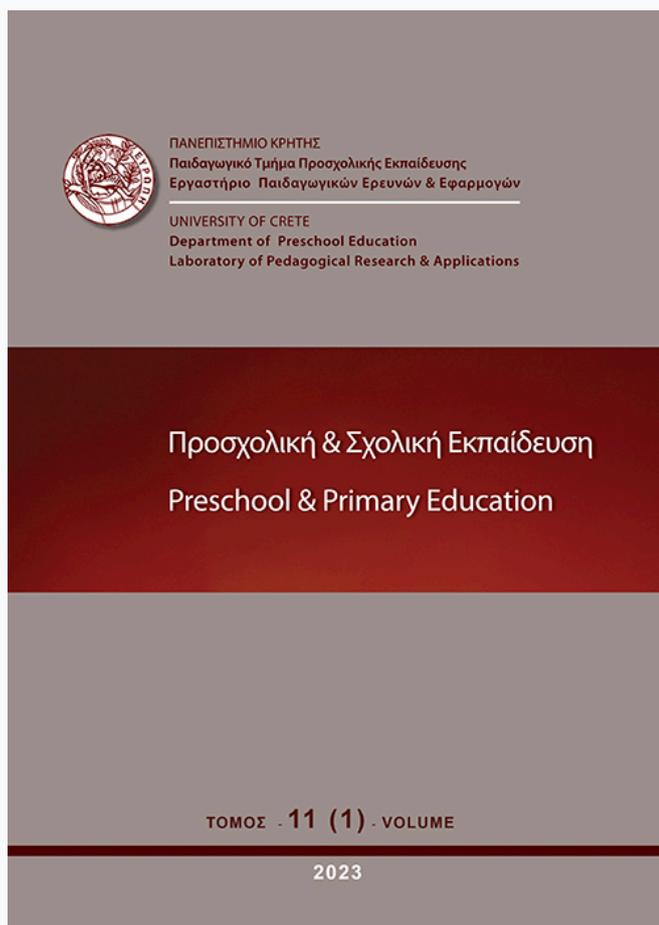


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Greek kindergarten children's motivation for reading

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Summary. The aim of the present study was to investigate Greek kindergarten children's reading motivation and their gender differences in reading motivation during kindergarten attendance. The sample of the present study consisted of 100 kindergarten children enrolled in public schools in Crete. The "Me and my reading profile" (MMRP) reading motivation tool was used. The MMRP was adjusted to Greek and was given to sample children in the beginning and at the end of the school year. Data analysis conducted with exploratory and confirmatory factor analysis revealed a 5-scale factorial structure in children's reading motivation. Results showed that kindergarteners enhanced their reading motivation throughout the school year in the 3 out of the 5 extracted factors, while significant differences were found in the degree of reading motivation improvement between boys and girls. The results are important because they present data related to children's reading motivation development at the first stages of literacy acquisition and are useful for making specific suggestions about educational practice and policy in Greece.

Key words: reading motivation, Greek kindergarten children, MMRP, gender differences

Introduction and conceptualization of reading motivation

Current data regarding students' literacy achievement highlight reading motivation as a significant contributing factor in their literacy development (EACEA/ Eurydice, 2011; PISA, 2018). To study students' reading motivation at any age, it is useful to bear in mind the basic constructs that have been used worldwide to conceptualize, evaluate and interpret reading motivation. Through this way, it is feasible to interpret the multidimensional nature of reading motivation and investigate its role in children's willingness to participate in literacy practices implemented in educational and non-educational settings. Having data from research conducted for decades by behaviourists, cognitive and sociocognitive psychologists, reading motivation could be defined as a person's intention to be engaged in a reading activity and his/her willingness to continue this action despite challenges (Gambrell, 2009). A basic conceptualization includes a distinction between intrinsic and

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extrinsic motivation, constructs that are based on self-determination theory which in turn focuses on the different reasons that motivate people's actions (Ryan & Deci, 2000). Particularly, Conradi et al. (2014), based on the analysis of relevant and current activity in the field of reading research, stated that "intrinsic motivation is the drive to read for internal purposes, such as deriving pleasure, attaining personal goals, or satisfying curiosity, while extrinsic motivation is the drive to read for external purposes, such as rewards or recognition" (p. 154).

