

JOURNAL OF SECURITY AND CRIMINAL SCIENCES

Banja Luka, 2019

JOURNAL OF SECURITY AND CRIMINAL SCIENCES

Publishers:

Faculty of Security Studies University of Banja Luka

Address: Bulevar vojvode Živojina Mišića 10 a

78000 Banja Luka, Republika Srpska

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<https://fbn.unibl.org/>

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Phone: +381 11 3161 444

<http://www.kpu.edu.rs/cms>

Journal's email address: casopis@fbn.unibl.org

Journal's web address: <https://fbn.unibl.org/casopis/>

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Print:

Agencija Aligo, Ilidža

Circulation: 200 copies

ISSN 2637-3076

The journal is published twice a year

The Journal of Security and Criminal Sciences (is registered in the Register of Public Media of the Ministry of Education and Culture of the Republika Srpska under number 688)

EDITORIAL INTRODUCTION

We have before us the second issue of the *Journal of Security and Criminal Sciences*, which is a step forward from the first issue. There are several reasons to claim this. The first reason is that from this second issue on, the journal is co-published by the Faculty of Security Studies, University of Banja Luka, and the University of Criminal Investigation and Police Studies in Belgrade. Thus, the editorial board is reinforced by well-known scholars in the area of security studies and criminal science from the Republic of Serbia, which will provide the Journal with additional quality. Another reason for believing in this valuable publishing venture is that more high-quality articles are published in this issues in relation to the previous one.

The article by Milan Lipovac and Nevena Stanković, entitled "Wendt's Theoretical Contribution to Security Studies: The Agent-Structure Problem," certainly contributes to this. The authors place the agent-structure problem at the center of interest within almost all social sciences, emphasizing that the core of these issues is "a starting point for exploring the phenomenon of the social world in a certain way". The theoretical contribution of Wendt's approach to security studies is the backbone of research, whereby "Wendt's attempts to explain how agents and structure can be mutually constituted and codetermined" is emphasized. In Wendt's reflection on the agent-structure relation, the authors find "two truisms about social life" which, according to Wendt, "underlie almost all social scientific inquiry". The first truism represents the claim that "human beings and their organizations are purposeful actors whose action helps to reproduce or transform the society in which they live." The second truth is a thesis that "society is made up of social relationships, which structure the actions between these purposeful actors." The authors reach a conclusion that the "agency and structure in this context are mutually dependent, but necessarily different entities."

The article in the area of security studies entitled "The Prevention of Radicalization, Violent Extremism and Terrorism through the Republika Srpska Education System" is co-authored by three close colleagues at the Faculty of Security Studies. The authors primarily view terrorism as a method used by a particular group or organization to achieve political and ideological goals, through panic and fear, which requires the use of violence. This political impetus is also created through missionary work, which is sometimes realized through lectures in front of larger audiences and more frequently in cyberspace. The response to this second form of action, which is more dangerous because it seductively penetrates the minds of young people, is prevention work. Of course, prevention work, in the fight against terrorism on a broader front, means not only the engagement of the police and specialized services, but also religious organizations, all government services, the media, and the non-governmental sector, but an important, perhaps the most important is the front line on which are educational institutions. According to the authors, terrorism, as a security threat in Bosnia and Herzegovina, has been marginalized "by certain BiH political elites and a portion of the public", but, as they emphasize, it has become a social reality. The aim of the research was "to determine the extent to which

the subject contents regarding radicalization, violent extremism and terrorism is represented in primary, secondary and higher education (at public universities) in the Republika Srpska and how the existing teaching facilities meet the needs of practice". It would be very interesting to explore this topic in the entire territory of BiH, which the authors have only touched upon, but the effort they have made in the Republika Srpska is noteworthy, as well as the conclusion: "Although the topics of extremism and radicalization are significantly present in public discourse, especially in the media, politics, police agencies and the judiciary in the Republika Srpska and entire BiH, their representation in the education system is extremely low."

That forensic accounting is gaining in importance both scientifically and practically is pointed out by Aleksandar Čudan and Dragan Cvetković in their article entitled "The Importance of Forensic Accounting in Forensic Economic and Financial Examination". The authors point out that the number of employees in forensic science institutes is increasing rapidly, but they also point out that "Forensic science has evolved in different directions, thus in the direction of forensic accounting as well." Thus, forensic accounting, the central theme of this article, is a novelty whose importance and application is explained in detail. In this regard, the authors indicated that forensic accounting is an interdisciplinary field and "a forensic accountant should, in addition to his or her knowledge of accounting and its regulation, also be familiar with the legal regulations of the country in which he performs his activities."

This issue also contains two articles in the field of special physical education. The first article entitled "The Effects of Special Physical Education on Changes in the Maximum Isometric Muscle Force of the Back Extensor Muscles in the Students at the University of Criminal Investigation and Police Studies" is co-authored by Bojan Mitrović, Goran Žugic, and Goran Vučković. The second article in the same field entitled "The Effects of Sport Skills Course Program on the Basic Motor Status in the Students at the Faculty of Security Studies" is co-authored by Darko Paspalj, Milan Gužvica and Lazar Vulin. The effects of physical education teaching on the students whom the authors teach (and conduct practical classes) has been the subject of two interesting studies. It should be noted that the subject Special Physical Education is a discipline taught exclusively at the institutions which are the publishers of this journal, therefore the attention devoted to this subject, both in the previous and this issue, is understandable.

Aleksandar Pavić, a political scientist from Belgrade, who received his enviable education at the University of Berkeley, wrote the review of the book entitled "In The Yard of Little Russians", which, according to Pavić, "is not only an analytical journal of the most important events in the world and in our country over the past two years, but is also a small geopolitical and security textbook, a kind of compass for understanding the current events, tendencies and threats faced by the world, and in it – the Republika Srpska and the entire Serbian space."

We are eagerly awaiting the next, third issue of the *Journal of Security and Criminal Sciences*, and hope for new editorial accomplishments.

Editor-In-Chief
Predrag Čeranić

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SCIENTIFIC ARTICLES

WENDT'S THEORETICAL CONTRIBUTION TO SECURITY STUDIES: THE AGENT – STRUCTURE PROBLEM

Review paper

DOI 10.5937/zurbezkrim1902011L	COBISS.RS-ID 8630808	UDK 351.78:316.334.3
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Abstract: The agent-structure problem is at the core of almost all social sciences' interest. The problematization of this issue in security studies emerged with social constructivism, particularly with Alexander Wendt's thought. By presenting Wendt's basic theoretical assumptions derived from his understanding of structure and structural theory which emerged as an attempt to eliminate the shortcomings of individualism and structuralism, this paper seeks to establish a theoretical contribution to security studies. Finally, this paper concludes that the division of structure into ideational structure, material structure, and structure of interests, attitudes toward the co-constitution and co-determination of agents and structure along with the scientific-realistic assumption of the (causal) significance of unobservables and emphasis on the importance of change not only play an important role in explaining security phenomena and processes, but may also contribute to a more accurate prediction of the dynamics of security reality, challenges, risks and threats, as well as the behavior of the most important security actors.

Keywords: Wendt, structure, agent-structure, scientific realism, social constructivism.

INTRODUCTION

The agent-structure problem is addressed by all social sciences and represents a starting point for exploring the phenomenon of the social world in a certain way. Determinism cannot be the solution to this problem, nor can it be a condition (in the way it is commonly conceptualized), since it emphasizes the ways in which structure and culture shape the social context within which individuals act, but neglects individual capacities (Archer, 2003). By attempting to reconceptualize the notions of agency and structure, theorists seek to find common threads of conflicting ontologies in order to discover the origins of social action – whether the individual's behavior and actions are independent or restrained and governed by structures (institutions, norms, ideologies, traditions) (Ilić, 2016: 148).

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Therefore, it is essential to provide an answer to the question of whether the causes of social phenomena and processes should be sought in individuals, their subjective beliefs, desires and intentions or in the social structures that govern the behavior of those individuals (Ilić, 2016: 152). In the first case, the explanation of social action starts with agents, while in the second case it focuses on the causality of structural factors; consequently, the agent-structure problem is usually referred to as a theoretical discussion of these two views, which at first glance seem completely opposed.

In the context of explanatory implications, international relations theories usually start from recent philosophical discussions within sociology and social theory, proposing a metatheoretical framework based on the dynamic conception of interdependence between interpretative, random agents, and a structural context defined both in terms of enablement and restraint (Carlsnaes, 1992).

Constructivism occupies the middle ground between rationalist and poststructuralist approaches to the study of international relations, taking a structural ontological starting point (according to many theorists). What is common to all social constructivists is that they start from the basic ontological assumption that agents and structures are interconnected. Although positivism and its static view of international reality was initially heavily challenged and criticized by constructivism, a division into theorists who remained faithful to the positivist approach (the critical school) and theorists who clung to the positivist direction (conventional or soft constructivism) was created within it over time (Ilic, 2016: 161).

Due to its importance for all social sciences, and consequently theoretical reflections on international relations, this issue has been the subject of the variety of criticism – from being “confusing and unproductive” to representing a significant barrier to critically-oriented international relations theories (Klotz & Lynch, 2006). While some theorists believe that constructivists have not answered this question by reaching a conclusion of reciprocal constitution, which is necessary to overcome the “unnecessary” epistemological division by focusing on ways in which empirical research can lead to the very essence of the problem (Klotz & Lynch, 2006), others believe that the existing gaps in international relations theories can be filled solely by focusing on the ontological differences that construct the theoretical framework by integrating this approach with the approach in social theory (Wight, 2006).

Emanuel Adler argues that constructivism is “interested in understanding how material, subjective, and intersubjective worlds interact in the social construction of reality,” and that, “instead of focusing solely on how structures constitute agents’ identities and interests, he also seeks to explain how, in effect, individual agents constitute these structures” (Zlatanović, Lipovac, 2014: 187, as cited in Adler, 1997: 322). Nicholas Onuf explains it as follows — structure exerts influence on agents by being often influenced by natural or social phenomena that we can see or we are unable to see, but to which we, as agents, respond by putting them in the institutional context. In this case, it is about “the institutionalization of structure” by agents (Onuf, 2013: 7). David Dessler, however, places particular emphasis on scientific realism in explaining these issues, arguing that the “gap” between scientific philosophy and practice may be filled by a model of international structure based on the principles of scien-

tific realism, or by considering its implications for structural research design in international relations theories. He concludes that the agent-structure debate has the capacity to produce integrative structural theory as well as the ability to bring about changes to the international system peacefully (Dessler, 1989).

One of the most fruitful constructivist approaches to solving the agent-structure problem is Alexander Wendt's approach. Based on Wendt's understanding of structure and structuralist theory as a proposal for resolving this problem, this paper seeks to examine the theoretical contribution of Wendt's approach to security studies. A critical examination of the explanatory potential of Wendt's thinking in security studies demonstrated that adopting a scientifically realist starting point, respecting the ideational aspect of structure and emphasizing the co-constitution and co-determination of agents and structure and the role and importance of processes in considering the agent-structure problem, undoubtedly represent a step forward in relation to the settled views of the (one-sided) solution to this problem by members of dominant theoretical directions. In summary, Wendt's addressing this socially significant problem seems to be one of the brightest examples of the need to study security phenomena using discourses of different paradigms, due to the "multidisciplinary nature of the field of security studies" (Lipovac, 2013: 441).

WENDT'S IDEATIONAL STRUCTURE

According to Wendt, social constructivism is not only close to idealism but also to structuralism and holism. Starting from the premise that "structures have effects irreducible to agents" (Wendt, 2014: 122), Wendt devoted a significant part of his work to dealing with structures. Without being defined as such, Wendt argues that the structure of any social system contains three elements — material conditions, interests, and ideas. Although related these elements are also in some sense distinct and play different roles in explanation. Yet, for analytical purposes, Wendt treats material structure, structure of interests, and ideational structure as separate structures. In doing so, however, he notes that these elements are always articulated and equally necessary to explain social outcomes, in other words, "without ideas there are no interests, without interests there are no meaningful material conditions, without material conditions there is no reality at all" (Wendt, 2014: 122). In the end, for any given social system there is just structure, in the singular (Wendt, 2014: 123). In this sense, the task of structural theorizing ultimately must be to show how the elements of the system fit together into some kind of whole.

Starting from idealism that Wendt explicitly advocates, that is, its key premise that people act toward objects (including each other) on the basis of the meanings that those objects have for them, knowledge occupies a significant place in Wendt's thought. Moreover, he views the ideational aspect of social structure as "the distribution of knowledge", which is a broader phenomenon than the distribution of interests and general beliefs and expectations, including "not only a belief but a good portion of desire" (Wendt, 2014: 123).

In this way, Wendt classifies certain knowledge into private and shared. However, especially with regard to the agent-structure problem, Wendt places an emphasis on a subset of social structure, socially shared knowledge or cul-

ture (knowledge that is both common and connected between individuals, in other words, shared in society). Culture, in this sense, can take many specific forms, including “norms, rules, institutions, ideologies, organizations, threat systems, etc.” (Wendt, 2014: 124).

Wendt’s observation that international relation’s debate between constructivists and rationalists about culture actually portrays a broader controversy within social theory between holist and individualist approaches to the question of how agents relate to the structures (ideational or material) in which they are embedded is significant (Wendt, 2014: 125). While individualists and holists agree that agents and structures are somewhat interdependent, they disagree on exactly how. Individualists claim that structure can be reduced to the properties and interactions of agents, while holists claim that structure has irreducible emergent properties (Wendt, 2014: 125). Finally, concerning the agent-structure problem, Wendt takes a synthetic position that combines elements mainly from structuration theory and symbolic interactionism².

THREE DISTINCTIONS: LEVELS, EFFECTS, AND THINGS

However, before presenting his version of structuration theory, that is, his solution to this problem, other significant conclusions that Wendt draws about structure should also be taken into consideration. To develop this (middle) position, Wendt makes three distinctions – “between two levels and two effects of structure on two things.” The two levels are micro and macro, where microstructures refer to structures of interaction and macrostructures refer to what Wendt calls structures of multiple realizable outcomes (Wendt, 2014: 125). Applied to culture, this leads to a distinction between common and collective knowledge. These two effects discussed by Wendt are causal and constitutive, and the two things are behavior and properties, where properties refer to agents’ identities and interests.

According to Wendt, all three distinctions concern the way reality is structured and to that extent the ontological dispute about structures and agents ultimately is an empirical debate, with rationalist and constructivist social theorists simply interested in various aspects of how reality is structured (Wendt, 2014: 126). Wendt maps his argument in a matrix form³.

In explaining the different views of rationalists and constructivists, Wendt states that rationalists tend to be interested in micro-level structures and within that the causal effects of structure on behavior, while constructivists tend to be more interested in macro-level structures, and within that the constitutive effects of structure on identities and interests. As the primary value of constructivist understanding in relation to the rationalist, Wendt points out the analysis of constituent effects at the micro level, especially at the macro level, in their approach to culture (Wendt, 2014: 127). It should be noted that Wendt

² Wendt points out that, in designing his own theory, he drew on ideas from Giddens (1979, 1984), Bhaskar (1979, 1986), Sewell (1992), as well as Mead (1934), Berger & Luckmann (1966), Stryker (1980), and Howard & Callero (1991).

³ By presenting this illustration, as he states, he does not intend to review the literature with solutions in social theory to discuss agents and structure, but to suggest different ways in which theorists may ask questions regarding structure. *Figure shown in Social Theory of International Politics by A. Wendt (2014: 126).*

develops his own distinction between micro and macro levels of structures with reference to Kenneth Waltz⁴, pointing out some problems with his understanding of structure⁵.

INDIVIDUALITY *PER SE* AND THE SOCIAL CONDITIONS OF INDIVIDUALITY

Considering the above issues, Wendt's attempts to explain how agents and structure can be mutually constituted and codetermined (the latter signifying a causal relationship versus constitutive relationship), or, in a nutshell, how a synthesis of individualism and holism is possible. In this light, Wendt's undoubted contribution to this issue is the distinction between "individuality *per se*" and "the social conditions of individuality". Individuality *per se* pertains to "those properties of an agent's constitution that are self-organizing and thus not intrinsically dependent on a social context." Wendt argues that these types of properties are essential to deliberate action, and, even when caused by society, they exist independently of them. Finally, Wendt finds this aspect of individuality in individualism (Wendt, 2014: 158). On the other hand, the social conditions of individuality refer to "those properties of an agent's constitution that are intrinsically dependent on culture." Wendt links this aspect of individuality with the claim that culture constitutes agents, which he finds in holism (Wendt, 2014: 158).

