

The influence of philosophical maxims on the behaviour of physical education students

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Received: 09 May 2022; Accepted: 25 October 2022; Published online: 27 December 2022

AoBID: 16095

Authors' Contribution:

- ✍ A Study Design
- 📁 B Data Collection
- 📊 C Statistical Analysis
- 📄 D Manuscript Preparation
- 📁 E Funds Collection

Abstract

Background & Study Aim:

Human behaviours are not fully understandable due to their individual diversity and unpredictability. When asked about what drives human behaviour, we often mention instinct, impulse, reactive responses to stimuli, the ability to perceive and process incoming information, the level of cognitive development (especially thinking), rationality, calculation, and their opposites or the expression of identity. Understanding these determinants of human behaviour is ambiguous. The aim of this explore is understanding and internalizing three philosophical maxims can impact individuals in three aspects: philosophical, developmental, and sports-related.

Material & Methods:

The research involved analysing statements from students of physical education (n = 116) regarding their interpretation of the three philosophical maxims: "Doubt everything", "Nothing human is alien to me," and "The truth will set us free." The analysis delved into their perspectives on the significance of doubt, empathy, and truth-seeking in various aspects of life.

Results:

The study revealed that understanding these philosophical maxims can lead to personal development, fostering qualities such as critical thinking, empathy, self-awareness, and authenticity. The impact varies across the three aspects, with philosophical understanding influencing rational thinking, developmental understanding encouraging open-mindedness, and sports-related understanding promoting perseverance and self-improvement.

Conclusions:

The findings suggest that these philosophical maxims can shape human behaviour positively, motivating individuals to seek knowledge, embrace diversity, and pursue personal growth. Their understanding can lead to improved decision-making, interpersonal relationships, and a sense of purpose in life.

Key words:

authenticity • critical thinking • empathy • personal development • self-improvement • sport

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Conflict of interest:

Author has declared that no competing interest exists

Ethical approval:

Not required

Provenance & peer review:

Not commissioned; externally peer reviewed

Source of support:

Departmental sources

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Erich Seligmann Fromm

(1900-1980) – was a German social psychologist, psychoanalyst, sociologist, humanistic philosopher, and democratic socialist. He was associated with the Frankfurt School of critical theory.

Publius Terentius Afer

(c. 195/185 – c. 159? BC), better known in English as **Terence** – was an African Roman playwright during the Roman Republic. His comedies were performed for the first time around 166-160 BC. Terentius Lucanus, a Roman senator, brought Terence to Rome as a slave, educated him and later on, impressed by his abilities, freed him.

René Descartes (1596-1650)

– was a creative mathematician of the first order, an important scientific thinker, and an original metaphysician.

Neo-gladiator

– a person who trains mix martial arts (MMA) and similar forms of hand-to-hand fighting that do not meet the definition of sport according to the Olympic Charter [16].

INTRODUCTION

Human behaviours are not fully understandable due to their individual diversity and unpredictability. When asked about what drives human behaviour, we often mention instinct, impulse, reactive responses to stimuli, the ability to perceive and process incoming information, the level of cognitive development (especially thinking), rationality, calculation, and their opposites or the expression of identity. Understanding these determinants of human behaviour is ambiguous. For instance, identity in psychology is defined as an individual's self-concept, encompassing appearance, psyche, and behaviour, perceived as distinct and unique from others. It involves how a person cognitively perceives themselves in various relations with themselves and the external world. Individual identity may be shaped by internalized social norms or established customs and rules during the process of socialization. Olga Tokarczuk (the Nobel laureate in literature for 2018, has a background in psychology) argues that identity is “a unique collection of numerous identities, certainly not a monolith of views, attitudes, or self-perceptions.” Thus, even with a correct understanding of these definitions, doubts arise in our minds. When attempting to comprehend human behaviour, we ascend an endless staircase, constructed upon various philosophical, biological, psychological, and social foundations. Despite our efforts to synthesize them, we find ourselves unable to fully grasp the complexity. As we climb higher, we may feel increasingly powerless to explain human behaviour determined, for example, by deficiencies or limitations in the availability of monoamine neurotransmitters such as serotonin (the “happiness hormone”), norepinephrine (NE), and dopamine (DA), central nervous system dysfunctions, or those related to mental disorders. Additionally, even behaviours considered to be within the realms of psychological or social “normality” can be challenging to comprehend [1].

