***Original Research Article***

**Gender representations and school textbooks: exploring sexism through the illustration of primary school language textbooks in Greece**

**ABSTRACT**

**Aims:** To investigate gender representations in the illustrations of 3rd grade Language textbooks used in Greek primary schools, with the aim of determining whether these illustrations perpetuate traditional and stereotypical messages regarding gender roles.

**Study Design:** Quantitative content analysis of visual material.

**Place and Duration of Study:** Conducted in Greek primary education, focusing on textbooks implemented from the 2006–2007 academic year up to 2025.

**Methodology:** The study analyzed five textbooks (three main textbooks and two workbooks) used in the 3rd grade Language curriculum. A structured content analysis method was applied, with predefined categories including the total number of male and female figures, their involvement in activities, leadership roles, stereotypical and non-stereotypical representations in family and professional settings, and animal character gender representations. The analysis involved measuring frequency and role distribution within illustrations.

**Results:** Out of 533 total figures, 327 were male and 206 female. Male characters were shown participating in activities 176 times versus 86 for females. Leadership roles were more often assigned to males (23) than females (15). Male animals (17) vastly outnumbered female animals (1). Although there were more non-stereotypical depictions in family (65 vs 9) and professional environments (8 vs 8), the overall presentation was predominantly stereotypical, with male figures dominating public, active, and leadership roles. Illustrative characters further confirmed this trend, with 248 male vs 121 female appearances.

**Conclusion:** Despite minor progress in non-stereotypical portrayals, the textbooks largely maintain traditional gender stereotypes through visual representation, reinforcing male dominance and undermining gender equality. There is a strong need for curriculum revision and teacher training on gender sensitivity to promote more balanced and inclusive representations in educational materials.

*Keywords: gender representations, stereotypes, school textbooks, illustration*

1. **INTRODUCTION**

An important point of human development is the construction of human identities, since the individual from the beginning of his life is confronted, from infancy onwards, with a multitude of models, based on which he structures his behavior. Furthermore, every person identifies specific characteristics that surround it, with social roles and individual characteristics of those around it, forming a variety of prejudices and stereotypes. At the same time, the individual, according to the theory of Social Learning (Bandura & Mischel, 1965), is subject to a process of observation of the behaviors and characteristics of his social environment. The ultimate stage of this process is the imitation of these models and the corresponding reinforcement, depending on how much he harmonized with the elements that are considered socially “positive” (Deligianni-Kouimtzi, 1999).

One part of the multiple patterns that circulate within the individual's environment (family, school, society in general) are gender stereotypes. With the latter, boys and girls are nurtured, becoming recipients, but also reproducers of them, from the very first stages of their lives. Within the field of education, we observe a series of diverse stereotypes, which may change to a certain extent over time, however they remain and continue to exert multifaceted effects. One of these is the stereotypes of the two sexes[[1]](#footnote-1), where members of the educational community, intentionally or not, embrace them in their everyday school life, separating and giving specific roles, characteristics and responsibilities to individuals exclusively and solely according to their gender. In this way, of course, they overlook the individual characteristics, personal inclinations, desires and choices of individuals, excluding them from a portion of personal, educational and professional choices in the long term (Frosi, Kouimtzis & Papadimou, 2001). The stereotypes of the two sexes, on the basis of which individuals become recipients of discrimination and inequalities, are created due to the distinction of sex on two levels: biological and social. Regarding the first, that is, biological sex (sex), it is about the genetically predetermined sex of the person (man - woman), with the corresponding genetic - biological characteristics, which distinguish men from women, such as, for example, the difference in the reproductive system - genitals (Kanner, 2004).

However, social influences have given cultural and social characteristics to subjects not in terms of equality, but with a logic of discrimination, depending on their gender. Thus, they have divided the world into two levels, categorizing social characteristics into male and female, mainly excluding the female gender from various activities, not based on women’s abilities, but according to their gender. Therefore, we are led to gender, a gender that is socially and culturally constructed. Oakley (2005: 7) states the following about the distinction between biological and social gender: “*Sex is a biological term; gender is a psychological an cultural one*”. With this term (gender), this very social construction of gender is emphasized, so that the position that female inferiority is due not to nature but to what we call culture is understood (Redentzi, 2003; Oakley, 2005).

In this context of social constructions, we are led to the social construction of gender differences and inequalities, which are pretextually and erroneously based on "natural" - biological differences between the two sexes, which are also transformed into social differentiations (Freiderikou & Folerou, 2004).

The result is that based on the formed gender identities, men and women must follow the appropriate behavior that suits their gender, in order to be considered "normal" (Papataxiarchis, 1992). This is a series of gender stereotypes that degrade women even today, not because they are biologically incapable of responding, but because society has created specific stereotypes that identify women with certain "normal" characteristics. In this context, a key area for promoting gender stereotypes is the school, which takes part in this process with multiple stakeholders, such as teachers, parents, and the students themselves. At the same time, there are a number of means that cultivate stereotypes for both genders, such as the hidden curriculum, perceptions of gender roles and choices, and the models presented in school textbooks. Regarding textbooks, they are considered a key means of maintaining and reproducing gender stereotypes through the way they present the two genders. For this reason, it is important to deal with sexism as it is presented in school textbooks, through the language used, but also the images presented.

