

‘What Will I Be When I Grow up?’
Children’s Preferred Future Occupations and
Their Stereotypical Views

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Abstract

This study explores the occupational preferences of 150 kindergarten and elementary school children living in urban, semi-urban and rural areas in Greece and the stereotypes that emerge from the choices they made when they were asked to make a drawing of ‘what they would like to be when they grow up’ and then to justify that choice. The statistical analysis of the data confirmed the findings made in previous studies: The analysis of variance showed that (a) the stereotypical representation of gender is more frequent among girls, (b) gender affects the choice of gender-typed occupations, as indicated by the boys’ more frequent choice of

‘traditionally masculine occupations’, (c) the educational background of the father affects children’s stereotyped choices, and (d) media and family influence is more frequent among younger children. Finally, the children’s justifications showed that, for the majority of the sample, their choice of occupation expresses a specific feeling, for a smaller percentage this choice expresses a certain playfulness, while for only a few does their choice express the desire for further knowledge and profit.

Keywords: occupational choice, occupational aspirations, gender roles, stereotypes, childhood, justification of choice, semantic analysis

1. Introduction

One’s occupation is for the majority of the population the most reliable indicator of wage levels, social status and life chances in modern societies (Blau & Duncan, 1967, p. 6; Mehan 2012; Herd & Holden, 2013). However, the process of choosing an occupation is seen from different angles. Sociologist Ginzberg (1951, p. 75; Rohlfing et al., 2012, pp. 330-337) argues that a person does not reach their ultimate decision in a single moment of time, but through a series of decisions made over a period of many years (Hardin et al., 2001, pp. 36-52; Stoltz et al., 2013, pp. 2-14). She divides this process into three stages: the period of fantasy choice, the period of tentative choice and the period of realistic choice. Gorz (1999, p. 143) argues that in a relatively degenerate world there is no room for choice (see also McDonald & Bubna-Litic, 2012, pp. 853-864). Researchers argue that the occupation one ends up with depends on circumstances and coincidences, which in their turn inform, to some extent, the level of preferences and choices (Sewell & Shah, 1968; Haystead, 1974; Ashby & Schoon, 2012, pp. 1694-170; Bentolila et al., 2010, pp. 20-45; Eeckhout & Joyanovic, 2012, pp. 657-683). The cultural atmosphere in which a young person socializes, orients him/her towards future career choices and aspirations that are in line with the value system that the young person shares with the other members of his/her social group (Roberts, 1973; Willis, 1977; Lawson & Lawson, 2013; Ashby & Schoon, 2012).

In this study we not only focus on children’s career preferences, but also on the stereotypes that emerge from their drawings.

The career choices of children are limited by their experiences so far and although they can’t be realistic, they give us clues as to how they perceive the structures of society and, more specifically, how they learn about work within the community they live. But how are their job preferences shaped and what factors influence these preferences?

According to the literature, a major factor in the shaping of the child’s preferences is gender. According to Bourdieu (1977), children build sexual identity, the key component of their social identity, at the same time that they develop an understanding of the division of labour between men and women, with pointers from the same set of socially defined and inseparable biological and social indicators (Richards, 2012). For Musgrave (1967), a child gradually realizes what possible roles are available to them and adopts a self-perception of their abilities that reduces the alternative roles from which they will have to choose (Barton, 2012). Psychologists Coleman (1987, p. 21) and Noonan (1983, p. 20) note that during childhood a

person's roles are prescribed by others, but as they mature during adolescence, they have the opportunity not only to choose the role they wish to play, but also to choose how they interpret these roles, taking into account skills, preferences and needs.

Numerous surveys show the influence of gender on children's choices when it comes to gender-stereotyped occupations (Cordua et al., 1979; Stockard & McGee, 1990). Occupations are classified by gender from as early as the age of two and a half (Cann & Haight, 1983; Tremaine et al., 1982; O'Keefe & Hyde, 1983; Rommes et al., 2007; Kessels, 2005; Gulz et al., 2007). As demonstrated by Kohlberg (1977), a child will have reached the first stage of gender conceptualization by the age of two (Turner, 1998). According to the social learning theory (Bandura, 1977), a child's behaviour is shaped by the behaviour of others, particularly its parents. Children observe the behaviours of men and women and which are considered to be acceptable, and then emulate them. In research conducted on the career choices of elementary school children, this time using interviews and role play, unlike previous studies, the children interviewed chose various occupations that are less defined by gender. Nonetheless, there was a clear dichotomy between job characteristics and gender roles (Francis, 1996; Miller & Budd, 1999).

The role that family relationships have played in the division of labour by gender (Arnot, 2006; Tegegn et al., 2012; Lim, 2012; Wendy et al., 2012), indicates that the traditional 'maternal' occupations affect the expected interests of boys and girls (Barak, 1991; Di Donato & Strough, 2013; Whitmarsh & Wentworth, 2013), while the sex of the child is a key factor affecting the parents' expectations for the future (Sandberg et al., 1987; McHale et al., 1999; Deligianni-Kouimtzi, 2003).

Gender inequalities are even promoted by the stereotypes found in today's book, (Eco, 1979; Nöth, 2013; Berns & Berns, 2013) namely television. Foucault (1977, p. 12) argues that the media's ideological function lies in its creation of stereotypes for certain social groups, while Fiske and Hartley (1992, p. 24) note that 'television does not represent the manifest actuality of our society, but rather reflects, symbolically, the structure of values and relationships beneath the surface'. Studies have shown how children identify with the occupations of television heroes (O'Bryant et al., 1978; Hoffner et al., 2006), especially with the hero's gender and the prestige of the particular occupation (Wright, 1995; Bignell, 2012; Rimkute et al., 2013; Scharrer, 2013; Signorielli, 2013).

School also plays an important role in shaping gender stereotypes. According to Bernstein (1977), teachers are responsible for the reproduction of messages and ideologies, while research shows that they treat children differently on the basis of their gender (Walkerline, 1994; Deligianni-Kouimtzi, 2000; Lim, 2012).

