet-Simon scale as the first instrument in history for measuring intelligence, created specifically to diagnose students with intellectual disabilities. The importance of this instrument for psychological science is clearly indicated by the fact that *Science*, one of the world's leading magazines for popularising science, declared the Binet-Simon scale an epoch-making discovery of the 20th century in 1984.⁴⁹ At the Vocational Counselling Centre, one of the three revisions of that test – Terman's, Bobertag's, and Stejskal's – were used.⁵⁰

The B.O.B. [Ballard – Ostojčić – Bujas] series for testing children's intelligence was produced as a Croatian intelligence test based on the original intelligence scale of the English pedagogue and psychologist P. B. Ballard. It was produced by Z. Bujas and A. Ostojčić in 1942 as a verbal-numerical test for group application on children aged between 7 years and 3 months and 13 years and 3 months.⁵¹

The N series is an instrument for testing the intelligence of people without any school education, constructed by Z. Bujas in 1942.

The Z-series is the first completely original Croatian intelligence test for adults. It was developed by R. Bujas and Z. Bujas in 1937.⁵²

The data on the application of the individual psychotechnical procedures for the assessment of specific work abilities – i.e. on work experiments with children and

48 *Izveštaj 1933.*, S. Žebec Šilj, Žebec, "Osnivanje i djelatnost Stanice za savjetovanje pri izboru zvanja," 11.

49 Hothershall, *Povijest psihologije*, 444.

50 Matešić, Pavlović, and Korać, "Razvoj psihodijagnostičkih sredstava," 51–79.

51 Zoran Bujas and Adela Ostojčić, *Inteligencija i njeno mjerenje* (Zagreb: Tiskara C. Albrecht, 1942), 49–103.

52 Matešić, *Psihodijagnostička sredstva*, 39, 42.

youth with disabilities (with aids and devices specific to the individual professions from the psychotechnical paradigm of ability assessment) – were not included in the application forms archived in the HR-DAZG-239 *Zavod za fiziologiju i psihologiju rada* fond.

The properties and examples of psychological diagnostics and occupational counselling of schoolchildren and youth with disabilities at the Centre/Office

Due to the lack of literature on the psychodiagnostic instruments that the Centre/Office used for assessing and counselling schoolchildren and youth with disabilities, it is impossible to expect that the *process* of diagnosing and counselling that population will be systematically described in the literature authored by the Centre/Office or anyone else. Thus, the characteristics of the diagnostics and counselling used during the Centre/Office's work with schoolchildren and youth with disabilities will be partly deducted from the annual reports published by the Centre/Office and partly from the application records and other records of the assessments and counselling, archived in the HR-DAZG-239 *Zavod za fiziologiju i psihologiju rada* fond.

Before analysing the traits of the Centre/Office's work with schoolchildren and youth with disabilities, we should underline two things. Firstly, observing the contents of the application records archived in the HR-DAZG-239 *Zavod za fiziologiju i psihologiju rada* fond, developmental disabilities is a category that includes a wide range of deviations, from severe forms of mental retardation, physical disability or underdevelopment, to sub-average reading and writing skills or manual dexterity. The basic assessment procedure was probably adjusted depending on the degree of deviations, although no written sources have been preserved about this. Secondly, the basic assessment and counselling procedure at the Centre/Office was constantly revised regardless of the requirements of working with schoolchildren and youth with disabilities. The procedures had been revised ever since the founding of the Centre/Office, at which point the procedures from similar German institutions were applied. Afterwards, new psychodiagnostic instruments were constantly being developed and/or adopted – from the introduction of procedures from the French psychotechnical tradition in 1937 to the radical changes in the social environment and collaborative institutions (economic, health, and scientific) in 1945. Since no annual activity reports were published after 1940, those changes are impossible to trace. The assumptions regarding the Centre/Office's work with schoolchildren and youth during and after the war, in 1945 and 1946, are impossible to determine with certainty. However, we can safely assume that the basic procedures did not differ significantly from those employed in 1944 because the Centre/Office employees remained the same.