Further examination and conceptualization of reading motives is attempted using the expectancy-value model which argues that a person's choice, persistence, and achievement could be interpreted by their perception about their ability to perform successfully in a task and by the degree that this task is valued by them (Barron & Hulleman, 2015). Self-concept is one of the main constructs which are based on this model and could be defined as the overall perception that a person formulates about themselves as a reader, including one's sense of competence in reading and the role that reading has in one's personal identity (Conradi et al., 2014). Self-efficacy is relative but somewhat different to the self-concept construct and refers to the extent that a person expects to successfully accomplish a reading task (Schiefele et al., 2012). The value of reading constitutes the last in the main reading motivation constructs that are based on this model and, according to a comprehensive definition provided by Conradi et al. (2014), refers to "an individual's beliefs about the extent to which reading is generally useful, enjoyable, or otherwise important" (p. 154). Many of the above constructs have been included in research tools to examine reading motives (Gambrell et al., 1996; Marinak et al., 2015; Pitcher et al., 2007).

Regardless of the different theoretical models that at times have been used for the definitional and conceptual clarification of reading motives, the latter are significantly related to children's literacy development in the first levels of education (Morgan & Fuchs, 2007). For example, Walgermo et al. (2018) found that emergent literacy skills of 5 to 6-year-old children are related to their empowered self-concept as a reader. Along the same lines of the data described above are those which have shown the positive relation between children's reading motivation and reading comprehension in the first grades of primary school (Cartwright et al., 2015; Schiefele et al., 2016; Stutz et al., 2016). Furthermore, there are research data which have shown that intrinsic motivation is related to children's reading behaviour and achievement (Schiefele et al., 2012) and constitutes a significant predictive indicator of students' reading achievement in secondary education (Froiland & Oros, 2014).

Reading motivation and evaluation during kindergarten attendance

Students' reading motivation begins to develop during preschool years as a result of the instructional and literacy practices employed by teachers and parents (Chou et al., 2016; Lerkkanen et al., 2012; Saçkes et al., 2016; Zhou & Salili, 2008). Indicatively, practices which engage children in shared storybook reading provide them access to an adequate number of age-appropriate books and the opportunity to act in a supportive environment that can stimulate children's interest in reading (Chou et al., 2016; Jean et al., 2018).

Taking into consideration all the above, examining children's early reading motivation by using age-appropriate constructs is significant to illustrate their current literacy profiles and to study reading motivation as a predictive factor in their future literacy achievement (Marinak et al., 2015). While the research into children's reading motivation in the upper grades of primary school or in secondary education is ample, there are limited research data about preschool or kindergarten children. Specifically, Conradi et al. (2014) in a review article noted that only 1/3 of the current research activity concerns kindergarten children and children in the first grades of primary school. The researchers also reported

that most of the available research data come mainly from Canada and the U.S. Taking into consideration these observations, it is important to assess reading motivation at preschool age and obtain relative data from different countries worldwide so as to formulate a clearer view of the conceptual content of reading motivation.

As mentioned above, research data regarding kindergarten children's reading motivation are few and there is a need to further examine it using the appropriate constructs. More particularly, Mata (2011) developed the Motivation for Reading and Writing Profile (MRWP). It is a research tool specifically designed to measure Portuguese kindergarteners' reading and writing motives. The tool is based on the multidimensional structure of reading motivation, derived from important constructs of current motivation theories, such as those which describe intrinsic and extrinsic motivation. According to the results of this study, children seemed to start to develop strong reading motives as they attended kindergarten. Enjoyment of reading, the value of reading and self-concept as a reader constituted the basic dimensions/scales which illustrated young children's reading motives. Of special interest was the fact that children's scores were high for the value of reading scale, followed by their scores in the self-concept as a reader scale. This means that the value and not the pleasure operated as main motive for children to be engaged in a reading activity.

Along the lines of the research data described so far are those of Zheng et al. (2016). They constructed the Emergent Reading Motivation Scale (ERMS), a developmentally appropriate measure, with which they evaluated U.S. pre-kindergarteners' emergent reading motivation. The results of this study showed that pre-kindergarteners' reading motivation could be described by the dimensions of reading self-concept, reading performance goal, and reading learning goal, constructs that are reflected in respective theoretical models. The same authors also stressed the need to design developmentally and age-appropriate research measures to evaluate very young children's reading motivation, because children in preschool and early school education are on different places on the continuum of the learning to read process and on their general cognitive development and also have differing degrees of educational experiences.

The feasibility of estimating children's reading motivation before formal reading instruction begins is also examined by McTigue et al. (2019). McTigue and her colleagues developed the Survey of Early Literacy Motivation (SELM) which was based on social cognitive theory and included the dimension of self-beliefs, which is further specified by self-concept and self-efficacy, and the dimension of interest. SELM was administered to Norwegian children in the first weeks of their attendance of the first grade. The results of this study highlighted that it is feasible to evaluate students' reading motives before the beginning of formal reading instruction and added to the work of developing multidimensional, culturally situated motivation research tools which are also developmentally appropriate for young students.

