

SOCIAL KNOWLEDGE OF PRIMARY EDUCATION STUDENTS IN GREECE ABOUT FAMILY, RELIGION AND PHYSICAL AND MENTAL HEALTH

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Abstract: The present study focused on the social knowledge that students of primary education in Greece possess regarding family, religion, as well as physical and mental health. This social knowledge constitutes the basis of formation of social axioms which are basic premises about the self, the social and physical environment or the spiritual world and are used as guidelines for people's behavior in various situations. This social knowledge is a result of conscious or unconscious learning, implicit or explicit learning during students' life. The sample included 249 students from ten primary education schools in Achaia, Greece. Qualitative data was collected using semi-structured group interviews. Thematic analysis was applied. Findings are discussed within the frame of the explicit knowledge that primary education students obtain regarding the topics of the study as defined in the national curriculum and syllabus as well as school texts.

Key words: Explicit knowledge, Implicit learning, Social axioms, Social knowledge

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INTRODUCTION

Human survival and effective functioning in everyday social and physical environment are based on “behavioral tendencies” or “predispositions” and values (Rokeach, 1968). Within one’s belief system, which contains ideologies, faiths, values, opinions and attitudes, values are desirable, abstract goals that apply across a wide range of situations. Values serve as guiding principles in people’s lives for action, people’s justification, and event evaluation (Rokeach, 1973; Schwartz, 1992). Social axioms and their five dimensions Social Complexity, Religiosity, Social Cynicism, Fate Control and Reward for Application seem to be the “core *etics*” of general beliefs that are interpreted universally. They constitute some basic premises, regardless the degree of social consensus they require, on physical and social reality, the nature of self and the others, resembling Rokeach’s (1973) five classes of beliefs: The “primitive, pro-ideological beliefs that are socially shared” and “the primitive beliefs that are not socially shared” (Rokeach, 1968) could be thought as the “ancestors” of social axioms in the international literature of social psychology. Along with the other three, “authority beliefs” that refer to positive or negative authorities or reference persons or groups, the “derived beliefs” stemming from authoritative sources, and the “inconsequential beliefs” that refer to arbitrary matters of taste (1968, p. 6) they represent “the innermost core of belief system” (1968, p. 6).

The “axiomatic characteristic” of social axioms refers to being true to one’s personal experiences and not being a consequence of any procedures of scientific validation (Leung et al., 2002). Thus, the individual’s social axioms depend on one’s social knowledge. The universal factor structure of social axioms (Leung et al., 2002) has been verified with students in Greece while a sixth factor emerged comprising social cynicism, social axioms and reward for application social axioms (Gari, Panagiotopoulou, & Mylonas, 2009). Thus, an emic study of the social axioms in Greece has been carried out in which an attempt was made to identify the social axioms of Greek students in primary education for the first time. The question posed was whether the social axioms expressed by the students in focus groups discussing specific scenarios regarding work, socio-economic crisis, family, religion, mental health, interpersonal and inter-gender relationships were tied with the curriculum taught in primary education. Due to probably biased answers by the scenarios formed, a step back in research was taken in drawing the next qualitative research design aiming at identifying the students’ social axioms. Therefore, the present study focused on the social knowledge of the primary education students in Greece which hosts the participants’ set of social axioms by which they are guided through their lives. The students’ social knowledge data unbiased by any questions related to the knowledge

acquired within the school program underwent qualitative analysis to gain a primary picture of what 8 to 12 years old students know about the world and life. In this manner the extent to which this social knowledge is an outcome of explicit learning of what is taught at school could be underlined.

Social knowledge

The constructionist approach to culture views culture as a dynamic set of cognitions, specific knowledge, attitudes, and theories closely intertwined (Hong, Morris, Chiu, & Benet-Martinez, 2000). This network is internalized by individuals, who form schemas based on culture's social norms, values, attitudes, and expectations. These schemas are situation-bound and are called on when the appropriate environmental conditions elicit them to guide the person's thoughts, emotions, and behaviour.

Explaining the human behavior has been a longstanding research effort based on psychological constructs, including motivational constructs, such as values, and cognitive constructs, such as social axioms (Bond et al., 2004). Like Schwartz's (1992) work on values which resulted in ten value types that guide human actions and choices, Leung and Bond (2004) presented a five-factor model based on social axioms at the individual level of analysis, because the unit of analysis is the individual and the theoretical analysis is psychological and not societal. The dimensions on which people are compared are derived by analysing the data in ways that adduce individual-level constructs, making the comparison of people possible (Leung & Bond, 1989).