The basic procedure for assessing schoolchildren and youth with milder developmental disabilities was probably the same as the one used for children and youth

with no disabilities, as most of those disabilities were officially confirmed/diagnosed only after the standard assessment procedure at the Centre/Office. After the medical examination (conducted to determine any health constraints regarding the possible/desired occupations), the applicants were referred to collective testing to assess their general intellectual development and often technical abilities/giftedness.⁵³ The sub-average development reported by the testing suggested certain groups of simpler professions, so the next step of individual testing depended on whether the applicant expressed a clear desire for a specific profession. In the case a wish was expressed, tests of specific abilities required by that profession were applied based on the profession's psychogram (a profession psychogram is a detailed description of a profession that reliably and precisely describes the appropriate activities of the profession and the required abilities). If the applicant fulfilled those demands, the psychological preconditions were met to recommend the desired profession to the seeker of professional guidance/applicant. On the other hand, if the applicant failed to fulfil the demands of a specific occupation during special tests, he was tested with other special ability tests required by other simple occupations on the labour market. This procedure determined the broader psychological profile of the individual relevant for employment in simple activities, after which the profession psychogram was searched that most closely matched the psychological profile. After the match between the psychogram and the individual's profile had been gained, a recommendation was given for the target profession. If the individual did not express a clear desire for a specific occupation during the counselling, after the assessment of the general intellectual abilities (and eventually technical giftedness), a special abilities test procedure was carried out to create a related psychological profile (relevant for occupations). Finally, a comparison of the psychological profile to profession psychograms was carried out, and the profession that matched was recommended.⁵⁴

The basic assessment/testing procedure for schoolchildren and youth with severe developmental disabilities, preceded by a medical examination, started with an individual assessment of general intellectual development and, eventually, technical giftedness. Depending on the results, following the determination of the general intellectual status, the special abilities test procedure was carried out, very similar to the one for schoolchildren and youth with milder developmental disabilities but with a significantly more limited choice of simple occupations. Considering that for many examined applicants with this status, the application cards contain nothing but the results of the general intellectual abilities test, we can assume that the counsel for choosing a profession was issued based on that result only, without any additional testing of special abilities.

It is important to stress that, according to the available sources, professional counselling of schoolchildren and youth with severe developmental disabilities represented the focus of the Centre/Office's activities in the second half of 1945 (as explained earlier in the paper). However, the care for schoolchildren and youth with developmental

⁵³ *Izveštaj 1937.*, 14–17.

⁵⁴ *Izveštaj 1932.*, 16–21.

difficulties, in terms of professional counselling, has been present at the Centre/Office since the very beginning of its work, although at the level of milder developmental difficulties. Namely, the Centre/Office's annual report for the year 1933 explicitly suggested (in the context of the institution's expansion) the establishment of a special department for the so-called less gifted, arguing that psychotechnical work acquires a particularly social and humane significance and value if its activities "provide assistance to the weaker, less gifted, and less normal".⁵⁵ This initiative was partly accomplished in 1937 by developing a special series of tests for the group assessment of general intellectual abilities of the ungifted youth and those who were not proficient in writing and reading.