Another important factor that influences children's career preferences is their parents' socio-economic status (Coleman, 1966; Dumas & Lambert, 2005; Lefebvre & Merrigan, 2008) and educational background (Blau & Duncan, 1967; Wilson, 1992; Feinstein, 2000; Ermisch & Francesconi, 2002; Bratti, 2002; Ochs, 2008).

Moreover, social status seems to play a role in the children's choice of career. Surveys verify

the theory proposed by Gottfredson (1996), who examined how children's career preferences evolve and found that children aged between nine and thirteen years have become aware of social status and tend to view less prestigious occupations negatively (Henderson et al., 1988; Trice et al., 1995; Teig & Susskind, 2008). Another study found that children are aware of the different responsibilities between men and women and the differences in wages in occupations defined by gender (Levy et al., 2000). Finally, a study conducted on children's perceptions of the social prestige of occupations found that older children gave a higher social ranking to stories that had to do with occupations held by men compared to those held by women (Liben et al., 2001).

2. Methodology

The main tool in this study is the children's drawings. Our aim was to make critical use of their pictures in order to reveal the stereotypes chosen and also to obtain a verbal justification of their choices. Drawing is recognized as one of the major means of expression that children have at their disposal and has been repeatedly associated with the communication of their personality and emotions; it is a message, a sample of spontaneous speech and free expression (Fineberg, 1998, p. 55; Jolley & Zhang, 2012).

Therefore, this study describes the artistic creations of the children along with their accompanying texts and relies on visual social semiotics (Jewitt & Oyama, 2001). The objective of social semiotics is the study of the anthropological dimension of semiotics, where every cultural phenomenon can be studied as a phenomenon of meaning, and thus also of communication (Eco, 1976).

Kress (2010) proposes a rhetorical approach, which relates the linguistic message with the pictorial, and calls it a multisemiotic or multimodal text; that is, a set of semiotic systems (Pun, 2008; Hiippala, 2012).

The multimodal analysis consists of two stages: 'mode and meaning' and the 'orchestration of modes' (Jewitt & Kress, 2003). We analyze each mode in isolation by exploring the way it operates and how all the modes interact with each other to make meaning. The image/text relations are analyzed by applying Eckkrammer's (2004) four dimensions of inter-semiotic layering-transposition, juxtaposition, combination and fusion. The interaction between the semiotic modes is explored by looking at how the ambiguities created are recognized and interpreted, and how the social changes have affected the way the representational world is presented (Snyder, 2001).

In this way, a semiotic analysis of children's drawings is attempted, where the drawing and interviews are analyzed as a multimodal text to see whether and to what extent the narrative element of pictorial writing recreates elements of the culture of adults. Naturally, a series of questions emerge regarding the reproduction of visual concepts. However, as Cogo reports (2012, p. 7), each story has a narrative momentum, which is based not only on structure but also on the understanding of relationships. The composition of relationships is based on a pre-understanding of the world of action. This means that if the story is an imitation of the action, there cannot be an advance skill; in other words, one cannot represent or discover

something new without advance information. Thus, for children to create pictures, they must first have an understanding of relationships on a 'practical' level before any transformation (e.g. into artwork) can take place.

This study is based on a mixed model of analysis, on the grammar of visual design (Kress & Van Leeuwen, 2010; Van Leeuwen, 2005) through a critical analysis (Chouliaraki & Fairclough, 1999). An analysis of children's drawings within a socio-semiotic framework was attempted (of particular relevance is Rose's (2007, p. 12) argument that 'visual representations have their own effects'), as was a descriptive statistical analysis of the data and a content analysis of the children's justifications.

All three semiotic fields are identified in the drawings gathered: the structural, the semantic and the pragmatic (Morris, 1938, p. 6; Leeds-Hurwitz, 2012). Structural analysis gives information about shapes, colours and combinations, whereas semantic analysis looks at the meaning of the signs. In the pragmatic field, the children seem to have an opinion about which occupation to choose and why.

3. Sample

The representational drawing topic was 'What I want to be when I grow up', and was selected in order to investigate children's career preferences and the stereotypes projected through these preferences. The sample is comprised of the drawings of 150 kindergarten and third- and fourth-year elementary schoolchildren, 52% of which are boys (seventy-eight) and 48% are girls (seventy-two). More specifically, the sample consists of twenty-nine third-grade children (19.3%), twenty-six fourth-grade children (17.3%), twenty first-year kindergarteners (13.3%) and seventy-five second-year kindergarteners (50%). The sample was taken from Florina [seventy-one children (47.3%)], Thessaloniki [thirty children (20%)] and rural areas in Crete (forty-nine children (32.6%)). The drawings were collected in March 2011. According to Luquet (1913), children's drawings in kindergarten belong to the second evolutionary stage, that of failed realism [ninety-five drawings (63.3%)], while third- and fourth-grade children's drawings belong to the third evolutionary stage, namely the stage of intellectual realism [fifty-five drawings (36.7%)]. We selected kindergarten and elementary schoolchildren in order to compare the two evolutionary stages of their drawings.

4. Syntactic Analysis

The results of the statistical analysis focused on correlating the variables of the syntactic analysis with the evolutionary stage of the children's drawing in relation to their age. In children's drawings, the anthropocentric model prevails (137 times), while imperfection in the shapes drawn depends on preschool drawing capability. Children paint figures of the same sex as theirs, and this preference was interpreted as a consequence of identifying with their gender, which is the result of the child's cognitive development (Cole & Cole, 2001). This identification can be seen in the relationship between the clarity of the figures and the child's gender, which was statistically significant ($\chi^2=25.238$, $df=2$, $p=0.000$). The boys were notable to clearly portray the figures at a higher rate (forty-four times) than the girls (fourteen times), who did not neglect to portray the feminine characteristics of their gender.

In the majority of the sample (113 times) the figures were not complete and there was no harmony in the images depicted (106 times). As the majority of the sample consists of kindergarten children, this verifies the evolutionary stage at which they find themselves, namely the stage of failed realism, in which the child tries to reproduce an adult drawing and experiments with this, of course without succeeding (Luquet, 1913). The relationship between the evolutionary stage and complete and harmonious figures is statistically significant ($\chi^2=17.840$, $df=2$, $p=0.000$), ($\chi^2=35.302$, $df=2$, $p=0.000$), since children belonging to the third evolutionary stage create more complete and more symmetric figures than children in the second evolutionary stage. Moreover, it is found that children focus on faces, depicting them larger than the rest of the body, which shows the importance that children place on the face. It usually being the most expressive (Belas, 2000).