Of special interest is the work of Marinak et al. (2015) who extended previous and relevant work (Gambrell, 1996; Malloy et al., 2013) and developed the Me and My Reading Profile (MMRP), a 20-item multiple-choice measure to evaluate kindergarten, first and second grade students' reading motivation in U.S. The conceptual constructs included in MMRP are based on the expectancy-value model. Exploratory factor analysis performed on the whole sample results confirmed the previously identified dimensions of self-concept and value of reading and revealed a newly identified one, the literacy out loud dimension, which, according to the authors, includes the items that reflect the social aspect of literacy that are more commonly observed in primary classrooms. The emergence of this new dimension supports the multidimensionality of reading motivation. Nevo et al. (2019) in a subsequent study used MMRP to examine Hebrew kindergarteners and early primary

students' reading motivation at two time points, at the beginning and at the end of the school year. In relation to kindergarteners, results showed that at the end of the school year children significantly increased their reading motivation in the three dimensions described by MMRP. Orellana et al. (2019) conducted a cross-cultural study in Chile, Finland, Greece, and the United States by also using MMRP to examine kindergarteners and early primary students' reading motivation. Results showed in all countries and for the three age groups, kindergarten, first and second primary grade, children increased their reading motives from the beginning to the end of the school year. The studies of Marinak et al. (2015), Nevo et al. (2019) and Orellana et al. (2019) differ from the relevant studies presented so far in that the same research tool is used for kindergarteners as well students of the first two grades of primary school. But what emerged in the rest of the studies is that reading motivation of preschool or kindergarten children should be assessed with developmentally appropriate measures, since there are age specific and educational factors which shape their reading motivation before formal reading instruction begins in primary school (Mata, 2011; McTigue et al., 2019; Zheng et al., 2016). So, the question of whether it is reliable to assess reading motivation in children aged 5 to 7 years old with the same constructs merits further investigation, since children in these age groups might experience reading in different conditions and perceive this process in a different way.

An interesting issue emerged from the studies presented above concerns gender differences in preschool children's reading motivation, adding to research conducted so far regarding boys' and girls' differences in reading achievement (e.g., Solheim & Lundetræ, 2018). It is worth noting that research on the evaluation of gender differences in preschool and kindergarten children's reading motivation, as concluded from the data presented so far, is sparse presenting contradictory results. In the studies of Nevo et al. (2019) and Orellana et al. (2019) results showed that there were no gender differences in preschoolers' reading motivation. In contrast, in the study of Mata (2011) results showed that there were gender differences with girls displaying greater motivation than boys, especially in relation to the dimension of enjoyment of reading. Of course, these few and mixed results propose that kindergartens' gender differences in reading motivation constitutes an issue that merits further investigation, taking into consideration that students' reading motives and attitudes might be influenced by stereotypes holding the view that reading is mainly a feminine endeavour (Espinoza & Strasser, 2020). Teachers and parents of very young children tend to assume that girls have a stronger interest in reading than boys (Baroody & Diamond, 2013). This attitude might in turn affect children's reading behaviour. Indeed, in the study of Wolter et al. (2015) preschoolers' gender differences were to some degree explained by teachers' gender role attitudes. Specifically, the boys exhibited weaker reading motivation as preschool teachers' attitude to gender roles was more traditional.

The present study

As presented above, research on kindergarteners' reading motivation is limited with the relatively few data showing an improvement in children's reading motivation while attending kindergarten (Nevo et al., 2019; Orellana et al., 2019) In addition, the conclusions by Conradi et al. (2014) highlight the need to expand relevant research activity in non-English speaking European countries with different educational systems. This is supported by the differences observed in the educational programs among different countries worldwide which formulate students' response and attitudes toward learning. For example, in some European countries such as Greece, Ireland, Belgium, France, and Spain, kindergarten curricula anticipate emergent literacy instruction to kindergarten children, while in other countries, such as Sweden and Finland, the kindergarten curriculum provides only a general framework for emergent literacy instruction (Tafa, 2008). In relation to

Greece, literacy instruction in kindergarten is guided by the Cross-Thematic Curriculum Framework which in turn is based on the emergent literacy philosophy (Ministerial Decision G2/21072b (Government Gazette 304/13-3-2003/vol.B' pp 593-597). The curriculum provides guidelines regarding play-based practices which help children develop awareness of their written language system. Children's engagement with different kinds of text genres, awareness of significant concepts and conventions about print (e.g., the directionality of reading, the 'technical' language of literacy such as page number, first line, book title, book cover), and text structure comprehension are some of the main goals that kindergarten teachers set for reading by implementing developmentally appropriate practices (Garbe et al., 2016). In this context, story reading constitutes a practice that Greek kindergarten teachers use frequently to help children accomplish several literacy goals (Kreza & Chlapana, 2019). Moreover, in relation to the classroom physical environment organization and literacy routines, in most kindergarten classrooms there is a library corner (Tafa, 2001) and a lending library (Carida & Thouliotis, 2013) to enhance children's engagement with books.