Based on the abovementioned (and related) written sources, we can state that diagnostic and counselling work with schoolchildren and youth – including those with developmental disabilities – was characterised by several professional qualities. Firstly, the Centre/Office constantly searched, implemented, and revised its organisational and psychotechnical procedures. For example, the initial profession psychograms (the basis of every psychotechnical procedure) originated from two volumes of the *Handbuch der Berufe* (Magdeburg-Leipzig, 1927). Furthermore, the organisation of psychotechnical procedures was initially taken from the *Institut für Arbeits- und Berufspsychologie* in Halle and the *Landesarbeitsamt Bayern* in Munich and later enriched with the French system of procedures for testing technical abilities (*Fische d'aptitudes techniques par Piéron*). Moreover, during its existence, the Centre/Office continuously supplemented its collection of aid materials and the apparatus for the psychotechnical testing of special abilities and either prepared Croatian versions of the established international instruments (*Bobertag*, *Stejskal* and *Terman adaptation of Binet-Simone scale*, *Ballard-Ostojčić-Bujas test*, *Alpha Army Test*, *Beta Army Test*, *Northumberland serial*, *George Bennet T-serial*) or developed its own instruments/tests (*Z-serial*, *Serial R*, *Serial R-II*, *Serial N*). Additionally, Centre/Office employees were continuously sent to train in renowned psychotechnical institutions throughout Europe and at foreign or domestic postgraduate studies. Consequently, the scientific production of most Centre/Office employees was significant. Most of them attained doctorates and kept cooperating with university clinics and the Psychological Institute of the University of Zagreb (which is quite unusual for an expert institution in the service of the economy). Finally, the Centre/Office was characterised by an outstanding work ethic, as the number of its service users grew constantly (except for a single recorded two-year stagnation) and all its segments kept developing (facilities, equipment, work organisation, collaborating institutions, number of employees and their qualifications), often accompanied by ultimate workload for the employees.

To empirically illustrate the work of the Centre/Office with schoolchildren and youth with developmental difficulties after the end of World War II, we will present a numerical description of the conducted examinations and the corresponding results in the second half of 1945 and in 1946.

⁵⁵ *Izveštaj 1933.*, 15.

According to the records kept in the Centre/Office’s archives, from June to October 1945, 134 school children and youth referred to the Centre/Office as persons with developmental or behavioural disabilities were examined and professionally counselled. Of these, the results of 111 examinees were recorded and statistically analysed because the remaining 23 could not be examined (they did not speak or did not understand speech, could not maintain attention, or did not want to cooperate).

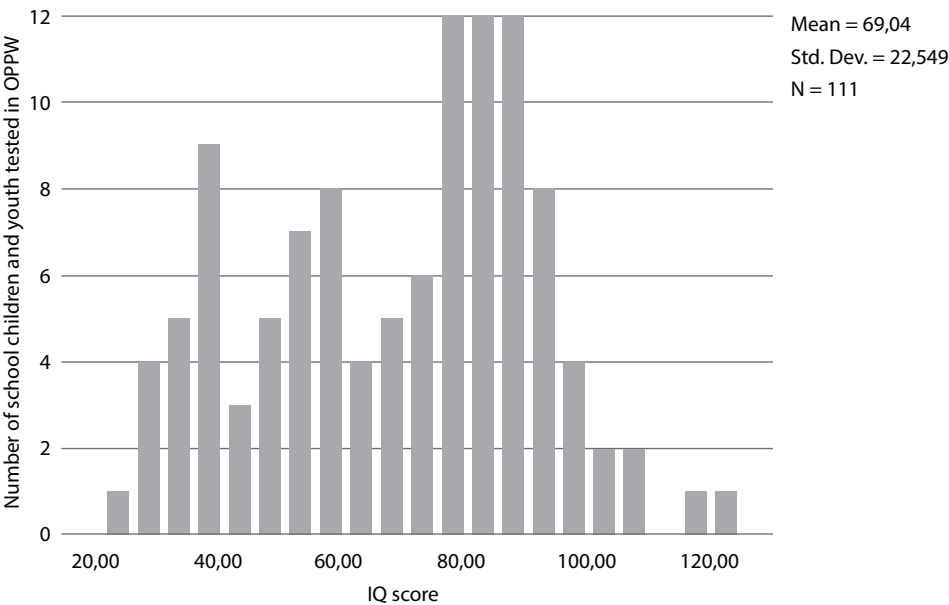
The following table and corresponding graphic show the intellectual status of that group of schoolchildren and youth.

Table 1: Descriptive statistics of IQ scores of schoolchildren and youth examined at the *Office for Psychology and Physiology of Work* (Centre/Office) during 1945 (from June until October) who were referred to the Centre/Office because of developmental difficulties in intellectual functioning or behaviour.

