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Emotional Intelligence vs. Digital Intelligence in the Face of Virtual Reality. New Challenges for Education for Safety:
The Need for "New" Communication and Adaptation Competencies

BARBARA WIŚNIEWSKA-PAŹ

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#### 1. Affiliazione Autore / Authors' information

University of Wrocław, Poland

### 2. Contatti / Authors' contact

Barbara Wiśniewska-Paź: barbara.wisniewska-paz[at]uwr.edu.pl

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# Emotional Intelligence vs. Digital Intelligence in the Face of Virtual Reality. New Challenges for Education for Safety: The Need for "New" Communication and Adaptation Competencies

Barbara Wiśniewska-Paź

University of Wrocław, Poland E-mail: barbara.wisniewska-paz[at]uwr.edu.pl

#### Abstract

Contemporary reality and accompanying it civilization development is an extremely complex and demanding area perceived on the one hand in the context of threats, on the other hand – the need to develop competencies that allow one to survive, and the other to develop in increasingly complex conditions of modern times. The conviction of people about life in permanent danger, the increasing complexity of conditions and events generates the need to work out often not one, but at least a few thought-out strategies adequate to time and spatial conditions, threats, problems and people that these problems and threats relate to or may concern. In addition to a pool of problems and events that we can deal with, predict their occurrence, prevent and counteract, we also have problems and threats that we have just started to recognize. The article focuses on contemporary challenges of education for security and the need to develop each of the competencies separately, emphasizing the importance of complementarity in their application in everyday life in order to ensure understanding, action and development of ourselves and the environment, solving problems and dealing with difficult situations and threats.

Keywords: Education, Emotional Intelligence, Digital Intelligence.

"There is a certain naivety in the information society, as it is ruled by the conviction that access to all knowledge is within one click and that we do not need to know as much as before. Meanwhile, the truth is quite the opposite: we still need basic skills such as reading comprehension, writing and mathematics so that we cannot be easily deceived. We must increase our criticism of the sources".

Fridolin G., Minister of Education of Sweden (2017)

#### 1. Contemporary Reality - Human - Competencies

Contemporary reality and accompanying civilization development is an extremely complex and demanding area perceived on the one hand in the context of threats, on the other hand - the need to develop competencies that allow one to survive, and the other to develop in increasingly complex conditions of modern times (Bieżuński, 2013). The conviction of people about life in permanent danger, the in-

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<sup>&</sup>lt;sup>1</sup> See: https://wpolityce.pl/spoleczenstwo/331629-szwedzi-chca-sie-bronic-przed-fake-news-w-szkolach-dzieci-beda-sie-uczyc-analizy-informacji

creasing complexity of conditions and events generates the need to work out often not one, but at least a few thought-out strategies adequate to time and spatial conditions, threats, problems and people that these problems and threats relate to or may concern (Kaczmarczyk, 2014). In addition to a pool of problems and events that we can deal with, predict their occurrence, prevent and counteract, we also have problems and threats that we have just started to recognize. These include the whole spectrum of cyberspace<sup>2</sup> that we still know too little about to notice and deal with.

It is a challenge which we are currently trying to face. It is not easy considering that we live in a world of permanent deregulation, changes and turns, artificial intelligence (AI), mutated forms of threats and transformations, and security as one of the highest values in the background.

In spite of the progressing obsolescence of the forecasts proposed in the 1970s or 1980s, the term "globalization" (Bauman 2000a) has not ceased to be presented in a too simplistic way, and its load capacity is not accompanied by the wealth of prospects and meanings associated with it. Interesting perspective in this respect has been proposed in the book Faces of Globalism (Wosińska, 2011), in which four dimensions of globalization have been presented: linguistic-cultural, economic and trade-related, demographic and social as well as concerning ecology and degradation of the natural environment. The globalization's faces presented in the mentioned publication have an analytical and reflexive dimension. The criterion of material differences - as it turns out - is not the basis for the occurrence or absence of problems in a given society. The traditional division of the world into people from more developed regions of the world and people from poorer parts of the globe does show the diversity of both worlds, but it does not mean that one of these groups of people is devoid of problems. These problems are just different. This is a kind of obviousness that still requires constant confirmation and at the same time the expansion and improvement of our competencies.