Casual observations suggest that people's behaviours can also be influenced by the ideas and concepts they espouse, including well-known philosophical maxims and aphorisms. It is interesting to explore to what extent physical education students (future facilitators of various physical activities) are familiar with some of the most famous philosophical maxims and whether they can relate these principles to their future profession.

By exploring these maxims and their potential influence on student behaviour, we aim to shed light on how philosophical insights can shape individuals' personal and intellectual development. Additionally, we examine their impact in the realm of sports, where fairness, discipline, and self-improvement are paramount. Understanding the implications of embracing these maxims can have far-reaching effects, contributing to a more compassionate, open-minded, and truth-seeking society.

This research analyses responses from students in the field of physical education, who reflect on these philosophical maxims and discuss their potential effects on behaviour. By investigating the connections between their understanding of these maxims and their behavioural tendencies, we seek to gain valuable insights into how philosophical wisdom can influence personal growth and self-awareness.

The aim of this explore is understanding and internalizing three philosophical maxims can impact individuals in three aspects: philosophical, developmental, and sports-related.

MATERIAL AND METHODS

The selection of maxims used in the study was not random. The universal content of the analysed maxims was emphasized through Erich Seligmann Fromm [2] who, in the introduction to the analysis of Marx's and Freud's theories, presents the fundamental common premises of both thinkers. According to Fromm, “the spirit of these shared ideas is best captured by three short maxims, two of which are of Roman origin, while the last one is Christian. Here they are: 1) *De omnibus est dubitandum* (“Doubt everything”). 2) *Nil humanum a mihi alienum putto* (Terence: “Nothing human is alien to me”). 3) *And the truth shall set us free* (Quote: “You will know the truth, and the truth will set you free,” which is an excerpt from Jesus' statement, “If you hold to my teaching, you are really my disciples. Then you will know the truth, and the truth will set you free” (J 8:31-42).

The task assigned to the students was to describe these maxims in three aspects: philosophical, developmental, and sports-related. The research was conducted as part of exercises during the

course “Psychology of Child Development and Education” at the University of Physical Education and Sport, Gdansk, Poland.

A total of 116 students participated in the study, including 49 female students and 67 male students. The age of the participants ranged from 19 to 24 years ($M = 20.43 \pm 1.06$). The collected data were subjected to quantitative and qualitative analysis. In total, 348 statements made by students regarding the three aspects of the described maxims were analysed. After each analysis, its interpretation concerning the influence of a given maxim on students’ behaviour was provided, along with a summary.

To illustrate the specificity of the conducted analyses, in section “Results” is an example dedicated of the statements of two students.

RESULTS

The analysis of the collected data revealed that the students most frequently referred their descriptions to the maxim “Nothing human is alien to me” (82.38%). Every tenth student chose the maxim “Doubt everything” (9.27%). And approximately every eleventh student opted for the maxim “And the truth shall set us free” (8.35%) – Figure 1.

An example method of analysing students’ statements

Student Martyna’s Philosophical aspect

Martyna’s interpretation of the maxim “Nothing human is alien to me” showcases her understanding of its historical context, with references to Seneca and Terence from ancient times and its popularity during the Renaissance among humanists. She provides a visual representation with a drawing that illustrates the journey of self-awareness and acceptance. The drawing depicts individuals facing various experiences, including doubts, mistakes, and self-discovery, ultimately leading to empathy and understanding for others. Martyna effectively captures the essence of the maxim’s philosophical depth.

Developmental aspect

Martyna associates the maxim with maintaining composure and reducing nervousness in various situations. By recognizing that everyone shares similar problems, needs, and behaviours as humans, she feels less isolated when facing challenges. She emphasizes that mistakes are common and should not lead to self-blame or shame, as everyone experiences similar situations. Martyna’s understanding of the developmental aspect highlights the maxim’s potential in promoting self-compassion and empathy.

