

The Contribution of Pythagorean Women Philosophers to Pedagogical and Didactic Reflection

Ioannis Fykaris (Corresponding author)

Department of Philology, University of Ioannina, GR

Department of Philology, University of Ioannina, Ioannina 45110, Greece

Tel.: 30-26-510-05187 E-mail: ifykaris@uoi.gr

Received: July 18, 2024 Accepted: August 15, 2024 Published: August 25, 2024

doi:10.5296/ijld.v14i3.22227

URL: <https://doi.org/10.5296/ijld.v14i3.22227>

Abstract

The text aims to highlight the pedagogical and didactic value and activity of Pythagorean women philosophers, which seems to be an issue that has not been sufficiently studied in the relevant literature. Therefore, the theoretical approach in this text also has the element of innovation, given that it emphasizes on the pedagogy and didactics of Pythagorean women, as a perspective for determining contemporary pedagogical and didactic manifestations and references. The methodology used in this publication is the “historical and philological analysis method”. In general, the publication, on the one hand, attempts to highlight the pedagogical and didactic views of Pythagorean women philosophers. On the other hand, the philosophical, pedagogical and didactically oriented thoughts of Pythagorean women philosophers are studied in relation to the prevailing atmosphere of their time.

Keywords: Pythagorean women, philosophers, pedagogical reflection, didactic reflection

1. Introduction

The research in the relevant literature on the life and activities of women in antiquity concerns, mainly, the activities and lives of ordinary women. That is, women who could not hold political offices or perform military feats, as men did in antiquity (McHardy & Marshall, 2004; Pellò, 2022). Something similar is also evident for the participation of women in philosophy (Dutsch, 2020; Iliadi et al., 2018; O'Reilly & Pellò, 2023). However, according to research the study of ancient women can push us to completely redefine philosophy and philosophers (Bonelli, 2021; O'Reilly, 2021).

It is possible that the absence of mention to women from philosophy in antiquity can be explained by the general lower status of women during the reference period. Women in

antiquity did not have the right to participate in the community, as men did, nor in public speech. Even in classical Athens, where democracy developed and flourished, the position of women was limited to their household (Katz, 1992). There they may have had strong influence, but this was about everyday private life and not about public social contribution (Blundell, 1995; Pellò, 2022).

The image of the absence of mention to women from the field of philosophy arises from the sources that exist for antiquity, in which, however, only a few references are found. The lack of primary archaic sources makes it difficult to investigate the issue, making it clear the difficulty of scholars to approach the philosophical activity of women in antiquity (McHardy & Marshall, 2004). These scholars tend to impose the views of an outdated gender perception on their interpretations of an era or to assume that women could not have any impact on public life (Hawley, 1994). On the basis of this perception, the tendency to claim that works attributed to women must have been written by men is an example of this behavior. Moreover, even when manuscript evidence suggests the existence of a strong female mathematician, Pandrosion, scholars refused to accept that a woman could take on this role and concluded that she must have been a man in reality (Berlinghoff & Gouvêa, 2020).

In such an atmosphere, it is not surprising that women faced problems in gaining acceptance as scientists over the centuries. However, where women received the support of their male relatives, they were able to achieve achievements in the fields of philosophy, mathematics, and physics, such as Theano, Myia, and Damo, the first as Pythagoras' wife and the next two as their daughters (McHardy & Marshall, 2004). Specifically, Pythagoras in the 6th century BC gave particular importance to the “woman”, making her worthy of studying in a philosophical school (Hall, 2021; Pellò, 2022).

2. Pythagoras and the Role of Women in the Pythagorean School

Pythagoras provided a new perspective on philosophy during the pre-Socratic period, contributing to the gradual shift from the study of nature to the recognition of the importance of ethics as the basis for improving the human soul, as well as the potential that this improvement can bring to the development of society's morality.

In this article, the approach to Pythagoreanism, with an emphasis on Pythagorean women philosophers, follows the biographer of Pythagoras, Iamblichus, according to whom Pythagoras was born, most likely, in 580 BC on the island of Samos and died in 497 or 496 BC in Metapontum. Pythagoras became a great philosopher, physicist, mathematician, reformer, and social regulator. Through these abilities of his, as well as his school in Croton in Southern Italy and his students, men and women, he had a constructive influence on the advancement of human thought (Riedweg, 2005).

Pythagoras' father, Mnesarchos or Mnemarchos, initially lived in Syria, where he acquired wealth by working in the cutting of precious stones. He then moved to Samos, where he built a temple to Apollo, inscribing on it “To the Pythian” (Iamblichus, 2001, p. 31). Pythagoras' mother was initially called Parthenis, but Mnesarchos renamed her Pythais. The renaming of her name by her husband - from Parthenis to Pythais - was due to the fact that, when they

went to the Oracle of Delphi, the Pythia prophesied that she would give birth to a boy who would differ in beauty and wisdom from all other people until then and would be a beneficial person for the whole human race (Iamblichus, 2001; Mattei, 1995, p.15). This prophecy of the Pythia essentially established Pythagoras as an “Apollonian prophet” (Riedweg, 2005).

Pythagoras received his education and inspiration for all knowledge and virtue from his mother, receiving a strong religious background in his upbringing, acquiring appropriate religious and social experiences from his childhood. These experiences, when the time came, contributed to the shaping of his philosophical way of thinking, as well as the type and content of his teaching (Riedweg, 2005). At the same time, Pythagoras was raised with every comfort and care, having distinguished teachers for his time (Iamblichus, 2001, p. 31). He grew up with modesty and temperance, which are timeless values that shape the quality of young people's character (Iamblichus, 2001, p. 31, Riedweg, 2005).