Globalization slowly ceases to be treated as a kind of ideé-fixe that will organize all the trouble-free future of a happy life. Recently, we started to observed a domination of the tendency to look at globalization as something inevitable but simultaneously as something requiring a process of progressive mutual dependence of individuals, groups or nations (Giddens, 2012) and the process of shrinking time and space that accompanies it. Views and concepts about the future, threats and security are constantly evolving. What was presented as a forecast twenty or thirty years ago is systematically verified by the authors of the concept, their continuators or adversaries (Bauman, 2000b; Stańczyk, 1996). For example, the concepts of Alvin Toffer (1998a, 1997a, 2003, 1997b, 1998b, 2006, 1996, 2007), Francis Fukuyama (1996, 2000, 1997a ,1997b, 2000, 2004, 2005, 2006), Jean Baudrillard (2006), Samuel Huntington (1977, 1985, 1995, 1997, 2000, 2007) or Ulrich Beck (2002, 2004, 2005; Beck, Giddens and Lash, 2009; Beck and Grande, 2009) have been subject to verification assessment. I devoted a separate article to it (Wiśniewska-Paź, 2018a). All these theories are eagerly cited and referred to while addressing the problem of contemporary changes, future and present threats, security and education. Thanks to the aforementioned scientific and popularizing activity, the theories are constantly modified, especially by their supporters and followers.

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<sup>&</sup>lt;sup>2</sup> See: M. Górka (ed). (2014). Cyberbezpieczeństwo jako podstawa bezpiecznego państwa i społeczeństwa w XXI wieku, Warszawa; K. Liedl, P. Piasecka, T. Aleksandrowicz (ed.). (2014) Sieciocentryczne bezpieczeństwo. Wojna, pokój i terroryzm w epoce informacji, Warszawa.

Contemporary society is sometimes referred to as the information society or the society of knowledge, networks, consumption, spectacle or risk. Information and time of its transmission have become the most desirable value. Looking at the results of social access to technology and our attachment to it - often addiction - we can come to somewhat different conclusions: what we were supposed to unleash, really enslaved us and instead of making us wiser and more aware, it caused that we are more and more confused (Pieczywok, 2015), drifting in a maze of information whose size overwhelms our ability to process it. It puts us in a state of being lost, lowers our activity, often leads to withdrawal from social life and reluctance to undertake even the simplest activities. Consequences are therefore opposite to the intended goals. This situation increases our susceptibility to influence and manipulation, our system of interpretation and verification of information does not keep up with the pace of their inflow and outflow. According to Thomas H. Eriksen (2003), greater flexibility of the environment deprives us of our own flexibility and paradoxically our freedom is limited by a greater choice (pp. 13-14). What potentially should save us time and increase our efficiency, in fact has exactly the opposite effect - it fills up every moment and our thoughts at any time of the day or night and anywhere, so instead of having more and more free time it happens that we do not have it not at all (Pieczywok, p. 34).

#### 2. The Modern World and Virtual Reality

What is the virtual reality we are talking about so much right now? (Korab, 2010). Virtual reality is a picture of artificial reality that has been created using widely understood information technology and concerns the creation of multimedia visions of space, events or objects. The creator of the concept is J. Lanier, whose thoughts became the basis for formulating the definition of virtual reality by S. Bryson as a way of " (...) using computer technology to create the effect of an interactive, three-dimensional world in which objects give the impression of a spatial (physical) presence" (Bryson, 2013). One can often find in the literature the definition of virtual reality in the form of 3 x I or I<sup>3</sup> - Interaction (interaction, relations), Immersion (penetration, depression), Imagination (imagination) (Burdea and Coiffet, 2003). The precursor of virtual reality (VR) is considered M. W. Krueger, who in the late 1960s created video installation projects, of which the most-known are "Gloflow", "Psychic Space", "Videoplace" or "Metalplace" (Ibidem). Over time, they have become an inspiration for the emergence of contemporary virtual reality systems that are used in various fields, including education, psychology, law, psychotherapy, army, medicine, audiovisual communication, trade, tourism, spending free time. Virtual reality is perceived by means of the sense of sight, it is becoming more and more realistic from year to year due to the development of technology. More and more often it is accompanied by sound, tactile and interactive arrangements, and work on the use of the fragrance is also underway. The aforementioned accompanying elements aim to initiate the participation of the rest of the human senses in the reception - in addition to sight, also the sense of hearing, touch and smell. The more advanced the development of technology is, the more difficult it becomes to distinguish virtual reality from the real life. The technological progress must be followed by the improvement of the individual in terms of competencies enabling the functioning of the individual on the border between the two realities and development.