In the sample, most figures are static. There is movement in very few (nineteen times), mainly in the older children's drawings, giving rise to a statistically significant relationship ($\chi^2=7.679$, $df=2$, $p=0.022$). The direction of the figures in the sample is identified in 'visual grammar' (Kress & Van Leeuwen, 2010) as a demand for recognition by the viewer when the figure is in a frontal position (127 times) or as an offer to the viewer when the figure is in profile (eight times). Finally, there were three drawings whose figures were shown from the back, which, according to Kress (2010), is an indication of confused feelings. These figures were portrayed from a high angle, which indicates that the illustrator and viewer have power over the figures depicted. The relationship between the figures' direction and the children's evolutionary stage is statistically significant ($\chi^2=10.215$, $df=4$, $p=0.037$), since the more advanced the evolutionary stage, the more frequently are the figures drawn in positions other than the frontal position.

In the majority of the drawings the subject was depicted in medium size (ninety-two times), in some it covered a very small part of the page (thirty-four times) and in others the subject took up the entire or almost the entire page (twenty-four times). Based on 'visual grammar', the subject's position in the drawing is important. It was more frequently (102 times) depicted in the centre of the drawing, which emphasizes the core information, that is, the occupation; in some drawings, it appeared on the left-hand side (twenty-three times) of the drawing focusing on the 'given or fixed' knowledge, and in others it was placed on the right-hand side (ten times) of the drawing, emphasizing the 'new' information.

Scenario was noticed in forty drawings, which is statistically significant with regard to the children's evolutionary stage in drawing ($\chi^2=18.856$, $df=1$, $p=0.000$) and their grade ($\chi^2=19.178$, $df=3$, $p=0.000$): the more advanced the children's stage, the more frequent the occurrence of scenario. The figures seem to represent the children's chosen careers in the appropriate work environments: football players kicking the ball, a painter holding an easel and painting, teachers teaching arithmetic and spelling, the police in action surrounding thieves, a trainer giving instructions, doctors, vets and dentists examining, hairdressers cutting hair and farmers tilling the fields.

Moreover, verbal signifiers were detected (twenty-four times), which were provided as captions and emphasize the image created by the illustrator. These captions are mainly found

in the drawings of elementary schoolchildren. As can be seen from their statistical analysis, their relationship is statistically significant ($\chi^2=27.497$, $df=6$, $p=0.000$), also with regard to the evolutionary stage ($\chi^2=22.446$, $df=2$, $p=0.000$).

In most of the paintings there was no scenery, with the figures portrayed against a blank background, while some drawings included a landscape (twenty times) and others the interior of a working environment (eighteen times). However, most children (114 times) depicted objects associated with their chosen occupation, while some (fifty-seven times) drew more than two figures to better express the occupation they want. The analysis of the variables reveals a statistically significant relationship between the representation of objects and the child's evolutionary stage in drawing ($\chi^2=10.583$, $df=1$, $p=0.001$) and between object representation and grade ($\chi^2=11$, $df=3$, $p=0.001$).

Colour is an element that attracts children and, according to research, reveals their emotional state (Sivropoulou, 2003). The predominant trend in children's drawings is for them to be colourful (107 times). Black and white (twenty-eight times) occurs less frequently and is mainly found in the older children's drawings, while monochromatic drawings (fifteen times) were chosen by young children in the sample. This is confirmed by the statistical analysis, which reveals a statistically significant relationship between colour and children's evolutionary stage in drawing ($\chi^2=35.726$, $df=2$, $p=0.000$) and also between colour and grade ($\chi^2=54.540$, $df=6$, $p=0.000$).

Finally, signatures were found in thirty-seven drawings in the sample and mainly in those of preschool children. Based on 'visual grammar', a signature placed in the upper part of the drawing (thirty-four times) is indicative of the 'ideal' in the composition, while a signature place in the lower part provides the actual data of the composition (three times). The correlation of variables points to a statistically significant relationship between the positioning of the signature and the child's grade ($\chi^2=21.927$, $df=3$, $p=0.000$) and also between the positioning of the signature and the child's evolutionary stage ($\chi^2=20.669$, $df=1$, $p=0.000$). A signature is thus mainly found on the drawings of kindergarteners and to a lesser extent on the drawings of elementary schoolchildren.

5. Semantic Analysis

Semiotics is the discipline that studies signs, signification and meaning. It is a discipline and a technique for the analysis and interpretation of texts, where the text acquires meaning within the specific context. Specifically, semiotics is effective in dealing with the analysis of heterogeneous texts (iconic, linguistic), which it analyses against a cultural background (Leone, 2010; Chandler, 1999; Friedman & Smiraglia, 2013).

Consequently, the signified, as distinguished in the children's drawings in individual representations, provide meaning to the occupations and are:

- (a) representations of gender, in drawings where characteristic features of gender are used to emphasise one of the two genders;

- (b) representations of gender-specific roles, with girls choosing customary 'female occupations' and boys 'male occupations';
- (c) representations of family influence, in drawings where the career chosen is the same as that of the parent;
- (d) representation of class, in drawings that indicate social status;
- (e) representations of media influence, in drawings portraying a television hero as a representation of career choice;
- (f) representations of collaboration, portraying environments in which people work or have fun together. Indeed, in a survey conducted on the perceptions of young children of and responses to their favorite fictional television characters, reported greater wishful identification with same- gender characters and with characters who seemed more similar in attitudes. Also, another survey highlights the influence of televised occupational portrayals on economically disadvantaged youths about their future occupational aspirations (Hoffner & Buchanan, 2005)

Regarding the representation of gender, in fifty-one drawings children highlighted the *female or the male role* using the morphological characteristics of the chosen sex. Indeed, the correlation between the variables of gender representation and the child's gender is statistically significant ($\chi^2 = 45.676$, $df = 2$, $p = 0.000$), with 61.1% of the girls and 9% of the boys representing gender stereotypically.