Pythagoras, after many travels and personal encounters with religions, as well as mystical religious practices and their inspirers, finally settled in the city of Croton in Southern Italy. It was there that he essentially began his teaching and intellectual work (Huffman, 2014, Renger & Stavru, 2016) at the school he founded, the Pythagorean school, which essentially became the first European university, perhaps even the first university in the world.

Pythagoras named his school in Croton “*Omakoeion*”, where teaching took place in secret. For this purpose, a “secret code” of communication was used among the students. Teaching at the Pythagorean School included the sciences: Cosmology, Numerology, Geometry, Stereometry, Theology, Musicology, Astronomy, Geography, Physiology, Medicine, Ethics, Politics, Astrophysics, Pyramidology, Philosophy, Poetry, Rhetoric (Dakoglou, 1988, p. 11; Sakellariou, 1963, p. 45; Mattei, 1995). In the Pythagorean school, there was a belief that humans were born to be happy (Kahn, 2005; Lambropoulou, 1995).

Entry into the Pythagorean society was through strict examination and under the requirement of silence. The requirements for initiation into Pythagorean philosophy and the subsequent duties were common for both men and women without exception (Vegetti, 2003). However, additional duties were assigned to women, which, according to the Pythagoreans, were suitable for their gender (Dellis, 2002). Thus, although Pythagorean customs were generally treated without distinction between men and women, some, perhaps later, peculiarities concerning female students of the Pythagorean School cannot be ignored (Guthrie, 1995; Lambropoulou, 2002).

Specifically, female students of the Pythagorean School were required to meet the following conditions to join the school: piety towards the gods, obedience to parents, absolute dedication to their husband, secrecy, prudence, generosity, harmony, avoidance of luxury, simplicity in dress and food, and genuine modesty (Lazaroiu, 2013). Moreover, a Pythagorean female student was obliged to adhere to the rules of the Pythagorean School with greater strictness compared to Pythagorean men, even in comparison to Pythagoras himself. However, the rules were strict for everyone, and this was due to the fundamental principle of the Pythagoreans that humans are by nature “evil” (Hanson, 2021).

3. Gender Equality as Principles of Pedagogical and Didactic Thinking in the Pythagorean School in Croton

Pythagoras established ethics as the primary goal of education in his school. Through ethics individuals could achieve upward contemplation, the path toward harmony and goodness. In other words, ultimately, it aimed at achieving likeness with the divine (Davidson, 2016; Kahn, 2005; Vogel, 1996). According to the Pythagoreans, this could be attained by both men and women.

Based on this principle, the Pythagoreans included women equally with men in their “*Circle*”. There are various interpretations that justify the inclusion of women in the Pythagoreans “*Circle*”. One interpretation was the Pythagoreans’ belief that all living organisms were interconnected because they embodied psychic demons. This belief resulted in the acceptance of women into society on an equal basis with men (Hanson, 2021). Another interpretation was the social tendency that emerged among the Pythagoreans to form a community of families, later evolving into a “*brotherhood*”. Thus, the ideal of harmonious family life became linked to unity among families in the Pythagorean community. The Pythagoreans viewed the family, like the city, as a microcosm of the universe, and the order and harmony of the universe had to be reflected in the city and the family (Davidson, 2016).

In accordance with the above principle, women were given a significant role in Pythagorean thought and society, as they constituted an essential part of the family and were necessary for the achievement of order and harmony within it. However, according to the Pythagoreans, each member within the family had to fulfill their role completely and maintain the position assigned to them by nature (Dancy, 1989). The traditional view of a woman's role was that of a submissive wife and mother. However, it was believed that a woman could perform this role “*well*” only if her intelligence had developed.

In the life of a Pythagorean woman, basic elements were her contribution to the common good, obedience to authority, and care for ethical beauty and divine order (Hanson, 2021). Pythagoras acknowledged in women, similar to men, the ability to philosophize and function on an equal basis. Thus, Pythagoras expressed his democratic views on gender, emphasizing the uniqueness of each gender, their different psychologies, and ages. He also separately taught married from unmarried women, as well as children separately from their parents. Pythagoras praised the virtues of men but also criticized their tendencies towards excesses and insatiable desires (Hussen, 1998, pp. 18-19). At the same time, he taught and recommended modesty in behavior and the suppression of the desire for a luxurious life and provocativeness in women. He even convinced prominent and wealthy female disciples to dedicate their luxurious dresses and jewelry to the goddess Hera, persuading them that a woman's true ornament is modesty (Hussen, 1998, pp. 19-20).

In general, in the Pythagorean belief system, a “*woman*” held a special value. Pythagoras expressed the view that honor should be attributed to women both in heaven and on earth because women provide the opportunity to understand the all-powerful mother, which is nature, and they themselves become a “*sanctified*” image of nature (Huffman, 2014). According to Pythagoras, women represent the soul of the world, as they give birth, sustain,

renew, and carry the world with them. Since the soul has no gender, both men and women are considered equal before God, and the law of virtue is common to both (Sangali, 2009).

Based on this principle, Pythagoras advocated for equality and justice between man and woman. He taught that each gender is superior in its own domain but is equal in value and nobility. Pythagoras considered women as daughters of God and men as sons of God. Therefore, both are considered children of God, with the same soul, as the soul has no gender (Kahn, 2005)¹. Additionally, Pythagoras recognized the value of women by founding the “*Association of Women*”, from which emerged the female philosophers of the Pythagoreans (Kahn, 2005).