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#### 3. Intelligence Quotient vs. Intelligence and its Types

In the 1980s, IQ (from Intelligence Quotient) reigned supreme, in the mid-90s there came the time for EQ / EI (Emotional Quotient / Intelligence). Whereas for the several last years we have been intensely entering the DQ / DI (Digital Quotient / Intelligence) era, which does not boil down to the skills in using a laptop or a smartphone, but it has a complex set of social, emotional and cognitive skills necessary for adaptation to the digital world, its rational use and confronting its challenges. The new type of intelligence (DQ / DI Digital Intelligence) operates on the basis of eight critical digital competencies, including digital law, digital communication, digital illiteracy, digital emotional intelligence, digital security measures, digital security, use / application of digital devices and digital identity which has been discussed in the further part of the article.

What is intelligence? Intelligence (Latin: *intelligentia*) - is the ability to perceive, understand, learn, analyze and adapt to changes in the environment and skilfully use for this purpose one's own competencies (knowledge and skills). It is, therefore, a feature of the mind that determines the level of cognitive efficiency of a person: their thinking, solving problems. In the 1980s, Howard Gardner proposed the theory of multiple intelligences distinguishing eight types of human intelligence: linguistic, logical-mathematical, visual-spatial, musical, interpersonal (social), intrapersonal (self-reflective), kinesthetic and naturalistic (Richard, Gerrig, Zimbardo 2008, pp. 292-294).

What is IQ? IQ (intelligence quotient) is the result of an intelligence test. His precursor is Alfred Binet - a French psychologist, a co-author (with T. Simon) of the first test examining the general intellectual performance in children (the socalled Binet-Simon test). Its aim was to determine the level of difficulty of tasks and to rank them according to the degree of difficulty in order to determine the thresholds for solving tasks in correlation with the age of children. He introduced the concept of "mental age" in order to interpret the obtained results (Ramsden, Richardson, Josse, Thomas et al., 2011.) He drew attention to a certain disproportion between the retardation of the mental age in relation to the age of life between children and teenagers. This concept was then developed in the first decade of the twentieth century by W. Stern who proposed a relativisation of the obtained value of the mental age to the age of life and presented the formula of intelligence quotient (Intelligenz-Ōuotient -IŌ), whose values placed on a standardized scale (called the intelligence quotient) over 100 determine the acceleration or delay in the mental development. Over time, this concept has been subject to further improvements and applications, generating different varieties of tests and intelligence scales (sometimes called tests and development scales) taking into account, among others, age of the subjects (e.g. variants of Wechsler scale). The issue of age turns out to be quite important when looking at it from the point of view of human development phases, which are very dynamic up to 13 years of age, and become slower and more stable with visible decreasing tendencies after one turns 16 (Berkovits, Armor 2006). Popular tests and scales include Stanford-Binet, Terman-Merrill, Psyche Cattell Infant Intelligence Scale, Brunet-Lezine's Psychosomatic Development, Wechsler-Bellevue and Grace Arthur's Performance Scale.

#### 4. EQ - Emotional Intelligence

Emotional intelligence is another type of intelligence defining competencies in recognizing emotional states of oneself and other people. It is assumed to be complementary to the so-called rational intelligence defining intellectual, abstract and analytical skills measured by the intelligence quotient (IQ) (Goleman, 1997a). An important aspect here is also the ability to control and manage one's own emotions, and a wide range of social skills correlated with emotions such as empathy or motivation.

Three key models of this kind of intelligence can be distinguished, in many points different in perspective, in others, convergent.