Social axioms

Social axioms are generalized beliefs about people, social groups, social institutions, the physical environment, or the spiritual world as well as about categories of events and phenomena in the social world (Leung, Bond, Carrasquel, Mu oz, Hern ndez, Murakami, Yamagushi, Bierbrauer, & Singelis, 2002; Leung & Bond, 2004). They are built on the individuals' life experience within their culture. Analysis of social axioms has identified five factors which are endorsed or not by individuals in every culture: (a) *Social cynicism*, represents a negative assessment of human nature, lack of trust in the social institutions, and rejection of legitimate means in achieving one's goals (e.g., "Kind-hearted people usually suffer losses"); (b) *Reward for application*, refers to the belief that investment of human resources, knowledge, and planning will lead to positive outcomes (e.g., "Hard working people will achieve more in the end"); (c) *Social complexity*, refers to the view that there are multiple solutions to a problem, the outcome of events is uncertain, and human inconsistency across situations is

acceptable (e.g., “One has to deal with matters according to the circumstances”); (d) *Fate control*, refers to the general belief that social events are influenced by impersonal, external forces (e.g., “Fate determines one’s successes and failures”); and (e) *Religiosity*, refers to the view that spiritual forces influence the human world and that religious institutions exert a positive effect on social outcomes (e.g., “Religious people are more likely to maintain moral standards”).

Social axioms are thought to guide behavior that addresses every day and stressful encounters that demand the attention of the individual. Social axioms constitute basic premises as to how the world functions and how particular entities are related, e.g., “good things happen to good people.” They also seem to augment attitudes’ predictive power for behavior, an output that has been recently demonstrated for political attitudes (Leung & Bond, 2004). Like attitudes (Katz, 1960) social axioms have the same functions: the instrumental function, the ego-defensive, the value-expressive and the cognitive organization of the world (Leung et al., 2002).

Explicit and implicit learning

Social axioms play an organizing role for the cognitive system of an individual and are related to a variety of social behaviors across cultures. They are general beliefs which are at a high level of abstraction and derive from social behaviors in various contexts, with various actors and targets as well as different periods of time. As such they could be thought as a result of personal experience and socialization and not of scientific validation. They could be regarded as a product of nonconscious learning. Implicit learning is a nonconscious process of learning which leads to the acquisition of general knowledge of the underlying structure of complex stimulus environment and specifically to a piece of knowledge that can be generalized to new stimuli without this knowledge being expressed easily (Reber, 1992). It is this specific process through which social knowledge might as well be acquired through life. Implicit memory is a passive process through which people acquire knowledge of new information that is presented to them. Explicit learning is an active process through which people seek out the structure of any information that is presented to them. Knowledge attainment can thus take place implicitly (a nonconscious and automatic abstraction of the structural nature of the material obtained from the experience of instances), or explicitly through selective learning (Ellis & O’Donnell, 2014). Conscious and selective learning is the dominant way of learning in the school environment which results in forming a major part of the students’ social knowledge.

Explicit and implicit learning are not mutually exclusive; most of the time they work together (Seger, 1994). Stimuli with complex unclear relationships may be more

involved in implicit learning. Also, implicit learning may account more for perceptual-motor learning or unstructured learning, whereas explicit learning may be used in verbal interactions with the world and in structured learning situations, such as formal schooling. Implicit and explicit learning could be depended on the context in which the knowledge is used, that is, formal environment encourages explicit learning (school) or informal one which encourages implicit learning (home). When justified conclusions need to be made implicit knowledge cannot be involved whereas in conditions of stress more resistant knowledge developed through explicit learning is salient (Masters, 1992).

Implicit learning may play an important role in the development of procedural knowledge of how complex real-world systems function (Senge & Serman, 1992). Also, it may be involved in cognitive development (Gelman, 1991) and in social information processing and decision making.

The present study

A first attempt to identify the social axioms of primary education students in Greece using the method of focus groups on specific scenarios was made by Καραγιάννη (2015). However, the findings seemed biased by the scenarios used (Παναγιωτοπούλου & Κουτσοκέρα, 2014). Thus, a step back in research was taken before planning the next qualitative research design aiming at the identification of the students' social axioms. The students' social knowledge as identified in the present research will determine the scenarios that will be formed for the next research step. Therefore, the present qualitative study examined the content of the social knowledge of primary education students in Greece on which their future social axioms will presumably rest upon. The students' social knowledge data unbiased by any questions related to the knowledge acquired within the school program in this early research stage will undergo qualitative analysis resulting in the first picture of what primary education students know about different aspects of life.

The findings to be reported concern family, religion and physical and mental health and are discussed within the frame of the primary education curriculum, the expected learning outcomes and the content of the school books. This "school teaching experience" is considered as explicit learning. The findings will constitute the pool data on which the following qualitative research for social axioms will depend on.