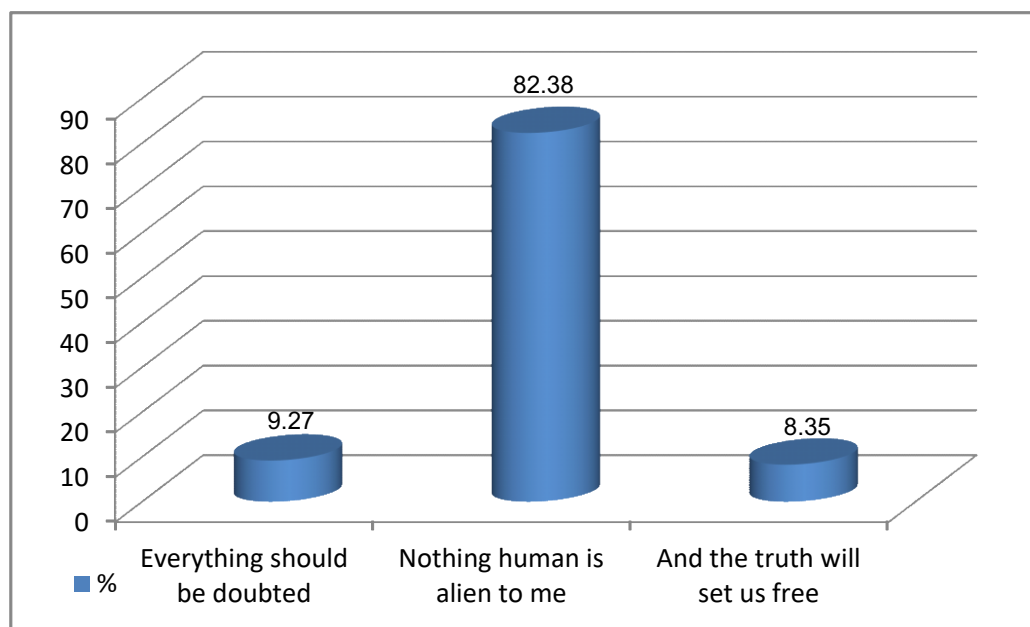


Figure 1. Histogram of the frequency of maxims described by students.

Sports aspect

In the context of physical culture, Martyna sees the maxim as a unifying force for athletes and the entire sports community. It fosters understanding, equality, and empathy towards others. The shared experiences of being human, going through similar challenges, successes, and emotions, create a sense of camaraderie and mutual support among athletes. Martyna recognizes how the maxim can contribute to a positive sports environment and promote a collective pursuit of excellence.

Student Karolina's Philosophical aspect

Karolina adeptly interprets the maxim "Nothing human is alien to me" in its relevance throughout history, from the Renaissance to modern times. She highlights the idea of continuous self-improvement, knowledge acquisition, and embracing progress. By acknowledging the potential for growth and development, Karolina connects the maxim to humanity's ongoing pursuit of betterment. Her analysis reflects a comprehensive understanding of the maxim's philosophical implications.

Developmental aspect

Karolina emphasizes the importance of using reason and continuous learning to guide personal growth and development. By adhering to the maxim, she encourages the pursuit of knowledge and self-improvement as essential components of individual advancement. Her understanding of the developmental aspect underscores the maxim's role in fostering intellectual and personal growth.

Sports aspect

Karolina skilfully applies the maxim to her experience in judo, where she approaches each competition and fight without fear, embracing progress and becoming better. Her interpretation demonstrates the maxim's applicability in the context of sports, as it encourages athletes to embrace challenges, strive for improvement, and fearlessly compete. Karolina's analysis effectively links the maxim to her journey in judo and illustrates its relevance in sportsmanship.

Martyna presents a philosophical interpretation of the maxim, highlighting its origins in antiquity and its popularity during the Renaissance. She draws attention to a hand-drawn illustration representing a symbolic life journey. At the beginning of the line, there is a cloud with the inscription

"I know this," and at the end, there is a flag and stairs. Two figures run along the line, while a third figure is depicted as "falling." Martyna interprets this as a symbolic reflection of the human path, where one may know various situations and experiences, but not always know how to cope with them. However, at the end of the journey, just behind the flag, two figures standing on the stairs represent unity, and the clouds with the inscriptions "you should try" and "why am I not human" suggest that it is worth making an effort and questioning what makes us human.