According to the first of the models built on the concept of J. Mayer and P. Salovey, we may distinguish four areas constituting emotional intelligence: perception of emotions, support of thinking with the help of emotions, understanding and managing emotions (Matthews, Zeinder and Roberts, 2004). On the basis of one of the most popular tools for testing emotional intelligence, namely the Multifactor Emotional Intelligence Scale (MEIS) both authors together with D.R. Caruso created the Mayer - Salovey - Caruso Emotional Intelligence Test (MSCEIT), which explores four levels of emotional intelligence: perception of emotions, use of emotions in cognitive processes, understanding emotions and managing emotions ("Rozmowa Agnieszki Chrzanowskiej z Geraldem Matthews" - 2009). Developed in Poland the Emotional Intelligence Test (TIE) (Śmieja, Orzechowski and Asanowicz 2013) is also embedded in this model.

Created on the basis of D. Goleman's (1997a) concept, the second model defines emotional intelligence as the ability to understand one's own and others' emotions, to exercise control over them and to manage them, the ability of self-motivation and other social competencies. The third model by R. Bar-On points to five components of emotional intelligence. These are intrapersonal intelligence, interpersonal intelligence, general mood, coping with stress and the ability to adapt (Matthews, Zeinder and Roberts, 2004).

Emotional intelligence is based on three complementary competence modules, including: psychological, social and praxeological (action) (Goleman, 1997a, 1997b; Krokowski and Rydzewski, 2004) competencies. As part of psychological competence we may distinguish, inter alia, self-awareness, self-esteem, self-control and self-regulation. As part of social competencies we distinguish, among others, empathy, assertiveness, persuasion, leadership and cooperation. Whereas within the competencies that define our attitude to the challenges and actions there are located: motivation, conscientiousness and adaptability.

Psychological competencies, therefore, apply to all types of states and relationships of the individual with oneself, the ability to recognize their own states, self-esteem, the ability to respond to external stimuli and control their own emotions. Social competencies in turn focus on on relationships with others, including the ability to understand and experience the states of other people, the ability to defend their own rights, the ability to influence and guide people, create relationships and cooperation. Meanwhile, praxeological competencies are associated with commitment, the ability to cope in a changing environment and adaptation to changes, as well as responsibility for implemented activities.

#### 5. Digital Intelligence

Increasingly often, one can come across the idea that intelligence (IQ) and emotional intelligence (EQ) are not enough to function effectively in the modern world and to achieve the desired "success", despite the ambiguous definition of the concept created by various social groups and institutions. Hence, the World Economic

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Forum draws attention to the need to develop digital intelligence (DQ) ("8 digital skills we must teach our children" 2018) in society.

The Institute of Digital Intelligence, created in 2016<sup>3</sup>, is of similar opinion. It pays great attention to the aspect of public health in the context of shaping this type of competencies. What is extremely important here is the question of understanding what digital intelligence is. Digital intelligence is not - as one might suppose computer or smartphone skills, does not focus on the amount of time actively spent in the company of digital / mobile devices and without them, and to maintain a balance in this aspect. The Institute defines this kind of intelligence as "the sum of social, emotional and cognitive skills that allow people to face challenges and adapt to the requirements of the digital life ("What is DQ? 8 digital skills we must teach our children" n.d.). It also determines what specific skills are involved. The functioning of a new type of intelligence (DQ / DI - Digital Intelligence) is proposed to be analyzed on the basis of eight critical digital competencies: digital law, digital communication, digital illiteracy, digital emotional intelligence, digital security measures, digital security, use / application of digital devices and digital identity<sup>4</sup>. Digital intelligence as opposed to IQ or EQ it is not a skill with which man is born. The process of acquiring competencies within this kind of intelligence takes place in the learning process. The earlier the process starts, the better the results are. The absolute need to educate the public in this respect is evidenced by the results of the research on the level of endangerment of specific age groups by specific types of threats in the network. This is particularly worrying especially among children in the context of experiencing by them on a daily-basis threats like increased anxiety, peer pressure in the network, identity theft, dependence on digital devices, misinformation or privacy violations. The research shows that over half of the children aged 8-12 from 29 countries are exposed to at least one of the threats occurring in the network. Children from technologically developing countries are exposed to the dangers 1.3 times more often than their peers from the countries well developed in terms of digital technologies<sup>5</sup>.