METHOD

Participants and procedure

Sample consisted of 249 primary education students from ten primary schools in the city of Patras and Aegion in Greece. Teachers were asked to indicate the same number of male and female students of each school performance level so that in each interview group gender and school grade would be equally represented. However, after a time and effort consuming procedure for the parents' permission and depending on teachers' assessment of male and female representatives at each level of school performance, the sample comprised 125 boys and 124 girls in total, 83 students of each school performance level and, 30.4% students from the 6th grade, 33.74% from the 5th grade, 18.08% from the 4th grade, and 17.66% from the 3rd grade (Table 1). The total number of group semi-structured interviews were 62 lasting 30'-45', with 3-5 students participating in each one. The number of students participating in the interviews was restricted by two reasons. First, a few pilot interviews were carried out to check the functionality of the research design. Difficulties regarding both the length of the interview and the students' concentration were evolved. Taken that the quality of the data was of major concern and that students would best not be absent from their class for two consequent teaching hours, the number of participants was cut down. Second, in classes of 20 to 22 students, the teacher had to discriminate with safety three student groups, preferably girls and boys equally represented at the same level of performance (low, medium and high). Also, for each focus group to be formed, teachers had to define the group in which each student should be appointed to according to their level of performance.

Table 1. Absolute and relative frequencies of participants by school performance, grade and sex

		Performance			
		Low	Medium	High	Total
6th grade	Boys	15 (6.02)	12 (4.82)	15 (6.02)	42 (16.86)
	Girls	11 (4.42)	13 (5.22)	10 (4.02)	34 (13.66)
5th grade	Boys	17 (6.83)	15 (6.02)	11 (4.42)	43 (17.27)
	Girls	11 (4.42)	13 (5.22)	17 (6.83)	41 (16.47)
4th grade	Boys	10 (4.02)	6 (2.41)	3 (1.21)	19 (7.64)
	Girls	5 (2.01)	9 (3.61)	12 (4.82)	26 (10.44)
3rd grade	Boys	7 (2.81)	6 (2.41)	7 (2.81)	20 (8.03)
	Girls	7 (2.81)	9 (3.61)	8 (3.21)	24 (9.63)
Total		83 (33.34)	83 (33.34)	83 (33.34)	249 (100)

Instrument

The method of group semi-structured interviews was applied. This method allows participants to give their own point of view (Cohen, Manion, & Morrison, 2011). At the same time, the topics to be discussed, even though pre-decided and predefined, may change according to the interviewer's judgment so that the spontaneous answers would be secured depending on the specific characteristics of the group of participants in hand (Robson, 2011). Group interview guarantees the collection of all the different views (Bauer & Gaskell, 2000) which is important in cases of examining complicated social procedures, behaviors and attitudes.

The topics selected for the interviews were identified in previous research on social axioms with adults and primary education students (Παναγιωτοπούλου, Καούρη, & Καραγιάννη, 2014; Καραγιάννη, 2015). The topics were: occupation, socio-economic status, interpersonal relationships, inter-gender relationships, physical and mental health, family, religion and free time.

Two questions were posed to the participants for each one of the topics. The first one asked participants to state the first thought, image or scene they would recall upon the topic discussed, that is, family. The second question asked participants to describe up to three features that they would attribute to their initial answer and that they would add to it in the event they had to draw a picture out of the image, thought or scene they had just proposed. This procedure was repeated for every topic. The order of the topics was the same in all the interviews. The interviewer would change the order in case not all students had equal participation to help those who had difficulty in expressing their thoughts.

Thematic analysis

After the completion of each interview the transcription took place. Some answers needed some reformation since they contained whole phrases from which the central meaning needed clarification. All the data were inserted in a single excel file. Thematic analysis (Boyatzis, 1998; Braun & Clarke, 2006) was applied separately for the images and for every topic. The same procedure was followed for the features. Every answer-image about family, for example, was coded. The codes were grouped according to their meaning and themes were identified. These thematic categories constitute the findings of the analysis for family. The same procedure was followed for religion and physical and mental health. Also, crosstabulation analysis was applied on the image data for family, religion and physical and mental health by school grade.

RESULTS

The thematic categories formed after analyzing the data gathered for the question about the images that the primary education students have regarding family were five: family activities, family members, emotions/expression within family, places, creating a family (see Table 2). The most frequently identified category was *Family Activities*, which consisted of three subcategories: *Entertainment/rest*, which included answers that indicate activities that make everyone happy such as “children playing games with parents”, “watching TV all together”, “family trip”; *Lunch*, which included answers that constitute sitting around the table over lunch, an important activity itself; *Doing things at home/studying*, which included answers like, “family helping the kids to do their homework”, “grandma cooks for everybody”.