1. **LINGUISTIC SEXISM IN TEXTBOOKS**

Initially, sexism is defined as the set of institutions that legitimize the dominance of men over women and includes various fields of manifestation, one of which is language, which is a key means used at every point of communication in our daily lives (Maragoudaki, 2007). This is because language is, according to Mylonas (2004), the main means of manifestation and expression of any ideology, which describes, explains, interprets or justifies within specific conditions a situation of a group or a social group (collectivité). Within this context, elements of sexist ideas, but also of stereotypical perceptions that compose a framework of inequalities, are cultivated through the language used (Antonopoulou et al., 2021). Thus, within the language, the imprinting of a multitude of discriminations and prejudices is observed, which reproduce a series of imperceptible and indirect inequalities. In this way, a two-way plan of effects is composed between language and social changes, based on which, as Pavlidou (2002) emphasizes, “social stratification is reflected in linguistic stratification” (Lytras, 2010; Pavlidou, 2002).

These effects, as Fragoudaki (2000) states, have great power and duration in the invisible composition of prejudices within the whole of society, which are quite difficult to combat. Furthermore, the existing prejudices within the language depend on the social, cultural, age and educational level of the individual, which constitute the identity of the individual. Within these is also included the element of gender, which, interdependent with the other elements, affects the way in which individuals handle and use language (Tsirantonaki, 2013).

More specifically, the main characteristic of sexist language is the disregard for women and the achievements that accompany them, placing them at a level inferior to men. Thus, saying that a person is a man presupposes positive characteristics, in contrast to a woman, who is presented as less strong and capable (Zindros, 2005). In this way, through linguistic sexism, a strong influence of language is observed in the maintenance of patriarchal structures of society, in the maintenance of gender inequalities, but also in the maintenance of male power over women (Lytras, 2010). A significant means of promoting linguistic sexism in the younger generation are school textbooks, especially elementary school textbooks, since they influence the individual at an early stage of his life. They thus function as transmitters of social norms and standards regarding the behavior and role of the two sexes (Giannoulis et al., 2022). In fact, among all school textbooks, the dominant influence in the transmission of stereotypes for the two sexes, through language, is held by the Language textbooks, indirectly transmitting gendered teachings and messages to the students (Deligianni & Ziogou, 1999). The result of sexist language is a distorted synthesis of students' perceptions of reality in terms of gender roles (Kogidou & Gasouka, 2010). Examining, in a general context, the structural elements of linguistic sexism, according to Tsokalidou (2001), we observe three linguistic areas of gendered elements. Thus, we have three levels of linguistic analysis, implied by linguistic sexism, which are grammar, syntax, and semantics.

1. **SEXISM THROUGH LANGUAGE SCHOOL TEXTBOOK ILLUSTRATIONS**

Image is the second important point examined in school textbooks, after language, since it also conveys a series of specific messages to the reader. Readers must be able to decode its symbolic system in order to perceive its direct or indirect messages, just as they decode the symbolic system of words and understand their content. Thus, it is understandable that the image contains its own messages, often different from those of the texts and has its own power. This is because it mainly addresses emotion and motivates readers and especially students differently in terms of the learning motivations they will manifest. Furthermore, it often contains a series of information and messages that are not stated or cannot be described through written language (Mavrousoudi, 2007).

Therefore, the image constitutes, according to Panagiotou (2013), the language of visual communication, through which subconscious messages, ideas and symbols are indirectly transmitted, which are interpreted and translated by viewers and lead them to the formation of attitudes and social or individual behaviors or choices. Furthermore, as Giannikopoulou (2005) states: “the illustrated children's book constitutes a multimodal genre, which relies equally on text and illustration and participates in two means of inherently rich ideological positions; language and image”. This is because it affects students just as much as the cited texts, in terms of shaping attitudes, behaviors and perceptions regarding the roles of the two genders, since it carries a series of specific ideological messages. Along the same lines, Dimitriadou (2007: 198) states that images are signifiers of culture as they convey social values ​​and perceptions. In particular, with regard to children, it is worth noting that they do not have the ability or readiness to correctly identify the ideas promoted through the images, which are presented in their daily environment (Panagiotou, 2013).

Continuing this study, the depiction and projection of stereotypes for the two genders is investigated. Through the images on the gender axis, the existence of asymmetry and inequality in the presentation of the two sexes through the images of the books, on the cover and in their content, is examined. The result of sexism from this medium is initially, the quantitatively more frequent appearance through the images of the male gender compared to the female. Furthermore, qualitative results are also noted, since the connection of the two sexes is realized with images that are consistent with the gendered standards of social roles. Thus, men and women appear in mainly stereotypical roles, where the masculine is associated, for example, with “masculine” professions, with high-prestige work and social positions and with the characteristics of the strong, the aggressive, the selfish and the most capable in the sphere of public life. On the contrary, the feminine is associated with the so-called “feminine” professions, with subordinate positions and with the characteristics of weakness, tenderness, kindness and preoccupation with private life (Deligianni-Kouimtzi & Sakka, 2007; Zindros, 2005; Maragoudaki, 2007; Pantou, 2010). It is therefore common for women, according to Maragoudaki (2007), to identify with passive roles, as a less intelligent and capable person, with a lack of economic and personal autonomy, since they are seen as dependent on men.

Additionally, the projected model that expresses her connects her primarily with the roles of housewife and wife and secondarily with some professional ones. When she is also presented in the professional sphere, her presence is limited to a specific range of professions and positions of responsibility, which seems destined for her and insurmountable. Thus, the positions of the illustrators and authors of the books, towards both genders, are reflected through the multitude of depicted women, but also by the details that depict them. Worthy of importance, therefore, is not only the verbal, but also the visual modality. It is, therefore, a frequent phenomenon to identify a multitude of more or less gendered iconic representations, which often accompany the quoted text.