At the European Cybersecurity Forum (CYBERSEC), recommendations regarding cyberspace threats and security were presented. They include:

- taking steps to protect against information activities in the network;
- requiring further analysis impersonating social media profiles and bot opera-
- the need to practice responsible journalism through the media, also when obtaining information in cyberspace, in particular from social media fact checking, critical thinking and awareness raising campaigns;
- the need for better education with a strong emphasis on technology, values, critical thinking, the ability to use the media safely;
- improvement of cybersecurity, raising operational potential and security;
- artificial intelligence (AI) being both an opportunity and a challenge, but also a risk of using AI to run disinformation campaigns<sup>6</sup>. Therefore, it will be impossible to deal with it without proper education.

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<sup>&</sup>lt;sup>3</sup> https://www.dqinstitute.org/what-is-dq/ online access: 20 June 2018.

<sup>&</sup>lt;sup>4</sup> For a more detailed description of the competencies see: https://www.dqinstitute.org/what-is--dq/ (online access: 16 February 2018).

<sup>&</sup>lt;sup>5</sup> Cf: Outsmart the Cyber-Pandemic. Empower Every Child with Digital Intelligence by 2020, https://www.dqinstitute.org/2018DQ\_Impact\_Report/ (online access: 20 June 2018)

<sup>&</sup>lt;sup>6</sup> https://cybersecforum.eu/.../cybersec\_2017\_recommendations.pdf (online access: 12 June 2018).

#### 6. The Challenges of Education for Safety

Security and education have now become two key concepts of contemporary theory and practice of everyday life of individual people, nations and states. They concern indirectly and directly almost all spheres of life and types of human activity from birth to old age. At the same time, we should be aware that no state and none of the services functioning within it can guarantee full security. For our own safety, we must take care of ourselves, constantly enhancing our knowledge, developing a habit of learning and further training, thus keeping up with the changes and constant development of our own competencies.

However, this activity and our willingness requires support. It will be all the more possible and more effective if from the side of the state, self-government authorities, local authorities or educational institutions (including schools and universities) support will be not only the framework of education strategies for safety, but a training system in the field of sensitization, and education of people belonging to different groups and social categories in the field of safe behaviors (including diagnosis, prevention and response). The challenge faced by the contemporary education for safety, therefore, requires an effort to build a new strategy of action and change the way of thinking about the threats, their place and ways of dealing with them, with attempts to prevent their emergence. Waiting for the emergence of threats and then just thinking how to deal with them, how to counteract, how to react is unfortunately a common practice that requires immediate change. For such a change to take place it is necessary to include permanent and multidimensional education in this activity. Education with a more practical than theoretical dimension, carried out in a continuous process from birth to old age. Only such a perspective of thinking about this type of education should have the desired effects.

The issue of widely understood education for safety is nowadays an increasingly popular aspect of considerations that absorbs researchers and the so-called ordinary people regardless of age, sex, income or education. I drew attention to this in the introduction to the book entitled: "Edukacja dla bezpieczeństwa wobec specyfiki szkolenia grup dyspozycyjnych" (Education for security against the specificity of training of disposable groups) (Wiśniewska-Paź, 2014), signaling the basic causes of this phenomenon. This is a positive symptom that can and should contribute to the above-mentioned change, which certainly will not happen right away. It is important that it appears in a thoughtful and planned manner (hence the importance of developing a long-term strategy) and that it should be of a continuous character, and not the domain of the moment or fashion impulse.

In terms of security, unfortunately, we have much more extensive educational offer in the field of security as such, this applies in particular to the offer of private and public higher education institutions in this field. There is no well-thought-out and comprehensive offer in the field of education for safety, which should start not in the second grade of junior secondary school (according to the new legal basis in grade 8 of the elementary school), but much earlier - in the pre-school period and be carried out in a continuous process - minimum until the end of the cycle of higher education. Deficiencies in this regard also concern the training of the teaching staff as well as the program of teaching the subject. Therefore, it is necessary to cope with this deficiency, because it is not a need of an individual but of the whole system.

It is worth taking up this challenge, because the need for safety is, as I mentioned at the beginning, one of the key human needs, which is the basis for the possibility of satisfying other important needs, such as: survival, identity and devel-

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opment (Rutkowski, 1995). It is important that safety is not understood as a state, but as a process (expressing duration) that provides a sense of stability, peace, confidence and security, lack of danger and protection against dangers. The latest security-related research highlights the aspect of identifying safety with the expansion of the area of freedom, responsibility and autonomy (Pieczywok, 2015, p. 17).