In relation to the above and taking into consideration: (a) the few data regarding children's reading motivation improvement during kindergarten attendance (Nevo et al., 2019), (b) the mixed results related to gender differences which constitute a significant factor which can affect children's reading motivation (Mata, 2011; Nevo et al., 2019), and (c) the need to expand the investigation into kindergarten children's reading motivation in non-English European countries (Conradi et al., 2014), the aim of the present study is to:

- a. add to the research conducted so far about reading motivation in kindergarten children (Marinak et al., 2015; Mata, 2011; McTigue et al., 2019; Nevo et al., 2019; Orellana et al., 2019; Zheng et al., 2016) by investigating reading motives in Greek kindergarten children and by examining the developmental trend of their reading motives from the beginning to the end of the school year,
- b. investigate gender differences in children's reading motivation during kindergarten attendance.

Methodology

Method and Sample

A short-term longitudinal study was conducted to investigate kindergarteners' reading motives at the beginning and the end of the school year. The sample of the present study consisted of 100 Greek kindergarten children ($N=100$) recruited with convenience sampling procedures from public schools located in different regions of Crete, Greece. Sample children were in the second year of kindergarten attendance. They came from families of middle socioeconomic status. Kindergarten children's age ranged from 5 to 6 years old. There were 44 boys and 56 girls. All sample children were native Greek speakers and, according to their teachers' estimates, none of them presented any language or cognitive deficits. Children's parents were informed about the aims of the present study and consented to their children's participation in it.

Research tool

To evaluate children's reading motives, the *Me and My Reading Profile* (MMRP) by Marinak et al. (2015) was used. This research tool was designed to evaluate kindergarten through second-grade students' reading motives and its field-testing took place in U.S. It consists of 20 multiple choice items which investigate different dimensions of children's reading motivation. In MMRP, 5 items (1, 3, 7, 11, 19) are clustered in the 'Self-concept as reader' scale. Self-concept as a reader refers to the degree to which students perceive themselves to be competent readers. Ten items (2, 4, 10, 12,

14, 15, 16, 17, 18, 20) are clustered in the 'Value of reading' scale which refers to the degree that children value reading as a procedure or as a goal and are willing to find opportunities to be engaged in it. The remaining 5 items (5, 6, 8, 9, 13) are clustered in the 'Literacy-out loud' scale, which represents the social aspect of literacy instruction and includes parameters such as reading out loud, talking about books and being read to. Children's responses are calculated on 3-point Likert scales. In some items the responses are ordered from the least to the most motivated (1-3) whereas in others the responses are reversed which means that the responses in the scale are ordered from the most motivated to the least motivated (scored 3-1)¹. The maximum score for the Self-concept and the Literacy Out Loud scale is 15 points whereas the maximum score for the Value of reading scale is 30 points. This process was necessary to enhance reliability in children's responses. To conduct the necessary statistical analysis in the present study children's responses were rerecorded having values 1 (least motivated) - 3 (most motivated) after the data collection. The items of MMRP have been translated into Greek by the researchers of the present study. Then, an inverse translation procedure was conducted to reach the final wording of the items. The Greek version of MMRP was used in the study of Orellana et al. (2019) to examine kindergarteners' and early primary students' reading motivation and subsequently it was used in the present study. It was considered significant to replicate its use only in Greek kindergarten children since the initial factorial structure described in the study of Marinak et al. (2015) and used in the subsequent studies of Nevo et al. (2019) and Orellana et al. (2019) was extracted in a sample comprised of kindergarten, first and second grade students. So, there might have been several factors which are related to the different age of children that might have contributed to the extracted results. Therefore, it was considered important to estimate the reliability and validity of MMRP only in kindergarten children. This process also seemed very useful taking into consideration directions of previous research in developing age-appropriate research tools to estimate young children's reading motivation (Mata, 2011; McTigue et al., 2019; Zheng et al., 2016).

Procedure

All sample children were assessed two months (by the end of October) after the beginning of the school year and in the last month of the school year (by June). MMRP was administered individually and orally to kindergarten children by trained researchers. The administration process took place in a quiet room in each school and lasted approximately 20 minutes. The researchers explained the procedure to the children and then read each item and the possible responses by indicating that there are no correct or wrong answers. The researchers could read each item more than once to make it comprehensible to children. Then, children's responses were recorded on the respective answer sheet.

Results

The factorial structure of Greek kindergarten children's reading motivation

The first step in the data analysis was to identify the factorial structure that underlies kindergarteners' reading motivation. The value of 0.846 of the Kaiser-Meyer-Olkin (KMO) Test in combination with the small value of the significance level (0.000) in the Bartlett's test of sphericity indicated that the data of the present study were suitable for structure detection. So, a principal component analysis (PCA) with varimax rotation was performed in the 20 items of MMRP. Through this procedure five components were extracted with eigenvalue ≥ 1 which accounted for 60.9 % of total variance. In Table 1 the MMRP items loadings in the five extracted components are presented.