Very often, in fact, as Giannikopoulou (2005) also states, the illustration is not analogous to linguistic sexism, since it is possible to have a sex-neutral text, with a series of gendered depictions, or vice versa. Therefore, the image itself has particular value in terms of promoting any ideological message, including gendered ideas. This shows the seriousness with which it must be examined, regardless of the content of the text in question (Karras et al., 2024). Thus, through an image, while the impression may be given that the two sexes are equal, presented in non-gendered roles, it is possible that there is a virtual sexism. This is because, for example, the external characteristics of each gender may be in harmony with gender stereotypes, presenting a woman as extremely well-groomed and stylish, indirectly promoting the idea of ​​the “weak” (Bambiniotis, 2005) or the “fairer sex” (Kazazis & Koutsoyiannis, 1998). Otherwise, just from the color depiction of the two genders, the association of boys with the color light blue or blue and girls with pink or red, is capable of reproducing the stereotypical gender roles in the reader. The result of all this indirect gender ideology is that the sexist standards associated with the two genders are promoted in a creeping way. In fact, it is possible that this creeping sexism is practiced unintentionally by the author or illustrator, without them realizing it. Correspondingly, the reader is even more likely to be affected by sexism through illustration, especially when it is practiced indirectly rather than overtly (Theodorakopoulos et al., 2024).

For these very reasons, it is considered extremely important to identify from the beginning the projected gender norms through the images and to identify their sexist character. In particular, we must be extremely careful with elementary school students, who do not have the ability to criticize the received images and reject or accept the projected norms. In conclusion, by deconstructing the images of children's books from the multitude of direct and indirect gender ideological messages, we can take a step towards leading to an egalitarian structuring of perceptions of the two genders, which students are going to form and follow throughout their lives.

1. **EXISTING RESEARCH ON THE GENDER DIMENSION IN PRIMARY SCHOOL LANGUAGE TEXTBOOKS**

As has already been emphasized, textbooks are a source of social and cultural information about the ideas and perceptions of a society. Thus, one of the issues raised is that of gender equality and the standards presented through them, regarding the roles, attitudes, activities and characteristics that define individuals, depending on their gender.

For this reason, the interest of researchers has been focused at an international level, since the 1970s, on the study of gender representations of teaching materials in all subjects at all levels of education. Thus, some of the first international publications are those of J. L. Trecker in the journal “Social Education” entitled: “Women in US History High School Textbooks”, as well as the research of the US government in 1972, regarding gender stereotypes in children's books. Regarding the research on gender equality that has been conducted in Greece, the first ones appear in the late 1970s and mainly in the early 1980s, with the interest of researchers having over time focused mainly on language textbooks for Primary School (Moschovakou, Hardalia & Ioannidou, 2008). This research review has as its starting point the research of Fragoudaki (1979). In this study, gender norms in reading materials taught in the period 1954-1979 were examined, with a main assessment of the image of gender in the family, where the researcher found the existence of gender discrimination in the mentioned textbooks of this period. With the beginning of the next decade, the 1980s, we have an increase in research interest in the representations of the two genders in primary school teaching materials. Some indicative studies are that of Georgiou-Nielsen (1980) and concerns the six textbooks used in the period 1977-1978, as well as Makrynioti (1980), who examined gender stereotypes in Language textbooks, used from 1953 to 1977. The conclusions do not differ from the aforementioned studies, since a reproduction of traditional family roles that identify female individuals with the roles of daughter, mother and grandmother was observed. On the contrary, men are associated with public life, participating for example in external work or in social events, such as war (Moschovakou, Hardalia & Ioannidou, 2008).

Subsequently, in 1987, we observe the research of Antoniou-Laiou (1987) and Deligianni-Kouimtzi (1987), regarding "new" school textbooks for the language subject, which were introduced in Primary School in the school year 1982-1983 and were taught until 2006. The research process established a quantitative superiority of men in the textbooks, which contradicts the realistic numerical superiority of women in the school units. Correspondingly, are the results of subsequent studies on the same sample of language books, where a traditional representation of gender roles was found, with men taking the lead in the public and professional field of action and women being limited to the family environment (Freiderikou, 1995; Kanatsouli, 1997; Kotsalidou, 2003).

From the 2006-2007 school year onwards, the new textbooks are applied to the comprehensive curriculum of the Primary School, which are taught up to the current year of the research (2005). Initially, we find the study by Maragoudaki (2007), which examined the existing textbooks of the Language course, in the 5th and 6th grades of Primary School, where the researcher identified an overemphasis on male professions, an association of women with household chores, but also a strong presentation of male celebrities. The following year, Tsilika (2008), examined all the latest language textbooks of the Primary School grades (1st, 2nd, 3rd, 4th, 5th and 6th grades), where she found that the woman takes on the role of the mother-housewife, who deals with household chores and tries to always keep her house tidy and tidy. At the same time, in addition to daily household duties, she also undertakes the education of children through the provision of, for example, assistance with school lessons (Tsilika, 2008: 72). Accordingly, are the findings of subsequent studies by Chrysanthakopoulou (2006), Pangourelia & Papadopoulou (2009), Karantzaidi (2016), Karametsou (2018), and Grafonta (2022), where a traditional division of roles was observed with women having a more passive and more limited role in the domestic environment. Furthermore, it was recorded in the most recent studies concerning the books taught in primary school and which were also studied by the present research, an attempt to mitigate gender stereotypes was identified, which, however, does not reflect the real degree of equality and the progress that society has achieved (Theodorakopoulos et al., 2025). Finally, examining the findings from international studies on language textbooks taught outside Greece, a similar picture is observed, where gender roles are reproduced in a traditional way, with women being placed in family roles, being underrepresented in the professional arena and not having particular knowledge and skills in new data such as the use of IT in work environments (Vervecken and Hannover 2015; Alexopoulos, Tsami & Charvourou, 2024; Crawfurd, Saintis-Miller & Todd 2024; Kalogeratos & Pierrakeas, 2024; Fruehwirth, Heilemann & Stoeger 2024; Kalogeratos et al., 2024).