Wendt sees the importance of distinguishing between individuality *per se* and its social conditions as a way of realizing that a relationship between agents and structures can be both independent and dependent, that is, causal and constitutive. In other words, this distinction "resolves the apparent paradox by showing that two types of qualities are involved in the constitution of agents, social and self-organizing qualities" (Wendt, 2014: 159). From this point of view, the moderate forms of individualism and holism are not incompatible, but merely point to different constituent qualities of individuality, that is, pose different questions. Wendt argues that the problem arises with radical forms of each ontology, "when someone says that intentional agency is merely self-organizing, or nothing but an effect of discourse" (Wendt, 2014: 160). Recognizing both is essential to a better understanding of each.

PROCESS

Finally, an indispensable term in Wendt's considerations of structure is process. Thus, although both agents and structures are of equal importance, they are mutually constitutive and codetermined; however, structure exists (has effects and evolves) only because of actors and their practices. All structure is "instantiated only in process" (Wendt, 2014: 160). Wendt argues that the dependence of structures on agency and the social process is both constitutive and causal. On the one hand, according to Wendt, "the distribution of knowl-

⁴ For more information on the micro and macro levels of structure thematized by Waltz, see Waltz, 1959 [2001].

⁵ According to Wendt, the problem lies in the fact that Waltz does see two levels of structure rather than in Waltz's "materialism" (Wendt, 2014: 127).

edge in a social system at any given moment exists only in virtue of actors' desires and beliefs", and "if culture only exists in virtue of desires and beliefs, it has effects, in turn, only in virtue of agents' behavior" (Wendt, 2014: 161). On the other hand, social structures also depend on agents and practices in a causal sense. Constitutive analysis, however, has an "intrinsic static" and it tells us what structures are made of and how they can have certain effects, but "not about the processes by which they move through time, in other words, about history." (Wendt, 2014: 161). However, he states that "structural reproduction too is caused by a continuous process of interaction that has reproduction as its intended or unintended consequence" (Wendt, 2014: 161).

Wendt concludes that, in both a causal and constitutive sense, structure is "an ongoing effect of process", while at the same time "that process is an effect of structure" (Wendt, 2014: 162). There are two levels of analysis (micro and macro), which are structured and instantiated by process, in his view. There are no structures without agents and no agents (except in biological terms) without structures, in other words, "social processes are always structured and social structures are always in process" (Wendt, 2014: 162). In doing so, he revisits the culture, claiming that "knowledge shared in society plays a key role in interacting relatively predictable over time, creating homeostatic tendencies that stabilize the social order," in other words, "culture tends to reproduce itself, and indeed must do so if it is to be culture at all" (Wendt, 2014: 163).

In summary, Wendt believes that cultural structures are complex in both their nature and effects and so sets out a typology based on three distinctions: 1) between the two levels on which they are organized, the micro and macro levels, manifested as common and collective knowledge respectively; 2) between their causal and constitutive effects; and 3) between their effects on behavior, identities, and interests. He notes that the analyses of these different modalities requires different types of structural methods, but in analyzing any of them, it is essential to show "how cultural forms articulate with and give meaning to material forces, and how the latter in turn constrain the former" (Wendt, 2014: 165). Again, it may be useful for analytical purposes to distinguish between material structure, structure of interests, and ideational structure, but in the end a social system has only one structure, composed both of material and ideational elements.

AGENT-STRUCTURE PROBLEM

Following the presentation of Wendt's key views regarding structure, an account of the agent-structure problem itself is presented. In his article *The Agent-Structure Problem in International Relations Theory* (1987), Wendt starts from two theories that have had a strong influence on contemporary academic discourse about international relations – neorealism (Kenneth Waltz) and world system theory (Immanuel Wallerstein). While both theories provide structural explanations of how states behave in the international system, that is, although they are both based on structural analysis, their understanding of system structure is, in Wendt's view, significantly different. On the one hand, neorealists define international system structures in terms of "observable" attributes of their member states, and consequently, they define the explanatory role of these structures in individualist terms, as "constraining the choices

of existing state actors” (Wendt, 1987: 335). “World-system” theorists, on the other hand, define international system structures in terms of “fundamental organizing principles of capitalist world economy which underlie and constitute states,” and thus they understand the explanatory role of structures in structuralist terms as “generating” state actors themselves (Wendt, 1987: 335)

However, Wendt’s primarily interest is to critique the conceptions of structural theory which he finds in each of them, and to use this critique to motivate the development of a new approach to structural theorizing about international relations adopted from the work of the aforementioned structuration theorists in sociology. Wendt argues that this approach, in turn, requires a foundation in realist philosophy of science (or “scientific realism”⁶), arguably the “new orthodoxy” in the philosophy of natural sciences, though largely unacknowledged by political scientists (Wendt, 1987: 336).

The agent-structure problem, according to Wendt, actually presents two interdependent problems, one ontological and the other epistemological (Wendt, 1987: 339). The first and more fundamental problem concerns the nature of both agents and structure, and, since they are both mutually implicit, their interrelation. In other words, the question concerns what these entities are (or, in the case of social structures, whether they are entities at all) and how they are interconnected. Essentially, Wendt believes that there are two basic approaches to answering this question – by defining one unit of analysis as an ontologically primary (basic) unit, or by giving them an equal and therefore irreducible ontological status. Depending on which entity is considered primary, these approaches generate three possible responses, which Wendt defines as individualism, structuralism, and structuration (Wendt, 1987: 339). Neorealism and world system theory mean individualism and structuralism, both of which ultimately diminish the importance of one unit of analysis in relation to another. Neorealists reduce the states system structure to the properties and interactions of its constituent elements, states, while world-system theory reduces states (and classes) as agents to reproduce the demands (needs) of the capitalist world system (Wendt, 1987: 339). The structuralist approach, on the other hand, seeks to avoid what Wendt calls “the negative consequences of individualism and structuralism” by giving agents and structures an equal ontological status. Consequently, it allows the use of agents and structures in explaining some of the basic properties that, in terms of effects, they have on one another. In other words, it leads to an understanding of agents and structures as ‘co-deterministic’ or ‘mutually constitutive’ entities (Wendt, 1987: 339).

⁶ By scientific realism Wendt means “a philosophy of science that assumes that the world exists independent of human beings, that mature scientific theories typically refer to this world, and that they do so even when the objects of science are unobservable” (Wendt, 2014: 43). “The core of scientific realism,” in Wendt’s opinion, “is opposition to the view ... that what there is in the world is somehow dependent on what we know or believe” (Wendt, 2014: 46). Finally, realism is “a philosophy of science, not a theory of society,” and as such “does not answer, first-order, empirical questions”. In other words, realism “makes it possible to conceive of states and the state systems as real and knowable, but it does not tell us that they exist, what they are made of, or how they behave”, - “this is a job for social scientists, not philosophers” (Wendt, 2014: 47).

ARGUMENTATION

Thus, Wendt attempted to identify significant differences between the theorists' understandings of neorealism and the "world system," and to link these differences to their different social ontologies. He also attempted to demonstrate that, despite these differences, neorealism and world-system theory share a common, underlying approach to the agent-structure problem, that is, they both attempt to make either agents or structures into basic, primitive units, leaving each of them unable to explain the properties of these units, and therefore to justify their theoretical and explanatory claims about state action (Wendt, 1987: 349). The obvious implication of this argument is that neither state agents nor the domestic or international system structure that constitutes them should be always treated as given, or basic, primitive units. International relations theories should be capable of providing the explanatory leverage of both (Wendt, 1987: 349). Wendt points out that this does not mean that an individual research endeavor cannot take one unit as primitive, because scientific practice has to start somewhere. However, this means that what is defined as primitive in one research endeavor must be at least potentially problematic (or function as a dependent variable) in another, that is, scientists need theories of their primitive units (Wendt, 1987: 349). Notwithstanding their apparent aspirations to be general theories of international relations, the individualist and structuralist ontologies of neorealism and world-system theory preclude the development of such theories. In contrast, a structurationist or structural approach to the agent-structure problem would contribute to the development of theoretical accounts of both state agents and systemic structures "without engaging in either ontological reductionism or reification" (Wendt, 1987: 349).

According to Wendt, the agent-structure problem originates in two truisms about social life, which, he believes, underlie almost all social scientific inquiry. The first truism represents the claim that "human beings and their organizations are purposeful actors whose actions help reproduce or transform the society in which they live," and the second is that "society is made up of social relationships, which structure the interactions between these purposeful actors" (Wendt, 1987: 337-338). Taken together, these truisms suggest that human agents and social structures are, in one way or another, "theoretically interdependent or mutually implying entities" (Wendt, 1987: 338). Thus, Wendt argues that the analysis of social action invokes at least an implicit understanding of the individual social relationships (or "rules of the game") in which the action takes place, just as the analysis of social structures somewhat invokes some understanding of the actors whose relationships make up the structural context (Wendt, 1987: 338). From the above, it can be concluded that both the properties of agents and those of social structure properties are relevant to explanations of social behavior. In fact, both neorealism and world-system theory use the properties of both state (power, interests) and of systemic structures (polarity, unequal exchange relations) to explain states' behavior, although they do so in different ways.

Believing that all social scientific theories embody at least an implicit solution to the agent-structure problem, which "situates agents and social structures in relation to one another" (Wendt, 1987: 337), Wendt acknowledges that these solutions help theory's understanding of, that is, that structural

analysis has a relative explanatory importance. However, while advocating very different understandings of structural theory, Wendt argues that the neorealist and world-system solutions to the agent-structure problem are, in at least one respect, very similar and that this similarity creates a common fundamental weakness in these theories as structural approaches to international relations. (Wendt, 1987: 337). Wendt concludes that structural theory, in turn, is a response to these weaknesses.

ONUF ON WENDT'S STRUCTURATIONAL THEORY

For the purpose of explaining Wendt's theory, Nicholas Onuf refers to what he regards as a prehistoric debate, that is, Waltz's opposing to reductionism on the ground that the unintended consequences of states' behavior produce irreducible structures that have impacts on behavior. Onuf concludes that this unambiguous claim gave Wendt an opportunity to introduce the issue of structure from a scientifically-realistic point of view (Onuf, 1998: 239), with two goals in mind: to demonstrate the inadequacy of both Wallerstein and Waltz's version of structuralism and to propose a theory of structure as a substitute for structuralism in general. He also concludes that Wendt believes that Waltz was not actually a structuralist at all, as he defined himself, but an ontological individualist. On the other hand, he states that Wendt found Wallerstein's world-system theory to be too holistic (Onuf, 1998: 240). Onuf proceeds to discuss Wendt's central claim regarding structure – that capacities, even the existence of human agents, are in some way necessarily related to a social structural context, that is, they are inseparable from human sociality. For Wendt, structuration theory is analytical in nature rather than substantive. In other words, it represents what he would later call metatheory, more precisely a theory about theory (Onuf, 1998: 241). Wendt concludes that structural theory addresses the types of entity to be found in the social world and their relations. According to Onuf, Wendt offered four essential assumptions on behalf of structuration theory.

First, unlike individualists, structurationists accept the reality and explanatory significance of irreducible and potentially unobservable social structures that generate agents. Then, unlike structuralists, structurationists oppose functionalism and emphasize the need for a theory of practical reason and consciousness that can account for human intentions and motivation. Furthermore, these oppositions are reconciled by joining agents and structures in a dialectical synthesis that overcomes the subordination of one to the other, which is characteristic of both individualism and structuralism. Finally, structurationists argue that social structures are inseparable from spatial and temporal structures, and that time and place must therefore be incorporated directly and explicitly into theoretical and concrete social research (Onuf, 1998: 241-242).

WENDT'S CONTRIBUTION TO SECURITY STUDIES

The absence of a single, generally accepted conception of the agent-structure relation has spawned a variety of conceptualizations of the relationships across the social sciences, each reflecting the particular philosophical and

practical commitments of its parent theoretical discourse. In this sense, Wendt states that even his own adoption of the terms “agents” and “structure” is not theory-neutral (Wendt, 1987: 338). Despite their many differences, however, “the agent-structure, parts-whole, actor-system, and micro-macro problems all reflect the same meta-theoretical imperative — the need to adopt, for the purpose of explaining social behavior, some conceptualization of the ontological and explanatory relationship between social actors or agents (in this case, states) and societal structures (in this case, the international system)” (Wendt, 1987: 338-339).

In addition to the fact that he is considered the theorist who introduced the agent-structure problem as such into the field of international relations, in attempting to resolve the agent-structure problem Wendt’s most significant contribution is undoubtedly his thesis on the co-constitution and co-determination of agents and structures. Thus, unlike the generally accepted view in international relations theories that agents and structure are ontologically independent, with one necessarily having primacy over the other (that is, each is an effect of the other), Wendt argues that both agents and the structure have an ontologically equal status from the beginning. His structurationist approach avoids the weaknesses of both individualism and structuralism by considering agents and structures as “co-determinants” and “mutually constitutive” entities. With a slight redacted Giddens’ claims, or rather, application to the field of international relations, the greatest advantage of Wendt’s understanding in relation to the understandings of his predecessors (but also some contemporaries) is embodied in the “conceptualization of both entities from the start as ontologically dependent upon the other, by conceptualizing agents in terms of the internal relationships (structure-related relations) that define them as such, and by conceptualizing social structures as existing only through the medium of the agents and practices that they constitute ”(Went, 1987: 360).

However, Wendt points out that the causal and constitutive effects of culture on agents can be exerted only on their behavior, on their properties (identities and interests), or on both (Wendt, 2014: 144), which can be questionable because it then means that, ultimately, there is behavior that is not directed toward particular interests (or in accordance with a specific identity), that is, the possession of certain identities or interests does not necessarily entail changes in behavior towards them. In this case, he was criticized for his imprecision in defining concepts, which, in principle, is insignificant in relation to the contribution he has made – his initial assumption about the simultaneous constitutive and causal influence of the entities.

Further, the essential contributions of Wendt’s structuration theory, in relation to individualism and structuralism, are reflected in the acceptance of the reality and explanatory importance of irreducible and potentially unobservable social structures that generate agents, the opposition to functionalism and the emphasis on the need for a theory of practical reason and consciousness relevant to human intentions and motivation, by combining agents and structures in a dialectical synthesis that overcomes the subordination of one to the other, as well as the claim that social structures are inseparable from spatial and temporal structures, and that both time and place must therefore be incorporated directly and explicitly into theoretical and concrete social research (Wendt, 1998). It is therefore important to point out the contribution Wendt made by

introducing scientific realism, as a step forward in understanding and further explaining what unobservable entities in the real state of affairs have, at least in understanding structure as unobservable, yet causally significant.

Wendt's division of the structure into material conditions, interests and ideas for analytical purposes is also very important. The division of these elements also makes it easier to see their different roles in explaining specific social outcomes. At the practical level, such a division has certain advantages; however, the way Wendt explains their necessary existence in each structure is quite confusing. The central part of the claim that "without ideas there are no interests, without interests there are no meaningful material conditions, without material conditions there is no reality at all" (Wendt, 2014: 122) is questionable, and since material conditions themselves exist and will exist regardless of anyone's or any interests. Therefore, it is more appropriate to explain his primary idea in that, on the basis of certain interests, material conditions are used as resources, that is, interests cannot be realized without the use of those material resources.

Wendt's distinction "between two levels and two effects of structure on two things" (Wendt, 2014: 125), that is, the separation of behavior from identity and interest, in the analytic sense, is of particular importance. Although in reality they are inextricably linked, they are clearly distinct. Therefore, the possibility of analyzing them separately may certainly contribute to a deeper understanding of security phenomena in practice. By studying the structure at the macro level, its micro level (for example, a certain state), and the mutual influences between them and the behavior and identities and interests of its agents, mutual co-determination and co-constitution, in Wendt's lexicon, can be clearly seen.

Finally, the role and importance of the process in the agent-structure relationship emphasized by Wendt is certainly an advantage, especially given the infrequent tendency to consider exclusively static phenomena as constitutively and causally significant in addressing security reality, but also in international relations in general.