4. The Role of Women in the Pythagorean School

Pythagoras's relationship with the female gender and the acceptance of his teachings by women elevated his prestige in the city of Croton, where his school was based. Moreover, Pythagoras's views on the uselessness of extravagance or ostentation, in contrast to the promotion of modesty and simplicity, gained widespread acceptance among both the women and men of the Pythagorean school and in the broader society of Croton. Ultimately, it was the women who convinced the men to recognize Pythagoras as a wise and beneficial figure for society (Hussen, 1998, pp.20-21).

The Pythagorean School was the only ancient school that admitted women, with the small exception of Plato, who had no objections to allowing women to study in the Academy. In fact, two female students, Lasthenia and Axiothea, were accepted. Perhaps this is not coincidental, given that Plato had connections with the Pythagoreans, and furthermore, his mother Perictione was a Pythagorean philosopher. However, strict limitations imposed on women in ancient Athens prevented many of them from studying and practicing philosophy (Giannikopoulos, 2006, p. 137). Nevertheless, Socrates argued that women, too, could engage in philosophy (Ahbel-Rappe & Kamtekar, 2006).

It is noteworthy that very few ancient sources present a different role for women in antiquity, such as the case of Sappho, who became a significant literary figure. However, Sappho was considered an exception rather than the rule (Lardinois, 2021). Until the 4th century BC, under the influence of their fathers and husbands, few women rejected their traditional gender roles and engaged in philosophy. Simultaneously, expressions of misogyny were evident, with the “*hetairai*” holding a significant position as companions to almost all prominent men (Katz, 1992). An example of this is Arēte or Aretē of Cyrene (5th century BCE or 4th-3rd century BCE), who was the daughter of Aristippus, the founder of the Cyrenaic School of philosophy. Arētestudied at Plato's Academy and is believed to have written books, being considered a teacher of philosophers. After her father's death, she took over the direction of the school. Her son, Aristippus the Younger, a philosopher, continued the family tradition as the director of the Cyrenaic School. He was named “*Mētrodidaktos*” because he learned

¹ This assurance is also given in the “Gospel According to Matthew” (22, pp. 29-30): «*Where Jesus Christ teaches: “Jesus answered: You are completely wrong! You don't know what the Scriptures teach. And you don't know anything about the power of God. When God raises people to life, they won't marry. They will be like the angels in heaven»*(Source: <https://www.goarch.org/el/chapel/bible> (accessed and retrieved on November 17, 2023). It is noted that angels are genderless (Karamanidou, 2017; Yfantis, 1996).]

philosophy from his mother, a rare occurrence for that time (Wider, 1986).

In analogy to Arēte, Lasthinia or Lasthenia or Lastheneia (4th century BC) hailed from Arcadia and seems to have studied at the Academy of Mantinea. Later, she settled in Athens. Lasthenia was a “*hetaira*” among foreigners. She was a scientist, mathematician, and philosopher, credited with defining the concept of sphere. She attended Plato's lectures dressed as a man. Plato's nephew, Speusippus, who succeeded Plato as the head of the Academy, was her teacher and companion (Huizenga, 2013).

In the 7th-6th century BC, there were philosophical activities by Polygnote, Themistoclea, and Melissa. Polygnote was knowledgeable in geometry and contributed to simplifying numerical symbols by introducing acrophony. Mentioned by Lovonof Argos as a companion and student of Thales, she was known to be wise in mathematical matters (Huizenga, 2013; Warren, 1989). Themistoclea was a mathematician and priestess at the Delphic Oracle. It is said that she taught Pythagoras Geometry and Numerology. Pythagoras's admiration for her knowledge and wisdom seems to be one of the reasons he decided to admit women to his school (Zhmud, 2012). Melissa was involved in constructing regular polygons and was a student of Pythagoras. Letters with advice to other women are attributed to her. In a letter to Cleareta, she advises modest dress and encourages pleasing one's husband rather than other men. Melisso taught that the most important dowry in marriage is obedience and that the beauties of the mind last longer than those of the body (Hawley, 1994). Additionally, it's important not to overlook the existence and role of Hypatia (355-415 AC) in philosophy, who, though later than the Pythagorean women, was influenced by Pythagorean philosophical thought and became the last philosopher of the Hellenistic era (Minardi, 2011; Ossen, 1994).

The topics discussed by Pythagorean women philosophers primarily revolved around female virtue and the proper marital behavior of women, advocating for chastity, self-control, and obedience to their husbands. Practical guidance and advice from one woman to another were also discussed, covering topics such as the treatment of slaves. More philosophical topics were also examined, such as wisdom by Perictione and the theory of numbers and the immortality of the soul by Theano (Pomeroy, 2013).

The responsibility of women for their households and men for city affairs was one of the fundamental principles of Pythagorean understanding for achieving a life governed by harmony and justice. Following this principle, they advised women to be temperate, modest, obedient to their husbands, and faithful in marriage (Lambropoulou, 2002). According to this principle, Pythagorean women were not seeking the role that women would play in an ideal society, but rather how they could achieve harmony in a real society. In societies dominated by men, they apparently believed that women's rebellion leads only to the loss of harmony (Warren, 1989). However, according to the Pythagorean perspective, women are not excluded from social justice but contribute to its empowerment. According to the Pythagoreans, achieving justice is impossible without harmony in the individual family unit (Haskins, 2005). Pythagorean women evolved into significant philosophers of their time who, however, did not receive recognition comparable to men. This lack of recognition can be attributed to the cultural norms of the time, which did not afford women the opportunity for such

acknowledgment, as will be elucidated in the presentation of Pythagorean women, to the extent allowed by information from primary sources.