**5. METHODOLOGY**

Our research refers to the representations of the two genders in the textbooks of the Language course and concerns the books taught from the school year 2006-2007, until today (2025) in Greek primary schools. The main purpose of these new books is to shape students on an ideological basis free from stereotypes and inequalities between individuals, with the ultimate goal of their intellectual independence, freedom of thought and critical thinking. For this reason, a research interest is created regarding the validity or rejection of the above view, regarding the degree of existence, reduction or exemption of these textbooks from gender stereotypes. Therefore, the purpose of this research is to investigate the gender representations in the textbooks of the Language of the 3rd grade of Primary School, through illustration. This is because a large and extremely interesting number of studies of the texts of language books have preceded it, and thus the need to investigate the images, which transmit a series of messages about gender roles, emerges.

**5.1 Sample selection**

Specifically, the textbooks in which the representations of the two sexes are to be studied were published in 2006, with the aim of replacing the previous books, which had been used for approximately twenty years. The sample selected includes the three issues of the language schooltextbook for the 3rd grade and the two workbooks for the same grade (a total of 5 textbooks).

**5.2 Research tool**

The research method chosen in this first phase of the research is the content analysis of the third grade Language textbooks in order to examine within their content the degree of existence of stereotypical representations of the two genders, which is a systematic, quantitative description of the data of the discourse (Berelson, 1948; Paschaliori & Milesi, 2002). Thus, content analysis can be applied to a diverse range of written or oral forms and media of communication, such as texts, interviews, television, cinema, radio, classic comics, etc. (Iosifidis, 2003; Tzanis, 2005), while according to Vamvoukas (2007) it is the best method for analyzing school textbooks (Vamvoukas, 2007).

The first stage of content analysis is the definition and selection of the unit of analysis, where as the unit of analysis, in this specific research, we take the analysis of images and symbols that appear either individually or collectively and are subsequently classified and objectively placed in the predefined analysis categories.

The second phase, during the content analysis process, is the definition and selection of the unit of measurement, which is related to the way of measuring the selected units of analysis each time, where in this research the quantitative type of analysis was chosen, where the frequency of occurrence of the elements that we have determined that we want to examine is studied (Vamvoukas, 2007; Tzani, 2005).

Then, we move on to the third stage of content analysis, which is the creation of a system of categories, in which groups of elements, objects or situations are summarized separately in each, with common points between them. The categories formed, called by Vamvoukas (2007) and Tzani (2005), as "windows", will constitute the field of concentration of all gendered elements that will be identified in the teaching material, in evaluation axes related to the objectives of the research and the research hypotheses. The tool used in the first phase of this research is the checklists, which record the results of the content analysis of the illustrations in the 3rd grade Language books.

Categories of Analysis are:

* Total number of persons
* Total number of boys/men
* Total number of girls/women
* Total number of depicted persons, whose gender is not apparent
* Number of boys/men participating in activities
* Number of girls/women participating in activities
* Leadership roles of boys/men
* Leadership roles of girls/boys
* Number of male animals
* Number of female animals
* Number of animals whose gender is not apparent
* Stereotypical representations in the family environment
* Stereotypical representations in the professional-social environment
* Non-stereotypical representations in the family environment
* Non-stereotypical representations in the professional-social environment

**5.3 Results of a quantitative analysis of the illustrations in the 3rd grade language textbooks**

One of the means that influence the perception that students form of the two genders is the images shown in the textbooks. For this reason, this study examined the way in which genders are represented through the illustrations in the 3rd grade language textbooks. The images in these books were analyzed quantitatively, based on specific categories of analysis through which the possibility of promoting sexism through them was examined.

The first categories that were measured through the illustrations in the 3rd grade reading books concern the number of depicted persons based on their gender. More specifically, in a total of 533 persons that appear in the images of the textbooks, men are depicted 327 times while women are depicted 206 times. This difference promotes the male presence in the consciousness of the students and reinforces a stereotypical representation of the genders, since the male element is emphasized and the female element is underestimated. At the same time, the small number of persons with their gender not apparent (total 37), does not mitigate the unilateral projection of the male gender, since this gender-neutral illustration is not remarkable.

It is therefore obvious that the more often students encounter male persons either simply as presences or in various activities, they associate the male gender with the characteristics of ability, activity and intense social life.

Following the examination of sexist transmitted models, through the illustrations of school books, the extent to which both genders are portrayed participating in activities was studied. From the counting of this category within the images of the textbooks, a strong promotion of the male gender and a reduced appearance of female characters were noted.

In this way, the male gender is presented as the "capable" and "active" gender, which participates in more activities, has an intense social and public life, in comparison to the female gender, which is presented as less "capable" and with more "limited possibilities" in taking part in all kinds of activities (Table 1).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Analysis Categories** | **1st Issue of language school textbook** | **2nd**  **Issue of language school textbook** | **3rd**  **Issue of language school textbook** | **1st**  **Issue of student Workbook** | **2nd**  **Issue of student Workbook** | **TOTAL** |
| 1. **Number of depicted boys/men participating in activities.** | 43 | 37 | 45 | 26 | 25 | **176** |
| 1. **Number of depicted girls/women participating in activities.** | 30 | 7 | 12 | 19 | 18 | **86** |

**Table 1. Total number of people, men and women.**

**Table 2. Number of men and women participating in activities**

In detail, 176 men are shown participating in activities, compared to 86 depicted women taking part in various activities, which confirms gender stereotypes through the more than double projection of male characters in the consciousness of students (Table 2).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Analysis Categories** | **1st Issue of language school textbook** | **2nd**  **Issue of language school textbook** | **3rd**  **Issue of language school textbook** | **1st**  **Issue of student Workbook** | **2nd**  **Issue of student Workbook** | **TOTAL** |
| 1. **Total number of people depicted.** | 160 | 87 | 109 | 97 | 80 | **533** |
| 1. **Total number of boys/men depicted.** | 87 | 63 | 68 | 57 | 52 | **327** |
| 1. **Total number of girls/women depicted.** | 73 | 24 | 41 | 40 | 28 | **206** |
| 1. **Total number of people depicted whose gender is not apparent** | 8 | 7 | 4 | 11 | 7 | **37** |

Moving on to the next category of analysis, after the participation of individuals in activities, the assumption of leadership roles by men and women was examined. Thus, although there was a large stereotypical projection of men participating in activities, in this measurement the data show sexism to a lesser extent.