Descriptive statistics		Statistic value	Std. Error
IQ	Mean	69.04	2.140
	Median	74.00	
	Variance	508.453	
	Std. Deviation	22.549	
	Minimum	23.00	
	Maximum	124.00	
	Range	101.00	
	Interquartile Range	35.00	
	Skewness	-.141	.229
	Kurtosis	-.789	.455

The findings presented in the previous table and the following Figure show that 85 % of the tested children and youth showed below-average results, of which the best 21 % are in the low average category. The lowest results (IQ = 23–30) indicated severe forms of intellectual underdevelopment, but there were also two examinees with above-average abilities (but obviously with other difficulties). This led to a significant dispersion of the results and large values of the related measures (SD, interquartile range), so we can conclude that the employed psychodiagnostic instruments could differentiate well between the tested schoolchildren and youth with difficulties.

Figure 1: Distribution of schoolchildren and youth with developmental difficulties in intellectual functioning or behaviour, referred to the Centre/Office from June until October 1945 based on IQ scores.

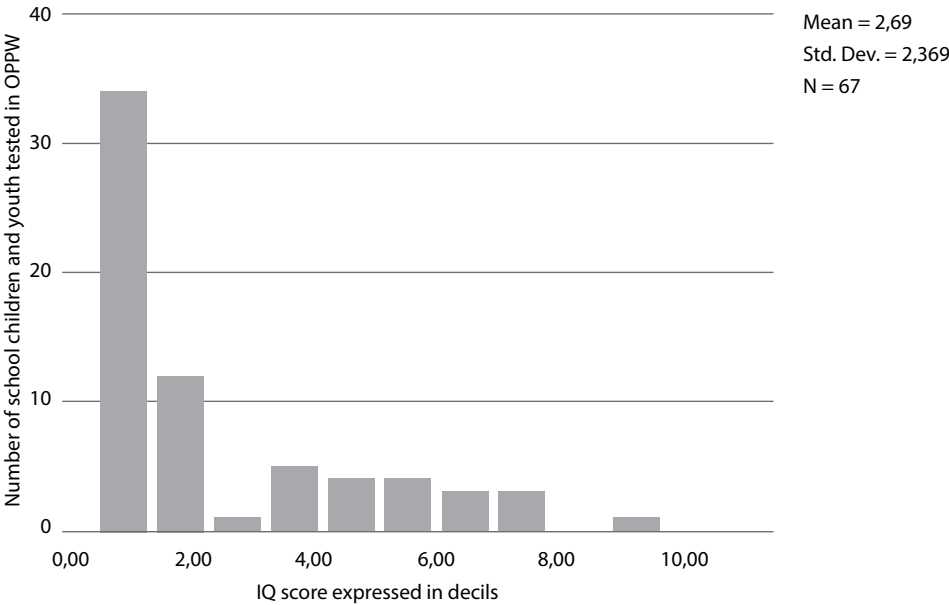


From March to September 1946, in the existing (accessible) parts of the HR-DAZG-239 *Zavod za fiziologiju i psihologiju rada* archive, 93 application forms of schoolchildren and youth tested at the Centre/Office in the category of persons with developmental or behavioural disabilities were found. They were sent to the Centre/Office from four children’s homes (*Civic Children’s Home, Tuškanac Children’s Home, Marko Orešković Children’s Orphanage, Velika Gorica Children’s Home*), two shelters (*Zagreb Children’s Shelter, Central Children’s Shelter*), from *Men’s Youth Home, University Hospital for Mental diseases*, and from the institutions where the *Ministry of Social Welfare* referred those schoolchildren and youth. Of the listed 93 application cards, some did not contain the intellectual ability test result, some did not state the age (which is why the IQ could not be calculated), and some were measured with instruments for which we lacked any available assessment standards. Consequently, the results of only those schoolchildren and youth whose intellectual ability was assessed via the B.O.B series or the Binet-Simon scale could be presented (67 of them, in total). These results are expressed in deciles because that was the only scale on which the results of both tests could be presented uniformly. The presentation of these results is in the following table and figure.