CONCLUSION

Finally, based the above issues, it may be concluded that the range of practical implications of Wendt's reflections on agency and structure on security is very broad. The attitude toward the co-constitution and co-determination of agency and structure enables the inclusion of a large number of unjustifiably neglected variables in the analysis of security reality. In other words, by accepting the view that agency and structure in this context are mutually dependent, but necessarily different entities, makes it possible to overcome the usual one-sided approaches to exploring the "origins" or causality of social and thus security action.

Taking the simultaneous constituent and causal effect of agents (primarily the most influential security entities at the national, regional and global levels) on structures, as well as structures (national, regional, global) on agents into consideration, one can see the potential contribution to predicting the dy-

namics of security reality and specific security challenges, risks and threats, or, on the other hand, a contribution to predicting the behavior of security actors.

Additionally, the contribution of scientifically realistic assumptions about the importance of unobservable entities goes beyond the scope of agent-structure problem. When discussing security phenomena and processes, we usually have unobservable but causally significant phenomena and processes in mind; as result, this approach seems most suitable for addressing any issues in security studies, which is applicable to any research endeavor in this field.

Wendt's emphasis on process seems particularly important for security issues, since almost all dimensions of security reality are characterized by marked mutability, that is, the possibility of transformation. Specifically, states, national identities, interests or interstate relations, and other issues directly related to the security field are commonly regarded as given, permanent, and immutable, and this is precisely the contribution of Wendt's novelty which he introduced by stressing not only the possibility but also the importance of change.

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Paper received on: 8. 10. 2019.

Paper accepted for publishing on: 28. 10. 2019.

THE PREVENTION OF RADICALIZATION, VIOLENT EXTREMISM, AND TERRORISM THROUGH THE REPUBLIKA SRPSKA EDUCATION SYSTEM

Original Scientific Paper

DOI 10.5937/zurbezkrim1902025S	COBISS.RS-ID 8631064	UDK 37.014.5:321.64]:323.28
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Abstract: Education is a source of knowledge about social phenomena and processes and plays a significant role in the prevention of socially harmful behaviors. This paper analyzes the extent to which educational content about radicalization, violent extremism, and terrorism in elementary, secondary, and higher education (public universities) is present, and the extent to which envisaged teaching topics are tailored to the current security environment. According to the keywords “radicalization”, “violent extremism” and “terrorism”, the curricula for all three levels of education in the Republika Srpska were analyzed and quantitative and qualitative analyses were conducted thereafter. The research findings demonstrated that the topics of radicalization, violent extremism, and terrorism are not addressed in primary and secondary education. Regarding higher education, there is a clear lack of courses in this field within many study programs. Topics in the study of terrorism have largely remained peripheral within the Republika Srpska education policy.

Keywords: radicalization, violent extremism, terrorism, education, prevention.

INTRODUCTION

Although police and security services and criminal justice agencies are directly concerned with the issues of radicalization, violent extremism, and terrorism, these phenomena should be the subject of interest to the entire society. The use of repressive actions to suppress them is unavoidable. However, repressive measures, if they are not accompanied by preventive actions, cannot produce long-term and sustainable results (Thomas, 2016). Education system can play a very important role in the prevention of these socially destructive phenomena. Youth is a particularly vulnerable category to various forms of manip-

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ulation and indoctrination, especially through modern information technologies. The dissemination of extremist ideas and radicalization through the Internet is a widespread phenomenon. According to the United Nations, the number of children recruited and exploited by terrorist organizations has increased in recent years. The prevention of child recruitment is a comprehensive process requiring the integration of knowledge and multiple approaches from different fields (UN-DOC, 2017).

Police officers are often unable to become actively involved in preventative activities, primarily because they are overwhelmed with operational tasks. This provides an opportunity for education system to enable young people to acquire basic knowledge of radicalization, violent extremism, and terrorism through educational processes. Education can help young people to develop interpersonal skills to respond to changes and disagreements with others with calm, to question legitimacy and justification as well as the views proclaimed by terrorist organizations, which can also help develop their resistance to violent action.²

Education in the area of security poses a major challenge to every society. In this respect, it is crucial that teaching activities are delivered by quality teaching staff at all levels of education. In this regard, there is a need for attractive curricula with clear educational goals, which are socially justified (Mijalković, 2014).

The prevention of extremism and terrorism is of great importance in every society, especially in Bosnia and Herzegovina (BiH) – a post-conflict country faced with these problems to a significant extent (Azinović, 2012). Islamic fundamentalism and terrorist acts in Bosnia and Herzegovina (BiH) are a social reality, even though this problem has been minimized and relativized by certain BiH political elites and a portion of the public.

A review of the relevant literature revealed the papers addressing the ontological, epistemological, and methodological issues in the field of terrorism studies (Reid, 1997; Silke, *The Devil you Know: Continuing Problems with Research on Terrorism*, 2001; Gordon, *Applying Analytical Methods to the Study of Terrorism*, 2004a; Jackson, 2012; Gordon, *Terrorism and Knowledge Growth: A Databases and Internet Analysis*, 2004b; (Sheehan, 2012; Mahoney, 2017; Altran, Axelrod, Davis, & Fischhof, 2017; Schuurman, 2018). These aspects relate to the creation of knowledge of terrorism, while the issues related to the dissemination of this knowledge in the educational sector, which is a very important aspect, have been significantly neglected (Mušić, 2016; Mijalković, 2014; Sheehan, 2012; Gordon, *Applying Analytical Methods to Study Terrorism*, 2004a). The literature review did not reveal similar studies on the prevalence of the topics related to radicalization, violent extremism, and terrorism in the educational process.

This study is exploratory in nature, so it was not possible to compare our findings with the findings of previous studies in the region and beyond. The aim of this paper is to determine the extent to which educational content about radicalization, violent extremism, and terrorism in primary, secondary, and higher

² The UNESCO Teacher's Guide on the Prevention of Violent Extremism suggests discussing local manifestations of radical extremist views with students rather than discussing its international forms. Discussing this phenomenon helps young people to understand the links between local and global challenges and the real risks and consequences of terrorism. Further, the teacher should be the moderator and objective to social, cultural, ethnic and other diversity in the local context and, of course, a person who possesses prior knowledge of violent extremism and terrorism (UNESCO, 2016: 13-17).

education (at public universities) is represented in the Republika Srpska and how the current subject contents meet practice.

This study is focused on two basic research questions: (1) the extent to which the topic of radicalization, violent extremism, and terrorism is studied in the public education system in the Republika Srpska and (2) whether the current curricula are adapted to social needs and the security environment we are facing.

METHODOLOGY

The content of curricula used by public educational institutions in the Republika Srpska was analyzed. The primary, secondary, and higher education curricula were analyzed. The Republika Srpska Ministry of Education and Culture, that is, the Republican Pedagogical Institute draws up primary and secondary education curricula in the Republika Srpska. The curricula set out the subjects, class schedule, the annual and weekly number of classes, as well as the content to be taught (Republican Pedagogical Institute, 2019). In the Republika Srpska, higher education is carried out in public and private institutions of higher education, which perform their activity according to different curricula (Republika Srpska Higher Education Law, Articles 11-24, RS Official Gazette 73/10; 104/11; 84 / 12; 108/13; 44/15; 90/16 and 31/18). Given that the focus of this paper is placed on the representation of course contents on radicalization, violent extremism and terrorism, the curricula used by two public universities, the University of Banja Luka and the University of East Sarajevo, in the Republika Srpska were analyzed. The curricula were analyzed based on the following keywords: radicalization, extremism, and terrorism. After identifying the keywords, quantitative and qualitative analyses of the curricula were performed. Additionally, the contents that could indirectly relate to the prevention of violence having a political, national, ethnic, racial or similar connotation was analyzed. The analysis of the content of the curricula revealed quantitative indicators, that is to say, a set of lessons taught at primary and secondary schools, and the institutions of higher education, and qualitative indicators, that is, the content of teaching units covering the topics of extremism and terrorism.

PRIMARY AND SECONDARY EDUCATION CURRICULA IN THE REPUBLIKA SRPSKA

In the Republika Srpska, the Republican Pedagogical Institute³ is responsible for adopting primary and secondary education curricula. The curricula contain the names of the subjects, subject content and the number of teaching hours (Republican Pedagogical Institute, 2019).

The curriculum for elementary education in Republika Srpska provides for the following subjects: Serbian (the languages of the Bosniaks and the Croats); Orthodox Religious Education; first foreign language; second foreign language; Art; Music; Nature and Society; Knowledge of Nature; Knowledge of Society; History; Democracy and Human Rights; Geography; Physics; Mathematics;

³ Republican Pedagogical Institute is an administrative organization within the Ministry of Education and Culture.

Biology; Chemistry; Technical Education; Computer Science; Physical Education; My Surroundings; Speech, Expression, Creation; Physical education, rhythmic, music; homeroom classes (Republican Pedagogical Institute, 2019).

The analysis of the curricula revealed that they did not encompass any topics which are directly related to radicalization, violent extremism and terrorism. However, some course programs address the topics that aim to develop tolerance and respect for cultural diversity. Such a content has been found in the educational plans for the subject Orthodox Religious Education and homeroom classes. As an example, we cite an excerpt from the program for the Orthodox Religious Education course that relates to the course objectives: “developing a sense of personal responsibility and self-conscious obligation, so that they can properly choose between good and evil as basic moral categories; and “developing a proper attitude toward a family and society and people who live, think, and believe differently.” Upon completion of the course, students are expected to “recognize the difference between good and evil” and “explain the importance of doing good deeds and avoiding bad deeds” (Republican Pedagogical Institute, 2019). Also, the planned topic of violence prevention is taught in homeroom classes in most grades, to help students recognize violent behaviors, differences as a cause of violent behavior, and develop socially acceptable patterns of behavior according to individual and group differences (Republican Pedagogical Institute, 2019).

Regarding secondary education in the Republika Srpska, according to the Republican Pedagogical Institute data, a total of 13 professions and the Grammar school offering four programs are available to students who graduate from the primary school (Republican Pedagogical Institute, 2019). The analysis of the subject contents did not identify those directly or indirectly addressing the topics of radicalization, violent extremism or terrorism.

STUDY PROGRAMS AT THE FIRST LEVEL OF STUDIES AT PUBLIC UNIVERSITIES IN THE REPUBLIKA SRPSKA

There are two public universities in the Republika Srpska: The University of Banja Luka and the University of East Sarajevo, and their programs at the first level of studies have been analyzed for the purpose of this research.

University of Banja Luka

A leading higher educational institution in the Republika Srpska, and the second largest institution in BiH, is the University of Banja Luka, which has 17 faculties with 58 first-cycle study programs, 65 second-cycle study programs and 9 third-cycle study programs (University of Banja Luka, 2019). The first-cycle study programs at the Faculty of Law and the Faculty of Security Studies were analyzed, that is, the faculties on whose websites course contents which could be linked to radicalization, violent extremism and terrorism were found.

In the curriculum used by the Faculty of Law, University of Banja Luka, three courses addressing the mentioned content were found – Criminal Law, Criminology with Penology, and Organized Crime. In the second year of study,

more precisely in the third semester, Criminal Law with the unit “Terrorism-related offenses” is a compulsory course (Faculty of Law, 2019). Criminology with Penology is a compulsory course in the third year of study, and students should acquire knowledge “in the area of criminal etiology and phenomenology, as well as in the area of penology.” The subject content of Criminology with Penology does not include the term “terrorism”. However, some of the envisaged teaching units address the etiology of crime, especially its economic, political, and ideological factors (Faculty of Law, 2019). In the fourth year of study, students can opt for an elective course – Organized Crime which includes the topic “Determining money-laundering methods used by organized crime and the methods of funding terrorist activities”, and the required level of knowledge should enable students to better understand organized crime and contemporary security challenges, risks, and threats (Faculty of Law, 2019).

The Faculty of Security Studies (former College of Internal Affairs) was created in 2017 in Banja Luka within the Ministry of the Interior of the Republika Srpska. Currently, courses are taught according to the old and new study program Security and Criminal Sciences, with two study options – criminal justice and forensic science (criminalistics), and students opt for one in the third year of study. The old study program offered by the College of Internal Affairs is still being attended by the students admitted to the College prior to the 2017/18 academic year, while the new study program is being attended by the students admitted to the College after the 2017/18 academic year (Faculty Summary, 2019).

During the study program at the College of Internal Affairs, students were first introduced to the term terrorism in the second year of study, as part of the compulsory course Methodology of Criminalistics. The unit “Terrorism – International Terrorism” occupied three teaching hours and two practical classes, in which the students acquired knowledge of the concept, characteristics, types, and manifestations of terrorism, the means and methods of commission and knowledge of terrorism-related offenses committed, the detection and capture of terrorists, as well as the characteristics and manifestations of international terrorism (College of Internal Affairs, 2012). Organized Crime encompassing the unit Organized Crime and Terrorism is a compulsory course in the third year of study, which is held 3 + 2 hours on a weekly basis (College of Internal Affairs, 2012), while in the seventh semester of the Criminal Science course, four teaching hours are devoted to cyber terrorism within the elective Cyber Crime course, which includes topics such as the definition of cyber terrorism, its characteristics, the profile of cyber terrorists and the ways of counteracting this type of terrorism (College of Internal Affairs, 2012).

The criminal justice program contains three courses dealing with terrorism, but none of these subjects is compulsory. The syllabus of the Intelligence and Security Services course envisages a total of eight teaching hours (four lectures and four practical classes) addressing the topic of extremism and terrorism, the concept and types of domestic extremism and terrorism, extreme political and terrorist organizations, international terrorism, and the forms of manifestation of extremist and terrorist activity. This teaching topic also covers totalitarianism, extreme nationalism and separatism, illegal organizing and banditry, conspiracy-coup actions, the individual acts of violence, civil war provocation, and foreign interventions. Other teaching units that can be associated with the subject of this paper are ideological-political indoctrination

and religious fanaticism (College of Internal Affairs, 2012). The elective course Security and Protection System gives students an opportunity to learn about the concept of terrorism, the characteristics and manifestation of terrorism, as well as the structures of terrorist organizations during a total of four teaching hours (College of Internal Affairs, 2012). Students were also given an opportunity to choose to attend the 60-hour optional course Terrorism (30 lectures and 30 practical classes), and the objective of taking this course is to acquire basic knowledge about globalization and terrorism and its application; the forms and content of organizing terrorist organizations, the new forms of terrorism and the fight against terrorism (College of Internal Affairs, 2012).

All students who enrolled in the first year of study in the 2017/18 academic year and thereafter attend the Security and Criminal Sciences 2017/18 study program. The curriculum has been modified with new, up-to-date content in line with changes in the security environment. Mastering some (compulsory) subjects requires knowledge of terrorism and the number of teaching hours has been increased significantly. Already in the first semester, a total of six teaching hours has been envisaged for teaching the course Fundamentals of Security Sciences intended to familiarize students with terrorism as a national and international security threat (Faculty of Security Sciences, 2019). The curriculum for the Defendology course, which studies contemporary security studies, provides a total of 6 teaching hours (4 lectures and 2 practical classes) on for the topic of terrorism as a threat to the political security sector (Faculty of Security Studies, 2019). A significant novelty is that the new curriculum envisages the courses Terrorism, and Intelligence and Security Services as compulsory courses (Faculty of Security Studies, 2019). Compulsory courses Global Security and Critical Infrastructure Protection were not analyzed because that they are not available yet under the new study program and changes to the submitted syllabuses are possible, and they were not encompassed by the previous 2014/15 study program.

A review of the teaching hours revealed that, at the Faculty of Law, a minimum of 13 and a maximum of 17 (through elective courses) are devoted to terrorism. At the Faculty of Security Studies, according to the 2014/15 curriculum, students have to attend minimum 10 and maximum 82 classes, while students studying according to the 2017/18 curriculum have to attend 110 classes devoted to topics on various aspects of terrorism.