5. Pythagorean Philosopher Theano of Thurii

Theano, formerly a student of Pythagoras and later referred to as the wife of Pythagoras, was the daughter of the physician Vrontinus and was both a mathematician and an astronomer. Theano appeared to be distinguished for her beauty as well as her ability in philosophy. Pythagoras and Theano had four children, two sons named Mnesarchos and Telauges, and two daughters, Aesara and Myia (Guthrie, 1995, p. 11).

Theano of Thurii took on the role of instructing married female students at the Pythagorean school in Croton. In the Pythagorean school of Croton, Theano taught Astronomy and Mathematics (Ossen, 1994). Several works are attributed to Theano, including “*Pythagorean Apophthegms*”, “*Advice to Women*”, “*On Piety*”, “*Philosophical Commentaries*”, “*On Pythagoras*”, “*The Theory of Numbers*”, and “*The Construction of the Universe*”. However, both Foley (1991) and Pomeroy (2013) question the existence of works by Theano. Therefore, it seems reasonable to accept the view that the legend of Theano is a later construction (Rowett, 2014).

Theano was considered the most famous female astronomer and cosmologist of antiquity. It is said that she formulated the Theory of the “*Golden Mean*”. This theory was used in architecture by ancient Greeks and Egyptians. The “*Golden Mean*” theory resembles the formulation of the theory of Mathematical constant of “*Pi*” created by Pythagoras (Ossen, 1994). Additionally, it is said that Theano formulated the theory of the “*Harmony of the Spheres*” (Deakin, 2023). According to this theory, the Universe consists of ten (10) concentric spheres that move around the central fire. These “*Ten*” spheres correspond to the Pythagorean teaching that the “*Decad*” encompasses the entire nature of numbers. Hence, it was believed that the “*Decad*” also represented the celestial bodies. Furthermore, it is said that Theano and her daughters demonstrated that a human embryo could be successfully born only after at least seven months of gestation (Deakin, 2013). Nevertheless, Theano's purported writings include topics such as reincarnation and immortality. Theano believed it was unjust for people who did not behave justly and ethically during their lives to die. She considered their rebirth a fair punishment but not in a human body, aiming to restore the balance they had disrupted with their behavior during their lifetime (Pellò, 2022; Pomeroy, 2013).

Moreover, according to Diogenes Laertius, Theano addressed the role of women in general and, particularly, in their relationship with their husbands. According to Diogenes Laertius, Theano advised women that when they met their husbands, they should “*present their morals along with their clothes*” (as cited in Pomeroy, 2013). This phrase was connected with a similar saying by Herodotus. In contrast, Plutarch stated that “*the moral woman is clothed in morality even when her garments are cast aside*” (as cited in Pomeroy, 2013).

The daughters of Theano and Pythagoras, Myia and Damo, were also Pythagorean philosophers in the latter part of the 6th century BC and the first half of the 5th century BC.

Myia was known for her general knowledge and household management skills (Iamblichus, 2001). In the Pythagorean School, Myia led the young women before marriage and the married women after marriage. She was the wife of the renowned athlete Milo of Croton (Wider, 1986). Myia is credited with a letter to an unknown woman regarding the type of nursemaid to choose for her newborn child. The philosophical significance of this letter is that it speaks of temperance and moderation, and thus, the nursemaid selected should possess these virtues. The letter itself is an example of moderation since the author concludes the letter by stating that these are the things that seem useful to write for now. There is measure, therefore, even in giving advice because she promises more later when it would be appropriate to remind the woman of other details of harmonious child-rearing (Dancy, 1989).

Diogenes Laertius reports that Pythagoras entrusted his discourses to his daughter Damo and instructed her not to reveal them to anyone outside their household (Rossetti, 2013). Even though she could have sold the discourses for a considerable amount of money, she refrained from doing so because she considered the lack of money, a consequence of obeying her father's commands, more valuable than gold (Lazaroiu, 2013). It is speculated that Damo wrote a commentary on Homer, although there is no ancient source confirming this. Although her writings are not preserved, the fact that Pythagoras seems to have entrusted her with his work suggests that she was likely an active and significant member of the Pythagorean School (Wider, 1986).

6. Pythagorean Philosopher Perictione

Perictione, mother of Plato, is included to the *“Circle of Pythagorean Women”*. Perictione was a descendant of the lawmaker and sage Solon, but she also had a familial relationship with Critias, who was regarded as the leader of the Thirty Tyrants. Her son and brother of Plato was the strategist Charmides (Plant, 2004, p. 76).

Perictione, in addition to being a philosopher, was a mathematician and author. One of her written works is *“On the Harmony of Women”*, dating back to the 4th to 3rd century BC and written in the Ionic dialect. The work touches upon the general duties of women. Perictione states that a harmonious woman should be full of wisdom and temperance, engaging in the duties towards her husband, marriage, and parents (Plant, 2004). Furthermore, Perictione emphasizes in her work that a woman's soul should exude virtue, being just, courageous, and wise in the sense of rationality in thought and action. She should adorn herself with the virtue of self-sufficiency and avoid vanity (Pomeroy, 2013). According to Perictione, it is preferable for a woman to derive beauty from wisdom rather than external means leading to licentiousness. Additionally, she asserts that a woman should respect God and her parents, obey the laws and customs of her place (Pomeroy, 2013). Collaborating with her husband, she should support marital fidelity and mutual assistance, fostering harmonious relationships and household (Guthrie, 1995, p. 155).