Karolina refers to the phrase "Homo sum, humani nihil a me alienum putto," which perfectly applies to humanity and everything associated with it. She emphasizes that Terence's words are still relevant in today's times, just as they were during the Renaissance. She points out the changed perspective of humans on life, health, acquiring knowledge, and development. This also reflects the developmental aspect, where following learning and reason are important for individual growth. In the sports context, Karolina refers to her experience in judo, where competition and fighting are not unfamiliar to her. She is unafraid of progress and striving to be better in this field.

In conclusion, the students' statements reveal diverse interpretations of the maxim "Nothing human is alien to me". Maria emphasizes the importance of reasoning and learning, Martyna focuses on the human journey through life, while Karolina addresses the philosophical, developmental, and sports-related aspects.

Summarizing the reviews of the students' statements concerning the maxim "Nothing human is alien to me," it can be observed that each of them presented their unique perspective on this phrase. Martyna highlighted the philosophical origins of the maxim and its popularity during the Renaissance. She also presented a drawing symbolizing the human life journey. She pointed out that a person may know different situations and experiences but may not always be able to cope with them. However, there is the possibility of unity and values that make us human. Karolina referred to the phrase "Homo sum, humani nihil a me alienum putto," which reflects the essence of humanity and everything associated with it. She emphasized that these words are still relevant today. Karolina noted that reasoning and striving for development are important for individuals.

In the sports context, she referred to her experience in judo, where competition and fighting are familiar, and progress and striving to be better are natural. In conclusion, the students' statements showcased diverse interpretations of the maxim "Nothing human is alien to me." Martyna focused on the philosophical aspect, highlighting the human journey through life, while Karolina addressed the philosophical, developmental, and sports-related aspects.

In this manner, the remaining 346 statements (descriptions) from participating students in the study were also analysed. Thus, the following text represents a generalized summary of all the reviews.

The understanding of philosophical maxims by students and their influence on behavioural changes

The philosophical aspect

The analysis of students' statements regarding the presented maxims revealed recurring similarities in the formulations concerning the philosophical layer. They indicate that respondents relied on readily available information found on internet pages. Therefore, below are the generalized analyses of students' understanding of the maxims.

Maxim 1: "De omnibus est dubitandum". Analysis in the context of this maxim: The text mentions the idea of doubt and the search for truth. Terence's words, stating that "nothing human is foreign to me," can be interpreted as an encouragement for constant questioning and exploration of various aspects of humanity. Doubt is regarded as an essential quality that helps avoid dogmatism and acquire true knowledge. There is an understanding that comprehending human beings and their existence fully requires constant examination, analysis, and asking questions.

Maxim 2: Terence "Nil humanum a mihi alienum putto". Analysis in the context of this maxim: This maxim directly refers to Terence's saying, emphasizing that nothing human is foreign to him. It underscores the idea of wholeheartedly engaging in human experiences and gaining a broad understanding of various aspects of humanity. This maxim highlights that to comprehend humans fully, one must be open to all experiences, emotions, and challenges we encounter. It is also an encouragement to understand and respect different behaviours and situations faced by other people.

Maxim 3: "And the truth shall set us free". Analysis in the context of this maxim: Truth is an essential element that emerges in the analysis of the text. It is stated that truth allows us to feel free from overwhelming thoughts that we may have treated another person unfairly. There is a belief that seeking truth, both about ourselves and the world, is a path to achieving spiritual liberation and personal success. Truth is perceived as a tool that helps us recognize good and evil, differentiate true values from false ones, and strive towards our goals in an honest and authentic manner.

In summary, all three maxims address significant aspects found in the analysis. Doubt, comprehensive understanding of human beings, and the pursuit of truth are key ideas that, in various contexts, emphasize the importance of critical thinking, openness to the diversity of human experiences, and the quest for authentic development.

The impact of students' understanding of the maxims on their behaviour: The understanding of these maxims can have diverse effects on students' behaviour, depending on their interpretations and personal beliefs (Table 1 provides examples of the influence of understanding the maxims on students' behaviour).

The impact of these maxims on students' behaviour can vary depending on their individual characteristics, educational context, and the values they uphold. Some students may adhere more closely to these maxims and actively embody them in their lives, while others may have different priorities and interpretations. Understanding the maxims can influence students' behaviour in various ways, as illustrated by examples in Table 2.