The second more frequently identified category was *Family Members*, which included answers referring to specific members of the family as well as the extended family, namely, “parents”, “parents and children together”, “with grandparents and cousins”. The third category was *Emotions/emotional expression* that stressed the happiness among family members with answers like “a happy family”, “united and happy family”, “giving the baby a hug”, “not to take things to extremes, referring to parents”. The fourth category was *Places* where family gathers together and included answers such as “family around the fireplace”, “in the yard”, “block of flats with many families”. The last category was *Creating a Family* including answers that had to do with the vision of making a family, that is, “two people get married”, “a mom giving birth to a baby”.

Table 2. Absolute and relative frequencies of images and features for the categories of Family

Images		Features	
Family activities	100 (40.2)	Family members	123 (24.7)
Family members	62 (24.9)	Actions/behaviors	76 (15.3)
Emotions	57 (23.1)	Games/hobbies	69 (13.9)
Emotional expression			
Places	12 (4.8)	Objects	61 (12.3)
Creating a family	7 (3.0)	Environment	58 (11.7)
		Emotions	
		Emotional expression	53 (10.6)
Missing/uncoded	11 (4.0)		58 (11.5)
Total	249 (100)		498 (100)

Crosstabulation analysis was applied on the data divided in the five categories by grade as well as on the data divided in all the subcategories by grade. The goodness of fit did not meet the requirements for chi square due to the data derived from the third and fourth graders resulting in cells with < 5 cases. This exploratory research effort although aiming at building the broadest data base for the next qualitative research project can present the following regarding the crosstabulation analysis applied on the five categories data. The goodness of fit was better for the five categories, $\chi^2(21, 245) = 42.355, p < .05, \eta = .32, \phi = .416$. than the subcategories $\chi^2(12, 244) = 31.237, p < .05, \eta = .29, \phi = .358$. The category *Family Members* was supported by all grades in a similar manner. *Family activities* were reported by 5th and 6th graders by 42.1% and 35.5%, respectively, while 3rd and 4th graders by 12.1% and 10.3%, respectively. Specifically, *Family activities* referring to *working together* on a task was supported mainly by the 5th and 6th graders by 41.7% and 33.3% respectively while by 3rd and 4th graders by 16.7% and 8.3%, respectively. Answers about *Creating a Family* were mainly given by the third and fourth graders with 25% and 50% even though the absolute frequency was very low.

The thematic categories formed after the analysis of the data gathered for the question about the *features* that the primary students attribute to their images regarding family were six: Family Members, Actions/Behaviors, Games/Hobbies, Objects, Environment, Emotions/Emotional Expression (see Table 2). The most frequently identified category was *Family members*. It comprised the members of the extended family, like “children”, “grandparents”, “uncles and aunts”, “cousins”, “godfather”. The second frequently identified category was *Actions/Behaviors* that included two subcategories: answers about *What members may do*, such as “family eating”, “making the table”, “mom cooking”, “parents not fighting”, “parents not ending up calling the police”, or *What state the family members may find themselves in* such as “mom/dad relaxing in a chair”, “wounded child”, “father sleeping”. The third category was *Games/Hobbies* that included answers that referred to specific actions the family members may get involved in, such as, “children playing”, “going for walk”, “watching TV”, “playing games at the computer”. The fourth category was *Objects* and included answers referring to furniture at home like “table”, “bed”, “chairs” and smaller objects in the house like, “photos”, “fireplace”, “screen”. The fifth category was *Environment* and referred to either indoors environment, such as “house”, “living room”, “restaurant”; “cinema” was the first subcategory or outdoors environment like, “park”, “beach”, “wood”. Finally, the last category was *Emotion/Emotional Expression* stressing either the emotional state the family may be in, such as “love”, “happy children with cousins”, “love my family”, “fear”, “friendship”, or the emotional expression of family members, such as, “hugging”, “holding hands”, “fighting with each other, referring to parents”.

The thematic categories emerged after analyzing the students' answers about the images they recall when asked about religion were seven: Church, Practices, Concepts, Propositions and Values, Religions, Figures of Religion, Objects, Religious Events and Ceremonies (see Table 3). The most frequently identified category was *Church* which constitutes practically the only answer. The second frequently identified category was *Practices* that included answers about what happens when we go to church, such as "people praying", "going to church on Sundays", "priest chanting", "believers confessing". The third category was *Concepts, Propositions and Values* that included answers such as "believe in God", "what we should and not do", "not to curse or mock", "to worship", "God will help us". The fourth category was *Religions* and included mainly the answer "Christianity", and "every country with its own religion". The fifth category was *Figures of Religion* and referred to "Jesus", "God", "Holly Mary". The sixth category was *Objects* that are located in church, such as "icons", "Cross", and finally, the last category was *Religious Events and Ceremonies* that referred to "Birth of Jesus", "Last Supper", "The Baptism of Jesus", "Easter", "wedding".