In essence, Perictione's work encompasses the duties and obligations of women, along with the fundamental characteristics they should possess (Hanson, 2021). Perictione insists on moderation and purity governing the behavior and appearance of women (Allen, 1988).

Perictione also delves into the subject of philosophy in her work, believing that women should engage in philosophical pursuits. The exercise of philosophy is seen as beneficial to a woman's role within the family. Thus, a woman who delves into philosophy gains control over herself and becomes wiser, leading to the adoption of ethical values (Burkert, 1992; Dancy, 1989). According to Perictione, women, through philosophy, attain harmony with themselves and find happiness, benefiting both themselves and their families (Zhmud, 2019).

It is also said that Perictione wrote the book “*On Wisdom*”, offering a philosophical definition of wisdom. This work falls into the pseudo-Pythagorean literature and is written in the Doric dialect in the 3rd century BC (Plant, 2004). Unlike her previous work, “*On Wisdom*” addresses everyone, not just women. The central theme is wisdom, approached philosophically (Plant, 2004). Specifically, the work suggests that wisdom can be attained through philosophy and the use of logic. The practice of philosophy by both men and women is considered a suitable means to achieve harmony (Addey, 2017). In this context, Perictione believes that women's engagement in philosophy can contribute to achieving harmony in private life, subsequently influencing not only themselves and their families but gradually the entire city (Berges, 2015). According to Perictione, attaining harmony can help women maintain a balanced relationship with their husbands, raise their children correctly, and exhibit ethical behavior themselves (Protasi, 2020). However, beyond their relationships with others, understanding harmony is essential for their souls because women will learn to align their actions with the principles of harmony (Pomeroy, 2013; Waithe, 1997).

7. Pythagorean Philosopher Phintys from Croton

Phintys or Philtys is considered to be the daughter of Theophrus, while Stobaeus mentions that she was the daughter of Kallikrates (Waithe, 1997). However, it seems that Phintys originated from Croton in Southern Italy and was a student of Pythagoras. She taught at the School of Croton and is said to have inspired the concept of “equality” that “connects the Pythagorean triads”. According to Phintys, a woman must be good and respectable. To achieve this, virtue is necessary. The fundamental virtue for women is prudence, which she considers suitable for the female nature (Lambropoulou, 1995). Furthermore, Phintys argued that a woman should be adorned with the virtues of temperance, justice, and wisdom (Guthrie, 1995, p. 181; Plant, 2004), as well as propriety, modesty, and circumspection (Lambropoulou, 1995).

There are questions about the authenticity of Phintys's work, as it was believed to be attributed to her but may have been written by men. One of her works is said to be “*On the Moderation of Women*”. In this work, it is argued that men and women share certain virtues (Bernardi, 2016). However, there are virtues that are more indicative of each gender. Women are attributed virtues such as moderation and self-control. At the same time, women are also attributed virtues theoretically belonging to men, such as wisdom, justice, and courage (Waithe, 1997).

Phintys does not place arguments in her work because she takes for granted that certain virtues are suitable for women and others for men. Possibly, the views expressed in this work may have been influenced by the social conditions of the time it was written and the

responsibilities assigned to each gender (Wertheim, 1996). According to Phintys, women have the responsibility to raise their children and nurture them in such a way that, as men, they will work for a just and harmonious city. If women lack self-control, they will not be able to fulfill their roles. This may have been the reason why self-control was considered, during the 6th century BC in the Pythagorean school, as the ultimate virtue for women (Waithe, 1997).

On the other hand, wisdom and courage were considered more masculine virtues because they were deemed necessary for the issues they had to face. The responsibilities of men included protecting the city from enemies and managing public affairs. Both wisdom and courage are necessary for success in these matters. It is likely that Phintys does not attribute virtues to each gender based on biological or other criteria but primarily due to social characteristics and the way society is organized (Dutsch, 2020). The organization of the city assigned distinct roles to each gender, and to achieve these roles, women and men must possess specific virtues. This dimension is reflected in the separation made by the philosopher according to the social expectations for each gender (Waithe, 1997).

8. Pythagorean Philosopher Aesara

Pythagorean philosopher Aesara is mentioned by Ioannes Stobaeus (1995) in the work “*On Human Nature*” (Plant, 2004). Although the complete work is not preserved, its philosophical content can be understood.

For Aesara, the study of human nature and the soul allows for an understanding of the nature of justice and law. It also enables the distinction of philosophical ideas concerning natural laws, ethics, and their application both at the individual level and in institutions such as social and family structures (Glassman, 2017). Aesara believed that the complexity of the human soul allows it to form standards regarding laws and justice independently. These standards can be applied by both the city and the family (Vivante, 2020). Aesara argued that the human soul consists of intellect, spirit, and desire, all in complete harmony (Boyett et al., 2020). The intellect thinks analytically, providing the ability to choose and judge. The spirit provides abilities, strength, and determination, while desire enables expressions of kindness, affection, and love (Panidis, 2022).

Aesara considered women as crucial for achieving harmony and justice within the household, while men must do the same at the city level (Levitas, 2018). Although family and city seem distinct, Aesara's position recognizes women as the essential characteristic for both areas. To establish justice and harmony in the city, it must first be achieved in the home, a responsibility of women (Thompson, 2000). Women contribute to the upbringing of men, teaching them to be ethical and just (Silverman, 2012). Since they raise morally and justly minded individuals, women deserve credit for the harmony and justice they achieve in the city (Huizenga, 2013).