Table 2: Descriptive statistics of IQ scores on a decile scale of schoolchildren and youth examined at the Centre/Office in 1946 (from March until September), referred to the Centre/Office because of developmental difficulties in intellectual functioning or behaviour.

Descriptive statistics		Statistic value	Std. Error
IQ score expressed on a decile scale	Mean	2.7	.29
	Median	1.00	
	Variance	5.61	
	Std. Deviation	2.37	
	Minimum	1.00	
	Maximum	10.00	
	Range	9.00	
	Interquartile Range	3.00	
	Skewness	1.317	.293
	Kurtosis	.641	.578

Figure 2: Distribution of schoolchildren and youth with developmental difficulties in intellectual functioning or behaviour, referred to the Centre/Office from March until September 1946, based on IQ scores expressed on a decile scale.



The findings contained in Table 2 and Figure 2 show that the tested schoolchildren and youth, sent from the abovementioned care homes, shelters, and institutions from the domain of the Ministry of Social Welfare, showed a significantly weaker intellectual status compared to the children tested at the Centre/Office in the second half of 1945. Namely, over 77 % of the tested children and youth with special care showed sub-average intellectual development, of which 51 % suffered from the most severe forms of underdevelopment. This is why the distribution showed a significant positive asymmetry. In the tested sample, only one applicant showed above-average intellectual development. According to statistical indicators ($CV=88.2\%$), the distribution shows a large dispersion, but the fact that 51 % of examinees were classified in the same decile indicates that the decile scale quite roughly differentiated the tested children and youth (but it was the only available scale for displaying the results of both tests applied).

By comparing the results of both groups of tested schoolchildren and youth with developmental disabilities, it is clear that the group referred to the Centre/Office from special care homes (during 1946) was significantly more vulnerable in terms of these disabilities. However, the educational work with both groups of schoolchildren and youth, as well as professional counselling and subsequent professional work after the testing at the Centre/Office, was subject to exact guidelines and a more realistic perspective.

In the context of the history of psychological work and care for children and youth with disabilities, we should mention the psychologist Dr Anka Matić, although she was not an employee and probably not even a collaborator of the Centre. On the contrary, according to the sources that reported criticism of the Centre's activities, Anka Matić indirectly challenged the components and integrity of the scientific paradigm of the psychological diagnostic procedures employed at the Centre/Office and thus the results of its work.⁵⁶ After her education in France and a short career at the University of Zagreb's Institute of Psychology, Anka Matić dedicated herself to working with children and youth with difficulties at the Counselling Centre for the Education of Children and Youth in Zagreb.

Conclusion

During the 1930s, the work of the Vocational Counselling Centre, based on the scientific expertise of a group mostly consisting of psychologists, resulted in what would later represent the core of the so-called Zagreb Circle of Psychology (*Zagrebački psihološki krug*). On those foundations, during the 1940s, the Office for Work Psychology and Physiology became a pool for developing the personnel for scientific work in education, rehabilitation, and psychology. Therefore, the Office for Work Psychology and Physiology made a notable impact on training the experts and developing scientific work with children and youth with disabilities after World War II.

⁵⁶ Novosel, "Borba za idejnu čistoću u nauci," 4, 5.

In the given historical circumstances, the Centre/Office, in a modern and professional (scientific) way, provided care to the population with disabilities. We could even say that this was the beginning of professional care for the population with disabilities from the social sciences perspective. Until then, youth with disabilities had depended on their subjective assessment if they wanted to determine what sort of work they could handle. Therefore, the Centre/Office's mission was to provide vocational counselling and function as an indispensable component of social care for children and youth with disabilities.