More specifically, 23 images of men were found compared to 15 corresponding female images, who take on leadership roles in various activities. Despite the reduction in the gap between the projected faces of the two sexes, the stereotypical representation of men at the expense of women is also a given in this category (Table 3).

The measurement of the next category is based on the stereotypes of the two sexes, but not directly through the depicted faces. This is because it examines the presentation of animals through the images of these reading books. More precisely, 17 male animals were identified compared to only 1 female, while at the same time 52 depicted animals were found without distinguishing their gender. The last category of analysis (xi. Number of depicted animals whose gender is not apparent), certainly reduces the correlation of gender with the projection of the subjects in various activities of private or public life, without however removing the existing

sexism.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Analysis Categories** | **1st Issue of language school textbook** | **2nd**  **Issue of language school textbook** | **3rd**  **Issue of language school textbook** | **1st**  **Issue of student Workbook** | **2nd**  **Issue of student Workbook** | **TOTAL** |
| 1. **Leading roles of depicted boys/men.** | 1 | 1 | 7 | 12 | 2 | **23** |
| **viii. Leading roles of depicted girls/boys.** | - | - | - | 11 | 4 | **15** |

This is because the male gender is clearly projected as the dominant gender through its over-projection compared to the female, even from this category, where we do not have a direct depiction of human faces. The last point does not negate the importance of this category of analysis, since in children's books the phenomenon of anthropomorphism, that is, the presentation of animals or things with human characteristics, is common. The projection, therefore, almost exclusively of male animals, indirectly passes through this point and the sexist model of the "capable" male, which unilaterally connects the male person with a multitude of skills, actions and characteristics, such as strength, boldness, bravery and participation in activities.

Towards the completion of the quantitative content analysis of the images of the 3rd Primary Language textbooks, the stereotypical or non-stereotypical representations of individuals within the family and professional-social environment are studied. Through this measurement, we have for the first time in the entire scope of the analysis of the images a non-sexist approach to the two sexes in these two environments.

**Table 3. Leading roles of men and women**

Thus, in 9 stereotypical representations of the two sexes within the family environment, 65 non-stereotypical ones are identified in comparison, which negate the stereotypes that characterize men and women in the family environment, with the latter not being sexistly associated with this space (Figure 1). On the same wavelength, the 8 non-stereotypical representations of individuals of both sexes in the professional-social environment, compared to only 8 stereotypical ones for this space, abolish the model of the man who has been sexistly associated with public life and a multitude of activities in this field, which only pertain to men.

**Fig. 1. Comparison of stereotypical and non-stereotypical images**

The stereotypical assessment of all the categories analyzed through the images of these language books is also evident through the count of the accompanying characters of the reading books. Thus, the depicted heroes/characters that accompany the students on each page of the textbooks consist of six male characters and only two female characters, where the depictions of the former are 248, while the latter only reach 121.

**Table 4. Illustration of heroes – accompanying characters of 3rd Grade Language textbooks**

|  |  |
| --- | --- |
| **Socratis** | **68** |
| **Sofoula** | **94** |
| **Sofoklis** | **9** |
| **Penelope** | **27** |
| **Aristos** | **86** |
| **Dimos and Timos** | **44** |
| **Evris** | **41** |

In conclusion, with the exception of the last categories of analysis of the listed images, the illustration of the 3rd grade Language textbooks is considered stereotypical in terms of the representation of the two sexes, which are still associated with gender characteristics and fields of action and projection, not according to the abilities and desires of the depicted individuals, but based on the reproduced gender stereotypes. The last non-sexist recording of the last categories of analysis is positive in the direction of an equalizing projection of the two in the textbooks, but it cannot contribute significantly in this direction, within a general set of gender depictions of all the remaining categories of analysis.

**5.4 Results on the multimodal analysis of illustration in 3rd grade language textbooks**

**Social and family roles**

1st Issue of Language Textbook, page 21: “*Thus, the adults see the twins interested in and successfully involved in sports and, at the same time, excelling in their studies. Both of them. They swim like fish, run like gazelles and skate like real professionals. Both of them. They very rarely make spelling mistakes and even know how to write the longest word in this book without the slightest mistake. Both of them… Exemplary students! And very gifted.*”



1st Issue of Language Textbook, page 28:

“*From Aristides' diary, Sunday, October 24*

*Dear diary, Today it is raining and I can't go out to play with my friends. When I am at home I usually play with my sister, but it's not the same*.”