9. Pythagorean Philosophers Timycha and Thymista

Timycha (4th century BC) was born in Croton, Southern Italy, but hailed from Sparta. She was the wife of Mylliasof Croton and is said to have joined the Pythagorean School early on.

Timycha fearlessly bit off her tongue to prevent betraying the secrets of Pythagorean teachings to the tyrant of Syracuse, Dionysius, in exchange for her safety (Lambropoulou, 1995). Along with her husband Myllias, they were captured by the tyrant Dionysius, who attempted to extract the Pythagorean doctrines from them. Failing to do so with her husband, he ordered Timycha's torture, believing that, as a woman pregnant and without her husband, she would easily reveal everything due to fear of suffering. However, the heroic woman, by biting off her tongue, silenced and spat it at the tyrant, proving that even under torture, she would find a way to remain silent (Wider, 1986).

Thymista was another Pythagorean philosopher of the 4th-3rd century BC, wife of Leontius, and a correspondent of Epicurus. She was also known as the “female Solon”, drawing a comparison to Solon, the great legislator of Ancient Athens, and was recognized as a philosopher (Huizenga, 2013).

From the brief mention of Pythagorean women in the sources, it appears that Pythagorean philosophers primarily discussed topics related to female virtue and the proper marital behavior of women. They recommended purity, self-control, and obedience to husbands, considering the fundamental responsibility of women for their households and men for civic matters as a basic principle of Pythagorean perception of harmony and justice in life. Based on this principle, Pythagorean women sought not to define their roles in an ideal society but to explore how they could achieve harmony in a real society. In societies where men dominated, they believed that women's uprising would only lead to the loss of harmony. However, according to the Pythagorean view, women are not excluded from social justice but contribute to its empowerment (Haskins, 2005). For Pythagoreans, achieving justice is impossible without harmony in the individual family unit (Warren, 1989).

Specifically, women of the “*Pythagorean Circle*” excelled as philosophers, shaping a philosophical and pedagogical thought based on achieving harmony in private life, with the ultimate goal of harmony in public life and, by extension, in broader society.

10. Instead of a Conclusion

As a comprehensive stance in the discussion of Pythagorean women philosophers, concerning their way of thinking and engagement, and from which derived reflections can be drawn in their contemporary interpretation and expression, it is emphasized that Pythagorean women philosophers focus on ensuring harmony and justice initially within their families and, by extension, in their cities. In this context, patience, wisdom, justice, harmony, and self-control are highlighted as supreme values, with self-control taking precedence.

Pythagorean women philosophers also asserted that individuals who are not just and ethical in their lives should not die but be reborn—not as humans but as something else—and this should be the just punishment for the lives they have led.

The primary purpose of Pythagorean women philosophers was to care for their families and parents, raising their children with dedication, justice, and wisdom so that these values could be transferred to society through the governance of men, whose upbringing they also contributed to.

The order and harmony in private life sought by Pythagorean women philosophers also contributed to achieving order and harmony in public life by men. They considered women as the essential characteristic in private and public life because they were responsible for raising boys and subsequently men who would govern the state.

Regarding their pedagogical and didactic positions, Pythagorean women philosophers focused primarily on acquiring virtues deemed appropriate for their gender. The virtues they wanted to acquire or already possessed were believed to be transferred to other women through philosophical teachings. They aimed to achieve harmony in private life and, by extension, harmony in public life and in society at large through their work.

Funding

None.

Informed Consent

Obtained.

Provenance and Peer Review

Not commissioned; externally double-blind peer reviewed.

Data Availability Statement

The data that support the findings of this study are available on request.

Competing Interests Statement

The authors declare that there are no competing or potential conflicts of interest.

References

- Addey, C. (2017). Plato's women readers. *In Brill's companion to the reception of Plato in antiquity* (pp. 411-432). Brill. Doi:https://doi.org/10.1163/9789004355385_024
- Ahbel-Rappe, S., & Kamtekar, R. (2006). *A Companion to Socrates*. Malden, Oxford, Victoria: Blackwell Publishing Ltd. <https://doi.org/10.1111/b.9781405108638.2005.x>
- Allen, C. (1988). Women Philosophers before 1300. *Philosophieet Culture: Actes du XVII e congrès mondial de philosophie*, 5, 54-61. <https://doi.org/10.5840/wcp1719885177>
- Berges, S. (2015). *Introduction: A Historical Perspective on Women's Ethical Experience, Care and Virtue Ethics*. *In A Feminist Perspective on Virtue Ethics*. London: Palgrave Macmillan. <https://doi.org/10.1057/9781137026644>
- Berlinghoff, W., & Gouvêa, F. (2020). *Math through the Ages: A Gentle History for Teachers and Others* (Expanded 2nd Ed. Vol. 32). American Mathematical Soc.
- Bernardi, G. (2016). *The Unforgotten Sisters*. Switzerland: Springer, Cham. <https://doi.org/10.1007/978-3-319-26127-0>
- Blundell, S. (1995). *Women in ancient Greece*. Cambridge, Massachusetts: Harvard

University Press.

Bonelli, M. (2021). Women Philosophers in Antiquity: Open Questions and Some Results. I. Chouinard, Z. McConaughy, A. Medeiros Ramos, & R. Noël (Eds.), *Women's Perspectives on Ancient and Medieval Philosophy*. Cham, Switzerland: Springer. pp. 3 - 16. https://doi.org/10.1007/978-3-030-73190-8_1

Boyett, C., Tarver, M., & Mildred, D. (2020). *Oracle of Delphi. Daily Life of Women: An Encyclopedia from Ancient Times to the Present* [3 volumes] 57, 185.