Table 1 Factor loadings of the MMRP items in the five components of the exploratory principal component analysis (PCA) with varimax rotation

MMRP items	Factors				
	1	2	3	4	5
Pleasure from reading	3. What kind of reader are you?	0.699			
	16. Do you like reading in your free time?	0.694			
	14. How would you feel if someone gave you a book as a present?	0.672			
	11. How do you feel when you are reading?	0.638			
	12. Do you like spending your time reading?	0.584			
	15. How do you feel learning to read?	0.566			
Book and library reading activities	5. How do you feel when you read something to somebody else?		0.692		
	10. I think libraries are...		0.602		
	9. Do you like reading books to somebody else? *		0.602		
	18. Do you have favorite books?		0.601		
Value of reading	1. Do you like reading books?		0.803		
	20. I think learning to read well is...		0.614		
	4. My friends think that reading is...		0.568		
Self - concept as a reader	19. For me reading is...			0.784	
	7. For me learning to read is...			0.725	
	6. Do you tell your friends about the books you have read?			0.418	
Reading as a joint and social action	13. How do you feel when you are in a group of people who talk about books?				0.762
	2. Learning to read is....				0.565
	17. How do you feel when you are reading along with others?				0.467
	8. When someone reads aloud books to me. I think that is...				0.448
	Total scale: $\alpha=0.89$	$\alpha=0.84$	$\alpha=0.67$	$\alpha=0.61$	$\alpha=0.64$

* See the results for the confirmatory factor analysis below for further information

The first factor accounting for 16.26% of the total variance describes the pleasure derived from reading. The second one refers to children's feelings which are caused by their participation in book and library related activities and accounted for 13.10% of the total variance. The third factor refers to the value that is given to the act of reading by young children and accounted for 11.58 % of the total variance. The fourth factor has to do with the degree to which students perceive themselves as competent readers and more specifically the degree to which they find the act of reading difficult. This factor accounts for 11.10 % of the total variance. The last factor, which accounts for 8.92 % of the total variance, describes children's feelings and thoughts which are triggered by the degree to which they perceive reading as a joint action by a group of people. Cronbach's alpha reliability coefficient for the total scale was 0.89 and for the five newly formulated scales ranged from 0.61 to 0.84. In general, the factors consisting of a lower number of items (3 or 4 items per factor, see Table 1) may be expected to have a lower alpha coefficient, with Cronbach's alpha underestimating the true reliability (Eisinga et al., 2013). The magnitude of internal consistency for the prementioned scale is similar to existing reading motivation criteria for young children, which have fallen in the 0.60 to 0.85 range (e.g., Chapman & Tunmer, 1995; Mata, 2011; Valeski & Stipek, 2001; Zheng et al., 2016).

A confirmatory factor analysis then was conducted to confirm the factorial structure described above and empower the relative results. The confirmatory factor analysis run by Mplus on the 5 factors proposed that there would be a better fit if item 9 was removed to factor 4 (Self -concept as a reader) instead of factor 2 (Book and library reading activities). Since this change seems meaningful, the results were calculated after this proposed change. The proposed model had an acceptable fit; CFI equal to 0.925, TLI equal to 0.911, RMSEA was equal to 0.049 and SRMR equal to 0.069, all 4 indices reflecting a good model fit (Hu & Bentler 1999; Schumacker & Lomax, 2016).

Effect of time and gender on children's reading motivation

The basic goal of the present study was to investigate whether kindergarten children improved their reading motives throughout the school year and whether there were gender differences in children's reading motivation improvement. To address this goal in the first step of analysis, the mean scores at pretest and posttest were calculated for each reading motive factor (see Table 2 for Descriptives). In the next step, multivariate mixed ANOVA was performed with gender as a between-subject variable (boys and girls) and pretest-posttest (time of assessment) on each reading motive factor as a within-subject variable. Results showed that the time of assessment was significant, meaning that children improved their reading motives from pretest to posttest, Pillai's $F(5, 94) = 1.91, p < 0.001$. To examine children's improvement in each reading motive factor, separate paired samples *t*-tests were conducted. Results showed that there was a statistically significant improvement in the children's scores in the value of reading factor, $t(99) = -3,895, p < 0.001$, in the reading as a joint and social action factor, $t(99) = -2,998, p < 0.05$ and in the book and library reading activities factor, $t(99) = -2,158, p < 0.05$.