1st Issue of Language Textbook, page 36:

“*One afternoon, as we were playing in Metelas Square, by the sea, a lady called out to us from the window of her house and invited us to come up to her to treat us to tea and cookies […].*

*She made us sit around a large walnut table and soon arrived with the tableware, tea, butters, jams and slices […].*”



2nd Issue of Language Textbook, page 42: “*Grandma Meropi bought tomatoes, spinach, eggplants, potatoes, cheese and chicken.*”

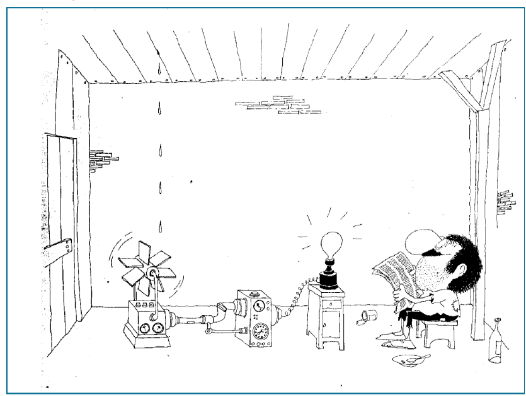


1st Issue of Language Textbook, page 52: “*They're fighting again!*”

1st Issue of Language Textbook, page 65: “*How we adopted a piece of land…*”



2nd Issue of Language Textbook, page 10



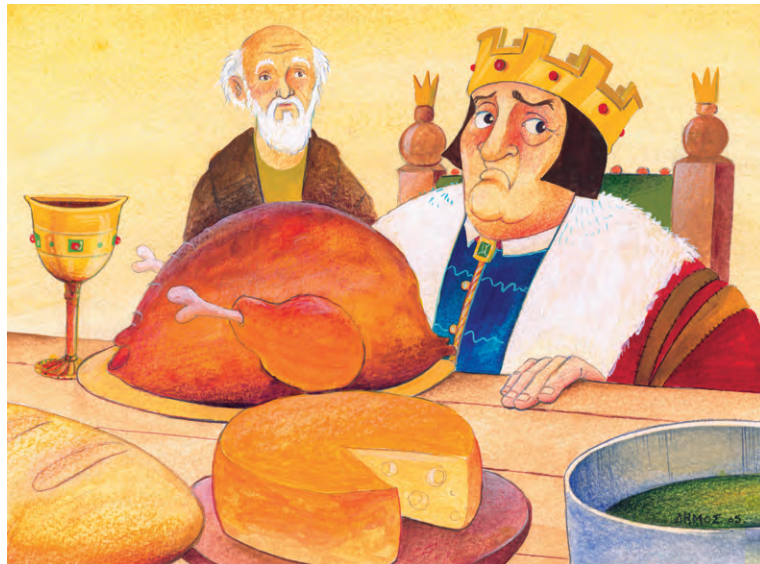
2nd Issue of Language Textbook, page 62

“*Look what he thought.”*



2nd Issue of Language Textbook, page 19

“*The adventures of Odysseus*”



3rd Issue of Language Textbook, page 28:

“*Once upon a time there was a rich king, very rich, who had everything his heart desired […]*”



3rd Issue of Language Textbook, page 35



3rd Issue of Language Textbook, page 36

**6.DISCUSSION**

During the quantitative analysis of the illustrations, a clear unequal projection of the two genders was found, since many more male than female faces are presented. In addition, beyond the simple numerical superiority of the appearances of male faces, we also have a stereotypical projection of the two genders in specific roles, with defining abilities. More specifically, men are depicted to a degree twice as high as women as participating in activities, while at the same time they excel in their projection as persons who assume leadership roles in all the spaces in which they operate, a fact that confirms the findings of previous studies

The only positive point that emerged from the illustrations is the existence of more non-stereotypical representations of men and women in their family, but also in their professional - social environment. However, the predominance of men in all other categories of illustration analysis, as well as in what emerged from all language categories, does not allow this egalitarian presentation of the genders to give a clear and substantial non-sexist character to this teaching material, an element that is also confirmed by the research of Karantzaidis (2016) and Karametsou (2018). Thus, women, as is logical, are presented to a lesser extent, not only as persons, but also through the roles they assume and the fields in which they are active. In this way, therefore, the existence of the female gender, the abilities it possesses, but also the activities and roles that it can successfully complete are underestimated. Correspondingly, men are accompanied by a multitude of capabilities, which make them more capable than women and more effective in assuming leadership roles and responsibilities for the completion of many activities, a fact that confirms the findings of research in Greece and internationally (Lytras, 2010; Vervecken and Hannover 2015; Crawfurd, Saintis-Miller and Todd 2024).

Thus, although in our time there should be equality between the two sexes in every field of human activity, the present research highlights the deficit of an equal approach between men and women, through the illustration which conveys a multitude of social messages to students (Giannikopoulou, 2005). Therefore, it is a fact that there is a need for further efforts, which will bring about broader social equality and particularly educational equality. This is because, as our research revealed, the teaching material used, although it has been introduced into education for a few years, is imbued with a multitude of characteristics that cultivate gender differentiation between the two sexes and increase inequality between them (Editor, 2024; Fruehwirth, Heilemann and Stoeger 2024).

For this reason, it is useful to achieve equality between the two sexes in every area of ​​social and family life. Only in this way will we be able to achieve equal opportunities for men and women, as well as an equal distribution of roles and professional-individual choices, which will allow individuals to freely express their personal choices and inclinations.

The reason for this urgent need concerns not only the school environment, but also the entire society, since education is one of the cornerstones that, together with the family, shape the characteristics of future society, shaping future citizens, who are none other than children. In this way, an equal allocation of opportunities, roles and rights can be achieved for each individual, regardless of their gender (Kheiltash & Rust, 2009).

It is equally important that teachers are trained on gender issues, so that they understand the importance of an egalitarian teaching approach and more easily recognize any kind of gender element either in school textbooks or in the way they teach. At the same time, it is legitimate for them to follow a differentiated teaching method, not because they will separate the two sexes, but because they will try to differentiate their teaching, where they detect any sexist element (Marmani, 2022). In this way, they will not only be able to alleviate gender stereotypes within the school, but also to alleviate them in the consciousness of the students, who are the future citizens. Furthermore, in the short term, they will send a message of equality to every family of every student, with the aim of immediate general social equality. Thus, the possibility of a diachronic equality between the two sexes in the whole of society is given.