Burkert, W. (1992). *Lore and science in ancient Pythagoreanism*. Harvard University Press.

Dancy, R. (1989). On A History of Women Philosophers. *Hypatia*, 4(1), 160-171. <https://doi.org/10.1111/j.1527-2001.1989.tb00875.x>

Deakin, M. (2013). Theano: the world's first female mathematician?. *International journal of mathematical education in science and technology*, 44(3), 350-364. <https://doi.org/10.1080/0020739X.2012.729614>

Deakin, M. (2023). *Hypatia. Encyclopedia Britannica*. <https://www.britannica.com/biography/Hypatia>

Dutsch, D. (2020). *Pythagorean Women Philosophers: Between Belief and Suspicion*. Oxford University Press. <https://doi.org/10.1093/oso/9780198859031.001.0001>

Foley, H. (1991). *Reflections of women in antiquity*. London & New York: Routledge.

Glassman, R. (2017). *The Women Philosophers, Scientists, Doctors, and Mathematicians of the Greek World. In The Origins of Democracy in Tribes, City-States and Nation-States*. Springer: Cham. <https://doi.org/10.1007/978-3-319-51695-0>

Hall, K. Q. (Ed.). (2021). *The Oxford handbook of feminist philosophy*. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780190628925.001.0001>

Hanson, K. (2021). *The Problem of the Pythagorean Women: Their Identities, Values, and Writings*. Doctoral dissertation, Kalamazoo, Mich: Kalamazoo College.

Haskins, E. (2005). Pythagorean women. In Ballif, M. & Moran, M. (eds.): *Classical Rhetorics and Rhetoricians: Critical Studies and Sources* (pp. 315–319). Westport: Praeger.

Hawley, R. (1994). The problem of women philosophers in ancient Greece. In Archer, L., Fischler, S. & Wyke, M. (eds) *Women in ancient societies* (pp. 70-87). Palgrave Macmillan, London. https://doi.org/10.1007/978-1-349-23336-6_4

Huffman, C. (2014). *A history of Pythagoreanism*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9781139028172>

Huizenga, A. (2013). *Moral Education for Women in the Pastoral and Pythagorean Letters*. Boston: Brill. <https://doi.org/10.1163/9789004245181>

Iliadi, S., Theologou, K., & Stelios, S. (2018). «Is the Lack of Women in Philosophy a

Universal Phenomenon? Exploring Women's Representation in Greek Departments of Philosophy». *Hypatia*, 33(4), 700-716. <https://doi.org/10.1111/hypa.12443>

Katz, M. (1992). Ideology and "the status of women" in ancient Greece. *History and Theory*, 31(4), 70-97. <https://doi.org/10.2307/2505416>

Lambropoulou, V. (1995). Some Pythagorean female virtues. In Hawley, R., Levick, B. & Levick, D. (eds) *Women in Antiquity: New Assessments* (pp. 122-134). London: Routledge.

Lardinois, A. (2021). Sappho's Personal Poetry. *The Cambridge Companion to Sappho*, 169, 180. <https://doi.org/10.1017/9781316986974.013>

Lazaroiu, G. (2013). Pythagorean Women: Their History and Writings. *Journal of Research in Gender Studies*, 3(2), 147-153.

Levitas, T. (2018). The Ethics of Care. In *Proceedings of the XXIII World Congress of Philosophy*, 29, 63-67. <https://doi.org/10.5840/wcp23201829722>

McHardy, F., & Marshall, E. (2004). *Women's influence on classical civilization*. London & New York: Routledge. <https://doi.org/10.4324/9780203209653>

Minardi, C. (2011). *Re-Membering Ancient Women: Hypatia of Alexandria and her Communities*. Dissertation, Georgia: Georgia State University.

Ossen, L. (1994). *Women in Mathematics*. United States of America. Massachusetts: The Massachusetts Institute of Technology.

O'Reilly, K. R. (2021). Women Philosophers in Antiquity and the Reshaping of Philosophy. In I. Chouinard, Z. McConaughy, A. Medeiros Ramos, & R. Noël (Eds.), *Women's Perspectives on Ancient and Medieval Philosophy*. Cham, Switzerland: Springer. pp. 17-28. https://doi.org/10.1007/978-3-030-73190-8_2

O'Reilly, K. R., & Pellò, C. (2023). *Ancient women philosophers: recovered ideas and new perspectives*. New York: Cambridge University Press. <https://doi.org/10.32920/24442321.v1>

Panidis, Y. (2022). *Children and Women in the Ancient Mediterranean World. An Extended Bibliography (1800-2022)* (2nded). Toulouse: Independent edition.