The developmental aspect

However, it is essential to note that the impact of these maxims on students' behaviour can vary depending on their individual characteristics, educational context, and the values they uphold. Not all students will react to them in the same way, and their interpretations and actions will differ based on their own experiences and goals. Understanding the maxims can have a distinct influence on students' behaviour in the developmental aspect, as demonstrated in Table 3.

Table 1. Impact of understanding maxims on students' behaviour.

Maxims/sentences	Behaviour
„Doubt everything”, Critical thinking:	Understanding this maxim may encourage students to approach information, theories, and beliefs critically. They may be more inclined to ask questions, analyse arguments, and constantly seek the truth. They can avoid being misled, developing the ability for independent thinking.
„Nothing human is alien to me”, Openness to diversity:	The maxim emphasizes the importance of respect and understanding for different experiences, behaviours, and perspectives. Students who grasp this maxim may be more open to cultural, social, and worldview diversity. They may be willing to listen and learn from others, creating an open and tolerant environment.
„And the truth will set you free”, Seeking truth and honesty:	The maxim can inspire students to seek the truth in their lives, knowledge, and relationships with others. They may strive for authentic development in line with their values and beliefs. They may also aim to be honest in their actions and make decisions based on reliable information.

Table 2. Ways understanding maxims impact students' behaviour.

Maxims/sentences	Behavioural changes
„Doubt everything”, Inclination towards exploration and development:	Understanding this maxim may stimulate students to seek new knowledge, experiences, and skills. They may be more open to new ideas and challenges, unafraid of doubt and questioning the status quo. They may be willing to take risks to grow intellectually and personally.
„Nothing human is alien to me”, Diversity of perspectives:	The maxim encourages students to be open to diversity and understanding of others. They may become more empathetic and capable of collaborating with various groups and individuals. They may also develop the ability to comprehend different perspectives, leading to increased tolerance and understanding within the academic community.
„And the truth will set you free”, Desire for seeking truth:	Understanding this maxim can lead students to seek truth both in their research and daily lives. They may become more critical of information, examining different sources and searching for reliable facts. They may also set high standards of honesty and ethics in their actions.

All three maxims are directed towards personal development and acquiring knowledge. Students who internalize these maxims may be more motivated to engage in continuous learning and improving their skills. They may strive to discover their potential and actualize it in various aspects of life. The potential changes in behaviour in pursuit of self-development are presented in Table 4.

The impact of these maxims on students' behaviour in the developmental aspect lies in stimulating their curiosity, openness to diversity, pursuit of truth, intellectual growth, and striving for continuous development. This encourages students to explore, learn, and discover new possibilities, leading to their personal and intellectual growth. Examples of the consequences of understanding

the maxims and their influence on students' behaviour in the developmental aspect are provided in Table 5.

The influence of understanding the above maxims on students' behaviour in the developmental aspect lies in promoting an open mind, seeking truth, self-acceptance, appreciating diversity, striving for self-realization, and learning from personal experiences. This encourages students to develop intellectually, emotionally, and personally, fostering the full utilization of human potential.

Sporting Aspect

Students emphasize that the sporting aspect is highly significant for human development, both physically and mentally. Through sports, individuals

Table 3. Possible ways understanding maxims impact students' behaviour in developmental aspect.

Maxims/sentences	Behavioural changes
„Doubt everything”, Inclination towards exploration and development:	Understanding this maxim may stimulate students to seek truth, ask questions, and explore various perspectives. They may become more open to new experiences and willing to explore different fields, leading to intellectual and personal growth.
„Nothing human is alien to me”, Intellectual development and knowledge acquisition:	The maxim encourages students to seek diverse forms of knowledge and acquire new skills. They may become more receptive to different academic disciplines and cultures, leading to comprehensive intellectual development.
„And the truth will set you free”	The maxim may inspire students to pursue truth and honesty. They may become more aware of the role of truth in life and the consequences of deception. This approach fosters moral and ethical development.

Table 4. Behavioural changes in pursuit of self-development.