Table 3. Absolute and relative frequencies of images and features for the categories of Religion

Images		Features	
Church	50 (20.3)	Church	124 (24.9)
Practices	43 (17.5)	Human roles in church	120 (24.1)
Concepts, propositions, values	36 (14.5)	Objects	107 (21.5)
Religions	29 (11.6)	Figures of religion	59 (11.9)
Figures of religion	27 (10.9)	Religious practices	35 (7.1)
Objects	20 (8.1)	Milestones of Jesus' life	15 (3.0)
Religious events, ceremonies	15 (6.1)		
Missing/uncoded	27 (11)		38 (7.5)
Total	247 (100)		498 (100)

Crosstabulation analysis was applied on the data divided in the seven categories by grade. The goodness of fit barely met the requirements for chi square due to the data derived from the third and fourth graders resulting in cells with < 5 cases. This exploratory research effort although aiming at building the broadest data base for the next qualitative research project can present regarding the crosstabulation analysis applied on the religion categories data that $\chi^2(18, 246) = 44.759, p < .001, \eta = .24, \phi = .427$. Therefore, it could be suggested that *Church* was the mainstream answer given mainly by the 5th graders with 51.7% pacing on a descending manner for the 6th, 4th and 3rd graders by 30%, 15% and 3.3%, respectively. *Practices* were supported in an ascending manner from the 3rd to the 6th graders by 15.1%, 17%, 26.4% and 41.5%, respectively. *Concepts, Propositions and Values* was supported

firstly by the 6th graders with 38.5%, then by the 3rd and 4th graders (25.6% and 23.1%, respectively) and lastly by the 5th graders with 12.8%. *Ceremonies* and *Objects* were supported in a similar manner.

The thematic categories emerged after analyzing the students' answers about the features they incorporated in the images they recall when asked about religion were six: Church, Human Roles in Church, Objects, Figures of Religion, Religious Practices, Milestones of Jesus' life (see Table 3). Basically, the categories are the same as the ones identified for the question that requested an image/scene except for the second frequently identified category which was *Human Roles in Church* that included answers about the roles people take during religious ceremonies in church, such as "priest", "believers", "groom".

The thematic categories of the analysis of the data gathered for the question about the images that the students have regarding *Physical and Mental Health* were nine: Way of living, Roles, Hobbies, Personal Condition, Emotional State, Abstract Concepts, Places, Psychological State, Objects (see Table 4). The most frequently identified category was *Way of Living*, which included answers that indicate how everyday life should be so that well-being and health of people is secured, such as, "person eating lots of fruit", "high quality nutrition", "no smoking", "a kid working out". The second frequently identified category was *Roles* that included answers referring to specific roles emerging during medical practice, such as, "doctor", "psychiatrist", "healthy person", mother or my mother", "patient", "psychologist", "person that does not think right". The third category was *Hobbies* and included activities that people take pleasure in and not the ones that promote health necessarily in everyday life such as, "running", "playing in front of the TV", "praying in church", "body and mind exercise". The fourth category was *Personal Condition* and included answers referring to specific situation that a person lived in like "sick person", "homeless", "children in wheel chair". The category labelled *Emotional State* referred to emotions that a person would show, such as "happy person", "happy with a dog", "sad". The next category was *Abstract Concepts* and included answers as "health", "body and soul", "a person's character". The category *Places* refers to where the individual can be taken care of while in need, such as «nursing home", "hospital", "doctor's office", "mental hospital", "places of social contact of poor and old people". The eighth category was *Psychological State* and included answers about the individual's emotional stability per se, such as "psychological problems", "not being hurt easily". The last category was *Objects* containing answers that had to do with what we use to maintain our health, i.e., "medicine", "medical equipment".