From a psychological perspective, we could conclude that the Centre/Office's work with children and youth with developmental disabilities was highly professional and socially compassionate at the time in terms of both diagnostics and counselling. Thus, it significantly improved the quality of life of the population in question in Zagreb after the end of World War II. Furthermore, this population's psychological diagnostics and educational-vocational counselling became a regular work process of the subsequent Psychological Department of the Croatian Employment Service, which contained specific annual cooperation plans with educational institutions responsible for that population. However, additional research efforts will be required to thoroughly analyse the archival materials kept in the *HR-DAZG-239 Zavod za fiziologiju i psihologiju rada* fond. Additionally, the archive materials and publications of today's Croatian Employment Service should also be examined, for which consent has already been requested.

To conclude, during its work with schoolchildren and youth with disabilities, the Vocational Counselling Centre/Office for Work Psychology and Physiology established four foundations for constructing the process of that population's social welfare. First, it developed the assessment procedures for this vulnerable social group's professionally relevant cognitive and motor abilities. Secondly, it conducted continuous diagnostics and vocational counselling of a remarkable number of members of this population throughout the 15 years marked by economic depression and war. Thirdly, it provided experience in the field of psychology and rehabilitation to several future Zagreb University professors who participated in founding the educational rehabilitation studies at the same university and later led them. Finally, it developed the organisational structure and trained the leading person – Mrs Jelena Kajfeš - of professional counselling relaunched during the 1950s within the Croatian Employment Service, which has remained in place and worked with schoolchildren and youth with disabilities until today.

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VLOGA CENTRA/ODDELKA/URADA ZA POKLICNO SVETOVANJE PRI POSTAVLJANJU TEMELJEV DELA Z INVALIDNIMI OTROKI IN MLADOSTNIKI V ZAGREBU PO 2. SVETOVNI VOJNI: ZGODOVINSKA IN PSIHOLOŠKA PERSPEKTIVA

POVZETEK

Center za poklicno svetovanje je bil ustanovljen 19. junija 1931 z odlokom izvršnega odbora Urada za izboljšanje trgovine pri Gospodarski, industrijski in trgovinski zbornici v Zagrebu. Njegova glavna naloga je bila svetovanje mladim pri izbiri obrtnih poklicev in poklicnih šol na podlagi zdravniške in psihološke ocene njihovega telesnega razvoja in zdravja oziroma sposobnosti in motivacije. V sedemnajstih letih je Center za poklicno svetovanje (pozneje preimenovan v Oddelek za poklicno svetovanje in Urad za psihologijo in fiziologijo dela) obiskalo več kot 30.000 ljudi, od katerih jih je več kot 20.000 opravilo psihološko testiranje. Čeprav se je število pregledanih in testiranih oseb v zadnjih letih delovanja Centra/Oddelka/Urada zelo povečalo, so ga leta 1948 zaprli iz ideoloških razlogov.

V zadnjih treh letih njegovega obstoja in v prvih letih novega komunističnega režima je Urad za psihologijo in fiziologijo dela opravljal vedno več ocen otrok z motnjami v duševnem in telesnem razvoju, zlasti tistih iz nekaterih zagrebških sirotišnic, npr. iz Doma za otroke Marko Orešković. Po ocenah so nekatere od njih namestili v Zavod za usposabljanje duševno zaostalih otrok v Veliki Gorici.

Ob zaprtju Urada za psihologijo in fiziologijo dela so bili v njem zaposleni zdravniki in pet psihologov. Ena od njih, Angelina Borić, je napisala knjigo *Mentalna nedovoljna razvijenost* (Mentalna nezadostna razvitost) (1960). Leta 1962 je bila med soustanoviteljki Visoke defektološke šole.

V prispevku je analiziran pomen Urada za psihologijo in fiziologijo dela pri postavljanju temeljev za delo z invalidnimi otroki in mladostniki, zlasti v obdobju po 2. svetovni vojni. Poleg tega so predstavljeni in obravnavani razpoložljivi arhivski podatki o uporabljenih psiholoških instrumentih in diagnostičnih rezultatih, povezanih z njimi.