Representations of gender-specific roles, that is, stereotypical career choices based on gender, were observed in 117 drawings, proving that the choice of occupation is traditionally associated with the gender of the child. The traditionally male occupations are divided into: a) *those requiring university education*: pilot, architect, scientist, agronomist, zoologist, doctor, dermatologist, lawyer; b) *those involving sports*: football player, basketball player, karate teacher; c) *those involving action*: police officer, fire fighter, sea captain and d) *those involving manual labour*: farmer, builder, painter, car mechanic, locksmith. The traditional female occupations are divided into: a) *those involving care*: elementary school teacher, kindergarten teacher, veterinarian, nurse; b) *those dealing with one's appearance*: hair stylist, fashion designer, jeweller and c) *those involving an art form*: singer, ballerina. Paediatrics and dentistry are considered to be neutral occupations since young children visit paediatricians and dentists frequently and both sexes are thus bound to identify with them. Cooking is also considered a neutral occupation, this choice perhaps having been influenced by the popular cooking shows on television at the time of the survey. Other occupations that are considered neutral are those of the fitness instructor, the artist and musician. Lastly, the comic-related careers of Spiderman and Tintin are also considered neutral.

It's apparent that in our sample, boys chose stereotypical occupations more often than girls. More specifically, 44.7% of the boys chose traditional male occupations, 33.3% of the girls chose traditional female occupations, 12% of boys and girls chose neutral occupations and finally 10% of the children chose occupations that traditionally belong to the opposite gender.

As regards' the parents educational background, 28% had completed elementary school, 25.3% had completed secondary school, 20% were technical college graduates and 26.7% had graduated from university. According to the statistical analysis, the father's education affects the choice of a traditionally female or male occupation, since the relationship between the two variables is statistically significant ($\chi^2 = 21,302$, $df = 3$, $p = 0.000$). It is observed that when the father has an elementary school or university education, then the child chooses more traditional occupations based on gender. The remaining analyses and correlations of variables concerning the father's occupation and the mother's occupation and education did not show any statistically significant relationship between these and the representations of gender-specific roles shown in the drawings.

Family influence is evident in eighteen of the children's drawings. The chosen occupation is the same as a parent's occupation or is influenced by the wider family environment.

This was identified either from the justification given by the children for the occupation that they chose, or from the data that we had on each child. Statistical analysis has revealed a statistically significant correlation between family influence and the age of the child ($\chi^2=9.062$, $df=3$, $p=0.028$). Indeed, there were nine occurrences of family influence on kindergarten children and only four on elementary schoolchildren.

Media influence is evident in the drawings of seven children from the sample, who chose the occupations of comic book heroes as well as that of a chef, which shows that they were influenced by the television programmes that were popular at the time. The statistical analysis also points to the younger children's particular susceptibility to media influence, since the correlation between variables is statistically significant ($\chi^2= 7.823$, $df=3$, $p=0.050$).

In fact, in a survey conducted on the perceptions of young children of and responses to their favorite fictional television characters, reported greater wishful identification with same-gender characters and with characters who seemed more similar in attitudes (Hoffner & Buchanan, 2005). Also, another survey highlights the influence of televised occupational portrayals on economically disadvantaged youths about their future occupational aspirations (Hoffner et al., 2006).

Regarding the representation of class in the drawings, it is observed that some children chose occupations that determine social status. These occupations are divided into a) prestigious jobs requiring university education or enjoying a high social regard owing to the uniform worn, such as doctors, agronomists, zoologists, scientists, lawyers, pilots, architects, police officers and fire fighters and b) less prestigious, low income jobs involving manual labour, such as builders, painters, farmers and locksmiths. It is observed that occupations that belong in the second category (low-status occupations) were selected by children from rural and suburban areas in Greece, while the children living in urban areas chose high-status occupations requiring university education.

As regards collaborative environments, the children's representations seem to also include individuals other than themselves who are given a certain role in the particular environment, thus shaping the working and social context, which signifies their experiential knowledge

(fifty-five times).

The code, in other words the framework of communication within which the signifiers and signifieds are connected, is as follows:

- Gender: The gender code is found in drawings in which careers are categorised according to gender.
- Dress/body: This code is used to highlight clothing or body features. Many children, and especially girls, use hairstyles and dresses to portray a woman.
- Occupation: This code is found when certain occupational behaviours seem to be reproduced in drawings.
- Family: This code is found in the representation of interpersonal relations and when portraying a house rather than a work environment.

Table 1. Chosen occupation: frequency of occurrence in relation to gender and class and gender classification

Occupation Preference	Frequency	Boys		Girls		Role of Gender
		1st	2nd	1st	2nd	
<i>Evolutionary stage</i>		1st	2nd	1st	2nd	
Footballer	21	11	10			Male
Teacher	18	2		10	6	Female
Police officer	15	7	6		2	Male
Hairdresser	13		1	11	1	Female
Doctor	11	4	3	4		Male
Veterinarian	7			2	5	Female
Kindergarten teacher	6			2	4	Female
Farmer	6	2	2	2		Male
Dentist	5	1	1	3		Neutral
Builder	4	4				Male
Fire fighter	4	3		1		Male
Singer	4			1	3	Female
Chef	4	1	1	2		Neutral
Car mechanic	3	3				Male
Fashion designer	3			3		Female

Occupation Preference	Frequency	Boys	Girls	Role of Gender		
Artist	3	1	2	Neutral		
Fitness instructor	3		1	1	Neutral	
Karate teacher	2	2		Male		
Paediatrician	2	1	1	Neutral		
Spiderman	2	2		Neutral		
Pilot	1		1	Male		
Architect	1		1	Male		
Agriculturist	1	1		Male		
Dermatologist	1	1		Male		
Lawyer	1		1	Male		
Painter	1	1		Male		
Scientist	1		1	Male		
Zoologist	1		1	Male		
Sea captain	1		1	Male		
Locksmith	1	1		Male		
Jewellery shop owner	1		1	Female		
Musician	1		1	Neutral		
Ballerina	1		1	Female		
Basketball player	1		1	Male		
Boxer	1	1		Male		
Tintin	1	1		Neutral		
TOTAL: 36	154 ¹	50	33	48	23	20M. 8 N., 8F.