Table 4. Absolute and relative frequencies of images and features for the categories of Physical and Mental Health

Images		Features	
Way of living	69 (27.9)	Roles	89 (17.9)
Roles	42 (16.7)	Way of living	74 (14.9)
Hobbies	29 (11.7)	Objects	51 (10.2)
Personal condition	21 (8.4)	Places	51 (10.2)
Emotional State	20 (8.0)	Hobbies	43 (8.6)
Abstract concepts	15 (6.0)	Emotional State	41 (8.2)
Places	12 (5.0)	Personal condition	31 (6.2)
Psychological State	8 (3.2)	Nutrition items	28 (5.6)
Objects	7 (3.0)	Human body	13 (2.6)
		Psychological State	10 (2.0)
Missing/uncoded	26 (10.1)		67 (13.4)
Total	249 (100)		498 (100)

Crosstabulation analysis was applied on the data divided in the nine categories by grade. The goodness of fit did not meet the requirements for chi square due to the data derived from the third and fourth graders resulting in cells with < 5 cases. This exploratory research effort although aiming at building the broadest data base for the next qualitative research project can present regarding the crosstabulation analysis applied on the nine categories data that $\chi^2(24, 238) = 70.554, p < .001, \eta = .41, \phi = .544$. One remark is that *Way of Living* and *Personal Condition* was supported by the students of the 3rd through the 6th grade in a reverse manner. For the first category, the percentages were descending from the lower grade with 36.1% falling to 18% for the 6th grade while for *Personal Condition* stands the opposite, 14% up to 38%. *Concepts, Propositions and Values* was supported first by the 6th graders with 38.5%, then by the 3rd and 4th graders (25.6% and 23.1%) and last by the 5th graders with 12.8%. *Emotional State* was supported only by the 5th graders with 3.8% and 6th graders with 20.3%. *Psychological State* seems to be stated more by the higher grades, that is, 42.1% by the 5th graders, falling to 5.3% in the 3th graders.

The thematic categories for the question about the features that the students attribute to their images regarding physical and mental health were ten: Roles, Way of Living, Objects, Places, Hobbies, Emotional State, Personal Condition, Nutrition items, Human Body, Psychological State (see Table 4). The most frequently identified category was *Roles* and included answers referring to persons not necessarily close to the students such as “child”, “psychiatrist”, “person with heart problems”, “old people friends with each other”, “mother”, “sister” “nurse”. The second frequently identified category was *Way of Living* that included answers of everyday habits such as “not to eat deserts”, “to eat healthy”. The third category was *Objects* and included answers related to illness such as “bed”, “blanket”, “stethoscope”, “vaccines”, “exercise instruments”, “wheel

chair”, and “thermometer”. The fourth category was *Places* and included answers like “hospital”, “park”, “play room”, “tennis court”, “gym”, “home”. The categories labelled *Hobbies*, *Emotional State*, *Personal Condition* resemble to the ones identified and described for the first question that requested an image/scene. The eighth category was *Nutrition Items* and referred to healthy food such as “fruit”, “vegetables” and “oranges”. The ninth category was *Human Body* that contained answers like “lungs”, “heart”, “blood” and, finally, the last category *Psychological Situation/Status* included answers like “IQ”, “bad psychological state”, “happiness”, “loose temper”.

Primary Education Curriculum

The research regarding the expected learning outcomes that the primary education curriculum sets for family, religion, and physical and mental health as presented in the school books for students and teachers as well as the volume of general educational goals of primary education teachers resulted in the following. Regarding family, apart from the Language course which presents family activities and the communication among family members, curriculum sets some core issues regarding family as the expected learning outcomes which the teacher is encouraged to achieve through and across all courses and activities in first two years of school life namely the role of family members, the importance of family for children’s development, love, compassion and cooperative thinking as factors for calm and smooth family life, circle of life. From the third grade and on in various courses other family topics are presented such as meaning of family tree (Study of the Environment), equality of gender rights within family, kinship relations, parents-children relations (Language), and importance of family in society (Civics and Social Studies) (See Table 5).

Table 5. Curriculum regarding Family

Grade	Expected learning outcomes
1st	Language, Student Book, Vol. B, page: 20/32 (mention family activities, communication among family members); Study of the Environment, Curriculum, page: 250 (family member roles, importance of the family for the individual’s development, love/understanding in a calm family environment, living conditions and ecological environment)
2nd	Curriculum, page: 308 (parenting roles for the child’s development, life circle and time passing by); Study of the Environment, Student Book, page: 131 (family in the audience for the school celebration)
3rd	Language, Student Book, Vol. B, page: 47 (family tree); Study of the environment, SB, page: 97 (equal rights for both genders within family)
4th	Language, Student Book, Vol. B, page: 15-16 (text: envy among siblings)
5th	Civics and Social Studies, page: 233 (general objective: assess the importance of the family)
6th	Language, Student Book, Vol. B, page: 84-98 (chapter 11, Kinship relations, relations between parents and children)

Religion is introduced to students from the second grade on in the Study of the Environment discussing about the local church and the religious activities experienced by the children in holly places, and from the third grade and on religion is discussed in its own lesson time. God as our Creator and Savior, Holy Mary, Holy Ghost, faith in God, the life of Jesus and its meaning and importance to humanity, the religious mysteries and celebrations, the deeper meaning and goal of a Christian's life and religious life in general, the content of Christian values and the meaning of the religious mysteries, the acknowledgment of the existence of other religions are some of the learning outcomes for religion in primary education (see Table 6).