What was also significant was the interaction between gender and children's score improvement in the reading motives factors scores, Pillai's $F(5, 94) = 0,120, p < 0.05$ (see Table 2 for Descriptives). To examine time effect in reading motivation improvement for each reading motive factor, separate paired samples *t*-tests were conducted for boys and girls. Results showed that boys' scores in the pleasure from reading and the self - concept as a reader factor decreased, while their scores in the rest of the factors improved. None of the differences in boys' pretest and posttest scores was statistically significant. On the contrary, girls improved their scores from pretest to posttest in the all the reading motive factors. The

difference in their pretest and posttest scores was significant in the value of reading factor, $t(55) = -3,925, p < 0.001$, in the reading as a joint and social action factor, $t(55) = -3,965, p < 0.001$ and in the pleasure from reading factor, $t(55) = -2,430, p < 0.05$.

Table 2 Descriptives of children's reading motivation on the five extracted factors of the MMRP at the beginning and the end of the school years for the total sample and for boys and girls

MMRP factors	<i>M</i>	<i>SD</i>	Gender	<i>M</i>	<i>SD</i>
Pleasure from reading pretest score	2.66	0.45	boy	2.64	0.43
			girl	2.67	0.46
Pleasure from reading posttest score	2.68	0.37	boy	2.53	0.46
			girl	2.80	0.22
Book and library reading activities pretest score	2.47	0.46	boy	2.37	0.46
			girl	2.54	0.44
Book and library reading activities posttest score	2.57	0.38	boy	2.50	0.43
			girl	2.63	0.33
Value of reading pretest score	2.39	0.53	boy	2.32	0.54
			girl	2.45	0.52
Value of reading posttest score	2.62	0.42	boy	2.46	0.44
			girl	2.75	0.34
Self - concept as a reader pretest score	2.43	0.51	boy	2.41	0.53
			girl	2.44	0.50
Self - concept as a reader posttest score	2.48	0.47	boy	2.36	0.54
			girl	2.56	0.40
Reading as a joint and social action pretest score	2.48	0.46	boy	2.46	0.47
			girl	2.49	0.46
Reading as a joint and social action posttest score	2.64	0.36	boy	2.49	0.43
			girl	2.75	0.25

Discussion

The goal of the present study was to describe Greek kindergarteners' reading motivation and investigate its development throughout the school year, as well as to investigate gender differences in children's reading motivation during kindergarten attendance. The *Me and My Reading Profile* (MMRP) by Marinak et al. (2015) was used to address these goals. Its use only in Greek kindergarten children along with the directions of previous research in developing age-appropriate research tools to estimate young children's reading motivation (Mata, 2011; McTigue et al., 2019; Zheng et al., 2016) and the need to expand relevant research to non-U.S. settings (Conradi et al., 2014) led us to examine first

the factorial structure of MMRP. The results extracted from the relevant exploratory and confirmatory analysis revealed a five-dimensional structure in reading motivation of Greek kindergarteners providing an alternative view in the dimensions proposed by MMRP. These results were used in the subsequent statistical analysis that was conducted to address the basic goals of the present study.

Pleasure from reading was the first factor that was extracted from the analysis. A closer observation of this finding reveals that the items that were loaded in this factor express children's feelings regarding the pleasure they derive from their participation in reading activities. This factor shares four common items with the *value of reading* scale of MMRP, those which express feelings about participating in reading activities. So, in the present study this factor is more specified with regards to the pleasure children feel when engaged in reading, while in the study of Marinak et al. (2015,) these items are added in a wider factor, that of value of reading. Taking into consideration the different theoretical perspectives that have been used for interpreting reading motivation, we could support that this new extracted factor is related to the construct of intrinsic motivation. In intrinsic motivation deriving pleasure, satisfaction or enjoyment constitutes a basic dimension that could motivate children's participation in a reading activity (Conradi et al., 2014; Ryan & Deci, 2000). Furthermore, this new factor is consistent with the enjoyment in reading factor described in the study by Mata (2011).

In the present study *Book and library reading activities* was the second emerged dimension of children's reading motivation. The library component might have functioned as a key element which resulted in the formulation of this factor. Particularly, in almost all Greek kindergarten classrooms there is a library corner (Tafa, 2001) and in most of them a lending library (Carida & Thouliotis, 2013). Because of the libraries, kindergarten teachers encourage children to participate in joint reading activities regularly and, on weekly basis, to borrow books which they can share and read with their family members. Thus, this process, which in time becomes a habit, could have formulated this dimension in Greek children's reading motivation, since it seems that it enhances children's interaction with books and brings them pleasure when participating in anticipated book activities. In any case, teachers' practices constitute a parameter which can affect kindergarteners' interest in reading (Lerikkanen et al., 2012).