Table 1. Overview of the number of teaching hours devoted to the topics of radicalization, violent extremism and terrorism – within study programs taught at the University of Banja Luka

UNIVERSITY OF BANJA LUKA

Faculty of Law		
Course Title	Type of Course	Number of teaching hours devoted to terrorism
Criminal Law	Compulsory	7
Criminology with Penology	Compulsory	6
Organized Crime	Elective	4

Total number of teaching hours devoted to terrorism		Minimum	Maximum
		13	17
Faculty of Security Studies			
<i>BA in Criminal Justice</i>			
Course Title	Type of Course	Number of teaching hours devoted to terrorism	
Methodology of Criminalistics	Compulsory	5	
Organized Crime	Compulsory	5	
Cyber Crime	Elective	4	
Intelligence Security Activity and Agencies	Elective	8	
System of Security and Protection	Elective	4	
Terrorism	Elective	60	
Total number of teaching hours devoted to terrorism		Minimum	Maximum
		10	82
<i>BA in Security and Forensics</i>			
Fundamentals of Security	Compulsory	6	
Defendology	Compulsory	6	
Terrorism	Compulsory	90	
Intelligence Security Activity and Agencies	Compulsory	8	
Total number of teaching hours within the study program devoted to different aspect of terrorism		Minimum/Maximum 110	

Source: Data analysis by authors

The University of East Sarajevo

The University of East Sarajevo consists of 17 organizational units with 56 study programs at the bachelor's level (first cycle), 48 at the master's level (second cycle), and 11 at the doctoral level (third cycle) (University of East Sarajevo, 2019). Although undergraduate courses at the law faculties within public universities in the Republika Srpska are not identical, in the Criminal Law and Criminology with Penology courses at the Faculty of Law in East Sarajevo, we find the same topics as well as the topics already mentioned in the same courses at the Faculty of Law in Banja Luka, which will not be discussed again. The difference is that Organized Crime is not envisaged as a course at the Faculty of Law in East Sarajevo (Faculty of Law, 2019).

Teaching units on violent extremism and terrorism were found within several study programs offered by the Faculty of Philosophy. Within the study program Journalism in the fourth year, the compulsory course International Relations envisages a total of 5 (3 + 2) teaching hours devoted to the topic “Terrorism and International Relations” (Faculty of Philosophy, 2019). Elective course within the study program Political Science and International Relations - International major, 5 teaching hours (3 + 2) are envisaged for the teaching unit Challenges of Extremism, Terrorism in the EU and BiH within the EU and BiH’s foreign police course (Faculty of Philosophy, 2019). The study program Sociology within the Contemporary Political Systems course addresses the topic “EU’s policy in the area of freedom, security and counter-terrorism” (Faculty of Philosophy, 2019).

Other content on the topic of radicalization, violent extremism, and terrorism were not found.

Table 2. Overview of the number of teaching hours devoted to the topics of violent extremism and terrorism – within study programs taught at the University of East Sarajevo

UNIVERSITY OF EAST SARAJEVO		
Faculty of Law		
Course Title	Type of Course	Number of teaching hours devoted to terrorism
Criminal Law	Compulsory	7
Criminology with Penology	Compulsory	6
Total number of teaching hours within the study program devoted to terrorism		Minimum/Maximum 13
Faculty of Philosophy		
<i>Study program – Journalism</i>		
Course Name	Type of Course	Number of teaching hours devoted to terrorism
International Relations	Compulsory	5
<i>Study program – Political Science and International Relations</i>		
Course Name	Type of Course	Number of teaching hours devoted to terrorism
EU and BiH’s Foreign Policy	Elective	5
<i>Study program – Sociology</i>		

Course Name	Type of Course	Number of teaching hours devoted to terrorism
Contemporary Political Systems	Elective	4

Source: Data analysis by authors

The review of course load found 13 teaching hours at the Faculty of Law and a total of 14 teaching hours within the three study programs offered by the Faculty of Philosophy, University of East Sarajevo.

DISCUSSION

Does public education in the Republika Srpska appropriately empower young people to understand the contemporary social environment and to recognize the dangers of radicalization, violent extremism and terrorism? Bosnia and Herzegovina, including some other parts of the Western Balkans (Europol, 2017), faces the problem of radical Islam. This problem in Bosnia and Herzegovina is significantly evident (Azinovic & Jusic, *The New Call to the War in Syria and the BiH Contingent of Foreign Fighters*, 2019; Prisljan, Chernigoj, & Lobnikar, 2018) and deserves the attention of practitioners, researchers and the public at large. The currentness of this issue demands that an appropriate place to educate new generations at all levels of education be found within the education policy of the Republika Srpska.

In relation to the subject content that addresses the topics of radicalization, violent extremism, and terrorism, the role of education in the Republika Srpska can be viewed from two basic perspectives. The first refers to primary and secondary education, during which students should become familiar with the basic characteristics of these phenomena and the threats they generate. It should aim at raising the security culture of young people to a higher level, so that young people may acquire proper knowledge to recognize threats and respond to them appropriately (Stajić, Mijalković & Stanarević, 2006; Stanarević & Bodin, 2014). This segment of education is of primary importance. Young people, on the other hand, learn to value cultural diversity and resolve disputes during their education (be it individually or at the level of social groups) exclusively in a peaceful way, through dialogue and tolerance.

In the context of higher education, the topics of radicalization, violent extremism, and terrorism are of great importance for preparing prospective graduates to be sufficiently trained in their professional work to cope with professional challenges in an increasingly precarious social environment. This knowledge is not exclusively intended for professional members of the security sector or criminal justice, but also for employees in other sectors, such as the media (Nacos B., 2016), social work centers (Ragazzi, 2017), public administration (Hague, 2002), research centers (Dongen, 2018), and so on. The range of activities is broad and covers all segments of social life.

The research findings demonstrated the extent to which these contents are studied and meet the needs of society. First, primary and secondary education curricula is reviewed. The research findings demonstrated that the subject

contents related to radicalization, violent extremism and terrorism is not studied. Certain general content relating to respect for cultural diversity and the prevention of violence is present to a lesser extent. In this context, curricula should be aligned with good practise and recommendations (United Nations Educational, Scientific and Cultural Organization, 2016) regarding the role of education as a significant factor in the prevention of violent extremism and terrorism. There is a social need, but these topics have not received sufficient attention. During this phase of education, young people do not even acquire the elementary knowledge about these phenomena, and they are neither prepared to understand the events in their environment nor to recognize threats and know how to properly handle the crisis and protect themselves and others.

The second perspective on looking at the role of education in the context of radicalization, violent extremism and terrorism refers to higher education. Those holding a first-cycle degree find employment in the public or private sector. The education attained during undergraduate study is applied in practice with the assumption of further professional development. The rhetorical question is whether the existing curricula within various courses of study are sufficient to prepare them for prospective work roles. Opposition to radicalization, violent extremism, and terrorism does not exclusively fall under the domain of employees in law enforcement, intelligence or criminal justice agencies, but covers a much broader range of activities in society. The analysis of study programs revealed that this problem, to which the largest number of teaching hours is devoted, is studied at the Faculty of Security Studies, University of Banja Luka. The curriculum used by this Faculty envisages one course on terrorism studies, which is at the same time the only course exclusively dealing with the topic terrorism at the bachelor's level at both public universities in the Republika Srpska. In a particular segment, the topics related to terrorism are taught within other courses at this Faculty. Such an approach is understandable because this institution of higher education educates personnel to work in the security sector. The number of teaching hours is significantly higher in regard to the program taught at the College of Internal Affairs, whose legal successor is the Faculty of Security Studies. These are positive trends in higher education regarding the topics of radicalization, violent extremism, and terrorism.

The institutions of higher education that include a small number of teaching hours devoted to this topic within different curricula are law faculties at both public universities in the Republika Srpska. The number of teaching hours devoted to these topics is not sufficient to provide fundamentals of radicalization, violent extremism, and terrorism, particularly because a number of law school graduates find employment in police and security agencies. Within other study programs, the topic of terrorism is partially studied, within other courses, as one teaching unit only. The name of the course is International Relations within the study program Journalism at the University of East Sarajevo. There is a justifiable need that prospective journalists have a general knowledge of terrorism and the role of the media, be it traditional or social networks, which are extensively used for propaganda and to radicalize and recruit supporters. In practice, the media is also used by government institutions to gain public support for counter-terrorism measures (Nacos B., 2016). Further, within the study program Political Science and International Relations at the University of East Sarajevo, the topic of extremism and terrorism is studied as

one unit within the course EU and BiH's foreign policy, while terrorism is studied as one unit within the Contemporary Political Systems course of the study program Sociology.

Following the September 11, 2001 terrorist attacks on the United States, a large number of universities worldwide introduced new courses (Silke, 2004) addressing terrorism from an interdisciplinary perspective. Additionally, research centers were set up at universities to deal exclusively with the phenomenon of terrorism. Considering the current state of higher education at public universities, these trends have not affected the education system and the topics in the field of terrorism studies remained peripheral within the Republika Srpska educational policy.

CONCLUSION

This paper sought to answer the questions about the extent to which the topics of radicalization, violent extremism and terrorism are studied in the public education system in the Republika Srpska, and whether the existing education system is adapted to the needs of society and the security environment.

Although the topics of extremism and radicalization are significantly present in public discourse, especially in the media, politics, police agencies and the judiciary in the Republika Srpska and entire BiH, their representation in the education system is extremely low. In this context, primary and secondary education along with the first cycle of higher education at public universities were analyzed. The research findings indicated that the primary and secondary education curricula do not contain topics on radicalization, violent extremism, and terrorism. Regarding higher education, the representation of these topics as a whole is insufficient with the exception of the Faculty of Security Studies, University of Banja Luka. In higher education, there is a lack of courses in the area of terrorism within many study programs. The phenomenon of terrorism is studied only within a number of study programs, with a minimum number of teaching hours. Terrorism is not only of particular interest to professionals in the security sector or criminal justice agencies, but it also has a much broader social and academic (multidisciplinary) context.

The analysis of the current state demonstrated that the answer to the second research question should be provided, that is to say, whether the existing curricula are adapted to the social needs and the security environment in which the Republika Srpska and the whole country of Bosnia and Herzegovina are situated. Looking at the levels of education analyzed, it can be concluded that the curricula do not properly prepare young people to understand terrorism and related phenomena. Taking into account the fact that the issue of radicalization in BiH is an important security issue, including the return of warriors who fought on the side of the terrorist organization ISIL and the terrorist attacks carried out in BiH – justification for studying terrorism at all levels of education in the Republika Srpska is not questionable. The prevention of radicalization, violent extremism, and terrorism through the system of education is a significant social resource that has not been sufficiently utilized.

Based on the research findings, the following recommendations are presented: It would be a good idea to introduce the subject Security Culture in

primary and secondary education, and within this subject to pay special attention to the topics of radicalization, violent extremism, and terrorism, with an emphasis on the prevention and vulnerability of young people when being recruited to join radical movements and terrorist organizations.

In regard to higher education, the analysis of curricula and study programs at public universities is recommended, and justification for introducing (or the need to introduce) new subjects (compulsory or elective) which would address the mentioned topic from the perspective of different scientific disciplines should be considered.

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Paper received on: 15. 12. 2019.

Paper accepted for publishing on: 13. 01. 2020.

THE IMPORTANCE OF FORENSIC ACCOUNTING IN FORENSIC ECONOMIC AND FINANCIAL EXAMINATION¹

Review paper

DOI 10.5937/zurbezkrim1902041C

COBISS.RS-ID 8631576

UDK 343.983:657.632

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Abstract: Economics and financial expert witnesses too participate in the process of determining facts pertinent to a case. The need for a forensic examination in legal proceedings arises when the court does not have the knowledge necessary to determine all relevant facts and render a final judgment, which is the reason why courts engage expert witnesses to determine facts by applying knowledge and skills within their expertise. The topic of this paper is forensic accounting with a special emphasis on its importance and role in forensic financial examination. The aim of the paper is to emphasize the importance of forensic accounting in the purpose of forensic economic and financial examination and the need for its further improvement and development. The practical aim of this paper is to promote financial forensics as a profession of the new millennium. Given the turbulent past and expected future, the Republic of Serbia undoubtedly needs this type of personnel.

Keywords: forensic accounting, expert witness, legal proceedings, fraud, forensic science

INTRODUCTION

Forensic science is an application of knowledge and technology from a wide range of scientific disciplines and it provides answers relevant to the court, be it in criminal or civil cases, meaning at the same time the application of science to administering the justice. In developed countries, that is, in the European Union, the number of forensic investigations has increased several times in the past decade, with the Netherlands Forensic Institute as one of the most developed institutes in Europe, in which the number of employees has tripled since the beginning of the new millennium, (Tjark, 2013: 3).

¹ This paper is part the project entitled "Crime in Serbia and the Instruments of Government Response", which was funded and implemented by the Academy of Criminalistics and Police Studies in Belgrade – the 2015-2019 scientific research cycle.

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Forensic science has evolved in different directions, thus in the direction of forensic accounting as well, as a result of serious damage to the economy caused by fraud and fraudulent financial statements (Čudan, 2014). Forensic accounting is a special branch of accounting, which deals with the use of accounting expertise in the prevention and investigation of different types of criminal activities within a company as well as in gathering evidence relevant to a litigation. Numerous examples of financial scandals in the past period have highlighted the shortcomings and limitations of auditing in detecting criminal activities, including the need to apply forensic accounting knowledge and skills to investigating and detecting various criminal activities.

Forensic evidence is collected in a way to be admissible in a court of law. Forensic accounting does not function as an advocate for one side or the other. This is the reason why forensic experts and their knowledge become a link which complements and makes the combat against economic crime even more effective.

In modern conditions, it is almost impossible to conclude criminal proceedings in case of economic crimes, in which a forensic expert, as a source of evidence or person with relevant expertise and skills necessary to determine or evaluate an important fact, was not called upon to provide expert opinion. Adherence to professional rules and the enforcement of their actual application is possible through the use of innovative bookkeeping and accounting branches: forensic accounting. Given that forensic accountants, who are familiar not only with auditing, accounting and financial reporting but also with legal regulations and laws, actuarials, statistics, software tools, and personality psychology, are gaining an important role not only in fraud detection but also in the provision of economic and financial expert opinion in criminal or civil cases, with the aim of gathering evidence that is relevant to litigation and dispute resolution. Taking into account the above issues, it may be said that forensic economic and financial examination holds a special place among a wide array of forensic scientific disciplines.

This paper addresses the concept of forensic accounting, the scope and tasks of forensic accounting, the legal and institutional framework of forensic accounting and financial expertise, including the importance and role of economic and financial expert testimony in court proceedings.

FORENSIC ACCOUNTING: CONCEPT, SCOPE, AND TASKS

In modern usage, the terms *forensics* and *forensic science* are often interchangeable. Given that the adjective *forensic* is synonymous with *legal* or *court-related*, this substitution cannot be considered very precise. However, the term has become so well-established in modern usage that many dictionaries offer similar meanings of the terms *forensics* and *forensic science*.

In the broadest sense, forensic science means the application of knowledge and technology from various scientific disciplines to solving legal issues. In practical application, forensic science uses its own experiential methods and borrows methods from other scientific disciplines, adapting them to its own needs in practice, whereby the adapted and innovated ones necessarily gain practical instructive importance. Due to the use of various forensic analyses,

this type of evidence often plays a final role in determining the guilt or innocence of the accused or defendant. In other words, forensic science involves the application of scientific methods to detecting and interpreting material traces, which is why the experts performing these tasks are called forensic scientists (Ivanovic and Ivanovic, 2013).

Although there are many definitions in the forensic accounting literature, the widely accepted and most complete definition is the one formally acknowledged by the Association of Certified Fraud Examiners (ACFE)³ according to which forensic accounting is defined as the use of accounting skills in potential or actual civil or criminal cases, including the generally accepted accounting and audit principles, to determine lost profits, income, asset values or to assess damage, including the assessment of the efficacy of internal controls, uncovering a fraud or the performance of other activities requiring the inclusion of accounting expertise in the legal system (Cvetkovic and Djuric, 2017).