Table 6. Curriculum regarding Religion

Grade	Expected learning outcomes
2nd	Study of the Environment: (religious consciousness): Study of the Environment, page: 32 (study of the church in children's neighborhood, description of the religious ceremonies based on students' experience, getting to know a mosque, a catholic church and a Hebrew synagogue)
3rd	Lesson of Religion, page: 136-137 (learning outcome: God is our creator and he loves his creation, blesses and honors man; Holy Mary; the meaning of the Birth of Jesus and for humans and family, importance of the religious mysteries, discriminate right from wrong and identification with Suffering of Jesus, and Resurrection); Language, Student Book, Vol. B, page: 74 (text about Christmas); Student Book, Vol. B, page: 8 (text about Annunciation); Student Book, Vol. C, page: 64 (text about Easter and customs and traditions)
4th	Lesson of Religion, page: 137-138 (the meaning of the navigation of the true Christian in life, the Prophets' and Saints' lives, The Word of God, Holy Ghost, the first Cristian communities, the temple, the history of Christianity, Religious Practice, celebration milestones, mission); Study of the Environment., Curriculum, page: 310 (civilization and culture of Greece and other countries, meaning of religious life); Language, SB, Vol. C, page: 64-72 (chapter 15 about Resurrection)
5th	Language, SB, Vol. C, page: 23-32 (Christmas); SB, Vol. B, page 27-34 (chapter 14 about Easter)

The issue of physical and mental health is presented and discussed in four lessons through primary education, School Sports, Study of the Environment, Language and Study of the Art. The expected learning outcome from the School Sports focuses on enhancing the need for physical activities, work out and training in some sports. Study of the Environment mainly aims at building students' knowledge about obtaining healthy nutrition habits, food pyramid and retaining good health through exercise as well. Language and Study of the Art deliver the message of the inextricable link between good physical health with sharpness of mind, positive thoughts and emotion and clear judgment (see Table 7).

Table 7. Curriculum regarding Physical and Mental Health

Grade	Expected learning outcomes
1st	School sports page: 559 (help students satisfy their need to be on the move); Study of the environment., page: 306 (to obtain attitudes that contribute to maintaining good health); Study of the Art, page: 97 (express emotions through pieces of art)
2nd	Study of the environment., page: 308 (emphasis on the importance of work out and its contribution to physical well-being and mental health); Language, Vol. B, page:75-76 (learn to talk about own feelings)
3rd	School sports (training to improve speed running, physical flexibility and agility as well as to realize the human need to be on the move and to spend time working out); Language, page: 40-43 (study of the food pyramid, attaining healthy nutrition habits); Study of the Environment, page: 62 (study of the food pyramid); Study of the Art, page: 97 (express emotions through pieces of art)
4th	Study of the Environment, page: 54-55 (emphasis on the importance of work out and its benefits for our lives); Study of the Environment, page: 108-112 (healthy eating habits and food pyramid); Study of the Art, page: 97 (express emotions through pieces of art)
5th	Language, page: 58-74, chapter 16 (sports and their benefits for the person's life); School Sports, page: 561 (obtaining basic knowledge of nutrition and hygiene)
6th	School Sports, same as 5th grade (obtaining basic knowledge of nutrition and hygiene)

DISCUSSION

Primary students seem to have solid and grounded knowledge about family, religion and social and mental health. It seems that part of students' social knowledge as revealed in their answers regarding family, religion and physical and mental health could be considered as product of students' explicit learning in school as directed by the content of the school books and the educational goals set by the Ministry of Education, Research and Religious Affairs in Greece for the three domains of research in the present study.

Specifically, the importance of the family, the bonds between the family members and family activities are all presented from the first grade already and are cultivated through the sixth. Quite differently from religion and physical and mental health, family topics are included in the General Curriculum for the first and second grade. Thus, family activities, family members communication, the role of family members, the importance of family for children's development, love, compassion and cooperative thinking as factors for calm and smooth family life, circle of life should be promoted in every lesson, school activity and chance teachers get in school life during the first two school years. It seems that these general educational goals across lessons and activities survived from the previous primary education curriculum and school books. A probe of the latter mentioned material showed that the above family

topics were presented in about one third of school books pages of Language lesson, Study of the Environment, and Literature Anthology. This main educational goal seems to appear in the answers of primary education students regarding the images coming to their minds when they think about family.