Value of reading was the next factor which was extracted from the data. In the present study the construct of the value of reading constitutes a more specific dimension with a relatively small conceptual range, since only three items were loaded on this scale as compared to the ten items that comprised this scale in the study by Marinak et al. (2015). It seems that in the present study the pleasure that children experience when reading (pleasure from reading factor) and the degree to which reading is perceived as an important process (value of reading factor) are conceptualized as two different but related dimensions: that of pleasure and value. These two constructs have roots in different theoretical models, such as the self-determination theory, in relation to value of reading dimension, and the expectancy-value model, in relation to the intrinsic motivation dimension, which have been used to interpret reading motivation.

Self-concept as reader was the next dimension which was defined in the context of Greek children's conceptualization of reading motivation. A closer examination of two items (7, 19) that were loaded in this factor revealed that what was asked of children was to estimate the difficulty of learning to read. It seems that in the present study, as compared to the study by Marinak et al. (2015), *self-concept as reader* has a different meaning to some degree since it includes aspects which are related to self-efficacy in reading. These results are in the line with the results of the study by McTigue et al. (2019) and Chapman and Tunmer (1995), which showed that children as young as kindergarteners can differentiate the basic

aspects of the self-concept as a reader dimension. The perception of difficulty in reading is one of the aspects of the self-concept as reader dimension and refers to the degree that someone believes that learning to read is hard or problematic. The remaining two items (6 and 9) reflect the relation between evaluating the difficulty of the act of reading and sharing reading activity with others. Under this point of view, on the one hand it is possible that when someone feels that their reading skill is more or less empowered, this in turn affects their desire or willingness to share their reading experience with others, such as reading a book to others or talking about the books they have read. On the other hand, peers or schoolmates play a significant role in the formulation of someone's motivation. That is because they can model positive reading attitudes among friends or classmates with their behaviour, concurrently affecting the degree that someone values reading or feels confident about it (Chiu, 2018).

Reading as joint and social action was the last factor extracted from the results describing young Greek children's reading motivation. This factor shares common elements (items 8 & 13) with the *reading out loud* factor in the study by Marinak et al. (2015) with regards to the role that reading books aloud has in the way that children perceive or feel about reading. It seems that the social aspect of literacy is common and has to do with the concept of interaction which is fundamental for literacy development in very young children.

As far as the development of Greek kindergarteners' reading motives throughout the school year is concerned, results showed that children had strong reading motives at the beginning of the school years, as this was described by their mean scores in all the extracted factors. However, results showed that children's scores demonstrated a statistically significant improvement in 3 of the 5 extracted factors, that of the value of reading factor, the reading as a joint and social action factor and the book and library reading activities factor. These results are in the line with the findings in the studies by Mata (2011), Orellana et al. (2019), and Nevo et al. (2019) which showed that children's reading motives are enhanced throughout the preschool years as a result of the positive literacy experiences they had in the school environment. Kindergarteners in Greece, according to the official curriculums, are encouraged to participate in emergent literacy activities the aim of which is not to teach them the conventional skills of reading and writing, but to help them realize literacy usefulness and its role as a communicational means. This is a possible reason which might explain children's non statistically significant improvement in the self-concept as a reader factor which is related with someone's competence in reading. Kindergarten children in Greece are encouraged to participate in cooperative activities in the context of inquiry-based learning (Penderi et al., 2021). During their inquiry they come in contact with different types of texts and books to answer the questions which guide their actions, thus understanding the value of reading. Furthermore, Greek kindergarteners are engaged frequently in storybook reading activities in which they hear their teachers reading aloud a variety of stories (Tafa et al., 2013). Moreover, according to relative data (Tafa, 2004), during the daily educational program Greek kindergarteners are encouraged to visit the classroom library either to pretend they are reading a book independently or pretend reading it to other classmates. These constitute practices which enhance children's reading motivation by providing them the opportunity to participate in cooperative processes which reveal the social aspect of literacy. All the above might constitute possible reasons which might explain to some degree their enhanced assessment of the value of reading, since they perceive it as a social and joint action which helps them accomplish several educational and entertainment goals. After all, practices which engage children in storybook reading and provide them access to an adequate number of age-appropriate books can stimulate children's interest in reading (Chou et al., 2016; Jean et al., 2018).