In addition to a wide range of applications, forensic accounting may be applied in two primary areas:

1. *Investigative accounting* is primarily aimed at detecting and uncovering fraud when it is suspected that a destructive unlawful act has been committed in the financial statements, that is, when the client's business is preventively audited. Investigative accounting involves a comprehensive investigation of criminal activities. It also integrates knowledge in accounting, auditing and investigative techniques and can take two forms:

- a) Financial crime investigation – is a special discipline within forensic accounting that investigates financial statement fraud. This type of investigation involves taking a proactive and reactive approach to the methodology aimed at identifying financial statement fraud. This type of forensic accounting work is performed by investigators who typically work in the office of state controllers and investigative/detective agencies, auditing agencies, and criminal police services. It is a team of experts with different knowledge, skills, and experience which they use to detect and document criminal activities.
- b) Forensic auditing of financial statements is a new specialized service used in the financial statement audit process. Forensic audit means engaging the services of an auditor with specialist training and experience in fraud prevention and detection through an auditing agency.⁴

2) *Litigation support* – the provision of professional services when certain acts have already been identified and brought before the court. It refers to the provision of professional services to persons involved in a legal dispute. Profes-

³ Association of Certified Fraud Examiners (ACFE) is an independent professional multidisciplinary organization covering a large number of forensic disciplines or similar fields, including forensic accounting. The purpose of the ACFE is to provide its members with continuous training in the area of forensic accounting and counseling. The ACFE has raised standards to a higher standard through education and training. One of the certifications issued by ACFE is Certified Forensic Accountant (Cr.FA). the ACFE is also a leader in anti-fraud training, gaining a high reputation and public confidence in the profession as an instrument for combating fraud. The primary aim of this organization is to minimize fraud occurrences and assist its members in fraud detection.

⁴ *Forensic Audit vs. Financial Statement Audits, Currents Accounts*, (2008). Retrieved from: <http://www.iagforensics.com/wp-content/uploads/2009/12/GSCPA-Thomas Buckhoff-ct08.pdf>

sional services are provided by persons with accounting and auditing skills and other knowledge contributing to the resolution of a dispute, such as economic and financial expertise, consulting and other services (Aleksić, et al., 2015). The American Institute of Certified Public Accountants (AICPA) defines litigation services as any professional assistance given to lawyers by non-lawyers in litigation process. Litigation services can be classified into three areas:

- a) Consulting expert – forensic accountants provide advice on accounting and financial matters relevant to a legal dispute. Consultants do not testify as expert witnesses in trials. Rather, they assist the lawyers and/or the parties to the litigation in various ways, using their accounting and auditing knowledge and skills. A forensic accountant can measure the economic damages or losses resulting from, for example, a breach or termination of a contract, then manage, sort, index and summarize a large number of accounting information to make it understandable and usable in a court of law.
- b) Forensic economic and financial examination services– based on their experience, knowledge and expertise, forensic accountants may serve as expert witnesses. As expert witnesses, forensic accountants may provide the opinion in the form of a report on the subject matter in accordance with the instructions they are given. In the proceedings already initiated, within evidentiary actions, the court may retain an expert witness to provide expert opinion “when it is necessary to have opinion evidence to assist in determining or evaluating an important fact.” An expert witness provides expert opinion on a particular matter based on his or her unique experience, education or training.” When testifying, expert witnesses “has to take a neutral position, because his or her role is to influence the court through facts rather than emotions.” A skilled forensic accountant who possesses a satisfactory level of knowledge and skills in accounting, auditing, and other areas of finance, may, in accordance with the rules of domestic legislation, register as an expert in financial matters and submit his or her expert report stating findings and opinion on a particular aspect of the case at the court’s request, independently or within a specific professional institution (Petković, 2010: 161).
- c) Other services – within the scope of their activities, forensic accountants may exceptionally serve as mediators to assist one of the parties to the proceedings.

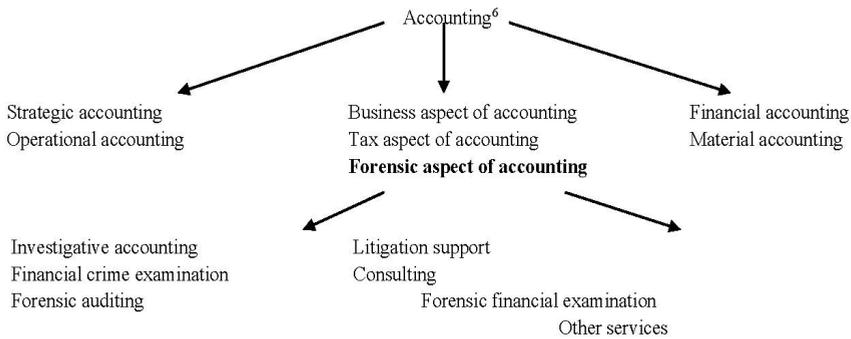


Figure 1: Schematic representation of the place of forensic accounting within accounting activity and its scope (Čudan, Nikoloska, 2018: 261)

The tasks of forensic accountants are to analyze, interpret, summarize, and present interrelated business-financial positions which are understandable and appropriately corroborated. Forensic accountants:

- compile documentation, investigate and analyze evidence of fraud;
- develop computer applications to manage the information collected or present financial evidence;
- communicate their findings in the form of reports;
- provide assistance in litigation, testify in court as expert witnesses, and prepare visual aids to support trial evidence (Dimitrijevic & Danilovic, 2017: 311).

It may be said that forensic accounting serves to uncover the truth in disputes, therefore forensic experts often appear as witnesses, professional witnesses, expert witnesses, analysts and the like. Forensic accounting is gaining in importance with the rise in the number of frauds, economic crime, and fraudulent misrepresentation.

LEGAL AND INSTITUTIONAL FRAMEWORK FOR FORENSIC ACCOUNTING AND FORENSIC ECONOMIC AND FINANCIAL EXAMINATION

Forensic accounting is an interdisciplinary field and a forensic accountant should, in addition to his or her knowledge of accounting and its regulation, also be familiar with the legal regulations of the country in which he performs his activities. Forensic accountants, that is, expert witnesses with expertise in economics and finance, are expected to be familiar with domestic criminal, civil, commercial and labor laws. The provision of expert opinion is mentioned by virtually all laws. Expert opinion is required not only because the authority conducting proceedings lack specialized expertise, which is often a court, but also because they cannot independently evaluate those facts that re-

⁵ Translator's note: Translation of Figure 1.

quire a certain level of education, training or a qualification even when having relevant expertise (Čudan, 2014).

Material and formal conditions must exist in legal proceedings in order for forensic examination to be carried out, depending on the expert witness' expertise and skills, that is, the forensic accountant carrying out forensic examination. Material conditions mean that expert witnesses must obtain all relevant data from institutions, organizations or litigant and be qualified to carry out this type of work. Formal conditions mean that expert witnesses must have a written request issued by the authority conducting proceedings to conduct forensic examination.

Procedural law defines the material and formal conditions for conducting forensic examination and the examination process itself, depending on the type of examination, is carried out in accordance with the rules of a specific profession and skills. The material condition requesting forensic examination arises from the need to obtain a finding or opinion from an individual or institution possessing the necessary expert knowledge to evaluate or determine an important fact, while the formal condition requires that the authority conducting proceedings issue a written order requesting forensic examination.

According to the provisions of the Law on Expert Witnesses,⁶ the provision of expert opinion means professional activities performed using scientific, technical and other advances to provide the court or other authority conducting proceedings with the necessary expert knowledge used to establish, evaluate or clarify legally relevant facts. Expert opinion may be provided by natural and legal persons who meet the requirements stipulated by this Law, government institutions, along with scientific and professional institutions.

Article 113 of the Criminal Procedure Code of the Republic of Serbia⁷ stipulates that forensic examination is required in those cases where it is necessary to obtain expert opinion from a person with necessary expertise to evaluate or determine an important fact. The legislature has divided forensic examinations in criminal cases into those explicitly normalized by law and those regulated by general provisions on forensic examination. According to the type of forensic examination, that is, the type of facts to be determined, forensic examination may be divided into:

- forensic examination of a cadaver (forensic pathology);
- forensic examination of personal injuries;
- forensic psychiatric examination;
- forensic examination of the general ledger;
- forensic examination of photographs, audio and video recordings.

Forensic economic and financial examination is at the same time very complex and delicate for the judge who, from a critical point of view, must analyze and evaluate the findings and opinions on matters that do not fall within the experience and knowledge of the judge, because the presentation of evidence can refer to specialized knowledge and scientific disciplines, requiring expertise not available to the court, such as the field of economics and accounting. This type of forensic expertise may be provided by legal and natural persons. Legal entities which may serve as ex-

⁶ Law on Expert Witnesses, *Official Gazette of the Republic of Serbia*, No. 44 dated 30.06.2010.

⁷ Criminal Procedure Code, *Official Gazette of the Republic of Serbia*, No. 35/2019 dated 01.12.2019.

pert witnesses include institutions which can provide forensic services within circumscribed areas, such as *Zavod za veštačenje* (Bureau of Forensic Science) in Belgrade. Government agencies may also provide forensic services within circumscribed areas. Other organizations such as faculties, institutes, the associations of accountants and auditors play an important role in the provision of forensic services.

Only Serbian nationals can conduct forensic economic and financial examination within our government-owned bodies, while persons who have been registered at the Register of Expert Witnesses may provide expert opinion in legal proceedings. Of course, expert witnesses need to have business acumen, but they also must meet other requirements that make them worthy of the job.

In Serbian judicial practice, there is a formulation which determines who is competent to provide expert opinion in the economic and financial area. Since the term “economic and financial area” is very broad, there are more than ten specialist courses in economic studies today. Therefore, this term must be strictly defined in order to avoid mistakes and omissions encountered in many controversial situations in practice. Due to the fact that someone has been declared competent in the area of economics and finance, it often happens in practice that expert witnesses easily accept an assignment where they do not have the knowledge, experience, qualifications and professional training appropriate for the assignment (Đorđević, 2011).

An expert witness has knowledge, experience, training or skill to determine or evaluate an essential fact in litigation. In order to conduct forensic examination, individuals and legal entities have to meet specific requirements which are prescribed by the provisions of the Law on Expert Witnesses.⁸

The most important court’s activity regarding forensic economic and financial examination is the evaluation of expert reports and opinions, that is, testimony. The essence of this evaluation is to determine, in a certain case, whether the opinion formulated by the expert witness has confirmed or denied the existence of a fact in question. In criminal cases, each piece of evidence is evaluated individually and in relation to other evidence, but the evaluation of the opinions provided by financial expert witnesses and is somewhat more complex⁹

⁸ *Official Gazette of the Republic of Serbia*, No.44 dated 30.06.2010.

⁹ In practice, it happens that the parties, most often the defendant and his defense counsel, independently obtain expert opinion, which, as a rule, contradicts expert opinion provided by an expert witness appointed by the authority conducting proceedings. Such expert opinion is not procedurally valid, which is why first-instance courts treat it only as a specific form of challenging the findings of the primary forensic examination.

Table 1. *Average duration of trial and forensic examination (in days) for the period 2015-2018.*¹⁰

Duration	Basic Courts	Commercial Courts	Serbia (average)
Average duration of trial	865	519	726
Average duration of forensic examination	65	49	54

Source: World Bank, 2018

Comparing the duration of forensic work with the total trial time, the work of expert witness amounted to an average of 7.5% of the total trial time.

Table 2. *Duration of forensic examinaion as % of trial duration*

Duration in %	Basic Courts	Commercial Courts	Serbia (average)
Duration of forensic examination as % of trial duration	7,5%	8,3%	7,5%

Source: World Bank, 2018

With the development of economics, finance and bookkeeping, numerous possibilities of applying research results to determining a questionable factual situation in criminal proceedings are created, such as misdemeanors in the field of economic crime, inappropriate criteria for assessing the qualifications of expert witnesses, inappropriate way of collecting material, gaps in the practical management of expert witness work, uncritical examination of expert witness opinions, and so on.

THE IMPORTANCE AND ROLE OF FORENSIC ECONOMIC AND FINANCIAL EXAMINATION AS A BRANCH OF FORENSIC ACCOUNTING

It is very difficult to say how important forensic economic and financial examination is, given that opinions concerning the issue are quite different (Coenen, 2008: 124). Some scholars think that forensic examination is just one of many evidentiary means which is not the most important, while others believe that expert witnesses provide direct assistance to the judge or the authority conducting the fact-finding proceedings or that expert opinions directly influence the decision itself. The importance of expert witnesses and forensic economic examination depends, to a large extent, not only on the quality of

¹⁰ According to statistical data, the duration of forensic examination is not a reason to delay or adjurne hearings. Over the last three years, an average duration of expert witness work amounted to 54 days, 64 days in basic courts and 43 days in commercial courts.

their reports, but also on the position of the judge conducting proceedings and his or her assessment of the importance of expert reports (Ilić, 2010: 313).

Forensic accountants can support the process through various types of expertise in terms of business assessments, divorce cases, marital disputes, property claims, business partner checks, the evidence of commercial fraud, personal injury and serious accident claims, assessee insurance jobs, warrants to seize property, civil and criminal proceedings concerning fraud and financial irregularities and the like. Therefore, in addition to substantive regulations, the rules governing the procedure before the judicial and other government authorities in civil and criminal proceedings are of particular importance for forensic accountants.

Forensic accountant expert witnesses are independent and they can draw conclusion from and interpret the facts, so that the hired lawyer is right and the opposite party has reached wrong conclusions. If a forensic accountant expert witness proves that he or she is right, then he is a very strong expert witness. Lawyers must assist a forensic accountant expert witness to reach his or her own conclusion so that the lawyer, judge and the jury can understand it. Forensic accountants are not equal regarding their experience and the number of years they have spent in this profession. Some may be IT expert witnesses, some are limited in business, some may be experts in the tax system, some may be experts in auditing, and so on. Also, forensic accountants may be found in the entertainment, clothing, furniture, banking and other industries (Telpner & Mostek, (2002: 2).

As has already been noted, forensic accountants may serve as expert witnesses as well. When the prosecution calls upon accountants and auditors, they generally testify on the findings obtained during the investigation, and when called upon by the defense, they provide facts about the quality of the findings or opinions presented by an expert for the prosecution so that the jury members may examine the credibility and gravity of the testimony given by an expert witness for the prosecution. Accountants and auditors need to have credibility and be educated in their fields, have sufficient knowledge and skills, be recognized members of their profession, or specialize in a particular aspect of practice relevant to the subject matter. Baring this in mind, there are several areas where expert witnesses are expected to have education and qualifications that differentiate them from laymen (Mikerević et al., 2013: 113).

- Professional license, certificate, and membership of the professional body,
- Undergraduate, graduate and postgraduate degrees - expertise in a specific field of study or area of professional practice,
- Specialist training and continuing professional education that goes behind academic titles,
- Relevant teaching, lectures and consulting indicating a high level of professionalism in the field,
- Membership in professional associations,
- Direct, relevant experience gained through previous engagements as a technical advisor or expert witness in a given field,

- Access to information specific to a given case, which classifies an individual as an expert.

The guidelines that need to be followed by expert witness in the preparation and presentation of evidence at trial are the following: expert witnesses need to prepare and study the necessary material in detail, plan their testimony in advance, listen carefully and be alert, carefully consider each answer and take a break before giving answers, be honest and unbiased, use simple words and maintain professional integrity. When an auditor is on the witness stand, the protocol for successful testimony goes beyond merely telling the truth or having good forensic evidence. Auditors must persuade the judge or jurors, leaving them with a great impression (Mikerević et al., 2013: 314).

The task of an expert witness is to assist the court to determine the truth, that is, to establish a certain concreteness of facts with his or her expert witness report or opinion within his or her area of expertise (economics, finance, mechanical engineering, medicine, construction and other areas of human activities) after which a discussion opens or concludes. The course and outcome of litigation or extra-judicial proceedings depend on the quality of expert witness reports and how comprehensive they are.

According to the Law on Expert Witnesses, an expert witness is an expert, that is, a person who is trained to perform a particular activity. In terms of the Law on Expert Witnesses, the Criminal Procedure Code, and the Civil Procedure Code, expert witnesses should have prescribed authorization in the area of professional activity.

In criminal and civil proceedings, expert opinion evidence shall be presented in order to determine or clarify a fact when the court requires the expertise which does not fall within the knowledge of the judge or jury in accordance with the law. In the Serbian literary language, the word *veštak* means an experienced, skilled, reliable, or seasoned person, but it also means a good connoisseur of something – a connoisseur or expert (Milosevic, 2004).

Lawyers, judges and forensic accountants often view expert witnesses and witnesses differently. Lawyers want expert witnesses to make a decision in favour of their clients, while judges generally want expert witnesses to make a decision when a judge is unable to reach a decision without the assistance of an expert witness. There are situations when more than one opinion is made by forensics available to an expert witness, but the judge wants the facts from the expert witness and his logic without reaching conclusions. This allows the judge to reach his or her own conclusion. A forensic accountant is a person who has an educational background in accounting and is able to assist lawyers at trial to understand and apply accounting law and discuss it. A forensic accounting expert witness has extensive experience in accounting and auditing investigations; he or she can write investigative reports and testify in court as an expert witness. They can be individually hired as litigation consultants. The expert witness must reach his or her own conclusions in court and the client who hired him may also come to the same conclusion as the expert witness (Telpner & Mostek, 2002: 1).