Maxims/ sentences	Behavioural changes
„Doubt everything”, Desire for continuous growth and learning:	Understanding this maxim may motivate students to strive for continuous development and learning. They may be inclined to seek new growth opportunities, acquire new skills, and explore new areas of knowledge. This approach fosters the realization of their potential and self-actualization.
„Nothing human is alien to me”, Self-awareness and understanding others:	Understanding and accepting one's own traits and the diversity of human nature arising from this maxim can help students in self-awareness and self-acceptance. Simultaneously, they may become more sensitive to the needs and perspectives of others, leading to empathy and understanding.
„And the truth will set you free”	Students who grasp this maxim may exhibit a greater tendency to analyse and evaluate information before accepting it as true. They may be more critical of viewpoints and claims, seeking solid evidence and arguments. They may also demonstrate a greater readiness to learn and explore various fields to broaden their knowledge.

Table 5. Consequences of understanding the highlighted maxims and their impact on students' development.

Maxims/ sentences	Consequences of behavioural changes
“Doubt everything”, Intellectual Development and Worldview: Doubt as Motivation for Development:	The inclination to doubt, seek truth, and develop critical thinking skills leads to arousing curiosity and a desire to delve into various topics. Students may be more willing to pursue knowledge, ask questions, and engage in intellectual growth. Doubting various aspects of life and seeking truth motivates students to continue their intellectual development. It encourages them to explore, ask questions, and seek answers, fostering the development of cognitive skills.
“Nothing human is alien to me”, Openness to Diversity: Experiencing the Fullness of Life:	Understanding this maxim leads to greater tolerance and acceptance of different behaviours, traits, and experiences of others. Students may be more open to cultural, emotional, and intellectual diversity, promoting the development of empathy and understanding. Recognizing that humanity involves experiencing various aspects of life, including both joy and challenges, makes students more aware of their emotions and needs. They may strive for harmony and balance in life, appreciating both positive and negative experiences.
“And the truth will set you free”, Self-realization and Acceptance: Responsibility and Learning from Mistakes:	Understanding that individuals have strengths, weaknesses, and experiences allows students to accept themselves and pursue self-realization. They become more aware of their qualities and skills, leading to increased self-confidence and motivation for personal development. Adopting the belief that humans are not without flaws and mistakes, students are inclined to take responsibility for their actions and strive for growth. They can learn from their own mistakes, improve themselves, and move towards becoming better versions of themselves.

become aware of their bodies, physical abilities, and limits, which translates into personal growth. Athletes become more conscious of their bodies, health, and capabilities, motivating them to pursue continuous development. In sports, as in other areas of life, decision-making is crucial. Athletes must make decisions regarding strategy, tactics, training, and risk. Responsible decision-making can bring benefits in achieving sports goals. It is also essential to recognize and accept one's weaknesses and strengths in sports. Athletes are aware that others also face difficulties and challenges and can understand and respect that. Sporting development requires dedication, effort, and consistency, but it also teaches how to work on one's body, appearance, and mind-set.

The sporting aspect impacts human development on multiple levels. Here are some of its manifestations as described by the students, presented in Table 6.

Summing up, the sporting aspect holds broad significance for human development. Besides the health benefits, engaging in sports contributes to the development of interpersonal skills, self-discipline, time management, and coping with challenges. Sport serves as an excellent tool for growth on multiple levels and achieving success both in the sporting and personal spheres.

In conclusion, analysing all the students' statements, several main points can be observed

René Descartes' maxim "Everything should be doubted" ("Doubt everything") is widely interpreted in all three aspects: philosophical, developmental, and sporting. Doubt is perceived as a significant element in each of these layers, leading to acquiring knowledge, avoiding extremes, dealing with complexes, and unpredictability.

Students' statements differ slightly in their interpretations depending on the aspect they analyse. For instance, in the philosophical context, doubt is seen as a rational and thoughtful action aimed at building foundational knowledge. In the developmental context, doubt is perceived as a natural feeling that can lead to complexes, but finding a balance is crucial. In the sporting context, doubt is viewed as an inherent element of sports, requiring coping with pressure and unpredictable results.

Based on the available data, it cannot be definitively stated that there are distinct differences in the interpretations of the described maxims based on gender. Students' statements were diverse, and no clear patterns related to gender could be identified. All students focused on analysing the texts and presenting their interpretations in the philosophical, developmental, and sporting contexts.