Furthermore, the promotion of gender role models by all the staff of the Primary School will push the need for equal treatment of men and women at every level of education and will broaden the message of equality to all members of the educational community. The beginning, therefore, of non-sexist education, must be from Preschool Education to the end of Secondary Education. This is because the sensitive age of 4-12 years is very important in the formation of the gender identity of individuals and in the formation of the basic elements of human behavior (Triga, 2005: 1).

Furthermore, the entry into adolescence requires a gender-equal educational approach, giving an example that equality is not an occasional issue, but a serious one that must be addressed and maintained. In fact, at this stage it is useful to investigate other aspects of gender inequality, which is related to various forms, such as gender-based violence or gender-based occupational segregation (Deligianni-Kouimtzi, 2002).

In this way, it is possible to prevent any form of sexist attitude of individuals and to freely develop the talents, inclinations and choices of individuals, not as imposed by gender stereotypes, but as they arise from the individual desires of each person (Vitsilaki & Gouvias, 2006: 89-110).

The ultimate goal of all these positions and proposals is none other than the realization of not just educational equality, but the formation of a completely non-stereotypical society, which will be able to move forward free from any kind of stereotype, giving its members substantial equal opportunities in every field of human activity.

**7.CONCLUSIONS**

Summarizing the conclusions of this research, initially, a reproduction of gender stereotypes was found in the illustration of the 3rd grade Language textbook. A clear connection of the two sexes with roles, characteristics and abilities that link men and women with traditional gender representations emerged.

Men and women are presented through these specific school textbooks in traditional roles, based on which men continue to excel in public life through a multitude of actions that they are shown to undertake having an intensely social life. In addition, the male characters show a guiding role in issues concerning the family environment, which are traditionally associated with their gender, such as the external work of a house or the provision of the necessary material goods that all members of a house need.

In this context, women continue to be associated with actions in their private lives, which are related to daily household chores, such as cooking or taking care of young children. At the same time, their activity in the public sphere is clearly more limited compared to men, especially in what is related to taking on professional roles, which are half as many as the corresponding reports of men. This is a particularly important finding, since it does not reflect modern social representations, since the female presence in the workplace is much more dynamic and intense in a multitude of professional roles, even positions of responsibility in several work sectors.

Thus, even the progressive and egalitarian trend that exists in certain social fields and which has brought about an attenuation of traditional gender representations, is not reflected in specific school textbooks. Of course, along with these, a traditional character is also maintained in the practices followed by teachers, together composing a particularly traditional framework for the construction of gender identities. If at this point we take into account that the school textbook is the main means of teaching and home study, but also that teachers have a strong influence on the children they teach, a traditional framework for approaching gender identities emerges.

These conclusions are particularly interesting, since they highlight the issue of gender inequalities in school textbooks from all sides, through which various attitudes and values ​​are transmitted to students that influence the construction of their gender identities. Additionally, the present research and the conclusions drawn highlight the necessity of the issue under study, as, as has become clear, a series of traditional gender norms continue to be reproduced and cultivated.

Consequently, there is a clear need for the Institute of Educational Policy to reform the Curriculum and to substantially include gender equality, not only in its goals, but also in the content of the textbooks. In this way, an important step will be taken to bring students into contact with teaching material free from gender inequalities, which will be reproduced and appropriately utilized by the teachers who teach it through targeted training that will concern their educational practices. This is therefore a particularly important field for achieving overall social equality, which will be an indispensable need of modern society and the individual rights of every citizen.

**COMPETING INTERESTS DISCLAIMER:**

Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.

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Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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Details of the AI usage are given below:

1. Language improvement

References

Alexopoulos, C., Stamou, A. G., & Papadopoulou, P. (2022). Gender representations in the Greek primary school language textbooks: Synthesizing content with critical discourse analysis. International Journal on Social and Education Sciences (IJonSES), 4(2), 257-274. <https://doi.org/10.46328/ijonses.317>

Antonopoulou, H., Halkiopoulos, C., Barlou, O., & Beligiannis, G. N. (2021). Transformational leadership and digital skills in higher education institutes: during the COVID-19 pandemic. Emerging Science Journal, 5(1), 1–15. DOI: <http://dx.doi.org/10.28991/esj>

Aretxaga, B. (2001). Gender and Feminist Studies in Anthropology. [International Encyclopedia of the Social & Behavioral Sciences](https://www.sciencedirect.com/referencework/9780080430768/international-encyclopedia-of-the-social-and-behavioral-sciences). <https://doi.org/10.1016/B0-08-043076-7/00875-5>

Avolio, Bruce J., Bernard M. Bass, and Dong I. Jung. (1999) “Re-Examining the Components of Transformational and Transactional Leadership Using the Multifactor Leadership.” Journal of Occupational and Organizational Psychology 72, no. 4 (December 1999): 441–462. doi:10.1348/096317999166789.

Bandura, A., & Mischel, W. (1965). Modification of self-imposed delay of reward through exposure to live and symbolic models. *Journal of Personality and Social Psychology, 2*, 698–705. [https://doi.org/10.1037/h0022655](https://psycnet.apa.org/doi/10.1037/h0022655)

Bedford, B. (2018), Illustrating casual sexism in science, *Eos, 99*, <https://doi.org/10.1029/2018EO111589>.