Expert witnesses focus solely on the forensics of the fraud that has already arisen, based on the case file and material received from the court. They possess the skills to give expert testimony, they examine evidence rather than

obtain it. Expert witnesses do not affect fraud prevention and fraud detection as forensic accountants do, nor do they evaluate the financial assets and the status of business partners, and many other forensic tasks dealt with by forensic accountants. If forensic accountants want to become expert witnesses, they must go through the legal appointment procedure to become a permanent expert witness.

Forensic accountants do not have to be expert witnesses. Considering the scope of their work, knowledge and skills they possess, forensic accountants may be police inspectors, tax inspectors, market inspectors, commercial forensic experts to evaluate business partners, internal forensic experts, and so on. If one wishes to become a permanent expert witness, the certified forensic accountant credential is different from the decision on being appointed permanent witness expert. In any case, if one wants to become a permanent expert witness, the certified forensic accountant credential will certainly mean proof of his or her knowledge of forensic accounting and thereby contribute to the affirmative decision issued by the court president. In the Republic of Serbia, forensic accounting is still undeveloped. However, some universities offer a forensic accounting course.¹¹

Thus, it follows from the aforementioned that the role of forensic accountants in the evaluation or examination process is to use knowledge and skills in litigation. Whether they are hired to detect criminal activity, or as expert witnesses, expert assistant to a prosecutor, witnesses and consultants in litigation, forensic accountants use the same knowledge and skills in accounting, auditing, statistics, economics, and so on.

CONCLUSION

It may be concluded that the introduction of financial forensic scientist profession in the Republic of Serbia will create well-educated professionals who will use international knowledge and experience in this field and apply them under our conditions. Forensic financial examination in criminal cases is conducted when it is necessary to ascertain facts from the domain of economics, finance and accounting on the basis of business documents and accounting documents. It is the forensic scientists who have the necessary tools and knowledge with effects deadlier than those given through international auditing standards to meet these expectations. Forensic accountants may, based on their expertise, knowledge and experience, be engaged as expert witnesses. When engaged as an expert witness, a forensic accountant can submit his or her report and opinion on specific court cases.

The role of forensic accounting is not to correct social anomalies, but to investigate, in this case, all forms of economic destruction and identify responsible persons. This does not mean that there is no social role for forensic accounting. Forensic work produces a concrete result, and this prevents new perpetrators. An exponent of forensic accounting is a forensic accountant, who can be defined as a person with some expert business-economic and economic-legal knowledge, with characteristics such as competence, education, reli-

¹¹ The course in Financial Forensics offered by the University of Criminal Investigation and Police Studies is taught based on the study program accredited at the graduate levels.

ability, cooperativeness, truthfulness and other virtues. The role of the expert witness in criminal proceedings is irreplaceable and makes a significant and sometimes crucial contribution to the truth.

This paper seeks to draw the attention of the professional public to the need to use forensic economic and financial examination as a form of forensic accounting, which is an indispensable evidentiary means and mechanism in the process of obtaining evidence in criminal and civil cases.

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Paper received on: 08. 10. 2019.

Paper accepted for publishing on: 22. 11. 2019.

THE EFFECTS OF SPECIAL PHYSICAL EDUCATION ON CHANGES IN THE MAXIMUM ISOMETRIC MUSCLE FORCE OF THE BACK EXTENSOR MUSCLES IN THE STUDENTS AT THE UNIVERSITY OF CRIMINAL INVESTIGATION AND POLICE STUDIES¹

Original Scientific Paper

DOI 10.5937/zurbezkrim1902055M	COBISS.RS-ID 8631832	UDK 796.8:355.233.22-057.36
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Abstract: The aim of this research was to determine the differences between the admission exam results and the results achieved at the end of the first year of study in the maximum isometric muscle force of the back extensor muscles among the students at the University of Criminal Investigation and Police Studies (UCIPS) in Belgrade, which occurred as a result of regular Special Physical Education (SPE) classes. The study sample consisted of 80 male students aged 19-21 (TV = 181.81 ± 7.31 cm, TM = 79.19 ± 8.09 kg, BMI = 23.96 ± 1.79 kg / m²). The results achieved by the students on the Basic Motor Skills (BMS) admission test, as an initial measurement, and the results achieved on the BMS assessment tests within the subject of SPE, as a final measurement were analyzed. To determine the significance of the differences between the results of the initial and final measurements, a T-test was used for the dependent samples. After SPE classes were conducted, the results of measurement demonstrated improvement in the final measurement (Mean \pm SD = 190.5 ± 21.0 DaN) compared to the initial measurement (Mean \pm SD = 158.8 ± 21.44 DaN), at a statistically significant level ($t = -14,283$; $p < 0.000$). Based on the results obtained, it can be concluded that, during the first year, SPE teaching has had a statistically significant impact on the improvement of the maximum isometric muscle force of the back extensor muscles in students.

¹ This paper is part of the National Scientific Project entitled "Effects of Applied Physical Activity on Locomotor, Metabolic, Psycho-Social and Educational Status of the Population of the Republic of Serbia" under the project number III47015 (project manager prof. dr Milivoj Dopsaj), and as part of the subproject entitled "Effects of Applied Physical Activity on Locomotor, Metabolic, Psycho-Social and Educational Status of the Police Population in Serbia", which was funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia - the 2011-2019 cycle of scientific projects.

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Keywords: police, motor skills, muscle force, SPE, effects.

INTRODUCTION

The system used for the selection of candidates for admission to the University of Criminal Investigation and Police Studies in Belgrade was designed as a positive selection model, consisting of the results achieved in previous schooling, health status, psychological structure, personality preferences and basic motor skills test (Dopsaj, Vučković, & Blagojevic, 2007; Jankovic & Koropanovski, 2017). Basic motor skills testing was conducted by assessing repetitive strength of arm and trunk muscles, the speed of leg muscles, the aerobic ability of the body, maximal isometric force of the back extensors (male students), or flexor muscles of the dominant arm (female students) and the assessment of motor education (Jankovic, 2009). Additionally, one of the basic criteria in the selection of candidates for admission to the UCIPS, as well as for prospective employment at the Ministry of the Interior of the Republic of Serbia, is the quantitative qualification of the morphological characteristics and motor skills in the candidates (Milošević et al., 1994; Božić, 1995; Amanović, Jovanović, and Mudrić, 1999; Blagojević, 2003; Dopsaj et al., 2007; Arlov, 2007b; Strating, Bakker, Dijkstra, Lemmink, & Groothoff, 2010).

Special Physical Education is a specialist subject that belongs to the scientific disciplines of system support (Blagojevic, Dopsaj, & Vuckovic, 2006). As an integral part of overall education, SPE aims to psychosomatically train future police officers through the achievement and maintenance of basic and specialized knowledge and abilities, to increase the emotional resilience of future police officers to professional conflicts and stressful situations and the overall resilience of the organism. Based on the current curriculum, SPE course is taught during the second semester of the first year of study (Blagojević, Vučković, and Dopsaj 2012).

The contractile abilities of the muscles are one of the elements of the motor space, and they manifest themselves as the maximal, explosive, speed, and repetitive force or strength, or as force or strength endurance (Milošević, 1985; Kukolj, 1996; Jukić et al., 2007). Each of the aforementioned characteristics of the manifestation of the muscle force is of great importance for the successful performance of certain police duties (Milošević, 1985; Lord, 1998; Vučković & Dopsaj, 2007a).

Maximum isometric force can be defined as the ability of muscles to endure maximum resistance, whereby the length of the muscle does not change (Kukolj, 1996). One of the tasks of SPE teaching is to develop basic physical abilities and the basic contractile abilities of muscles, that is, to develop a higher maximum muscular force exertion level (Milošević, Zulić, & Božić, 2001; Blagojević, 2003).

There is evidence that a certain level of contractile characteristics manifestation, including the maximal isometric force of the back and leg extensors, regardless of whether they are absolute or relative indicators, is of great importance for the successful and efficient performance of police tasks (Vučković, Jovanović, and Dopsaj, 2001; Vuckovic and Dopsaj, 2007b; Mihaljcic, 2016).

The subject of this study was the selected motor skill among the first-year undergraduate male students at the University of Criminal Investigation and Police Studies, that is, the maximum isometric force of the back extensor muscles.

The research problem was to determine the effects of SPE teaching on changes in the maximal isometric force of the back extensor muscles in male and female students.

The aim of this research was to determine the changes in the results achieved in the maximal isometric force of the back extensor muscles on the admission test and the results at the end of the first year of undergraduate studies in male and female students, which occurred as a result of SPE teaching.

METHODS

Prior to conducting this study, all male and female respondents were informed of the tests and the purpose of this study which belongs to applied research in which, for the purposes of new knowledge, the experimental method was used, using the methods of field testing (Ristanović and Dačić, 1999).

The results achieved by the students in the BMS admission exam as an initial measurement were analyzed, and the results on the BMS assessment tests in the subject of SPE at the end of the first year, as a final measurement. The same meter measured the same variables at the initial and final measurements to minimize the impact of parasitic factors.

Sampling

The study sample consisted of 80 male students aged 19-21 who were accepted to an undergraduate degree program at the UCIPS. The sample characteristics are as follows: body height 181.81 ± 7.31 cm, body weight 79.19 ± 8.09 kg, and body mass index 23.96 ± 1.79 kg / m².

Variable sampling

The students were tested in the BMS assessment lab and easurements were made using a hardware-software system with standardized measurement procedures (Dopsaj et al., 2010).

The sample of variables consisted of one variable, and the computer system for testing physical abilities entitled *Physical Ability Test 02 - PAT 02* (UNO-LEX, Novi Sad, Serbia; as cited in Janković, 2015) was used to make measurements. The maximum isometric force value of the variable tested among the students is expressed as DaN (Dopsaj et al., 2007). The aforementioned variable – an integral part of the test battery used to assess BMS among the students is F_{\max} BACK – the maximum value of the dead-pull test in the students (the maximum isometric muscle force of the extensor muscles in the back-loin musculature – DaN).

DATA PROCESSING METHODS

The results obtained were analyzed using descriptive statistics to calculate the basic parameters of the central tendency: arithmetic mean (*Mean*), the coefficient of variation (*sV%*), standard deviation (*SD*), the minimum and maximum value of each variable observed (*Min*, *Max*), skewness (*Skew*), kurtosis (*Kurt*). In order to determine the significance of the differences in the variable observed, that occurred as a result of SFO teaching, Student's T-test for dependent samples was used. Statistical significance was defined at the 95% probability level, that is, at $p > 0.005$ (Hair, Anderson, Tatham, & Black, 1995). All analyzes were determined using the SPSS 20.0 statistical data processing package.

RESULTS

In accordance with the research objective which relates to the determination of differences in the results of maximum isometric force of the back-bone muscles among the students at the UCIPS achieved on the BMS entrance examination, as an initial measurement, and the results achieved on the BMS assessment tests after SPE classes at the end of the first year, as the final measurement, the results obtained are presented in Tables 1, 2, and 3. The results obtained are presented in the order in which the appropriate statistical procedures were applied.

Table 1 shows the results of the descriptive statistics of the maximum isometric force of the back extensor muscles among the students at the UCIPS.

Table 1 Results of the descriptive statistics of the maximal isometric muscle force of the back extensor muscles among the students (N = 80) at the University of Criminal Investigation and Police Studies (initial and final measurement)

Variable	Maximal isometric muscle force of the back extensor muscles (DaN)	
	Initial measurement	Final measurement
Mean	158.80	190.50
Standard deviation	21.41	21.00
Coefficient of variation %	13.50	11.02
Min.	121.50	155.60
Max.	216.20	250.10
Skew.	0.458	0.584
Kurt.	0.010	-0.223

Key: N – the number of respondents; Mean – arithmetic mean; SD – standard deviation; CV% – the coefficient of variation; Min. – the minimum value of the variable observed; Max. – the maximum value of the variable observed; Skew. – skewness; Kurt. – kurtosis; FmaxBACK – the maximum isometric force of the back extensor muscles (expressed as deca Newtons)

The Student's T-test for dependent samples was used on the final versus initial measurement to determine the significance of the differences in the variable observed, which occurred as a result of SPE classes; the results are shown in Table 2.

Table 2 Results of the T-test for dependent samples – the determination of significance of the differences of arithmetic means at initial and final measurement – the students at the UCIPS (N = 80)

Variable	Mean		DF	T- value	T-test (significance)
	Initial	Final			
Max. isometric force of the back extensors	158.80	190.50	79	-14.258	0.000*

Key: Mean – arithmetic mean; DF – the degree of freedom; t-value – the value of the Student's t-test; Sig. – significance. *significance<0.01

The results of the dependent-samples Student's t-test indicated that a statistically significant influence of SPE teaching was determined at the end of the first year among the students at the UCIPS in the maximal isometric force of the backbone muscles ($t = -14.258$; $\text{Sig.} = 0.000$).

DISCUSSION

Maximum isometric force is one of the components responsible for the exertion of muscle force and can be defined as the ability of a muscle to exert as much force as possible with maximal contraction, through an attempt to move, that is, when the maximum resistance is exerted, while the length of a muscle remains unchanged (Kukulj, 1996; Blagojevic, 2003).

Regarding SPE teaching during undergraduate studies at the UCIPS, classes are organized in such a way that students, after enrolling in the first year of studies, do not have SPE classes for eight months, that is, they start attending SPE classes in the second semester. During those eight months without SPE classes, a decrease in the level of body status and certain parameters of muscle force and strength compared to the entrance exam was evident (Mitrovic et al., 2016).

Based on the results of descriptive statistics in the initial and final measurements (Table 1), it can be concluded that the respondents achieved better average score (Mean) in the final measurements.

The results of measuring the maximum isometric force of the back extensor muscles (Figure 1) obtained in this study on a sample of students (N = 80) demonstrated statistically significant changes ($t = -14.283$; $p < 0.000$) in the final result (Mean \pm SD = 190.5 ± 21.0 DaN) compared to the initial measurement (Mean \pm SD = 158.8 ± 21.44 DaN) following the Special Physical Education course at the end of the first year of undergraduate studies at the UCIPS. The absolute difference amounts to 31.7 DaN, while the relative value is 19.9% higher.

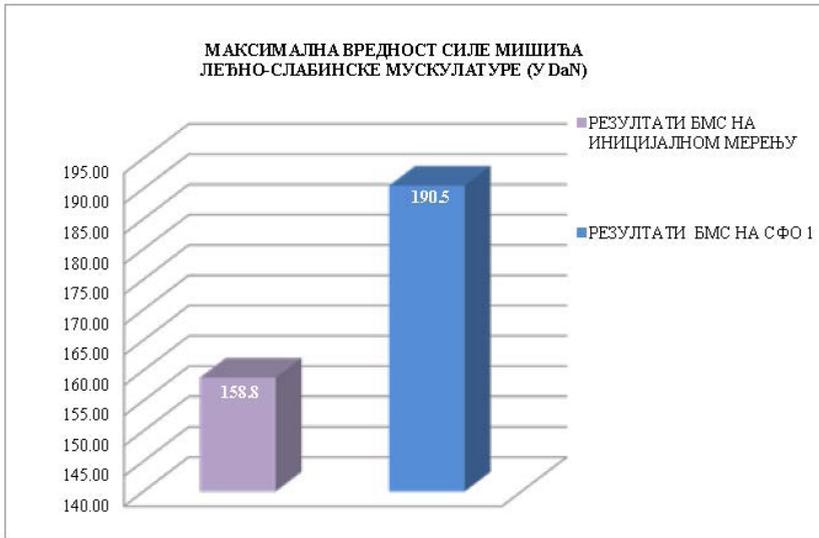


Figure 1 *Difference in the mean values of the maximum isometric muscle force of the back extensors in a sample of the students at the UCIPS, initial and final measurements (N = 80)*

The study conducted by Blagojević (2003) on the population of first-year, second-year, and third-year students at the Police Academy conducted at the end of winter semester (the 1995/1996 generation), the average values of the F_{\max}^{BACK} variable were found to be: 169.31 ± 21.65 DaN for the first year; 169.61 ± 23.07 DaN for the second year, and 176.01 ± 22.67 DaN for the third year of study. Compared to the data obtained in the final measurement, it can be determined that the average values in the student population observed (N = 80), compared to the 1995/1996 generation – the average at the first-year student population level, increased by 21.19 DaN (or 11.12%).