Also interesting were the data of the present study concerning gender differences in relation to reading motivation improvement throughout the school year. Specifically, results showed that girls in contrast to boys improved their scores in all the reading motivation factors and their improvement was statistically significant for the value of reading factor, the reading as a joint and social action factor and the pleasure from reading. These results are in the same line with the results in the cross-cultural study of Orellana et al. (2019), which showed that in Greece girls outperformed boys in kindergarten in the total score of MMRP which was used for estimating Greek students reading motivation. Additionally, the results of the present study are congruent with the results in the study of Mata (2011), which showed that there were gender differences with girls displaying greater motivation than boys especially in relation to the dimension of enjoyment of reading, and with results concerning primary school students showing that boys value reading less than girls (Marinak & Gambrell, 2010). It worth noting that in the present study girls compared to boys enhanced their motivation in value and pleasure dimensions which are related mainly in intrinsic motivation. But what are the possible reasons which might explain boys' and girls' differing response throughout the school year? One possible interpretation has its roots in gender stereotypes that are derived from the family and the educational environment. Teachers and parents of very young children tend to believe girls have a stronger interest in reading than boys (Baroody & Diamond, 2013). Such an attitude might in turn affect the content, the quantity and the quality of the literacy practices implemented either in the school or in the family environment affecting boys' and girls' participation in these differently (Chiu, 2018). Indeed, the features of teachers' practices affect the formulation of children's reading motivation. Specifically, as research data have shown, gender differences in reading motivation might be reduced by high quality teaching practices characterized by elements such as clarity, effective classroom management, focus on all students' language competencies (Hochweber & Vieluf, 2018). Furthermore, the way that teachers promote classroom interaction constitutes a factor that might influence students' reading motivation. The quality of their emotional and instructional support is related to children's motivation and willingness to participate in the learning activities taking place in kindergarten (Lerikkanen, 2018).

Conclusion, limitations, and future research

The results of the present study advocate the design of age-appropriate instrumentation to measure young children's reading motivation and estimate its development during preschool attendance. This conclusion was supported by the fact that the use of the five- dimensional structure of the MMRP, which was revealed and confirmed by the conducted exploratory and confirmatory factor analysis, was appropriate in describing children's reading motivation throughout the school year and in revealing significant gender differences in their reading motives. This new five-dimensional structure of the MMRP, as it was evaluated with only Greek children and in Greek preschool settings, highlights the multidimensional nature of reading motivation in relation to the several theoretical approaches, such as the self-determination theory and the expectancy-value theory, that can be used in describing it. After all, the combination of appropriate statistical methods, such as those used in the present study (exploratory and confirmatory factor analysis), and the relation of the outcomes to existing theories, constitute significant steps when a validated educational tool is used in a new educational setting (Schönrock-Adema et al., 2009).

The results of the present study concerning Greek kindergarteners' reading motivation development in relation to the value of reading, the reading as a joint and social

action and the book and library reading activities factors reflect the curriculum goals and the instructional practices that are set for Greek kindergarten as far as children's literacy development is concerned. Cooperative book reading constitutes a main reading practice for Greek kindergarten teachers, which gives children the opportunity to realize the value of reading, the usefulness of libraries and books and the social aspect of literature which concurrently affects the respective dimensions of their reading motivation.

In relation to gender differences, the results of the present study led to the conclusion that boys and girls might not benefit equally from the reading experiences that take place during their kindergarten attendance. Boys' reading motivation remained stable throughout the school year, while girls improved their reading motivation in most of its dimensions. This result highlights the need for teachers, policy makers and also parents to examine this issue deeply and proceed to actions which will help all children, regardless of their gender, to develop strong reading motives from the beginning of their school attendance, thus setting the basis for their academic and professional success.

Of course, there are significant limitations that should be taken into account when evaluating the findings of the present study. The relatively small sample means that the study should be replicated with a larger sample of kindergarten children attending schools located in different regions of Greece. This would add to the generalisation of the results, and it would be a necessary step for the standardisation of the MMRP in the Greek population. Moreover, the sample children in this study were asked to self-report on their reading motives orally. More developmentally suitable practices, such as the use of puppets, computer software or photographs (e.g., Mata, 2011; McTigue et al., 2019; Zheng et al., 2016) are needed to enable young children to reflect and describe their reading motives as accurately as possible. Finally, in future research, it would be useful to combine the administration of MMRP with reports concerning teachers' as well parents' literacy practices and with measures of kindergarten children's literacy skills. This procedure could add and enhance the validity of the proposed research tool for describing the aspects of Greek kindergarteners' reading motivation and for interpreting its alterations while young children attend to kindergarten.

In conclusion, considering the dimensional structure in young children's reading motivation, teachers as well parents could have a useful insight in the way that children perceive and feel about reading before formal literacy instruction begins in the school environment. The constructs mentioned above provide the context for parents and teachers to organize cooperative in- and out-of-school activities which relate to children's exposure to age-appropriate books and enhance their engagement in reading activities with the ultimate goal being to help children develop into confident and skilful readers.

Endnotes

- ¹ See for values attributed in each scale in Marinak, B. A., Malloy, J. B., Gambrell, L., & Mazzoni, S. A. (2015). Me and my reading profile. A tool for assessing early reading motivation. *The Reading Teacher*, 69(1), 51-62.

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