Table 6. The impact of sports on human development

Sport Aspect	Benefits resulting from sports participation
Physical Health:	Physical activity, regular training, and engaging in sports contribute to overall physical health and fitness. Regular physical activity has a positive impact on the cardiovascular system, strengthens muscles, improves flexibility and endurance, and helps maintain a healthy body weight.
Mental Health:	Participating in sports can bring numerous benefits to mental health. Regular physical activity helps reduce stress, enhances well-being, increases the release of endorphins (happiness hormones), and improves sleep quality. Sports can also serve as a way to relax and release daily tensions.
Self-Discipline and Time Management:	Engaging in sports requires proper time management and self-discipline. Athletes need to train regularly, maintain a proper diet, and ensure adequate recovery. Through participating in training and competitions, individuals learn effective time management and develop self-discipline.
Teamwork and Collaboration:	Many sports disciplines require teamwork and collaboration with others. By being part of a sports team, individuals learn communication, cooperation, problem-solving, and achieving common goals. These skills are valuable beyond the realm of sports and can be beneficial in professional and personal life.
Challenges and Growth:	Sports present various challenges, both physical and mental. By overcoming difficulties, achieving new goals, and surpassing personal limits, individuals experience growth and become stronger both in the sports field and in their everyday life.

It turned out that students in their descriptions paid attention to maxims that resonated with them. Regarding the influence of the highlighted maxims on the behaviour of female and male students, it can be assumed that certain maxims may evoke different reactions depending on gender. Table 7 contains several hypothetical examples and possible influences on behaviour.

DISCUSSION

The philosophical maxims used in this study proved to be useful in determining their impact on the behaviour of the surveyed students. The strength of the influence of these analysed maxims on human behaviour can be illustrated by examples drawn from literature. Here are a few literary examples where these maxims are referenced:

Maxim: "Doubt everything." Descartes [3] engaged in a reflection on scepticism, questioning the possibility of certain knowledge and doubting all previous convictions to seek irrefutable foundations of knowledge. Kundera [4] explored themes of identity, freedom, and the meaning of life, challenging certain social conventions and beliefs. Dostoevsky [5] made this maxim a fundamental theme in his novel "The Brothers Karamazov," where characters engage in profound discussions

about faith, morality, and the existence of God. Nietzsche [6] questioned the authority of traditional values and religion, encouraging critical thinking and independent contemplation. Lem [7] explored the relationship between humans and an alien life form in his novel "Solaris," questioning our understanding of reality. Kochanowski [8] wrote: "Humo sum, nil humanum a me alienum esse puto - I am human, thus, nothing human can be alien to me." This motto, the cornerstone of the Renaissance humanism, represented a clear rebellion against the ideology of the Middle Ages and also guided Kochanowski as a man and a poet (p.11). Tokarczuk [9] in "Ego dormio et cor meum vigilat - Kummernis in the third temptation by the devil in the form of a bishop, responded to his speech by saying, "Your whole strength comes from doubting. May you one day experience the grace of trust" (p. 91).

The literary examples provided offer valuable insights into the themes related to the maxims, showcasing their relevance and universality across different works and authors. It is evident that these philosophical maxims have been an integral part of human thought and exploration throughout history. They have influenced and inspired writers to delve into profound questions about human existence, knowledge, and values. Moreover, the diversity of literary references

Table 7. Hypothetical impact of sentences on student behaviour

Sentences / Participants	
female students (n = 49)	male students (n = 67)
<i>„Victory over oneself is the greatest triumph“</i>	
This sentence can motivate young women to self-improvement, develop self-confidence, and find inner strength in their pursuit of success.	This sentence can inspire young men to set and achieve personal goals, overcome their weaknesses, and develop willpower.
<i>„Doubt is the beginning of wisdom“</i>	
This sentence can inspire young women to ask questions, inquire, and develop analytical skills, leading to a deeper understanding of the world and making informed decisions.	This sentence can encourage young men to investigate, analyse, and verify information, develop critical thinking skills, and seek truth in various aspects of life.
<i>“Sport teaches humility and perseverance“</i>	
This sentence can motivate young women to gain experience through sports, emphasizing the importance of humility and perseverance in both victories and challenges.	This sentence can prompt young men to develop discipline, patience, and the ability to endure difficult situations, both on the sports field and in their daily lives.

highlights the versatility of these maxims in addressing various aspects of human behaviour and understanding.