The results of the study conducted by Koropanovsky and Jankovic (2007) among the first-year students at the Academy of Criminalistics and Police Studies indicated that the average value of the F_{\max}^{BACK} variable amounted to 170.84 ± 22.36 DaN, which is by 19.66 DaN (or 10.32%) lower than the result achieved in the final measurement.

The study conducted by Dopsai et al. (2010) in a sample of 1579 respondents aged 18-24 (1223 male students and 356 female students), most of them being the first-year students at the Academy of Criminalistics and Police Studies, while a small number of the respondents consisted of the students at the Sports Academy in Belgrade and the Faculty of Sport and Physical Education, University of Belgrade, demonstrated that the mean values $\text{Mean} \pm \text{SD} = 165.2 \pm 25.26$ DaN were found for the F_{\max}^{BACK} variable among the students at the UCIPS. Compared to the results of this study, it can be stated that in the final measurement, as a result of the impact of SPE teaching, the F_{\max}^{BACK} values were higher by 25.3 DaN (or 15.3%).

The results achieved by the students at the University of Criminal Investigation and Police Studies in the final measurement compared to the initial measurement are probably the result of a larger number of the students actively involved in sports, as well as those involved in various sports activities, especially given that these activities have positive effects on raising the level of physical abilities (Australian Federal Police, 2004). There are many sport clubs at the UCIPS, so it is likely that a larger number of students were involved in them (<http://www.kpa.edu.rs/cms/studenti/sekcije/>).

Also, another reasons might be the students' high persistence and motivation to pass the SFO test, that is, BMS, where one of the tests being evaluated is the dead-pull test used to assesses the maximum isometric force of the back extensor muscles (Dopsay , Milosevic, Blagojevic, and Vuckovic, 2002).

CONCLUSION

The effect of SPE teaching was determined by monitoring the changes in the maximum isometric muscle force of the back extensor muscles in a sample of 80 first-year undergraduate students aged 19-21 at the UCIPS. This study is significant because the monitoring of the changes in the maximum isometric muscle force of the back extensor muscles among the students at the UCIPS, as future managers in police departments, is used to evaluate the efficacy of SPE teaching and, based on the results obtained, propose measures to improve and advance the quality of personnel educated at the UCIPS for the needs of the Ministry of the Interior of the Republic of Serbia.

The results obtained in this study showed that SPE teaching caused a statistically significant change in the absolute value of the maximum isometric force of the back extensor muscles in this sample of students.

Also, based on the study results presented and comparison with the results of the mentioned studies, it can be concluded that the current number of SPE classes in the first year of studies at the UCIPS is insufficient, even though it has effects on the improvement of the maximum isometric muscle force of the back extensor muscles.

However, the possibility of generalizing the results of this study is limited in terms of sample size and data collection method. It is necessary to undertake new and similar research to confirm these results as relevant.

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Paper received on: 02.10.2019.

Paper accepted for publishing on: 22. 11. 2019.

THE EFFECTS OF SPORT SKILLS COURSE PROGRAM ON THE BASIC MOTOR STATUS IN THE STUDENTS AT THE FACULTY OF SECURITY STUDIES

Original Scientific Paper

DOI 10.5937/zurbezkrim1902065P	COBISS.RS-ID 8632088	UDK 355.233.22-057.36:796.9
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Abstract: Using an experimental method, this study was conducted to determine, whether the program of physical training in the subject of Sports Skills in Security, under regular working conditions, can result in significant changes in the motor skills in the students at the Faculty of Security Studies in Banja Luka. The study was conducted during the 60-hour course in the 2018/2019 academic year, in a sample of 31 first-year male students aged between 19 and 20 at the Faculty of Security Sciences, with an initial measurement at the beginning and final measurement at the end of the first semester. The sample of variables consisted of seven motor skill tests used in candidate selection for admission to the Faculty of Security Studies. Using the Student's t-test for dependent samples, it was found that programed exercise resulted in statistically significant differences in the status of students' motor skills in the initial and final measurements, with the following variables: number of push-ups in 10 seconds (MSKL), stick agility (MOCP), somersault – backward somersault – running (MKNT), and hand tapping (MTAP), thus partially confirming the basic hypothesis. The research findings could be used as a valuable information in the further education of students, that is, to plan and program teaching contents of the subject Special Physical Education.

Keywords: students, sport skills, regular lessons/teaching, motor skills

INTRODUCTION

The subject of Sport Skills in Security, which was launched by the Faculty of Security Studies in Banja Luka, is aimed at developing and improving

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natural forms of movement which have been noted, through experience and practice, to have not been adopted in the earlier stage of child development, who are now students, to a level that would enabled them to adopt more complex forms of movement faster and more efficiently. Through the improvement of natural forms of movement, based on scientific findings, it is realistic to assume that this new program in the subject Sport Skills in Security, will also affect the development of motor skills and morphological characteristics, which are important for the further education of students or the acquisition of the contents of the subject Special Physical Education. This assumption is based on numerous scientific studies, which claim that the optimum level of motor skills and morphological characteristics contribute not only to faster learning and adoption of complex motor programs in Special Physical Education, but also to the possibility of their practical application in real life situations: (Milošević, 1985; Božić, Milošević and Zulić, 1990; Milošević et al., 1994; Blagojević et al., 1994; Mudrić, Jovanović, Milošević and Ćirković, 1994; Stojičić, 1994; Blagojević, 1996, 1997; Dopsaj, Milošević, Arlov, Blagojević and Stefanović, 1996; Milošević, Mudrić and Amanović, 2003; Dopsaj, Milošević, Blagojević and Mudrić; 2002; Amanović, Mudrić and Jovanović, 2002; Subotički; 2003; Amanović, Milošević and Mudrić, 2004; Gužvica, 2005; 2006; 2007; 2008; Paspalj, 2008; 2009; 2010; 2012; 2013; Janković, Vučković and Blagojević, 2014).

Thus, the Sport Skills in Security course is delivered as a part of the study program at the Faculty of Security Studies, which is an optional course aimed at developing morphological characteristics, motor and functional skills as well as other knowledge necessary for a successful performance of security jobs. This 15-week course, or a total of 60 teaching hours, is scheduled 4 times per week in the first year of studies. The objective of the course is to enable the students at the Faculty of Security Studies to develop and acquire motor skills important for successful learning, mastering and performing activities characteristic of prospect security personnel. Additionally, the aim is to familiarize the students with the ways of dealing with simple and complex situations and obstacles occurring under the spatially and temporally predictable conditions, as well as to improve their health, based on contemporary scientific, theoretical and practical knowledge.

The expected outcome of the course is that the students fully adopt biotic movements, develop motor and functional skills, improve morphological characteristics which will positively influence the easier mastering of specific knowledge and skills typical of performing complex motor problems that prospect security workers may encounter in their professional work. Through teaching contents, the students perform physical activities aimed at developing endurance, force, speed, coordination, flexibility, agility, reactivity and balance, while special attention is paid to the development of knowledge in order to overcome horizontal and vertical obstacles in laboratory and real conditions, as well as mastering deep and calm water surfaces by swimming and diving, and rescuing drowning persons in shallow and deep waters.

Of the 60 classes envisaged, 15 classes are held at the City Olympic Pool through the development of certain skills for mastering deep and calm surfaces by swimming and scuba-diving (aimed developing agility and feeling in space), while 30 classes are realized in the Athletic hangar at the Faculty of Physical Education and Sports, University of Banja Luka, with the aim of improving the

status of motor skills, primarily coordination, force and strength, speed, endurance, flexibility, agility, reactivity and balance.

The program encompasses those kinesiological activities that are represented in the regular program. These are natural forms of movement with specific tasks and different forms of movement, and a set of body-sculpting exercises – individually and in pairs. The training process for the development of basic motor skills was realized through exercises using an individual's own bodyweight and training paraphernalia, whereby circuit training and stations were used, as well as the obstacle course. Overcoming obstacles was performed through natural forms of movement, meaning that the students had to overcome a number of obstacles indoors without stopping in the shortest possible time. In the implementation of the aforementioned contents, simple and then complex methodological and organizational forms of work were applied first. Tests and measurements were not encompassed by the program but were performed prior to and after the application of the program.

The subject and aim of the study

The subject of this study are motor skills in the first-year students at the Faculty of Security Studies. The main objective of this research is to identify differences in basic motor space between first-year students at the beginning and end of the first semester of the 2018/2019 academic year, that is, to determine whether activities in Sport Skills in Security classes impact the basic motor status in the students at the Faculty of Security Studies. In this way, by measuring the initial and final status of the motor skills status, the conditions for monitoring, control, comparison with the results achieved in the previous measurements, improving the existing battery of tests during the selection process for admission to schooling, as well as improving the existing Sport Skills in Security course curriculum have been created. This research has one general hypothesis with the basic assumption that, after the performance of exercises, the basic motor status in the respondents will improve.

Thus, the assumption is that the implemented program within the contents of the Sport Skills in Security course will have a significant positive impact on the transformation of the students' motor skills and that a statistically significant difference between the initial and final measurements will be obtained.

RESEARCH METHODS

This study is of an experimental nature, in which the initial and final measurements of motor skills were made. The initial measurement was made at the beginning of the first semester of the 2018/2019 academic year and the final measurement was performed at the end of the first semester. The study was conducted in the athletic hall within the Faculty of Physical Education and Sports in Banja Luka and the FC Borac Athletic Stadium in Banja Luka. The testing was conducted by the teachers of Special Physical Education, Faculty of Security Studies.

Sampling

The sample consisted of 31 first-year male students aged 19-20 at the Faculty of Security Studies, who were clinically healthy with no visible physical defects or morphological aberrations and nearly completing morphological and motor development. It should be noted that all respondents had successfully passed the medical examination and psychological tests required for admission to the Faculty of Security Sciences.

Variable sampling

The sample of variables consists of a battery of seven motor skills tests used in the selection process for admission to the Faculty of Security Studies: standing long jump (MSDM), the number of push-ups in 10 seconds (MSKL), the number of trunk lifts in 30 seconds (MPTR), stick agility (MOKP), somersault – backward somersault – running (MKNT), hand tapping (MTAP) and the Cooper 12-minute run test (MKUP). The first variable was used to assess the explosive power of the leg extensors, the second and third to assess the repetitive upper limb and trunk strength, the fourth to assess body coordination, the fifth to assess agility, the sixth to assess the frequency of arm movement, while the seventh variable used to assess the respondents' aerobic energy potential. A detailed description, the method of implementation, measurement conditions and the norms of the assessment of motor skills are contained in the Rulebook on the implementation of the selection process of candidates for admission to the Faculty of Security Studies.

METHODS OF DATA PROCESSING

The data obtained in this study were processed by descriptive and comparative statistical procedures. Their mathematical processing was performed using the SPSS program – version 20.00. Using the method of primary data processing, information on the distribution of variables within the space studied was obtained, with the arithmetic mean being determined as a measure of the average of the result values and standard deviation as an indicator of the deviation of the results from the arithmetic mean of the results. The Kolmogorov-Smirnov test was used to test the correctness of the data distribution, while the dependent-samples Student's t-test was used to test the difference of the average values for each variable in the initial and final measurements. In addition to the numerical indicators, a qualitative assessment of the results achieved in the initial and final measurements was conducted.

RESULTS AND DISCUSSION

Table 1. Results of the initial and final measurements of motor skills

Variables	Results of the initial measurement				Results of the final measurement			
	Number of respondents	Mean	The mean deviation	Significance of K-S test	Number of respondents	Mean	The mean deviation	Significance of K-S test
MSDM	31	245.96	13.84	.625	31	249.00	16.31	.605
MSKL	31	13.48	2.29	.159	31	15.38	1.81	.094
MPTR	31	31.90	3.36	.517	31	33.03	2.76	.490
MOKP	31	5.84	.94	.968	31	4.99	.62	.890
MKNT	31	5.94	.57	.600	31	5.44	.36	.509
MTAP	31	52.12	3.87	.748	31	54.32	4.57	.575
MKUP	31	2854.19	284.61	.646	31	2749.35	274.41	.743
NUMBER OF RESPONDENTS	31				31			

Table 1 shows the basic central and dispersion results of the initial and final measurements of basic motor skills. As it can be seen in Table 1, the measures of variability indicate a small dispersion of the respondents' individual results in relation to their average values, on the basis of which we can accept the hypothesis that the distribution in all variables is normal, which indicates the fact that it is a very homogeneous set. An examination of the arithmetic mean of the results achieved in the initial and final measurements shows that in the final measurement, in the variables observed, except the Cooper 12-minute run test variable, there was a certain improvement of the results compared to the results achieved in the initial measurement.

Table 2 demonstrates the numerical data of the grades achieved on the motor skill test between the initial and final measurements.

Table 2. Evaluation of the results in the initial and final measurements of motor skills

Grades	Grades for the initial measurement results							Grades for the final measurement results						
	0	1	2	3	4	5	AG	0	1	2	3	4	5	AG
MSDM	0	3	10	4	5	9	3.22	0	4	5	7	4	11	3.41
MSKL	0	1	4	6	7	13	3.87	0	1	0	0	5	25	4.70
MPTR	0	0	1	4	7	19	4.41	0	0	0	2	7	22	4.64
MOKP	0	1	6	10	11	3	3.29	0	0	0	4	15	12	4.25
MKNT	0	0	5	11	14	1	3.35	0	0	0	5	17	9	4.12
MTAP	0	0	5	13	6	7	3.48	0	1	0	11	6	13	3.96
MKUP	3	4	9	7	5	3	2.51	6	6	10	5	3	1	1.87
NUMBER OF GRADES	3	9	40	55	55	55	3.44	6	12	15	34	57	93	3.85

Key: MSDM – standing long jump, MSKL – the number of push-ups in 10 seconds, MPTR – the number of trunk lifts in 30 seconds, MOKP – stick agility, MKNT –

somersault – backward somersault – running, MTAP – hand tapping, MKUP – the Cooper 12-minute run test, AG – average grade

As shown in Table 2, regarding the first variable (MSDM) – standing long jump, none of the respondents received 0 points in the initial and final measurements. The mean value of the grades in the initial measurement amounts to 3.22, while in the final amounts to 3.41.

Concerning the MSKL variable – number of push-ups in 10 seconds, none of the respondents received 0 points in the initial and final measurements. The mean value of the grades in the initial measurement amounts to 3.87, while in the final amounts to 4.70.

Regarding the MPTR variable (number of carcasses performed in 30 seconds), all respondents received positive grades. The mean value of the grades in the initial measurement amounts to 4.41, while in the final is 4.64.

In the case of the MOKP variable (stick agility), none of the respondents received 0 points in the initial and final measurements. The mean value of the grades in the initial measurement amounts to 3.29, while in the final amounts to 4.25

For the MKNT variable (somersault – backward somersault – running), none of the respondents were awarded 0 and 1 grades. The mean value of the grades in the initial measurement amounts to 3.35, while in the final amounts to 4.12.

With the MTAR variable (hand tapping), none of the respondents were awarded 0 points in the initial and final measurements. The mean value of the grades in the initial measurement is 3.48, while in the final is 3.96.

Considering the results of many previous studies that have dealt with similar issues, this result is to be expected. In this case, too, under the influence of the appropriate kinesiological operators envisaged by the Sports Skills course program, positive transformations have occurred. The data obtained indicate that a number of respondents, after completion of the program, have made significant progress regarding the quality of motor skills. Specifically, it was observed that the respondents who had worse results in the initial measurement made more progress than the respondents who achieved excellent results in the initial measurement. It is believed that the respondents who had worse results in the initial measurement contributed a great deal to the statistically significant differences between the initial and final measurements.

In the final measurement, lower values of the results were found for the MCUP variable (Cooper 12-minute run test) than those achieved by the respondents in the initial measurement. The mean value of the grades in the initial measurement amounted to 2.51, while in the final one was 1.87. A large number of respondents were reported to have performed poorly on this test. Specifically, 3 respondents received 0 points in the initial measurement and 6 respondents in the final measurement. This phenomenon can be explained by a small number of classes pertaining to the development of students' functional skills. Kinesiological operators which were predominantly represented by the program did not significantly impact the development of functional skills, so their stagnation was also expected, at best.