6. Content Analysis of the Justifications

In this study, the children chose the career that they would like to follow in the future and gave reasons for their choices. The justifications were an opportunity for the children to express themselves and to explain why they like the career they chose. According to

¹ The total number of jobs is greater than the number of children participating in the study because 4 out of the 150 children depicted two professions, splitting the A4 page into two parts.

Fairclough (1989), the verbal references to the drawings are of great value. Language is the means through which ideology is reproduced and thus plays an important role in how power is distributed within a society (Efthymiou, 2006).

The children's justifications are divided into the following categories: a) those that express some feeling towards the particular career, b) those that express playfulness, c) those expressing a desire for further knowledge and d) those expressing a desire for profit.

According to the analysis, the majority of the children justified their career choice by expressing emotional involvement with regard to the latter. More specifically, emotions were expressed in ninety cases, mainly through the use of related verbs in the active voice indicating will and emphasising 'direct objects' in a social context: *I love kids, I love animals, I want to help people, I love kindergarten, I want to cook for the poor.*

There were forty responses expressing playfulness and they mainly used verbs in the active voice signifying desire and behaviour with the emphasis on the action of the subject: *I love to sing, I like to comb hair, I like to cut hair, I like to play ball, I like to put out fires, I like to examine, I like to score goals.*

Thirteen justifications indicated a desire for further knowledge, characterized by verbs in the active voice used in sentences with a subordinate clause, verbs expressing will with a strong future inclination using effective links, with 'direct objects' included in the sentence structures concerning the education of children: *to teach children to exercise, to learn to draw well, I want to educate children, to teach children to read, I want to teach children things.*

Finally, there were seven justifications expressing financial aspirations, with phrases relating to professional/economic stereotypes that may or may not require university studies: *I want to make a lot of money, I want to earn a lot.*

According to the statistical analysis, the relationship between the children's justifications and their age is statistically significant ($\chi^2=35.856$, $df=9$, $p=0.000$). Indeed, it is observed that through their stated career preferences, the younger children in the sample express a desire to play, while the older children express emotion. In other words, we observe that the higher up we go in school, the greater the number of career choices based on emotion, whereas the lower the grade, the greater the number of career choices that express playfulness.

Moreover, a statistically significant relationship emerges from the variables 'education of father' and 'justification' ($\chi^2=20.234$, $df=9$, $p=0.016$). Indeed, it is observed that the more educated the father is, the more the child's choices are based on emotion, while the less educated the father is, the greater the number of career choices expressing playfulness.

7. Discussion

Children seem to obtain their information on careers from their family, their school, the society in which they are growing up and television. Several professions appeared in the present sample, some quite popular and some less popular, as further research showed. This is due to the fact that the sample was taken from different areas, particularly several rural areas, the children's families were from different socio-economic backgrounds and the children in

the survey were of different ages.

The drawings reveal that the children and especially the boys chose jobs that corresponded to their gender, with the exception of twenty-nine children, who chose gender-neutral occupations, or even professions traditionally associated with the opposite sex. The adoption of stereotypical occupations is affected by the educational background of the child's father (when the father has either completed elementary school or is a university graduate), thus verifying what many investigations have reported about the influence of the family in shaping children's gender identity. There was no significant relationship noted between gender representation and occupation or the mother's education.

Moreover, the female gender was stereotypically represented, especially by the girls, who portrayed the female form with strong features, long hair and a dress or skirt. This stereotypical representation was more frequent in certain areas of Greece.

Also, the results showed that the family affects the career preferences of children, especially if some of them choose the career of a parent or of other relatives. It seems that the family affects mainly the younger age groups, as shown by our statistical analysis.

Moreover, the sample reveals the influence of the media, considering that some children chose a TV hero as representing what they would like to do in the future. We would like to point out that we cannot be precise with regard to the media's influence, since we do not know what programmes the children were exposed to at the time of the survey. We did, however suspect this being the case with some careers, such as those of chef and singer, which the children may have chosen because of a relevant programme on television.

Overall, the parsing of drawings depicted a correlation with the respective developmental stage of the child, thus verifying the characteristics of children's drawing. The older children in the sample created more complete and more harmonious human figures than the younger children did, also often depicting their figures in motion and facing different directions, and also more frequently portraying a scenario in their drawings when compared to the younger children. Furthermore, the girls drew clearer figures than the boys, making it easier to identify the gender of the depicted figure.

Most children in the sample drew their desired career either in the appropriate work environment or with various objects that define the particular occupation, and often drew their figures working together with others. This shows the children's interest in what they were asked to illustrate and the effort that they made to make their drawings as clear as possible to the viewer.

Career choices indicating social status were also made. This is due to the different areas from which the sample was taken, and mainly the rural areas, where the children often chose jobs involving manual labour and not requiring university education.

The explanations given by the children for this choice were highly interesting and were divided into those that express emotion, playfulness, a desire for further knowledge and a desire for profit. It was found that younger children's career preferences often express

playfulness, while older children often express emotion in their justifications. Furthermore, the desire for profit was only expressed a few times and mainly by elementary schoolchildren, and the desire for further knowledge mainly by kindergarteners. Lastly, children with fathers with a poor educational background more often expressed playfulness through their career choice, whereas children with highly educated parents more often expressed emotion about their chosen career.

A key characteristic of communication in the twenty-first century is the image. We live in a culture that is overflowing with iconic information. It is a fact that we often do not understand these images, and at times do not even fully realize their power in our society. Nevertheless, images are now, just as in the past, the key to understanding how we give meaning to the world around us (Schroeder, 2002).