Pellò, C. (2022). *Pythagorean Women. Cambridge Elements. Women in the History of Philosophy*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781009026864>

Plant, I. (2004). *Women writers of ancient Greece and Rome: an anthology*. Norman: University of Oklahoma Press. <https://doi.org/10.1558/isbn.9781845538804>

Pomeroy, S. (2013). *Pythagorean Women. Their History and Writings*. Baltimore: The Johns Hopkins University Press. <https://doi.org/10.1353/book.23995>

Protasi, S. (2020). Teaching Ancient Women Philosophers: A Case Study. *Feminist Philosophy Quarterly*, 6(3), 1-26. <https://doi.org/10.5206/fpq/2020.3.8437>

- Renger, A-B., & Stavru, A. (eds) (2016). *Pythagorean Knowledge from the ancient to the modern word: Askeris, Religion and Science*. Wiesbaden: Harrassowitz. <https://doi.org/10.2307/j.ctvc770xm>
- Riedweg, C. (2005). *Pythagoras: His life, teaching and influence*. Ithaca: Cornell University Press.
- Rossetti, L. (2013). When Pythagoras was still Living in Samos. In Cornelli, C., McKirahan, R. & Makris, C. (eds) *On Pythagoreanism* (pp. 63-89). <https://doi.org/10.1515/9783110318500.63>
- Rowett, C. (2014). The Pythagorean society and politics. *A History of Pythagoreanism, 112-130*. <https://doi.org/10.1017/CBO9781139028172.006>
- Sangali, A. (2009). *Pythagoras' revenge: A mathematical mystery*. Princeton: Princeton University Press. <https://doi.org/10.1515/9781400829903>
- Silverman, M. (2012). Virtue Ethics, Care Ethics, and The Good Life of Teaching. *Action, Criticism, and Theory for Music Education, 11(2)*, 96-122.
- Thompson, P. (2000). Hestian Thinking in Antiquity and Modernity: Pythagorean Women Philosophers and 19th Century Domestic Scientists. *Philosophy in the Contemporary World, 7(2/3)*, 71-82. <https://doi.org/10.5840/pcw200072/319>
- Vivante, B. (2020). *Women and Gender in Ancient Mediterranean Cultures. A Companion to Global Gender History*. New York: Wiley-Blackwell. <https://doi.org/10.1002/9781119535812.ch13>
- Vogel, C. (1996). *Pythagoras and early pythagoreanism: An interpretation of neglected evidence on the philosopher Pythagoras*. Assen, Netherlands: Van Gorcum.
- Waithe, M.-E. (1997). *A History of Women Philosophers. Volume I. Ancient Women Philosophers. 600 B.C.-500 A.D.* Dordrecht, Boston, Lancaster: MartinusNijhoff Publishers.
- Warren, M. A. (1989). Feminist Archeology: Uncovering Women's Philosophical History. *Hypatia, 4(1)*, 155-159. <https://doi.org/10.1111/j.1527-2001.1989.tb00874.x>
- Wertheim, M. (1996). Pythagoras' trousers. *Math Horizons, 3(3)*, 5-7. <https://doi.org/10.1080/10724117.1996.11974960>
- Wider, K. (1986). Women philosophers in the ancient Greek world: Donning the mantle. *Hypatia, 1(1)*, 21-62. <https://doi.org/10.1111/j.1527-2001.1986.tb00521.x>
- Zhmud, L. (2019). What is Pythagorean in the pseudo-Pythagorean Literature?. *Philologus, 163(1)*, 72-94. <https://doi.org/10.1515/phil-2018-0003>
- Gannikopoulos, A. (2006). *I Ekpaideusi stin Klassiki kai Proklassiki Archaioitita (Education in Classical and Pre-Classical Antiquity)*. Athens: Grigoris Publications.
- Dakoglou, I. (1988). *O Mystikos Kodikas tou Pythagora kai I Apokryptografisi tis Didaskaliastou (The Secret Code of Pythagoras and the Decryption of His Teaching, Vol. 1)*.

Athens: Nea Thesis Publications.

Dellis, I. (2002). *Eisagogisti Filosofia (Introduction to Philosophy)*. Athens: George Dardanos Publications.

Iamblichus (2001). *PeritouPythagorikouBiou (On the Pythagorean Life)* -trans. AlexiosPetrou. Thessaloniki: Zitros Publications.

Karamanidou, A. (2017). AngelologiatouAgiouDamaskinoutouStuditou (The Angelology of Saint Damascene of Studius). In *Proceedings of the 5th Theological-Angelological Conference, on the theme: "Saints Akakios and Damascene of Studius."* Thessaloniki: Theological School of AUTH (27-11-2017).

Sakellariou, G. (1963). *Pythagoras: O Daskalos ton Aionon (Pythagoras: The Teacher of the Ages)*. Athens: Efstathios D. Drivopoulos Publications.

Stovaios, I. (1995). *Anthology* (trans. TheodorosMavropoulos). Athens: Kaktos Publications.

Ifantis, P. (1996). *O Pnevmatikos Kosmos sto Ergo Gregoriou tou Theologou. Schediasma Paterikis Angelologias (The Spiritual World in the Work of Gregory the Theologian. Design of Patristic Angelology)*. Athens: Apostolic Ministry Publications.

Davidson, J. (2016). *Alitheia kai Katigorisi (Truth and Predication)*, transl. by EleniManolakaki. Athena: EkdoseisEkktreμες.

Guthrie, K. (1995). *Ta keimena ton Pythagoreion: Oididaskalies ton Pythagoreion mesa apo ta archaiakeimena (The Pythagorean sourcebook and library: an anthology of ancient writings which relate to Pythagoras and Pythagorean philosophy)*. Translated by Anastasia Nanou-Tsakali. Athena: Pyrinos Kosmos.

Hussen, H. (1998). *Pythagoras (Translated by. EleniKalkani)*. Athena: Ekdotikos Oikos Damianos.

Kahn, C. (2005). *O Pythagoras kai oiPythagoreioi (Pythagoras and the Pythagoreans)*. Translated by Mariana Stavropoulou. Athena: Ekdoseis Enalios.

Copyright Disclaimer

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).