The need for safety is, therefore, subjective in nature, which remains in the direct and indirect relationship with the structural dimension co-created by various governmental institutions, local governments and groups (including various formations of uniformed groups: military and paramilitary). Both dimensions interpenetrate mainly on the declarative and media levels, and the point is that the security understood in this way is to be implemented practically and in the reality as it is now, and not as it was, for example, ten or twenty years ago (Świniarski, Chojnacki 2014, p. 69). Care for personal safety is the basis for rational interpretation and co-creation of structural security (Pieczywok, 2012, p. 9). I mentioned this already on the occasion of the previous publications (Wiśniewska-Paź 2015; Wiśniewska-Paź, Liberacki 2016, p. 230; Wiśniewska-Paź 2018b). The key task in this aspect is performed by education (ed. Wojnar, Kubin 1996; Raport UNESCO 1998), in particular by its specialized area that is the education for safety.

#### References

- Augustyniak, K. & Piotrowski, A. (ed.) (2011). *Edukacja dla bezpieczeństwa*. *Cywilizacyjne problemy bezpieczeństwa*. Poznań: Wydawnictwo Wyższej Szkoły Bezpieczeństwa.
- Baudrillard, J. (2006). *Społeczeństwo konsumpcyjne, jego mity i struktury*. Warszawa: Wydawnictwo Sic!
- Bauman Z. (2000a). *Ponowoczesność jako źródło cierpień*, Wydawnictwo Sic! Warszawa.
- Bauman, Z. (2000b). *Globalizacja. I co z tego dla ludzi wynika*. Warszawa: Państwowy Instytut Wydawniczy.
- Bauman, Z. (2006). *Społeczeństwo w stanie oblężenia*. Warszawa: Wydawnictwo Sic!
- Beck, U. (2002 and 2004). Społeczeństwo ryzyka. W drodze do innej nowoczesności. Warszawa: Wydawnictwo Naukowe SCHOLAR.
- Beck, U. (2005). Władza i przeciwwładza w epoce globalnej. Nowa ekonomia polityki światowej. Warszawa: Wydawnictwo Naukowe SCHOLAR.
- Beck, U., Giddens, A. & Lash S. (2009). *Modernizacja refleksyjna. Polityka, tradycja i estetyka w porządku społecznym nowoczesności*. Warszawa: Wydawnictwo Naukowe PWN.
- Beck, U. & Grande, E. (2009). Europa Kosmopolityczna. Społeczeństwo i polityka w drugiej nowoczesności. Warszawa: Wydawnictwo Naukowe SCHOLAR.
- Berkovits, E. & Armor, D.J. (2006). *Maximizing Intelligence*. Transaction Publishers, New Brunswick (USA) and London (UK) s. 71-75.
- Bieżuński, A. (2013). *Teoria bezpieczeństwa i jego pochodnych w zarysie*, [in:] Kaczmarczyk B., Wawrzusiszyn A. (cur.). Podstawowe problemy bezpieczeństwa i edukacii dla bezpieczeństwa, Wydawnictwo Mazurskiego Ośrodka Doskonalenia Nauczycieli w Ełku, Ełk 2013.
- Burdea, G. & Coiffet, P. (2003). *Virtual Reality Technology*. New Jersey: John Wiley & Sons.
- Chrzanowska, A. (2009, January). Rozmowa Agnieszki Chrzanowskiej z Geraldem Matthews. *Magazyn Psychologiczny Charaktery*, 1(144).
- Czajkowska-Ziobrowska, D. & Zduniak, A. (2007). Edukacja dla bezpieczeństwa. Bezpieczna szkoła bezpieczny uczeń . Edukacja wobec zagrożeń szkolnych , Poznań: Wydawnictwo Wyższej Szkoły Bezpieczeństwa.
- Raport UNESCO (1998). Edukacja- jest w niej ukryty skarb, Warszawa.