By drawing connections between the analysed maxims and their literary references, this study further strengthens the argument for their significance in shaping human behaviour and cognition. Literature serves as a powerful medium to explore and express the complexities of these philosophical concepts, providing readers with valuable perspectives on life, identity, and the human condition. Thus, the examples presented in this study enhance the understanding of the impact of these philosophical maxims on human behaviour and emphasize their enduring relevance in the realm of literature and beyond.

Maxim: Nothing human is alien to me. Feuerbach [10] analysed religion, arguing that God and spirituality are projections of human desires and characteristics, and understanding human nature is the key to understanding religion. Tolstoy [11] widely examined various aspects of human life, including interpersonal relationships, emotions, and morality. Camus [12] explored the themes of alienation and the absurdity of human existence, illustrating the consequences of lacking interpersonal bonds. Márquez [13] deeply analysed the fate of the Buendía family, portraying a broad spectrum of human experiences and emotions.

Maxim: *And the truth will set us free.* Murakami [14] and Krzemień [15] they explore the theme of identity, the search for the meaning of life, and the mysterious nature of reality, emphasizing the necessity of seeking the truth that can liberate the individual.

The presented reviews of statements from physical education students regarding their understanding of the three philosophical maxims, "Everything should be doubted", "Nothing human is alien to me", and "And the truth will set us free", allowed us to observe their influence on their behaviour. The influence of understanding the analysed maxims manifests in three aspects: philosophical, developmental, and sporting.

In the philosophical aspect, the choice of a specific philosophical maxim can lead to greater self-awareness and better decision-making regarding health. In the developmental aspect, these maxims can

encourage students to seek diverse experiences, pursue knowledge, intellectual development, value emotions, and authentic action. In the sporting aspect, the choice of specific philosophical maxims can influence athletes to take responsibility for their physical development, surpass their limits, strive for improvement, exhibit fair play, seek self-realization, and remain motivated.

In conclusion, the understanding and internalization of these philosophical maxims have the potential to significantly impact human behaviour, guiding individuals toward greater self-awareness, authenticity, morality, and spiritual, intellectual, and physical growth. These maxims can influence behaviour by encouraging individuals to reflect on their own nature, seek truth, value human experiences, and strive for comprehensive development. Furthermore, they can inspire athletes to embrace challenges, persevere, act with integrity, and strive for excellence in sports. The study of these philosophical maxims highlights their enduring relevance and their potential to shape human behaviour across various aspects of life.

According to the author, the results of this research may bring an important supplement and new inspirations to the dialogue on the pathology of neogladiatorism. This phenomenon is camouflaged under the name of "mixed martial arts" [16, 17] and, due to its effective promotion by electronic media, it suppresses the argumentation (supported by numerous scientific evidence) of the positive impact of combat sports and martial arts on various dimensions of health [18-23]. Also as the art of self-defence, which is an important element of personal support for survival [24-29].

CONCLUSIONS

Understanding philosophical maxims can have a significant impact on human behaviour, affecting intellectual, emotional, and social aspects of an individual's life. Each of the analysed maxims can shape different aspects of human behaviour, contributing to overall personal development.

The maxim "Doubt everything" can serve as motivation for continuous pursuit of knowledge, acquiring new skills, and seeking a better understanding of the world. Additionally, a propensity for doubt can help avoid dogmatism and open the mind to diverse perspectives.

The maxim “Nothing human is alien to me” emphasizes the importance of empathy and the ability to relate to others. Such an approach can foster a more open and understanding society, where differences are appreciated and respected.

The maxim “The truth will set us free” highlights the significance of honesty and integrity, both towards oneself and others. Seeking truth can lead to authentic and fulfilling lives, where individuals do not need to conceal their true feelings and beliefs.

All of these conclusions underscore the importance of understanding and embracing philosophical maxims in an individual's life. They encourage the development of critical thinking, empathy, and honesty, which can lead to a more fulfilling and balanced life. It is essential to recognize that these maxims may have different impacts on different individuals and situations, and they may evolve over time in response to life experiences. Ultimately, the ability to reflect on these philosophical maxims can aid individuals in their pursuit of personal growth and reaching their full potential.

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Cite this article as: Jasiński T. The influence of philosophical maxims on the behaviour of physical education students. Arch Budo Sci Martial Art Extreme Sport 2022; 18: 73-83