References

- Arnot, M. (2006). *Procedures, Reproduction of Gender. Feminist Theory and Educational Policies*. Athens: Routledge.
- Ashby, J., & Schoon, I. (2012). Living the dream? A qualitative retrospective study exploring the role of adolescent aspiration across the life span. *Developmental Psychology*, 48(6), 1694-1706. <http://dx.doi.org/10.1037/a0027297>
- Bandura, A. (1977). *Social Learning Theory*. N.J.: Prentice Hill.
- Barak, A., Feldman, S., & Noy, A. (1991). Traditionality of Children's Interests as Related to their Parents' Gender Stereotypes and Traditionality of Occupations. *Sex Roles*, 24, 511-524. <http://dx.doi.org/10.1007/BF00289336>
- Barton L., Meighan R., & Walker S. (2012). *Schooling, Ideology and the Curriculum*. New York: Routledge.
- Belas, T. (2000). *The drawing as a diagnostic tool of personality*. Athens: Irakleitos. p. 18-20
- Bentolila, S., Michelacci, C., & Suarez, J. (2010). Social contacts and occupational choice. *Economica*, 77(305), 20-45. <http://dx.doi.org/10.1111/j.1468-0335.2008.00717.x>
- Berns, R. M., & Roberta, B. R. (2013). *Child, Family, School, Community: Socialization and Support*. Wedsworth, USA.
- Bernstein, B. (1977). *Class, Codes and Control. Towards a Theory of Educational Transmission*. London: Routledge and Kegan Paul.
- Bignell, J. (2008). *An introduction to television studies*. Routledge: New York.
- Blau, P., & Duncan, O. (1967). *The American Occupational Structure*. New York: John Wiley and Sons.
- Bratti, M. (2002). 'Parents' current income, long-term characteristics and children's education'. *Warwick Economic Research Papers*, 658. Coventry UK: University of Warwick.
- Chandler, D. (1999). 'Semiotics for Beginners'. [Online] Available:

<http://www.aber.ac.uk/~dgc/semiotic.html> (March 8, 2013).

Chouliaraki, L., & Fairclough, N. (1999). *Discourse in Late Modernity. Rethinking Critical Discourse Analysis*. Edinburgh: Edinburgh University Press.

Cogo. (2012). *Fenomenologia di Umberto Eco*. Baskerville, Bologna.

Coleman, J. (1985). Equality of Educational Opportunity. In A. Fragkoudaki (ed.), *Sociology of Education*. Athens: Papazisi. p. 301-357.

Coleman, J. (1987). Adolescence and Schooling. In D. Marsland (ed.), *Education and Youth* (pp. 21-41). London: The Farmer Press.

Cordua, D. G., McGraw, O. K., & Drabman, S. R. (1979). Doctor or Nurse: Children's Perception of Sex Typed Occupations. *Child Development*. 50. 590-593. <http://dx.doi.org/10.2307/1129442>

Deligianni, V., & Ziogou, R. (1995). Gendered Youth Transition in Northern Greece: Between Tradition and Modernity through Education. In L. Chisholm (ed.), *Growing up in Europe*. Berlin: Walter de Gruyter.

Deligianni, V., Maziridou, E., & Kioseoglou, G. (2003). The expectations of parents for their children's future: shaping gender identities within the family. In A. Kostaridou, & E. Stogianidou (ed.), *Scientific Annals of the Department of Psychology*. 5.189-213.

Di Donato, L., & Stroh, I. N. (2013). Do College Students' Gender-typed Attitudes About Occupations Predict Their Real-World Decisions? *Sex Roles*. 68(9-10). 536-549. <http://dx.doi.org/10.1007/s11199-013-0275-2>

Dumas, C., & Lambert, S. (2005). *Children education in Senegal: How does family background influence achievement?*. [Online] Available: <http://www.inra.fr/internet/Departements/ESR/UR/lea/documents/wp/wp0503.pdf> (March 7, 2013).

Eckkrammer, E. M. (2004). Drawing on Theories of Inter-semiotic Layering to Analyze Multimodality in Medical Self-counseling Texts and Hypertexts. In E. Ventola, C. Charles, & M. Kaltenbacher (ed.), *Perspectives on Multimodality*. Amsterdam & Philadelphia: John Benjamins. p. 211-226

Eco, U. (1976). *A Theory of Semiotics*. Bloomington, IN: Indiana University Press.

Eco, U. (1979). Can Television Teach? *Screen Education*. 31. 15-24.

Efthymiou, A. (2011). Short presentation of the views of Fairclough so as described in the book *Language and Power*. [Online] Available <http://semiotics.nured.uowm.gr/pdfs/Fairclough.pdf> (April 10, 2013).

Ermisch, J., & Francesconi, M. (2002). The Effect of Parents' Employment on Children Education Attainment. *Working Paper of the Institute for Social and Economic Research, 2002-21*. Colchester: University of Essex.

- Feinstein, L. (2000). The Relative Economic Importance of Academic, Psychological and Behavioral Attributes Developed in Childhood. *Center for Economic Performance (CEP) Discussion Papers, 443*. LSE, London.
- Fineberg J. (1998). *Child Art, Essays on childhood, primitivism and modernism*. Princeton University Press.
- Fiske, J., & Hartley, J. (1992). *The Language of Television*. Athens: Communication and Culture.
- Foucault, M. (1977). *Discipline and Punish: The Birth of the Prison*. New York: Pantheon.
- Francis, B. (1996). 'Doctor/Nurse, Teacher/Caretaker: Children's Gendered Choice of Adult Occupation in Interviews and Role Plays. *Journal of Education and Work*. 9(3). 47-58. <http://dx.doi.org/10.1080/0269000960090304>
- Friedman, A., & Smiraglia, R. P. (2013). Nodes and arcs: concept map, semiotics, and knowledge organization. *Journal of Documentation*. 69(1). 27-48. <http://dx.doi.org/10.1108/00220411311295315>
- Ginzberg, E. (1951). Toward a Theory of Occupational Choice. In L. William, N. Hitchcock, & M. Kemp (eds.), *Readings in Guidance*. New York: MSS Educational Publishing Company. p. 74-77.
- Gorz, A. (1999). *Reclaiming work, beyond the wage-based society*. Oxford: Polity Press, Blackwell.
- Gottfredson, L. S. (1996). Gottfredson's Theory of Circumscription and Compromise. In D. Brooks (ed.), *Career Choice and Development Brown*. San Francisco, CA: Jossey-Bass. p.179-232
- Gulz, A., Haake, M., & Tärning, B. (2007). Challenging gender stereotypes using virtual pedagogical characters. Seminar paper presented at: *The Helsingborg 2007 GLIT Seminar*. GLIT Research Network, Helsingborg, Sweden. [Online] Available: <http://www.lucs.lu.se/wp-content/uploads/2011/12/GLITant.pdf> (March 8, 2013).
- Hardin, E. E., Leong, F. T. L., & Osipow, S. (2001). Cultural Relativity in the Conceptualization of the Career Maturity. *Journal of Vocational Behavior*. 58(1). 36-52. <http://dx.doi.org/10.1006/jvbe.2000.1762>
- Haystead, J. (1974). Social Structure Awareness Contexts and Processes of Choice. In M. Williams (ed.), *Occupational Choice-A Selection of Papers from the Sociological Review*. London: Allen and Unwin. p. 171-187
- Hiippala, T. (2012). Reading paths and visual perception in multimodal research, psychology and brain sciences. *Journal of Pragmatics*. 44(3). 315-327. <http://dx.doi.org/10.1016/j.pragma.2011.12.008>
- Hilligos, S., & Howard, T. (2002). *Visual communication: a writer's guide*. New York: Longman.