Berelson, B. (1952). *Content analysis in communication research*. Glencoe, IL: Free Press

Cope, B., & Kalantzis, M. (2009). “Multiliteracies”: New Literacies, New Learning. *Pedagogies: An International Journal*, *4*(3), 164–195. <https://doi.org/10.1080/15544800903076044>

Crawfurd, L., Saintis-Miller, C., & Todd, R. (2024). Sexist textbooks: Automated analysis of gender bias in 1,255 books from 34 countries. PLOS ONE, 19(10), e0310366. <https://doi.org/10.1371/journal.pone.0310366>

Deligianni-Kouimtzi, V., & Sakka, D. (Eds.). (2007). *From adolescence to adulthood: Studies on gender identities in contemporary Greek reality*. Athens: Gutenberg Publishing.

Fragoudaki, A. (1979). *Elementary School Reading Books – Ideological Coercion and Pedagogical Violence*. Athens: Themelio.

Fruehwirth, B., Heilemann, M., & Stoeger, H. (2024). The gender representation of women and men in the occupational areas of STEM and care work in German textbooks. Linguistics and Education, 80, 101284. <https://doi.org/10.1016/j.linged.2024.101284>

Gouvias, D., & Alexopoulos, C. (2016). Sexist stereotypes in the language textbooks of the Greek primary school: a multidimensional approach. *Gender and Education*, *30*(5), 642–662. <https://doi.org/10.1080/09540253.2016.1237620>

Huang, P., & Liu, X. (2024). Challenging gender stereotypes: representations of gender through social interactions in English learning textbooks. *Humanities and Social Sciences Communications*, *11*(1), 1-14. https://doi.org/10.1057/s41599-024-03293-x

Jaser, Z.(2020). “The Connecting Leader. Aligning Leadership Theories to Managers’ Issues.” Leadership (December 18, 2020): 174271502098118. doi:10.1177/1742715020981188

Kalogeratos, G., & Pierrakeas, C. (2022, July). Knowledge and skills of the digital transformation of the Greek public school in the post covid era. In 2022 13th International Conference on Information, Intelligence, Systems & Applications (IISA) (pp. 1-7). IEEE. DOI: [10.1109/IISA56318.2022.9904416](https://doi.org/10.1109/IISA56318.2022.9904416)

Kalogeratos, G., & Pierrakeas, C. (2024). Use of learning theories and visual programming (Scratch) in education. Technium Education and Humanities, 10, 41–54. <https://doi.org/10.47577/teh.v10i.11688>

Mahdiyar, H., Akbari, E., & Shakeri, T. (2024). Representation of gender identities in the second secondary school textbooks. *Iranian Journal of Anthropological Research*, *13*(2), 101-117. Doi: <http://10.22059/IJAR.2024.368462.459848>

Maragoudaki, E. (2007). *Educational support materials for school textbooks of theoretical subjects: Elementary*. Ioannina: EPEAEK II.

Marmani, F. (2022). Gender and asylum seekers – The case of Greece. Migration and Diversity, 1(1), 31–40. <https://doi.org/10.33182/md.v1i1.2875>

Mylonas, T. (2004). *Sociology of Greek education (Contributions)*. Athens: Gutenberg.

Nandi, A., Hader, T., & Das, T. (2024). Gender Stereotypes and Bias in English Language School Textbooks: Reflection from Literature Review across Different Countries. *An-Nisa Journal of Gender Studies*, *17*(2). DOI: 10.35719/annisa.v17i2.320

Oakley, A. (2005). *Gender, women and social science*. The Policy Press.

Pavlidou, T.-S. (2002). Language–gender–sex: Problems, searches and the Greek language. In T.-S. Pavlidou (Ed.), *Language–Gender–Sex* (pp. 13–76). Thessaloniki: Observer.

Santora, Joseph C. (1999) “Book Review: A Force for Change: How Leadership Differs from Management.” Journal of Management 17, no. 1 (March 1991): 218–218. doi:10.1177/014920639101700115.

Theodorakopoulos, L., Theodoropoulou, A., Kampiotis, G., & Kalliampakou, I. (2025). NeuralACT: Accounting Analytics using Neural Network for Real-time Decision Making from Big Data. IEEE Access. DOI: [10.1109/ACCESS.2025.3526706](https://doi.org/10.1109/ACCESS.2025.3526706)

Trecker, J. L. (1971). Women in US history high school textbooks. *International Review of Education, 19*(1), 133–139.

Tsirantonaki, S. (2013). Teachers' reflection on dealing with sexism in primary school. Adult Education and Culture in the Community, 9. Retrieved from <http://cretaadulteduc.gr/blog/?cat=25>

Vervecken, D., & Hannover, B. (2015). Yes I can! Effects of gender fair job descriptions on children’s perceptions of job status, job difficulty, and vocational self-efficacy. Social Psychology, 46(2), 76–92. <https://doi.org/10.1027/1864-9335/a000229>

Xenofontos, C. (2024). Gender representations in school mathematics: A study of primary textbooks in the Republic of Cyprus. *International Journal of Mathematical Education in Science and Technology*, 1-21. <https://doi.org/10.1080/0020739X.2024.2337945>

Zaidman-Zait, A. (2014). Content Analysis. In: Michalos, A.C. (eds) Encyclopedia of Quality of Life and Well-Being Research. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-0753-5\_552

1. Regarding the binary distinction of sex, it is important to emphasize the existence of even more modern views, according to which this particular dichotomy is completely negated and any gender categorization is criticized (Butler, 1993). In this context, gender identity is perceived as a completely fluid concept that individuals define themselves, regardless of their biological sex. However, although this is a particularly interesting modern view, it was not taken into account in this research, since it does not serve its purposes, since in the school textbooks of the Greek state that were investigated, characters are presented only through the binary form of man - woman. [↑](#footnote-ref-1)