Thus, comparing the mean of the grades of the whole system of the variables applied, it is evident that the final measurement, as a result of the implemented program, with the exception of functional skills, the mean values of the results achieved compared to the initial measurement increased.

Table 3 shows the results of the Student's paired samples t-test for the motor skills variables observed after the initial and final measurements.

Table 3. Results of the Student's paired samples t-test concerning motor skills

Motor skills variables		Paired differences of results				T-test statistics	Number of degrees of freedom	Significance (two-way)	
		Mean value	The mean deviation	Standard error of the mean	95% trust interval				
					Lower limit				Upper limit
Pair 1	МСДМ1 - МСДМ2	-3.03226	8.43202	1.51444	-6.12515	.06063	-2.002	30	.054
Pair 2	МСКЛ1 - МСКЛ2	-1.90323	2.07131	.37202	-2.66299	-1.14346	-5.116	30	.000
Pair 3	МПТР1 - МПТР2	-1.12903	3.25312	.58428	-2.32229	.06422	-1.932	30	.063
Pair 4	МОКП1 - МОКП2	.84935	.76309	.13705	.56945	1.12926	6.197	30	.000
Pair 5	МКНТ1 - МКНТ2	.50161	.47523	.08535	.32730	.67593	5.877	30	.000
Pair 6	МТАР1 - МТАР2	-2.19355	3.60943	.64827	-3.51750	-.86960	-3.384	30	.002
Pair 7	МКУП1 - МКУП2	104.83871	159.16178	28.58630	46.45770	163.21972	3.667	30	.001

Key: MSDM1-MSDM2 – standing long jump in the initial and final measurements, MSKL1-MSKL2 – the number of push-ups in 10 seconds in the initial and final measurements, MPTR1-MPTR2 – the number of trunk lifts in 30 seconds in the initial and final measurements, MOKP1-MOKP2 – stick agility in the initial and final measurements, MKNT1-MKNT2 – somersault – backward somersault – running in the initial and final measurements, MTAP1-MTAP2 – hand tapping in the initial and final measurements, MKUP1-MKUP2 – the Cooper 12-minute run test in the initial and final measurements.

The analysis of the results obtained by comparing the difference between the mean values of the results of the motor skill tests on the initial and final testing demonstrated statistically significant differences between the initial and final measurements for the following variables: number of push-ups in 10 seconds (MSKL), stick agility (MOCP), somersault – backward somersault – running (MKNT), and hand tapping (MTAP), which is also evident in a higher grade for the score achieved, which resulted in an increase in value by one grade. Quantitative or qualitative changes in favor of the results obtained in the final measurement were also found in the variables used to assess motor skills, in which no statistically significant differences were observed, with the exception of the results obtained on the Cooper 12-minute run test variable (MCI) in which the respondents achieved worse results in the final measurement by one grade.

The analysis of the results obtained indicates that the quantitative changes occurred within motor skills such as strength, coordination, agility, and the frequency of movement, which is largely due to the structuring movement

mechanism, which can be explained by a larger portion of teaching contents, whose movement structure and execution efficiency is based on these motor skills.

Based on the review of the studies dealing with the transformation of motor characteristics in a similar population of respondents, it may be concluded that similar results were obtained: (Kopaš, 1994; Rodić, 1994; Blagojević, 1997; Mudrić, Božić, Subotički and Baltić, 1998; Amanović, Jovanović and Mudrić, 1999; Arlov, 1999; Blagojević, 2002; Janković et al., 2008), who investigated the effects of motor treatments of the Special Physical Education program on changes in motor skills and the dynamics of their transformation.

CONCLUSION

The aim of this paper was to determine changes in the basic motor status in the first-year students at the Faculty of Security Studies, influenced by systematic exercise as part of the implementation of teaching contents of the Sport Skills in Security course, during the 60-hour course, during the first semester of the 2018/2019 academic year. In the research of motor skills development during the process of regular teaching, seven motor skill tests were used, which are usually used during the selection of candidates for admission to the Faculty of Security Studies.

An experimental longitudinal research method with one group and initial and final measurements was used as the main method in this study. For the purposes of this paper, changes in the given characteristics were examined in a sample of 31 male subjects, aged between 19 and 20, with the assumption that the program contents encompassed by the Sport Skills in Security course will have significant positive impact on the motor skills status in the students at the Faculty of Security science, which was confirmed by this research.

The analysis of the results obtained indicated that the improvement of motor skills was achieved in the following variables: the number of push-ups in 10 seconds (MSKL), stick agility (MOKP), somersault – backward somersault – running (MKNT), and hand tapping (MTAP). Other variables used to assess motor skills, in which no statistically significant differences were observed, also showed quantitative or qualitative changes in favor of the results obtained at the final measurement, with the exception of the results obtained on the Cooper 12-minute run test (MCI), which the respondents scored worse in the final measurement. Considering that the classes were held indoors during the winter semester, which is why the contents aimed at developing functional skills could not be sufficiently practiced, it was not possible to significantly influence the development of this skill.

Finally, it can be noted that owing to the systematic work through the teaching of Sports Skills in Security, there was a significant improvement in the status of basic motor skills in the first-year students at the Faculty of Security Studies in Banja Luka.

Considering the fact that the basic role of the Sport Skills in Security course is to prepare the students at the Faculty of Security Studies for the acquisition and realization of the content of the subject of Special Physical Education in the further education of students, as well as the fact that a number

of previously published studies found that the effectiveness of acquiring the content of the subject Special Physical Education depends, to a great extent, on students' motor skills, our research findings could be used as useful data in the further education of students when planning and programing teaching contents of the subject Special Physical Education.

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Paper received on: 29. 09. 2019.

Paper accepted for publishing on: 22. 11. 2019.

BOOK REVIEWS

IN THE YARD OF LITTLE RUSSIANS

by Predrag Ćeranić

Serious analytics dressed in literary attire

	COBISS.RS-ID 8632600	UDK 355.233.22:351.74/.76(048.48)
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Aleksandar Pavić

Ćeranić's analytical texts are distinguished by their sophistication, precision and comprehensive approach. At a time when, due to the collapse of the entire post-Cold War order, relevant, crucial information and events are sorted out on tray, at short intervals, when life, political, and even geopolitical twists and turns become faster and often more dramatic than a drama – these are not only the desirable, but also the most necessary qualities of writing which seeks to be relevant, meaningful, and understandable to both general and professional readers. Those analysts who are able to interact with both types of readers with equal success are rare. And one of those rare beasts is precisely Predrag Ćeranić.

Combining a literary gift with professional expertise in the articles written for the All About Srpska portal, Ćeranić analyzes global topics effortlessly, at the same time linking them to, that is, illuminating their intertwinement with those concerning the former Yugoslavia, particularly the Republika Srpska and the Serbian ethnic space as a whole. In addition to providing valuable insights, many of his articles also provide exclusive information that has not previously appeared in both domestic and foreign media. His articles have greatly contributed to the rise of analytical texts published on the portal from a purely local or regional level to a globally relevant level. It is one thing to claim that we and our region are important in the context of seeing into global developments. However, it is quite a challenge to show it or prove it in practice as well, that is, in analytics. And an equally great challenge is to tackle domestic politically sensitive topics, what Ćeranić does without a backlash, observing them solely from the standpoint of state interest, with no compromise with truth or any embarrassing facts.

Another quality that distinguishes Ćeranić's analysis of the political and security aspects of today's turbulent age is that he does not avoid identifying and often naming behind-the-scenes actors whose impact is enormous. In other words, although a highly skilled, trained, and experienced war veteran, Ćeranić has stepped out of standard academic templates and secure textbook settings, without worrying if it is going to be perceived as "conspiracy theories" or not. Simply, the actions and influence exerted by non-institutional, unelected, informal actors and centers of power on political and social everyday life in the world and in our country are never missed by his expert analytical eye.

However, it is worth repeating all of the above, as those who have not had the opportunity to familiarize themselves with his texts will see that they are packaged in the format adapted to the reader himself/herself. New knowledge and insights are much easier to acquire if presented in an engaging way. This is a skill that only a few have mastered, among whom the author of the texts collected in this book holds a prominent place, which is not only an analytical diary of the most important events in the world and this region over the past two years, but also a real small geopolitical and security textbook, a compass for understanding the current events, tendencies and threats facing the world, including the Republika Srpska and the entire Serbian ethnic space.



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- List two or more works by different authors cited within the same parentheses in a chronological order by year of publication (Šikman, 2011; Mijlković, 2012), the earliest first. Separate the citations by semicolons.
- Secondary sources: (Vukovic, 2004, as cited in Krstic).
- Citing documents in text: (Nezavisne novine (2017, October 7).
- Citing documents and reports: (first citation: Ministry of the Interior of the Republika Srpska [MUP RS] 2012), subsequent citations (Ministry of the Interior, 2012).
- Citing newspaper articles: (Nezavisne novine (2017, October 7).

2. The reference list

- **Books:** The surname of the author followed by initials, the year of publication in parentheses, italicized title of the book, the place of publication, the name of publisher.

Example:

Ignjatović, Đ. (1998). *Kriminologija*. Beograd: Nomos.

- **Book chapter:** The author's surname followed by initials and the year of publication in parentheses, the title of the chapter followed by the preposition In, initials followed by the surname (of the editor), edition abbreviation (in parentheses), italicized title of the book, the entire page range, the place of publication, the name of publisher.

Example:

Emerson, L, & Manalo, E. (2007). *Essays*. In L. Emerson (Ed.), *Writing guidelines for education students* (2nd ed, pp. 42-49). South Melbourne, Australia: Thomson.

- **Journal articles:** The surname of the author followed by initials, the year of publication in parentheses, the title of the article, italicized name of the journal, and the entire page range, volume and issue numbers:

Example with the volume number and year of publication:

Milašinović, S. (2008). *Suština i uzroci društvenih konflikata*. *Nauka, bezbednost, policija*, 13(1), 55-77.

Example with the issue number:

Strobl, R, Klemm, J, & Wurtz, S. (2005). *Preventing Hate Crime: Experiences from two East-German Towns*. *British Journal of Criminology*, 45, 634-646.

- **Doctoral dissertations:** The surname of the author followed by initials, the year of publication in parentheses, italicized title of doctoral dissertation, doctoral dissertation, the name of institution:

Example:

Lipovac, M. (2016). *Nacionalna bezbednost Republike Srbije u regionalnom bezbednosnom potkompleksu Zapadni Balkan*. Doktorska disertacija. Univerzitet u Beogradu: Fakultet bezbednosti.

- **Internet sources:** To cite documents published on the internet, include the title of the document or webpage, the date of publication, a complete website address and a retrieval date.

Example:

(Републички завод за статистику Републике Српске [РЗСРС]. (2009). *Статистички годишњак Републике Српске*. Retrieved March 3, 2010, from http://www.rzs.rs.ba/Publikacije/Godisnjak/2009/Godisnjak2009_Yearbook2009.pdf)

- **References to legal materials:** Include the full title followed by italicized name of the newsletter in which the regulation was published,

the number and year of publication, separated by a comma. Reference the full name at first mention with the abbreviation set off by a dash and use the abbreviation in subsequent citations (Law on General Administrative Procedure – LGAP, Official Gazette of RS, No. 13/02).

- **References to court judgments:** include complete and correct data (the type and number of judgment, the year of judgment, and, if possible, the publication where it appears).
- **Conference papers:** The surname of the author followed by initials, the year of publication in parentheses, the title of the paper, italicized title of the conference proceedings, the page number(s) being cited in parentheses, the place of publication followed by the name of publisher.

Example:

Kelly, L. (2011). Violence against women and children in the national legislation of the EU member states: an overview of the research results. *Druga godišnja konferencija Viktimološkog društva Srbije-Žrtve kriminaliteta i žrtve rata: međunarodni i domaći kontekst, knjiga apstrakta* (p. 13). Beograd: Viktimološko društvo Srbije & Prometaj.

- **Newspaper articles:** The surname of the author followed by initials, the year and date in parentheses, the title of newspaper followed by a page number in text, or webpage from which the text was retrieved.

Example:

Гудељ, Ј. (2006, October 23). Полиција чува крст изнад Мостара. *Независне новине*, Бања Лука. Retrieved November 17, 2010, from <http://www.nezavisne.com/novosti/bih/Policija-cuva-krst-iznad-Mostara-1473.html>

Additionally, authors are asked to comply with the following guidelines:

- Foreign names are transcribed into Serbian Cyrillic as they are pronounced and their italicized surnames in the original language are included in parentheses at first mention, for example: Godme (*Gaudemet*) or Šenke (*Schönke*).
- The article, paragraph, and item of the regulation should be abbreviated as Art., Para, It. after the last issue without a period (for example, CCP, Art. 5, para. 2, it. 3, or CC, Art. 5, 6, 9 and 10, or ZPS, Art. 4-12, etc.).
- Latin and other foreign words, website addresses are italicized.
- Each reference cited in text must appear in the reference list.
- Uncited sources should not be included in the reference list.
- When citing several works by the same author, they should be ordered by year of publication, the earliest first.

- When an article has two authors, co-authored articles are listed after single author articles.
- If a work has no author, use the title of the work or the name of institution in place of an author's name.
- When writing a work, it is necessary to properly use the intellectual property of other authors. Plagiarism, taking people's original ideas, words or other creative expression without acknowledging the source by citing a reference, represents a serious violation of scientific ethics. Plagiarism is a violation of the author's rights, which is punishable by law.



ФАКУЛТЕТ БЕЗБЈЕДНОСНИХ НАУКА
УНИВЕРЗИТЕТ У БАЊОЈ ЛУЦИ

JOURNAL OF SECURITY AND CRIMINAL SCIENCES

JOURNAL OF THE FACULTY OF SECURITY STUDIES,
UNIVERSITY OF BANJA LUKA

- GUIDELINES FOR REVIEWERS-

The Journal of Security and Criminal Sciences publishes innovative scholarly articles that address topics ranging from security studies, criminalistics and forensics, protection and rescue, the organization of policing and police activities, to special physical education. Additionally, the journal publishes articles in other scientific fields that are closely related to the profile of the journal.

The journal publishes original research articles, review articles, short communications, article critique or response papers, conference reports, book reviews, and research projects reports that have not previously been published or submitted to another journal for consideration in any form.

Article 53 of the Rulebook on Publishing Academic Work ("Official Gazette of Republika Srpska" No. 77/17) provides for the quality of a review as one of the criteria for the categorization of journals.

- Pursuant to Article 35(5) of the Rulebook, the review must contain the following:

1. Evaluation of the relevance and originality of the article and its contribution to the relevant field;

2. Evaluation of the novelty and originality of research;
3. Evaluation of the methods used;
4. Recommendation for assorting the manuscript into the relevant category or article type;
5. Evaluation of the literature used;
6. Recommendation to publish the article.

• Article 23 of the Rulebook provides for the following article types:

1. **Original research article** is, in principle, organized according to the IMRAD scheme for experimental research or in a descriptive way for descriptive scientific fields, in which the text about the research results of the author's own study obtained using scientific methods, which are textually described and allow for the research to be replicated and the facts to be verified, is published for the first time.
2. **Review article** presents an overview of recent articles regarding a specific topic with the aim of summarizing, analyzing, evaluating, or synthesizing the main ideas arguments and findings, with new syntheses that must encompass the results of the author's own research.
3. **Short communication** is a short article or a preliminary study which does not have to include all the IMRAD elements. It summarizes the findings of the author's completed original research or article still in progress.
4. **Article critique or response paper** is a discussion of a certain scientific topic, based exclusively on scientific argumentation, in which the author expresses his/her opinion which must be supported with evidence, that is, confirms or disproves the findings of other authors.
5. **Informative review** such as editorials or commentaries.
6. **Review** is an evaluation of a book, instrument, computer program, case, or a scientific event. It evaluates the correctness/incorrectness of a scientific paper, criteria, or starting points, with a particular emphasis on the quality of the work evaluated.

• When reviewing the article, the reviewers should consider the following:

1. **Does the article fit the scope of the Journal of Security and Criminal Sciences?**
2. Does the title clearly describe the article?
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• Other notes (Article 35, items 2, 4 and 6)

1. Articles are evaluated descriptively.
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3. Reviewers are required to point out possible violations of ethical standards in the work.
4. Reviewers should provide a full reference to a representative single author/co-authored articles from the