- Hoffner, A. C., Levine, J. K., Sullivan, E. Q., Crowell, D., Pedrick, L., & Berndt, P. (2006). TV Characters at Work: Television's Role in the Occupational Aspirations of Economically Disadvantaged Youths. *Journal of Career Development*, 33(3), 3-18. <http://dx.doi.org/10.1177/0894845305282768>
- Hoffner, C., & Buchanan, M. (2005). Young Adults' Wishful Identification With Television Characters: The Role of Perceived Similarity and Character Attributes'. *Media psychology*, 7, 325-351. http://dx.doi.org/10.1207/S1532785XMEP0704_2
- Jewitt, C., & Kress, G. (2003). A Multimodal Approach to Research in Education. In S. Goodman, T. Lillis, J. Maybin, & N. Mercer (eds.), *Language, Literacy and Education: A Reader*. Stoke on Trent: Trentham Books. p.277-292.
- Jewitt, C. & Oyama, R. (2001). Visual Meaning: a Social Semiotic Approach. In T. Van Leeuwen, & C. Jewitt (eds.), *Handbook of Visual Analysis*. London: Sage. p.183-206
- Jolley, R., & Zhang, Z. (2012). How drawing is taught in Chinese infant schools. *Journal of Economic Theory*, 147(2), 657-683.
- Kessels, U. (2005). Fitting into the stereotype: How gender-stereotyped perceptions of prototypic peers relate to liking for school subjects. *European Journal of Psychology of Education*, 20(3), 309-323. <http://dx.doi.org/10.1007/BF03173559>
- Kohli, W. R., & Burbules, N. C. (2012). *Feminisms and Educational Research*. United Kingdom Rowman & Littlefield.
- Kress, G., & Van Leeuwen, T. (2010). *Reading Images - The Grammar of Visual Design*. (Fotini Papadimitriou ed.) Athens: Epikentro.
- Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication*. London: Routledge.
- Lawson, M. A., & Lawson, H. A. (2013). New Conceptual Frameworks for Student Engagement Research, Policy, and Practice. *Review of Educational Research*. <http://dx.doi.org/10.3102/0034654313480891>
- Leeds-Hurwitz, W. (2012). *Semiotics and Communication: Signs, Codes, Cultures*. Routledge.
- Lefebvre, P., & Merrigan, P. (2008). Family background, family income, cognitive tests scores, behavioral scales and their relationship with post-secondary education participation: Evidence from the NLSCY. *Working Paper*: 08-30. Montréal: Université du Québec.
- Leone, M. (2010). *Saints and Signs*. Berlin: De Gruyter. <http://dx.doi.org/10.1515/9783110229523>
- Levy, G., Sadovsky, A., & Troseth, G. (2000). Aspects of young children's perceptions of gender-typed occupations. *Sex Roles*, 42, 993-1005. <http://dx.doi.org/10.1023/A:1007084516910>
- Liben, S. L., Bigler, S., R., & Krogh, R. H. (2001). Pink and Blue Collar Jobs: Children's

- Judgments of Job Status and Job Aspirations in Relation to Sex of Worker. *Journal of Experimental Child Psychology*. 79. 346-363. <http://dx.doi.org/10.1006/jecp.2000.2611>
- Lim, L. (2012). Ideology, rationality and reproduction in education: a critical discourse analysis. *Discourse: Studies in the Cultural Politics of Education*. 1-16.
- McDonald, M., & Bubna-Litic, D. (2012) Applied Social Psychology: A Critical Theoretical Perspective. *Social and Personality Psychology Compass*. 6(12). 853-864. <http://dx.doi.org/10.1111/spc3.12004>
- McHale, S. M., Crouter, A. C., & Tucker, C. J. (1999). Family Context and Gender Role Socialization in Middle childhood: Comparing Girls to Boys and Sisters to Brother. *Child Development*. 70(4). 990-1004. <http://dx.doi.org/10.1111/1467-8624.00072>
- Miller, L., & Budd, J. (1999). The Development of Occupational Sex-role Stereotypes, Occupational Preferences and Academic Subject Preferences in Children at ages 8,12 and 16. *Educational Psychology*. 19(1). 17-35. <http://dx.doi.org/10.1080/0144341990190102>
- Moore, A., & Prescott, P. (2012). Absent but present: a critical analysis of the representation of sexuality in recent youth policy in the UK. *Journal of Youth Studies, Taylor & Francis*. 16(2). 191-205. <http://dx.doi.org/10.1080/13676261.2012.704991>
- Morris, C. (1938). *Foundations of the Theory of Signs*. Chicago: Chicago University Press.
- Musgrave, P. W. (1974). Towards a Sociological Theory of Occupational Choice. In M. Williams (Ed.), *Occupational Choice-A Selection of Papers from the Sociological Review*. London: Allen and Unwin. p. 97-110.
- Noonan, E. (1983). *Counseling Young People*. London: Methuen. <http://dx.doi.org/10.4324/9780203408513>
- Nöth, W. (2000). Umberto Eco's semiotic threshold. *Sign Systems Studies*. 28. 49-61.
- O'Bryant, L. S., & Corder-Bolz, R., C. (1978). The Effects of Television on Children's Stereotyping of Women's Work Roles. *Journal of Vocational Behavior*. 12. 233-244. [http://dx.doi.org/10.1016/0001-8791\(78\)90038-6](http://dx.doi.org/10.1016/0001-8791(78)90038-6)
- O'Keefe, E., & Hyde, J. (1983). The Development of Occupational Sex-Role Stereotypes: The Effect of Gender Stability and Age. *Sex Role*. 9. 481-492. <http://dx.doi.org/10.1007/BF00289788>
- Ochsen, C. (2008). Parental Labor Market Success and Children's Education Attainment. *Institute of Economics, Working Paper*. Rostock: Rostock University. p. 95.
- Pun, B. O. K. (2008). Metafunctional Analyses of Sound in Film Communication. In Unsworth (ed.), *Multimodal Semiotics: Functional Analysis in Contexts of Education*. London: Continuum. p. 105-121.
- Richards, C. (2012). Playing under surveillance: gender, performance and the conduct of the self in a primary school playground. *British Journal of Sociology of Education*. 33(3). 373-390.