- Eriksen, T.H. (2003). Tyrania chwili. Szybko i wolno płynacy czas w erze inform acji. Warszawa: PWN.
- Fukuyama, F. (1996, 2000). Koniec historii. Poznań: Zysk i S-ka Wydawnictwo.
- Fukuyama, F. (1997a). Ostatni człowiek. Poznań: Zysk i S-ka Wydawnictwo.
- Fukuyama, F. (1997b). Zaufanie: kapitał społeczny a droga do dobrobytu. Warszawa – Wrocław: PWN.
- Fukuyama, F. (2000). Wielki wstrząs: natura ludzka a odbudowa porządku społecznego. Warszawa: Bertelsmann Media.
- Fukuyama, F. (2004). Koniec człowieka. Konsekwencje rewolucji biotechnologicznej. Kraków: Wydawnictwo ZNAK.
- Fukuyama. F. (2005). Budowanie państwa. Władza i ład międzynarodowy w XXI wieku. Poznań: Rebis.
- Fukuyama, F. (2006). Ameryka na rozdrożu. Demokracja, władza i dziedzictwo neokonserwatyzmu. Poznań: Rebis.
- Gerrig, R.J. & Zimbardo, P.G. (2008). Psychologia i Życie. Warszawa: Wydawnictwo Naukowe PWN.
- Goleman, D. (1997a). *Inteligencja emocjonalna*. Poznań: Media Rodzina.
- Goleman, D. (1997b). Inteligencja emocjonalna w praktyce. Poznań: Media Rod-
- Goszczyńska, M. (1997). Człowiek wobec zagrożeń. Uwarunkowania oceny i akceptacji ryzyka, Wydawnictwo "Żak", Warszawa.
- Górka, M. (cur.). (2014). Cyberbezpieczeństwo jako podstawa bezpiecznego państwa i społeczeństwa w XXI wieku, Difin, Warszawa 2014.
- Huntington, S. (1977). Kryzys demokracji. Warszawa: Wydawnictwo IBWPK.
- Huntington, S. (1985). Przyszłość demokracji. Warszawa: Wydawnictwo Myśl.
- Huntington, S. (1995). Trzecia fala demokratyzacji, Wyd. I, Warszawa: PWN.
- Huntington, S. (1997). Zderzenie cywilizacji i nowy kształt ładu światowego. Warszawa: Wydawnictwo Muza.
- Huntington, S. (2007). Kim jesteśmy? Wyzwania dla amerykańskiej tożsamości narodowej. Kraków: Wydawnictwo ZNAK.
- Huntington, S. & Harrison, L.E. (2000). Kultura ma znaczenie . Jak wartości wpływają na rozwój społeczeństw. Poznań: Antropos.
- Kaczmarczyk, B. (2014). Bezpieczeństwo i zagrożenia w teorii i praktyce. Kraków: Wydawnictwo Szkoły Aspirantów PSP.
- Kępiński, A. (2002). Lęk. Kraków: Wydawnictwo Literackie.
- Korab, K. (ed.) (2010). Wirtual. Czy nowy wspaniały świat?. Warszawa: Wydawnictwo Naukowe SCHOLAR.
- Korczyc, W. (2006). Determinanty współczesnych zagrożeń. Piła: Państwowa Wyższa Szkoła Zawodowa im. Stanisława Staszica w Pile.
- Krokowski, M. & Rydzewski, P. (2004). Inteligencja emocjonalna. Łódź: Imperia
- Kwiasowski, Z. & Cenda-Miedzińska, K. (2012). Edukacja dla bezpieczeństwa wobec wyzwań współczesności. Kraków: Wydawnictwo Naukowe Uniwersytetu Pedagogicznego w Krakowie,
- Liedel, K., Piasecka, P. & Aleksandrowicz, T. (ed.). (2014). Sieciocentryczne bezpieczeństwo. Wojna, pokój i terroryzm w epoce informacji. Warszawa: Difin.
- Matthews, G., Zeinder, M. & Roberts, R.D. (2004). Emotional Intelligence: Science and Myth. Cambridge: MIT Press.
- Nisbett, G. (2010). Inteligencja. Sposoby oddziaływania na IQ. Warszawa: Wydawnictwo Smak Słowa.
- Pieczywok, A. (2015). Refleksyjny wgląd w wybrane obszary edukacji dla bezpieczeństwa. In Pieczywok, A., Loranty, K. (ed.). Bezpieczeństwo jako problem edukacyjny. Warszawa: Wydawnictwo AON.
- Pieczywok, A. (2012). Edukacja dla bezpieczeństwa wobec zagrożeń i wyzwań
- współczesności. Warszawa: Wydawnictwo AON. Pieczywok, A. & Loranty, K. (2015). Bezpieczeństwo jako problem edukacyjny. Warszawa: Wydawnictwo AON.
- Ramsden, S, Richardson, F.M., Goulven, J., Thomas, M.S.C. et al. (2011). Verbal and non-verbal intelligence changes in the teenage brain. *Nature*, 479(7371).