Also, the general meaning that children attribute to family, namely, the joined family activities that offer members pleasure and happiness, the family members as persons and the experience and expression of emotions within the family, mainly positive emotions fall in the school curriculum. All these concepts are introduced in the first school years. The results show a compact, clear and comprehensive piece of knowledge about the importance of family members and the strong bonds among its members (Γιώτσα, 2007), the love, good communication and happiness that guarantee the calmness and quality family life and the fact that parents are crucial for the development of children. This is the main expected learning outcome of the curriculum. Findings not related to the curriculum is the goal of making a family including the concept of wedding and giving birth to a baby, the specific games the children play when all the family members, the objects that are directly related with these activities and the places they spend time together as well as the negative aspect of emotion expression and conflict between parents (Vairami & Vorria, 2007).

The total number of references about religion in the primary education curriculum and school books was the largest of all the topics. However, the categories described in the findings as far as the question about the recalled images on religion focused almost exclusively on everything that is related to church. This topic is introduced from the second grade. What falls in what is scheduled to be taught at primary education schools are: superficial concepts about religion, faith in God, the acknowledgment of the existence of other religions, as well as the figures of Jesus, Holy Mary and Holy Ghost, and the religious events and celebrations. A lot of what is taught during the lesson of religion, and especially the deeper religious messages, meaning and goal of a Christian's life and religious life in general, the content of Christian values and the meaning of the religious mysteries do not seem to be recalled by the students when asked about religion. Moreover, some answers about specific practices in church, about roles that anyone may take in various ceremonies, habits regarding going to church do not seem to come from either the content of the respective lesson or the expected learning outcomes of the Curriculum. It seems that what students think about religion is somewhat superficial deriving from spheres other than the school curriculum. As noted by Χατζηιωάννου (2005) previous researches have indicated that what students recall about religion depends on how often students are engaged in religious practices with their families and on their parents' attitudes towards religion.

The findings regarding physical and mental health indicate a multidimensional piece of knowledge that the primary education students have, namely, everyday life, habits and emotional expression. The content of the school books and the educational goals as set by the Ministry of Education, Research and Religious Affairs in Greece, feed the primary education students in Greece with information on the right nutritional habits, the food pyramid, and the inextricable link between good physical health with sharpness of mind, positive thoughts and emotion and clear judgment already by the third grade. This is depicted in students' answers which mainly rest on the healthy way of eating and their good physical health and mind balance. Exercise for body and mind are interrelated in their minds. Bearing in mind the content of the school books as well as the educational goals teachers are reaching out for, based on the curriculum, it seems that the students' answers referring to a healthy diet, high quality nutrition, and exercise are the result of the explicit learning taking place at school. Also, emotional expression is also elaborated with the students as a teaching goal for the course of Language. Categories not falling within the school curriculum can be traced to professionals coming from the field of the health profession such as doctors, psychiatrists, nurses, psychologists and places where people could receive medical treatment, i.e., hospital, doctor's office or psychological support, i.e., nursing homes and places where people can communicate and talk, especially old people. As mentioned by Καρασιμοπούλου (2010) and Θεοδωράκης και Χασάνδρα (2006), the bigger the emphasis on health promotion programs at school the stronger the attitudes students hold toward relating physical with mental health. There was no indication of the role of self-determination to the students' views regarding eating healthy and exercising in relation to their peace of mind (Leptokaridou, Vlachopoulos, & Papaioannou, 2015). However, answers concerning diseases, places for medical care and places where people especially the elderly spend time and, finally, answers about personal hobbies may not count as expected outcomes after achieving the courses' objectives. They very well might be the outcome of experiences from environments outside school.

Limitations and future directions

The responses came from primary education students attending the last four grades from the broader area of the Greek cities of Patras and Aegion. Even though the curriculum is the same for all schools, the convenience sampling method, not having sample from Athens hosting the country's population, limits the representativeness of the findings. This sample could imply some conservative direction of knowledge and thinking. Also, the method of posing questions to students

of the age eight to twelve within the school environment may trigger answers that are more related with the conscious knowledge acquired in the class and not spontaneous answers that could be collected in another environment. On the other hand, for this same reason the answers not related with the curriculum already gathered offer solid ground to assume the influence of experiences not related with the school environment.

Having outlined the social knowledge of the primary education students regarding family, religion and physical and mental health, the further examination of how students view and behave as far as these fields of life are concerned and to what extent this cognitive system is constructed at school may be achieved at the next research design. Future focus groups scenarios based on social knowledge available to students could lead to the identification of social axioms formed as a result of the formal environment of school or other less formal social environments. Therefore, a quantitative research of how children think about their world and lives in it will be possible. Also, it may become clearer the extent to which primary education curriculum contributes to these personal theories of the world that individuals have.

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