<http://dx.doi.org/10.1080/01425692.2012.659457>

Rimkute, L., Hirvonen, A., Tolvanen A., Aunola, K., & Nurmi, J. E. (2012). Parents' Role in Adolescents' Educational Expectations. *Scandinavian Journal of Educational Research*. 56(6). 571-590. <http://dx.doi.org/10.1080/00313831.2011.621133>

Roberts, K. (1973). An Alternative Theory of Occupational Choice. *Education and Training*. 310-311.

Rommes, E., Overbeek, G., Scholte, R., Engels, R., & de Kemp, R. (2007). I'm not interested in computers': Gender-based Occupational Choices of Adolescents. *Information, Communication & Society*. 10(3). 299-319. <http://dx.doi.org/10.1080/13691180701409838>

Rose, G. (2007). *Visual Methodologies – An Introduction to the Interpretation of Visual Materials*. London: Sage.

Sandberg, D. E., Ehrhardt, A. A., Mellins, C. A., Ince, S. E., & Meyer-Bahlburg, H. F. L. (1987). The influence of individual and family characteristics upon career aspirations of girls during childhood and adolescence. *Sex Roles*. 16. 649-668. <http://dx.doi.org/10.1007/BF00300379>

Schroeder, J. (2002). *Visual Consumption*. Routledge, New York.

Signorielli, N. (2012). Gender-Role Socialization in the Twenty-First Century. *The International Encyclopedia of Media Studies*. <http://dx.doi.org/10.1002/9781444361506.wbiems116>

Sivropoulou, P. (2003). *Journey into the world of illustrated short stories*. Athens: Metaixmio. p.150.

Snyder, I. (2001). A New Communication Order: Researching Literacy Practices in the Network Society. *Language and Education*. 15(2/3). 117-131. <http://dx.doi.org/10.1080/09500780108666805>

Stenberg, R. (1999). *Cognitive Psychology*. New York: Harcourt Brace College Publishers.

Stockard, J., & McGee, J. (1990). Children's Occupational Preferences: The Influence of Sex and Perceptions of Occupational Characteristics. *Journal of Vocational Behavior*. 36. 287-303. [http://dx.doi.org/10.1016/0001-8791\(90\)90033-X](http://dx.doi.org/10.1016/0001-8791(90)90033-X)

Taylor, S. (2013). Reading as reconstruing: a social-semiotic and pragmatist approach to inner sign-making in the classroom. *British Educational Research Journal*. <http://dx.doi.org/10.1002/berj.3038>

Tegegn, B. G., & Tegegn, B. (2011). *Gender and Education*. Verlag: Grin.

Teig, S., & Susskind, E. J. (2008). Truck Driver or Nurse? The Impact of Gender Roles and Occupational Status on Children's Occupational Preferences. *Sex Roles*. 58. 848-863. <http://dx.doi.org/10.1007/s11199-008-9410-x>

Trice, A. D., Hughes, M. A., Odom, C., Woods, K., & McClellan, N. C. (1995). The Origins

of Children's Career Aspirations: IV. Testing Hypotheses from four Theories. *The Career Development Quarterly*. 43. 307-322. <http://dx.doi.org/10.1002/j.2161-0045.1995.tb00436.x>

Turner, P. J. (1998). *Biological sex, gender identity and ego*. Athens: Greek Letters.

Van Leeuwen, T., & Jewitt, C. (2008). *Handbook of Visual analysis*. Sage Publications Ltd..

Van Leeuwen, T. (2005). *Introducing Social Semiotics*. New York: Routledge.

Walkerdine, V. (1994). Femininity as Performance. In. L. Stone (ed.), *The Education Feminism Reader*. London: Routledge.

Whitmarsh, L., & Wentworth, D. K. (2012). Gender Similarity or Gender Difference? Contemporary Women's and Men's Career Patterns. *The Career Development Quarterly*. 60(1). 47-64. <http://dx.doi.org/10.1002/j.2161-0045.2012.00005.x>

William, H. S., & Vimal, P. S. (1968). Parents' Education and Children's Educational Aspirations and Achievements. *American Sociological Review*. 33(2).191-209.

Williams, M. (1974). *Occupational Choice. A Selection of Papers from the Sociological Review*. London: Allen and Unwin.

Willis, P. (1977). *Learning to Labor. How Working Class Kids Get Working Class Jobs*. Farnborough: Saxon House.

Wilson, P. M., & Wilson, J. R. (1992). Environmental influences on adolescent educational aspirations. *Youth & Society*. 24. 52-70. <http://dx.doi.org/10.1177/0044118X92024001003>

Wright, C. J., Huston, C. A., Truglio, R., & Fitch, M. S. (1995). Occupational Portrayals on Television: Children's Role Schemata, Career Aspirations and Perceptions of Reality. *Child Development*. 66. 1706-1718. <http://dx.doi.org/10.2307/1131905>

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