- Rutkowski, C. (1995). Bezpieczeństwo i obronność: strategie koncepcje doktryny. Warszawa: Zeszyty Naukowe AON.
- Skrabacz, A. & Kanarski, L. (2014). *Edukacja dla bezpieczeństwa. Teoria i praktyka*. Warszawa: Wojskowe Centrum Edukacji Obywatelskiej.
- Stańczyk, J. (1996). Współczesne pojmowanie bezpieczeństwa. Warszawa: Instytut Studiów Politycznych PAN.
- Smieja, M., Orzechowski, J. & Asanowicz D. (2013). *Test Inteligencji Emocjonalnej (TIE). Podręcznik*, Kraków: Wszechnica UJ.
- Świniarski, J. & Chojnacki, Wł.. (2014). Barwy i cienie w edukacji dla bezpieczeństwa. In Skrabacz, A. & Kanarski L. (ed.) Edukacja dla bezpieczeństwa. Warszawa: Wojskowe Centrum Edukacji Obywatelskiej.
- Toffler, A. (1997). *Trzecia Fala*, pierwsze wydanie pełne. Warszawa: Państwowy Instytut Wydawniczy.
- Toffler, A. (1998). Szok Przyszłości. Poznań: Zysk i S-ka Wydawnictwo.
- Toffler, A. (2003). Zmiana władzy. Wiedza, bogactwo i przemoc u progu XXI stulecia. Poznań: Zysk i Sk-a Wydawnictwo.
- Toffler, A. (2006). *Wojna i Antywojna*, I wyd: Wydawnictwo Kurpisz, Poznań; Warszawa (1997), II wyd: Warszawa (1998), III wyd: Poznań.
- Toffler, A. & Toffler, H. (1996). *Budowa Nowej cywilizacji. Polityka trzeciej fali*, Poznań: Wydawnictwo Zysk i S-ka.
- Toffler, A. & Toffler H. (2007). *Rewolucyjne bogactwo*. Poznań: Wydawnictwo Kurpisz.
- Wiśniewska-Paź, B. (ed.) (2014), Edukacja dla bezpieczeństwa wobec specyfiki szkolenia grup dyspozycyjnych. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego.
- Wiśniewska-Paź, B. (ed.) (2015). Edukacja a bezpieczeństwo w różnych wymiarach i kontekstach: formacje militarne i paramilitarne wobec wyzwań edukacyjnych. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego.
- Wiśniewska-Paź, B. (2018a). Współczesne zagrożenia a bezpieczeństwo. Od edukacji obronnej do edukacji dla bezpieczeństwa . In Zawartka-Czekaj, M (ed), Bezpieczeństwo wewnętrzne. Aspekty prawne społeczne– pedagogiczne, Katowice.
- Wiśniewska-Paź, B. (ed.) (2018b). Współczesne zagrożenia bezpieczeństwo edukacja. Czyli jak uczyć społeczeństwo zasad bezpieczeństwa . Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego.
- Wiśniewska-Paź, B. & Liberacki M. (ed.) (2016). Społeczny i edukacyjny wymiar inicjatyw proobronnych w Polsce stan obecny i perspektywy. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego.
- Wojnar, I. & Kubin, J. (ed.). (1996). *Edukacja wobec wyzwań XXI wieku*. Warszawa: Dom Wydawniczy Elipsa.
- Wosińska, W. (2011). Oblicza globalizacji. Warszawa: Smak Słowa.
- Zacher, L.W. (1997). Spór o globalizację. Eseje o przyszłości. Warszawa: Elipsa.
- Zduniak, A. & Kryłowicz, M. (ced.) (2004). Edukacja dla bezpieczeństwa w rodzinie, szkole i pracy. Warszawa –Poznań: Elipsa.